Undergraduate Catalog

2025-2026

Website

www.stthomas.edu/catalog

Notice

This catalog is accurate to the best of our knowledge and ability at the time of publication, but is subject to change. Additions and changes to the catalog are available on the Web. It is the student's responsibility to know and meet graduation requirements and academic policy.

Affirmative Action Statement

The University of St. Thomas does not discriminate on the basis of race, color, creed, religion, ancestry, national origin, sexual orientation, disability, age, marital status, or status with regard to public assistance in the employment of faculty or staff, the admission or treatment of students, or in the operation of its educational programs and activities. As permitted by applicable statutes and regulations, the university reserves the right to consider gender a one factor in its undergraduate admissions policy in order to effect a desired balance in the proportionate representation of sexes in the student body.

MOHE Statement

The University of St. Thomas is registered with the Minnesota Office of Higher Education pursuant to sections 136A.61 to 136A.71. Registration is not an endorsement of the institution. Credits earned at the institution may not transfer to all other institutions. Contact information for the Minnesota Office of Higher Education is:

1450 Energy Park Drive, Suite 350

St. Paul, MN 55108-5227

Phone: (651) 642-0567

Toll Free: (800) 657-3866

Fax: (651) 642-0675

https://www.ohe.state.mn.us/

The University of St. Thomas is registered as a private institution with the Minnesota Office of Higher Education pursuant to sections 136A.61 to 136A.71. Registration is not an endorsement of the institution. Credits earned at the institution may not transfer to all other institutions.

Academic Calendar

Fall Semester 2025

September 3, 2025	Classes begin
September 9, 2025	Last day to add a class without instructor permission
September 16, 2025	Financial aid deadline to add a class for fall semester
September 16, 2025	Last day to drop a class without notation on record
September 16, 2025*	Last day for 100% tuition refund
September 23, 2025*	Last day for 80% tuition refund
September 30, 2025*	Last day for 60% tuition refund
October 7, 2025*	Last day for 40% tuition refund
October 10, 2025	Last day to designate grading option (Pass/Fail)
October 13, 2025	No classes - Indigenous Peoples Day
October 14, 2025*	Last day for 20% tuition refund
October 15, 2025	Incomplete coursework due from spring semester and summer sessions**
October 24, 2025	Mid-term break begins
October 27, 2025	Classes resume (mid-term break ends)
October 27, 2025	Mid-term grades due to Registrar
November 10-21, 2025	Early registration for J-term and spring semester begins
November 14, 2025	Last day to withdraw from a class without a grade of F
November 27, 2025	Thanksgiving break begins
December 1, 2025	Classes resume (Thanksgiving break ends)
December 12, 2025	Final day of classes
December 15, 2025	Study Day; Final exams begin at 5:30 p.m.
December 19, 2025	Final exams end
January 5, 2026	Final grades due to Registrar

January Term 2026

January 5, 2026	Classes begin
January 6, 2026	Last day to add a class without instructor permission
January 7, 2026	Last day to drop a class without notation on record
January 11, 2026*	Last day for 100% tuition refund
January 14, 2026	Last day to designate grading option (Pass/Fail)
January 18, 2026*	Last day for 50% tuition refund
January 19, 2026	No class - Martin Luther King Jr Day
January 23, 2026	Last day to withdraw from a class without a grade of F
January 29, 2026	Final day of classes
February 6, 2026	Final grades due to Registrar

Spring Semester 2026

February 2, 2026	Classes begin
February 6, 2026	Last day to add a class without instructor permission
February 13, 2026	Financial aid deadline to add a class for spring semester
February 13, 2026	Last day to drop a class without notation on record
February 15, 2026	Incomplete coursework due from fall semester
February 15, 2026*	Last day for 100% tuition refund
February 22, 2026*	Last day for 80% tuition refund
February 27, 2026	Summer session registration open to seniors
March 1, 2026*	Last day for 60% tuition refund
March 2, 2026	Summer session registration open to all degree-seeking students
March 8, 2026*	Last day for 40% tuition refund
March 13, 2026	Last day to designate grading option (Pass/Fail)
March 15, 2026	Incomplete coursework due from J-term
March 15, 2026*	Last day for 20% tuition refund
March 30, 2026	Mid-term break begins
April 3-6, 2026	Easter break
April 7, 2026	Classes resume (mid-term break ends)
April 7, 2026	Mid-term grades due to Registrar
April 7-17, 2026	Early registration for fall semester begins
April 17, 2026	Last day to withdraw from a class without a grade of F
May 15, 2026	Final day of classes
May 18, 2026	Study day; Final exams begin at 5:30 p.m.
May 22, 2026	Final exams end
May 23, 2026	Baccalaureate Commencement
May 24, 2026	Dougherty Family College and Graduate Commencement
May 29, 2026	Final grades due to Registrar
July 15, 2026	Incomplete coursework due from spring semester**

* Refund dates based on full-term courses. Contact the Business Office regarding courses that are not designated as full-term.

** In courses with an experiential, field work, clinical or community engagement component, the instructor may extend the deadline one time for submission of the designated work to the date specified below:
May 15 – for an incomplete assigned in the fall semester or January term
Dec. 15 – for an incomplete assigned in the spring semester or any summer term

Table of Contents

General Undergraduate Information

Academic Calendar 2
Fall Semester 2025 2
January Term 2026 2
Spring Semester 2026 3
Table of Contents 4
General Information 14
Accuracy Disclaimer 14
More Information 14
University Information 14
Accreditation 14
Assessment of Programs 14
Equal Opportunity Statement and Notice of Nondiscrimination 14
History 14
Locations 15
Mission & Undergraduate Vision Statement 15
4-1-4 Calendar 15
Student Concerns and Complaints 16
Refund Policy and Schedule 16
Student Records & Privacy 16
Organization and Personnel 16
Associate Program Information & Policies - Dougherty Family College (DFC) 16
Admissions Information-DFC 16
Financial Aid-DFC 16
Graduation-DFC 16
Catalog of Record 16
Commencement Ceremony 17
Committee on Undergraduate Studies 17
Date of Graduation 17
Diploma 17
Transcripts 17
Academic Policies, Processes and Resources-DFC 17
Academic Integrity 17
Advising and Academic Support-DFC 17
Advising Policy 17
Academic Early Intervention Policy 17
Scholars Resource Center 18
Faculty Mentors 18
Degree Requirements and Honors-DFC 18
Degree Requirements 18
Dean's Honor List 18
Associate Degree Academic Honors 18
Grades-DFC 18
Overview 18
Grade Point Value, Grade Point Total, and Grade Point Average 19
S-R Grades 19
Mark of Incomplete 19
Change of Grade 20
Grade Reports 20
Non-Traditional Grading 20
Registration and Attendance Policies-DFC . 20
Overview 20
Courses 20
Attendance 21
Admission Information-Baccalaureate 22
Information & Visits 22
Credit for Prior Learning 23
Advanced Placement Credits 23
Cambridge International A Levels 25
College Level Examination Program (CLEP) 26

Department Examinations 26
International Baccalaureate 27
Minnesota Bilingual Seals 28
Waiver of Credits 28
International Students 28
Non-Degree Students 29
Readmission Policies 29
Transfer Application Procedures 30
Veteran Student Admissions 31

Academic Policies, Processes, and Resources-Baccalaureate 31
Academic Honors 31
Academic Integrity 34
Academic Support-Baccalaureate 34

Baccalaureate Information and Policies 36
Major Requirements 36
Education Co-Majors 37
Minor Requirements 37
Certificate Requirements 38
Addition of major, minor, or degree after graduation 38

Core Curriculum-Baccalaureate 38
Goals of the Core Curriculum 38
Summary of Core Requirements 39
Overview of Requirements 39
First-Year Experience 39
English 40
Language and Culture 40
Natural Science 40
Quantitative Analysis 41
Historical Analysis 41
Fine Arts 42
Social Scientific Analysis 43
Philosophy & Theology 43
Diversity, Inclusion, and Social Justice 44
Integrations in the Humanities 45
Global Perspectives 47
Signature Work 48
Writing Across the Curriculum 48

Courses-Baccalaureate 49
Course Load 49
Credit Hour Definitions 49
Final Examinations 49
Generic Courses 49
Retaking a Course 52

Degree Requirements-Baccalaureate 52
Overview 52
GPA Requirements 52
Minimum Credit Requirement 53
Senior Residency Requirement 53
Enhanced Curriculum 53

Grades-Baccalaureate 53
Overview 53
Grade Point Value, Grade Point Total, and Grade Point Average 54
S-D-R Grading 54
S-R Grades 54
Mark of Incomplete 55
Change of Grade 55
Grade Reports 56
Non-Traditional Grading 56

Graduation-Baccalaureate 56
Catalog of Record 56
Commencement Ceremony 56
Committee on Undergraduate Studies 56
Date of Graduation 56
Diploma 56
Transcripts 56

Progress to Degree-Baccalaureate 57

Student Classification 57
Academic Standing 57
Registration & Attendance Policies-Baccalaureate 58
Overview 58
Attendance and Coursework Completion Policy 58
Auditing a Course 58
Change in Registration 58
New Student Scheduling 59
Withdrawal 59
Other Related Policies 59
Transfer Credit Policies-Baccalaureate 59
Transfer Courses 59
Post-Matriculation Transfer Credit Limit 60
Minimum Transfer Grade Requirement 60
Quarter Credit to Semester Credit Conversions 60
FYE Requirement for Transfer Students 61
Transfer Block Agreements 61
Special Academic Programs-Baccalaureate 62
Special Curricula 62
Associated Colleges of the Twin Cities (ACTC) 62
Parents-on-Campus Program 63
Washington Semester 63
Current Curricula: 2025-2026 63
DOUGHERTY FAMILY COLLEGE 63
Liberal Arts Major (A.A.) 63
Program Overview 63
A.A. Courses 65
COLLEGE OF ARTS AND SCIENCES 68
Actuarial Science 68
Major in Actuarial Science (B.S.) 69
Minor in Actuarial Science 69
Actuarial Science Undergraduate Courses 70
Aerospace Studies 70
Minor Options 72
Aerospace Studies Undergraduate Courses 72
American Culture and Difference 73
Minor in American Culture & Difference 74
American Culture & Difference Undergraduate Courses 75
American Sign Language 75
Amer. Sign Language Undergraduate Courses 75
Arabic 76
Arabic Undergraduate Courses 76
Art History 76
Major in Art History 77
Minor in Art History 78
Minor in Museum Studies 78
Art History Undergraduate Courses 79
Biochemistry 85
Major in Biochemistry (B.S.) 86
Biochemistry Undergraduate Courses 86
Biology 86
Major in Biology (B.A.) 88
Major in Biology (B.S.) 89
Minor in Biology 90
Biology Undergraduate Courses 91
Biology of Global Health 100
Major Overview 100
Catholic Studies 101
Major in Catholic Studies 102
Minor in Catholic Studies 102

Catholic Studies Undergraduate Courses .102
Chemistry 106
Major in Chemistry (B.S.) 107
Major In Biochemistry (B.S.) 107
Concentration in Biochemistry 107
Major in Chemistry (B.A.).....108
Minor in Chemistry.....108
Chemistry Undergraduate Courses.....109
Chemistry (9-12).....114
Co-Major – See Education 114
Chinese.....114
Chinese Undergraduate Courses 114
Classics 114
Major in Classics - Culture Track.....114
Major in Classics - Language Track 115
Minor in Classics - Culture Track 115
Minor in Classics - Language Track.....115
Classical Civilization Undergraduate Courses 116
Communication Arts & Literature (5-12).....117
Co-Major – See Education 117
Communication Studies 117
Major in Communication Studies 117
Minor in Communication Studies 118
Communication Studies Undergraduate Courses 118
Computer Sciences 121
Major in Computer Science (B.S.).....122
Minor in Computer Science 123
Teacher Licensure 123
Computer & Information Sciences Undergraduate Courses 123
Criminal Justice.....127
Major in Criminal Justice 128
Minor in Criminal Justice.....129
Criminal Justice Undergraduate Courses .129
Data Analytics 129
Major in Data Analytics (B.S.).....130
Domain requirements.....130
Data Analytics Undergraduate Courses 135
Data Science 135
Major in Data Science (B.S.).....135
Minor in Data Science.....136
Data Science Undergraduate Courses 136
Digital Media Arts 138
Major in Digital Media Arts 139
Minor in Digital Media Arts.....140
Minor in Game Design 140
Digital Media Arts Undergraduate Courses 141
Economics 143
Major in Economics (B.A.) 144
Major in Economics (B.S.).....144
Minor in Economics 146
Economics Undergraduate Courses 146
English.....149
Majors in English.....151
Minors in English.....155
English Undergraduate Courses 156
Environmental Science.....166
Major in Environmental Science (B.S.) 166
Minor in Environmental Science.....168
Environmental Science Undergraduate Courses 169
Environmental Studies.....169
Major in Environmental Studies.....170
Environmental Studies Undergraduate Courses 171

Family Studies 172
Major in Family Studies 172
Minor in Family Studies 173
Family Studies Undergraduate Courses 174
Film Studies 175
Major in Film Studies 175
Minor in Film Studies 176
Film Studies Undergraduate Courses 177
Film Studies and Media Production 179
Co-Major 179
French 180
Major in French 180
Minor in French 180
French Undergraduate Courses 180
Geography 181
Majors in Geography 182
Minors in Geography 183
Cert. in Geographic Information Systems (GIS) 183
Geography Undergraduate Courses 183
Geology 185
Majors in Geology 186
Minor in Geology 188
Geology Undergraduate Courses 188
German 192
Major in German 193
German: Int'l Engineering Program (IEP) 194
Minor in German 195
German Undergraduate Courses 195
Greek 197
Greek Undergraduate Courses 197
History 197
Major in History 199
Minor in History 200
Certificate in the Study of War and Society 200
History Undergraduate Courses 201
Holocaust and Genocide Studies 209
Minor in Holocaust & Genocide Studies 209
Instrumental Music Education K-12 209
Co-Major - See Education 209
International Studies 209
Major in International Studies 210
Irish Studies 211
Minor in Irish Studies 211
Irish Studies Undergraduate Courses 211
Italian 212
Italian Undergraduate Courses 212
Japanese 213
Japanese Undergraduate Courses 213
Journalism 213
Major in Journalism 213
Minor in Journalism 214
Journalism Undergraduate Courses 214
Justice and Peace Studies (JPST) 216
Major in Justice and Peace Studies 217
Minors in JPST 221
JPST Undergraduate Courses 222
Latin 224
Latin Undergraduate Courses 224
Latin American and Caribbean Studies 225
Minor in Latin American and Caribbean Studies 226
LACS Undergraduate Courses 227
Legal Skills 227

Minor in Legal Skills 227
Legal Studies 228
Minor in Legal Studies 228
Liberal Arts in Business 229
Liberal Arts in Business Minor 229
Liberal Arts in Business Undergraduate Courses 230
Life Science (9-12) 230
Co-Major – See Education 230
Liberal Studies 230
Second major (B.A.) in Liberal Studies 230
Mathematics 230
Majors in Mathematics 231
Minor in Mathematics 232
Mathematics Undergraduate Courses 232
Mathematics 5-12 236
Co-Major – See Education 236
Modern and Classical Languages 236
Language options 237
Teacher Licensure 237
Museum Studies 237
Minor – See Art History 237
Music 237
Majors in Music 238
Majors in Music Business (B.A.) 240
Minors in Music 241
Music Performer's Certificate 244
Music Performance Studies 244
Music Ensembles 244
Music Undergraduate Courses 244
Music Performance Studies Undergraduate Courses 249
Music Ensembles Undergraduate Courses 252
Neuroscience 254
Major in Neuroscience (B.S.) 254
Minor in Neuroscience 255
Neuroscience Undergraduate Courses 255
Peace Engineering 257
Interdisciplinary Minor – See Engineering. 257
Philosophy 257
Major in Philosophy 258
Minors in Philosophy 258
Philosophy Undergraduate Courses 261
Physics 267
Majors in Physics 268
Minor in Physics 269
Physics Undergraduate Courses 270
Physics (9-12) 272
Co-Major – See Education 272
Political Science 272
Major in Political Science 273
Minor in Political Science 273
Political Science Undergraduate Courses . 274
Pre-professional Programs 277
Preparation for the Catholic Priesthood 277
Pre-Law 277
Pre-Health Professions 278
Pre-Physical Therapy 280
Psychology 280
Major in Psychology 281
Minor in Psychology 281
Psychology Undergraduate Courses 282
Risk Management and Insurance 286
Interdisciplinary Certificate – see Business 286
Science, Medicine and Society 286

Minor in Science, Medicine & Society 286
Social Studies (5-12) 287
Co-Major – see Education 287
Social Work and Criminal Justice 287
Co-Major – See Social Work 287
Social Work and Psychology 287
Co-Major – See Social Work 287
Social Work and Sociology 287
Co-Major – See Social Work 287
Sociology 287
Major in Sociology 288
Minor in Sociology 288
Sociology Undergraduate Courses 289
Spanish 292
Major in Spanish 292
Minors in Spanish 293
Spanish Undergraduate Courses 294
Sports Management 298
Interdisciplinary Minor – See Business 298
Statistics 298
Major in Statistics (B.S.) 298
Minor in Statistics 298
Statistics Undergraduate Courses 299
Strategic and Business Communication 300
Co-Major 300
Strategic Communication: Advertising and Public Relations 301
Major in Strat. Comm.: Adv'g and PR 301
Minor in Strat. Comm: Adv'g and PR 302
Strat. Comm. Undergraduate Courses 302
Sustainability 304
Minor in Sustainability 304
Theater 304
Theater Undergraduate Courses 304
Theology 305
Major in Theology 308
Minors & Certificate in Theology 308
Vocal Music Education (K-12) 321
Co-Major – See Education 321
Women, Gender, and Sexuality Studies 321
Major in Women, Gender & Sexuality Studies 322
Minor in Women, Gender & Sexuality Studies 322
World Language and Cultures Education (K-12) 324
Co-Major – See Education 324
MORRISON FAMILY COLLEGE OF HEALTH 324
Exercise Science (EXSC) 324
Major in Exercise Science 324
Minor in Exercise Science 325
Exercise Science Undergraduate Courses 325
Health Promotion & Wellness 328
Major in Health Promotion & Wellness 328
Undergraduate Health Courses 328
Nursing 331
Major in Nursing (BSN) 331
Nursing Undergraduate Courses 331
Nutrition 333
Major in Nutrition (B.S.) 334
Minor in Nutrition 334
Nutrition Undergraduate Courses 335
Pre-professional Programs 335
Public Health 335

Major in Public Health (B.S.) 335
Minor in Public Health 336
Public Health Courses 336

Social Work 339
Major in Social Work (B.A.) 340
Minor in Social Welfare 340
Social Work Undergraduate Courses 340

Social Work and Criminal Justice 343
Co-Major 343

Social Work and Psychology 344
Co-Major 344

Social Work and Sociology 345
Co-Major 345

OPUS COLLEGE OF BUSINESS 346
Opus Academic Programs 347
Business Undergraduate Courses 347
Business Analytics Courses 349

Accounting 349
Major in Accounting 349
Minor in Accounting 350
Accounting Undergraduate Courses 350

Business Administration 352
Major in Business Administration 352
Minor in Business Administration 353

Business Analytics 353
Minor in Business Analytics 353

Business Communication 354
Major in Business Communication 354
Business Communication Undergraduate Courses 355

Business in a Digital World 355
Certificate in Business in a Digital World 355

Business of Healthcare 356
Minor in Business of Healthcare 356

Entrepreneurship 356
Major in Entrepreneurship 357
Minor in Entrepreneurship 358
Entrepreneurship Undergraduate Courses 358

Finance 361
Major in Financial Management 362
Minor in Finance 363
Certificates in Finance 363
Finance Undergraduate Courses 364

Human Resource Management 368
Major in Human Resources Management 368
Minor in Human Resources Management 369

International Business 369
Major in International Business 369

Law and Compliance 371
Major in Law and Compliance 371
Minor in Law and Compliance 372
Business Ethics Undergraduate Courses 372
Business Law Undergraduate Courses 374

Leadership and Management 376
Major in Leadership and Management 376
Minor in Leadership and Management 377

Management 377
Management Undergraduate Courses 377

Marketing Management 381
Major in Marketing Management 381
Minor in Marketing 382
Marketing Undergraduate Courses 383

Operations and Supply Chain Management 385

Major in Operations and Supply Chain Management....386
Minor in Operations and Supply Chain Management....387
Operations & Supply Chain Management Undergraduate Courses....387
Real Estate Studies....389
Major in Real Estate Studies (B.S.)....389
Real Estate Studies Undergraduate Courses....391
Risk Management and Insurance....391
Certificate in Risk Management and Insurance....392
Sports Management....392
Minor in Sports Management....392
Strategic and Business Communication....392
Co-Major in Strategic and Business Communication....392
SCHOOL OF EDUCATION....394
Teacher Education....394
Education Majors....394
Education Minors....395
Education Undergraduate Courses....395
Elementary Education....405
Elementary Education Major (K-6):....405
Elementary Education Courses....405
Middle/Secondary Level and K-12 Education....406
Major in Middle/Secondary and K-12....406
Chemistry (9-12) Co-Major....407
Communication Arts & Literature (5-12) Co-Major....407
Life Science (9-12) Co-Major....408
Mathematics (5-12) Co-Major....409
Music: Instrumental and Classroom (K-12) Co-Major....409
Music: Vocal and Classroom (K-12) Co-Major....410
Physics (9-12) Co-Major....411
Social Studies (5-12) Co-Major....411
World Language and Cultures Education (K-12) Co-Major....412
General Science Concentration....413
Special Education....414
Major in Special Education (B.S.)....414
Optional License Add On....415
Optional Teacher Education Minor....415
Special Education Exceptionalities Minor....415
Student Teaching and Seminar....415
Special Education Undergraduate Courses....416
SCHOOL OF ENGINEERING....418
Majors in Engineering....419
Minors in Engineering....420
Engineering Undergraduate Courses....420
Biomedical Engineering....427
Minor in Biomedical Engineering....427
Civil Engineering....428
Major in Civil Engineering....428
Computer Engineering....429
Major in Computer Engineering....429
Electrical Engineering....430
Major in Electrical Engineering....430
Minor in Electrical Engineering....431
Engineering Education....432
Minor in Engineering Education....432
Environmental Engineering....432
General Engineering....432

Minor in General Engineering 432

Materials Science and Engineering.....433

Minor in Materials Science and Engineering 433

Mechanical Engineering.....434

Major in Mechanical Engineering.....434

Minor in Mechanical Engineering.....435

Peace Engineering 435

Minor in Peace Engineering.....435

INTERDISCIPLINARY STUDIES (IDSC) 436

Cross-College Program 436

Interdisciplinary Studies Undergraduate Courses 436

Appendix 1 441

Equal Opportunity Statement and Notice of Nondiscrimination.....441

Appendix 2 442

Undergraduate Student Academic Integrity Policy 442

Appendix 3 444

Credit for Prior Learning Policy 444

Appendix 4 449

Undergraduate Attendance and Coursework Completion Policy.....449

Appendix 5 453

Undergraduate Course, Term and Institutional Withdrawal Policy.....453

Appendix 6 457

Dougherty Family College Term and Institutional Withdrawal Policy.....457

Appendix 7 461

Military Withdrawal Policy 461

General Information

Accuracy Disclaimer

This catalog is accurate to the best of our knowledge and ability at the time of publication, but is subject to change. It is the student's responsibility to know and meet graduation requirements and academic policy.

If you have general questions about catalog information, contact the Office of Academic Affairs. Specific questions pertaining to degree requirements, policies, or procedures should be directed to your academic advisor.

More Information

You can also explore our About page (https://www.stthomas.edu/about/index.html) and Information Center (https://www.stthomas.edu/info-center/index.html) for more information.

University Information

Accreditation

The University of St. Thomas is accredited by the Higher Learning Commission (www.hlcommission.org; 312-263-0456), an institutional accrediting agency recognized by the U.S. Department of Education.

All University of St. Thomas education licensure programs within the School of Education are approved by either the Minnesota Professional Educator Licensing and Standards Board (651-539-4200) or Minnesota Board of School Administrators (651-582-8754).

The University of St. Thomas is registered with the Minnesota Office of Higher Education pursuant to sections 136A.61 to 136A.71. Registration is not an endorsement of the institution. Credits earned at the institution may not transfer to all other institutions. Contact information for the Minnesota Office of Higher Education is:

1450 Energy Park Drive, Suite 350
St. Paul, MN 55108-5227
Phone: (651) 642-0567
Toll Free: (800) 657-3866
Fax: (651) 642-0675
https://www.ohe.state.mn.us/

For more information about accreditation, including which programs have specialized (or discipline-based) accreditation, please go to the Accreditation website:

https://www.stthomas.edu/academics/accreditation/index.html

Assessment of Programs

The program to assess student learning is an integral part of the university's commitment to excellent teaching and effective learning. The assessment effort is sustained by the faculty and is fully supported by the administration. Information is systematically collected and examined both to document and improve student learning. The assessment program itself is routinely updated, and the information gained from the assessment process becomes part of on-going curricular development.

Currently, all curricula for majors and the undergraduate core curriculum are routinely assessed. Thus, students are asked from time to time to participate in testing, surveys, interviews, or other methods of collecting data for assessment purposes.

Equal Opportunity Statement and Notice of Nondiscrimination

Equal Opportunity Statement and Notice of Nondiscrimination: See **Appendix 1**

History

The University of St. Thomas was founded in 1885 by Archbishop John Ireland, less than a year after he was installed as St. Paul's third bishop. What began as the St. Thomas Aquinas Seminary – with 62 students and a faculty of five – has grown to be Minnesota's largest independent university with three campuses and more than 10,000 students.

Built near a river bluff on farmland that was still considered "far removed from town" in the late 1800s, the university's main campus is nestled today in a residential area midway between the downtowns of St. Paul and Minneapolis.

In its first decade, St. Thomas was a high school, college and seminary; students enrolled in either the preparatory, classical or theological departments. In 1894 the theological department moved to an adjacent campus where it became The Saint Paul Seminary. The preparatory and classical departments, meanwhile, remained on the original campus and became the College of St. Thomas.

The classical department gradually grew to a four-year college curriculum. The first baccalaureate degrees were conferred in 1910 and St. Thomas was officially accredited in 1916. The preparatory department became the St. Thomas Military Academy, a high school that moved to a suburban campus in 1965.

After 92 years of all-male enrollment, St. Thomas became coeducational in 1977. Today, 50 percent of the undergraduates and 55 percent of the graduate students are women.

Coeducation, coupled with new graduate programs as well as new campuses, contributed to St. Thomas' growth.

Long-standing graduate programs in business, education, professional psychology and social work offer degrees at the master's, specialist, and doctoral levels.

St. Thomas' original "classical" and "theological" departments came together once again in 1987 through an affiliation between the seminary and university. Together they created the School of Divinity, which offers graduate degrees in pastoral studies, divinity and theology. St. Thomas is also home to the undergraduate St. John Vianney Seminary.

In 1990, recognizing the many changes and the addition of graduate programs to the institution, the name of the College of St. Thomas was changed to the University of St. Thomas.

Locations

The university's main, 78-acre campus anchors the western end of St. Paul's historic Summit Avenue.

In 1992 the university opened a permanent campus in downtown Minneapolis, which is home to the Dougherty Family College, the School of Law, and programs in the Opus College of Business, the School of Education, and the Morrison Family College of Health.

The Bernardi Residence in Rome, which opened in 2000, is a remodeled residential estate on the banks of the Tiber River. Serving as a home to students on the university's core semester program and the Center for Catholic Studies' Rome program, the Bernardi Residence is also available for conferences, study tours and housing for faculty, students, and visitors to Rome.

Mission & Undergraduate Vision Statement

Mission

Inspired by Catholic intellectual tradition, the University of St. Thomas educates students to be morally responsible leaders who think critically, act wisely, and work skillfully to advance the common good.

Convictions

As a community we are committed to:

- **Pursuit of Truth**
  We value intellectual inquiry as a life-long habit, the unfettered and impartial pursuit of truth in all its forms, the integration of knowledge across disciplines, and the imaginative and creative exploration of new ideas.
- **Academic Excellence**
  We create a culture among faculty, students and staff that recognizes the power of ideas and rewards rigorous thinking.
- **Faith and Reason**
  We actively engage Catholic intellectual tradition, which values the fundamental compatibility of faith and reason and fosters meaningful dialogue directed toward the flourishing of human culture.
- **Dignity**
  We respect the dignity of each person and value the unique contributions that each brings to the greater mosaic of the university community.
- **Diversity**
  We strive to create a vibrant diverse community in which, together, we work for a more just and inclusive society.
- **Personal Attention**
  We foster a caring culture that supports the well-being of each member.
- **Gratitude**
  We celebrate the achievements of all members of our community in goals attained and obstacles overcome, and in all things give praise to God.

4-1-4 Calendar

The Undergraduate program follows a 4-1-4 calendar. The 4-1-4 calendar consists of a fall semester during the months of September through December, a four-week January term, and a spring semester during the months of February through May. Each Spring and Fall semester consists of approximately 14 weeks of classes and a four-day examination period.

Regular Semesters -
During the fall and spring semesters, a student normally enrolls in 16-18 credits.

The January Term -
Students may enroll in a maximum of four credits in a January term.

Summer Sessions -
The university offers two six-week sessions, one eight-week session and one twelve-week session during the months of June through August. A student may enroll in a maximum of eight credits a given session, with a maximum of sixteen credits for the summer.

Please note, the Dougherty Family College A.A. is not in the summer or J-term.

Student Concerns and Complaints

Student Concerns and Complaints: https://www.stthomas.edu/about/consumer-information/student-concerns/index.html

Refund Policy and Schedule

The St. Thomas Refund Policy and Schedule (https://www.stthomas.edu/about/departments/business-office/paying-your-bill/erefunds/refund-policies-and-schedule/index.html) provides the general terms and rules of refunds. The Academic Calendars (https://www.stthomas.edu/academics/calendars/index.html) provide the specific dates for refunds within each standard term.

Student Records & Privacy

The Family Education Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. Read the complete FERPA policy (https://www.stthomas.edu/registrar/ferpa-records-privacy-information/index.html) on the Registrar's website.

Organization and Personnel

Visit the University Leadership page (https://www.stthomas.edu/about/leadership/index.html) to view the current University President, Executive Vice President and Provost, academic deans and more.

Associate Program Information & Policies - Dougherty Family College (DFC)

The Dougherty Family College (DFC) Associate of Arts program policies differ in some areas from the Baccalaureate program policies.

Outlined here are specific policies, support services and requirements for the Dougherty Family College students. Please contact the college administration with questions or concerns.

Contact the Dougherty Family College

Terrence Murphy Hall, room 301
1000 LaSalle Ave.
Minneapolis, MN 55403

DFC@stthomas.edu
(651) 962-8010
(800) 328-6819, ext. 8010

Admissions Information-DFC

Find Admissions and Tuition information for the Dougherty Family College: https://dfc.stthomas.edu/admissions-tuition/index.html

Financial Aid-DFC

Find Financial Aid information for students in the Dougherty Family College: https://dfc.stthomas.edu/admissions-tuition/paying-for-college/index.html

Graduation-DFC

Catalog of Record

The catalog in effect at the time of matriculation is usually considered the catalog of record and determines the student's graduation requirements. However, a student may wish to choose a later catalog if degree requirements change, and the student would like to take advantage of those changes. Generally speaking, the student may

choose any catalog in force during the time the student is enrolled for a degree.

Choosing a new catalog means accepting all changes in that catalog. If there is a change in core curriculum requirements, for example, the student will be responsible for those changes or will need to petition for a waiver. Students should contact Academic Counseling If they wish to change their catalog of record.

Commencement Ceremony

A single commencement ceremony is held in May for all students earning an undergraduate degree each year. Students who complete degree requirements at the end of summer, fall, January, and spring terms participate in the May ceremony following the term in which requirements are completed. Students who have four or fewer credits remaining to complete all degree requirements are permitted to participate in the May ceremony.

Committee on Undergraduate Studies

The Committee on Undergraduate Studies is charged with interpreting the general academic requirements of the undergraduate program and has the authority to grant exceptions and waivers when warranted. The committee is composed of elected faculty members and a representative from Academic Counseling.

Students begin the petition process by visiting the Director of Academic Support and Compliance in Academic Counseling in the Center for Student Achievement.

Date of Graduation

Degrees are awarded at the end of fall, January, spring, and summer terms. The date of graduation will be the last day of the term in which a student is registered. The degree will not be awarded until the student completes all degree requirements. To be considered completed, all courses must have final grades. An Incomplete (I) or a Not Reported (NR) grade is not considered a final grade and must be changed before the degree will be awarded.

Diploma

One diploma is awarded for each degree earned. Diplomas are distributed to graduates after the university has verified that all requirements for graduation have been met. This may be several weeks after commencement. Diplomas will be sent to the graduate's permanent address by mail.

Diplomas will not be released to students who have holds on their record.

The size of all diplomas is 8.5 x 11 inches. Information on the diploma includes the name of the university, the university seal, the graduate's name, the degree represented by the diploma, and the date of graduation.

Transcripts

A transcript of a student's academic record will be issued only upon receipt of a written request from the student. Former students should submit a complete and signed Transcript Request Form (https://www.stthomas.edu/registrar/transcript-request/index.html) to the Office of Student Data and Registrar (https://www.stthomas.edu/registrar/index.html). Current students may request a transcript via Murphy Online. Transcripts will not be issued to students who have active holds on their record.

Academic Policies, Processes and Resources-DFC

Academic Integrity

St. Thomas has an Undergraduate Student Academic Integrity Policy that establishes expectations for undergraduate students related to academic honesty and integrity, which are essential for a strong, functioning academic community. Students are responsible for reading, understanding, and adhering to the Undergraduate Student Academic Integrity Policy: See **Appendix 2**

Advising and Academic Support-DFC

Advising Policy

All students will meet with their faculty mentors for one-on-one meetings approximately 15 minutes every month to discuss academic, social, career, and other topics related to student success.

Academic Early Intervention Policy

Students who earn less than a C grade on any assignment (e.g., quiz, homework, essay, research paper, exam, team project, etc.) should meet with

their instructors and faculty mentors and create an action plan to improve their performance in the course(s).

If the student regularly receives less than a C grade in the same course, the student must meet with the associate dean of academics and other members of the Dougherty Family College academic early intervention team to review the previous action plan and determine the next steps to be taken to improve the student's performance in the course.

Scholars Resource Center

The Scholars Resource Center provides a variety of math and writing resources including math and writing student tutors, math placement exam proctoring and preparation, one-on-one and small group assistance with math and writing assignments. Students also have access to the Center for Writing and the Math Resource Center on the St. Paul campus.

Faculty Mentors

Full-time faculty members serve as mentors to all students. Faculty mentors assist students with class schedules and enrollment decisions each semester during their first and sophomore years.

Faculty mentors guide their advisees' progress toward a degree by reviewing grade reports and degree evaluations, assisting students with academic challenges, and consulting with them about career decisions.

Degree Requirements and Honors-DFC

Degree Requirements

The University of St. Thomas grants the degree Associate of Arts in Liberal Arts (A.A.) to individuals who successfully complete its associate degree programs. To receive an associate of arts degree, a student must successfully complete a minimum of 64 credits and fulfill all degree requirements.

A minimum grade point average (GPA) of 2.00 must be achieved in order to earn the associate of arts degree.

Dean's Honor List

A student who attains a grade point average of 3.50 or more at the end of a semester in which he or she has taken at least twelve credits for regular grades (A, B, C) will be placed on the Dean's Honor List if there are no grades of D or F or marks of I or R.

The list is made public and the student receives a letter of commendation from the Associate Vice Provost for Undergraduate Studies.

Associate Degree Academic Honors

Three types of academic honors are conferred upon graduates of the Dougherty Family College program.

Distinction
A scholar whose overall cumulative grade point average and St. Thomas grade point average are both between 3.50-3.69 receives the associate degree with distinction.

High Distinction
A scholar whose overall cumulative grade point average and St. Thomas grade point average are both between 3.70-3.89 receives the associate degree with high distinction.

Highest Distinction
A scholar whose overall cumulative grade point average and St. Thomas grade point average are both between 3.90 or higher receives the associate degree with the highest distinction.

Honor Society

Phi Theta Kappa

Grades-DFC

Overview

At the end of each semester or term, each student who is registered for a course receives either a grade or a mark in that course. In each case, the grade or mark is one of the following letters: A, B, C, D, F, I, R, S, or W. At the discretion of the instructor, the grade A may be followed by a minus, as A-, and the grades B, C, D may be followed either by a plus, +, or a minus, -. The use of plus and minus indicates performance levels between those suggested by these characteristics:

A	**Excellent Work**
B	Very Good Work
C	Satisfactory Work
D	Poor but Passing Work
F	Failing Work
I	Incomplete

S	Satisfactory
R	Unsatisfactory
W	Withdrawal
NR	Indicates a grade that has not been recorded

Grade Point Value, Grade Point Total, and Grade Point Average

The grades A, B, C, D, either alone or followed by a plus or minus, and the grade F are called regular grades. Each of these grades has an associated rade point value. These values are listed below:

A	4.0	C	2.0
A-	3.7	C-	1.7
B+	3.3	D+	1.3
B	3.0	D	1.0
B-	2.7	D-	0.7
C+	2.3	F	0.0

Marks of W, I, R, and S have no grade point value.

The grade point total is the sum of grade points (multiply each grade point value by the number of credits for the course) for all courses with grade point value.

The grade point average (GPA) is determined by dividing the grade point total by the number of credits with grade point value.

For example, using a standard four-credit course as a basis, if a student received two A's (32 points), one B- (10.8 points), and one C+ (9.2 points) divided by 16 (the number of credits), the GPA would be 3.25. If the student received a grade of F (0 points) in a course, the grade point total would still be divided by 16 credits, and the GPA would be lower.

S-R Grades

1. All experiential learning courses are marked with S for satisfactory work and R for unsatisfactory work.

2. For individual study or research courses, the mark of S is given for satisfactory work and the mark of R for unsatisfactory work. If a student wishes to be graded according to the regular system (A, B, C, D, F), this choice must be approved by the appropriate faculty supervisor and the department chair.

3. In addition, this choice must be indicated on the form used to outline the individual study project.

   Several other courses in various departments are routinely marked with S for satisfactory and R for unsatisfactory work. The grading system for such courses is indicated as part of the regular course description.

4. Courses that are routinely graded on the S-R system are not counted among the one-eighth of a student's courses for which the S-D-R grading system may be selected.

Mark of Incomplete

The mark of Incomplete ("I") is assigned at the instructor's discretion if the student has not completed the work of the course, has been actively engaged in the course, has good reason for delay, and has made arrangements with the instructor before grades for the course are due. Ordinarily, good reason will involve matters beyond control of the student, such as serious illness, necessary absence, or other extenuating circumstances. The mark of "I" may only be assigned if the student is passing at the time of the request and the student satisfactorily completed a substantial part of the coursework (generally at least 70%). The mark may not be assigned as a substitute for a failing grade or to allow a student to improve a grade by completing additional work over and above that ordinarily expected for the course or by repetition of work already submitted to the instructor. The mark of "I" should not be used without prior arrangement between the instructor and student.

If a mark of I is assigned, an Incomplete Form (https://one.stthomas.edu/sites/its/student-data-registrar/SitePageModern/232310/faculty-staff-forms) must be submitted to the office of Student Data Registrar. This form includes a description of work left to complete, a deadline for completion, the option for an instructor to provide a provisional grade based on work the student has completed to date, and signatures of both the student and instructor.

The student must complete the designated work and submit it to the instructor by the date specified below:

- February 15th – for an incomplete assigned in the Fall semester
- March 15th – for an incomplete assigned in the January term
- July 15th – for an incomplete assigned in the Spring semester
- October 15th – for an incomplete assigned in any Summer term

In courses with an experiential, field work, clinical, or community engagement component, the instructor may extend the deadline one time for submission of the designated work to the date specified below:

May 15th – for an incomplete assigned in the Fall semester or January term

December 15th – for an incomplete assigned in the Spring semester or any Summer term

The deadline specified on the mark of Incomplete Form may not be extended. If the designated work is not submitted to the instructor before the deadline, the mark of "I" will change to the provisional grade assigned on the form. The instructor may change a provisional grade by means of university grade change policies and procedures (see below).

Change of Grade

An instructor may change a grade or mark by using the Grade Change Form in the following situations:

1. Instructors may change a conventional letter grade only if there has been an error in the computation, transcription, or reporting of the grade.
2. Instructors may change a provisional grade that results from the lapse of a mark of Incomplete ("I").

All changes must be submitted to the Office of Student Data and Registrar within six months of the original grade or mark submission. From six months until one year after the original grade or mark submission, changes require the approval of the department chair and dean. After one year, changes are not allowed.

Changes may not be made on the basis of additional work completed by a student unless all members of the class had the option to submit additional work.

Grade Reports

Final grades can be accessed by the student through Murphy Online, the St. Thomas student self-service system.

Non-Traditional Grading

St. Thomas will post non-traditional grades that meet our minimum transfer grade policy (these include AB or a grade value of 3.5 and BC or a grade value of 2.5). To be posted, all non-traditional grades must be the equivalent of a C- or higher.

Registration and Attendance Policies-DFC

Overview

A student must register for a course before attending, and will not receive credit unless registered.

Students must attend the first day of class in order to secure their place in the course. The instructor has the option to drop a student from the class roster if the student was not in attendance on the first day of the session. Students must not assume they have been dropped if they did not attend the first day of class. To officially withdraw from the class, the student must consult with the DFC Associate Dean of Academics and file a Change in Registration form with the Office of the University Registrar or drop the course using the Murphy Online Web registration system.

Each student is required to meet with his/her faculty mentor to begin the registration process each semester. There are two concurrent registration periods – summer sessions and fall semester in April; January term and spring semester in November. Each student will work with his/her faculty mentor to register for classes.

Courses

Most undergraduate courses at St. Thomas are 4-credit courses, although some departments also offer 0-credit or 2-credit courses. Each course is assigned a subject-area code consisting of four letters, which designates the department or discipline, followed by a three-digit number. For example, ENGL 121 is the English course numbered 121.

Courses offered through the Dougherty Family

College have numbers that begin with either 1 or 2, which indicates they are lower-division courses.

The number of class meetings for a course varies with the nature of the course. Class Finder (https://classes.aws.stthomas.edu/index.htm) indicates the days and times each class meets.

Credits Earned Prior to Admissions

Dougherty Family College is based on an academic cohort model allowing students to take classes together and receive intensive mentoring and other academic and social support. The courses in the curriculum were selected to provide graduates of Dougherty Family College with a pathway to four-year degree programs at St. Thomas and other colleges and universities.

Students who have previously earned credits during high school (e.g., AP, IB, CIS, PSEO) will be required to decline those credits for equivalent courses that are offered in the curriculum for the Associate of Arts Degree. All other credits for non-equivalent courses will be treated as elective credits at Dougherty Family College.

Course Load Policy

The normal course load for fall and spring semesters is 16 credits. Students may take no more than the number of credits listed below without endorsement of their faculty advisor and approval of the relevant dean. Students are advised to seek this approval before registration begins.

Credit Limits

- Fall semester: 16 credits
- January term: 4 credits
- Spring semester: 16 credits
- Summer term: 8 credits (4 credits per summer session)

Students on academic probation may register for no more than 16 credits.

Adding Courses/Dropping Courses

A student must consult with his/her faculty mentor and associate dean of academics to add and/or drop a course because it impacts financial aid and progress toward degree completion.

Note: DFC students may not withdraw from individual courses.

Withdrawing

Dougherty Family College students should immediately consult with their faculty mentors and associate dean of academics when thinking about withdrawing from all classes. Students may withdraw from the university (that is, withdraw from all classes) at any time by contacting the Academic Counseling & Support Office, but should use the Murphy Online process or paper Drop/Add form to withdraw their class registrations as soon as they decide to take that action. The standard withdrawal calendar as defined in the Changes in Registration section determines how the withdrawal will be recorded on the transcript. Students who withdraw from all classes must return any items that belong to the university (e.g., laptop computer and accessories, metro pass, etc.). Tuition refunds, if any, are established by the tuition refund schedule posted in the section on conditions determining tuition refunds.

New Student Scheduling

New Students will be assigned a faculty mentor and receive their class schedule during their mandatory Summer Enrichment Program.

Retaking a Course

A student may retake a course if her or his grade or mark is F, R, D-, D, or D+. If the course is retaken at St. Thomas, only the higher grade will be used to compute the GPA. Credit will not be given more than once for the same course. Both notations, however, will remain on the transcript.

If the course is retaken elsewhere, the student must obtain preapproval from the relevant department to confirm that the course is equivalent to the course originally taken at St. Thomas.

If the student earns a C- or higher after taking the off-campus course, the course can transfer to St. Thomas to fulfill a requirement, but credit will not be given for the course the second time and the St. Thomas grade will not be replaced in the GPA. Both notations, however, will be included on the transcript.

Note: DFC does not allow students to take required courses at another university.

Attendance

Students are expected to attend the first class meeting of a course for which they are registered. Thereafter, regular attendance at classes is expected and required. Instructors will take attendance in all classes. While instructors have the authority to drop

a student from a class if the student does not attend on the first day, students cannot assume that this will happen and are responsible for following the appropriate steps to withdraw from a course they do not attend. Non-attendance or minimal attendance of a class does not justify a tuition refund for the course if the instructor does not drop the student from a course and the student does not withdraw using Murphy online or the Add/drop form.

Excused Absence

Students have the responsibility to attend their classes and complete their coursework. If a student wishes to be excused from the equivalent of two class sessions per semester due to illness, a family or parenting-related emergency, it is the responsibility of that student to inform his or her instructor(s) of the absence as soon as possible.

In the case of numerous and excessive absences (total absences amounting to three class sessions per semester), students must meet with their instructors and faculty mentors to inform them of the situation responsible for the absences as soon as possible and comply with verification requests/requirements that the instructors and faculty mentors may have. Instructors should use their own discretion to determine whether the absences warrant a grade penalty, an incomplete status, a recommendation of withdrawal from the course, or the completion of coursework missed (or an appropriate equivalent) without grade penalty for late submission.

If the student misses four class sessions. The student will need to meet with the instructors, faculty mentors, and the associate dean of academics to create an action plan to address the excessive absences.

Admission Information- Baccalaureate

Information & Visits

All correspondence and telephone calls concerning undergraduate admission should be directed to:

Office of Admissions
University of St. Thomas
2115 Summit Avenue, Mail 5017
St. Paul, Minnesota 55105-1096.
Phone: (651) 962-6150 or (800) 328-6819
ext. 2-6150
e-mail: admissions@stthomas.edu

When writing, inquirers should be sure to include their full name, address with zip code and telephone number.

The Office of Admissions is located in 256 Murray-Herrick Campus Center (MHC). It is open from 8 a.m. to 4:30 p.m., Monday through Friday, and 9 a.m. to noon on select Saturdays during the academic year. Admission counselors and scheduled tour times are available during those hours. Please contact the Office of Admissions for an appointment.

Admissions Policies

The University of St. Thomas is an equal opportunity educator and employer. St. Thomas does not unlawfully discriminate, in any of its programs or activities, on the basis of race, color, creed, religion, national origin, sex, sexual orientation, family status, disability, age, marital status, status with regard to public assistance, membership or activity in a local commission, genetic information, or any other characteristic protected by applicable law. The university's policy of nondiscrimination extends to all aspects of its operations, including but not limited to, employment, educational policies, admissions policies, scholarship and loan programs and all other educational programs and activities.

For more information, please see our site: Equal Opportunity Statement: https://www.stthomas.edu/policies/equal-opportunity/index.html

The University of St. Thomas is registered with the Minnesota Office of Higher Education pursuant to sections 136A.61 to 136A.71. Registration is not an endorsement of the institution. Credits earned at the institution may not transfer to all other institutions. Contact information for the Minnesota Office of Higher Education is:

1450 Energy Park Drive, Suite 350
St. Paul, MN 55108-5227

Phone: (651) 642-0567
Toll Free: (800) 657-3866
Fax: (651) 642-0675
https://www.ohe.state.mn.us/

Admissions Standards

It is recommended that an applicant's high school transcript include four units in English, four units in one foreign language, four units of mathematics (three units required), two units in natural sciences and two units in history or the social sciences.

Graduates of accredited high schools are admitted on the basis of their grade point average (GPA), academic rank in their graduating class (if applicable), and college preparatory course selection. St. Thomas is a test-optional institution. Students may choose to submit their Scholastic Aptitude Test (SAT) or the American College Test (ACT), but they are not required. Students are also encouraged to submit an optional essay and letters of recommendation with their application.

The university's SAT code number is 6110. The ACT code number is 2102.

Students with a Graduate Equivalency Diploma (GED) should submit the GED, including scores, in addition to their high school transcript.

Application Procedures

Candidates for admission should complete the following steps.

1. The official undergraduate application for admission is available at Application Portal and the Common App (www.commonapp.edu).
2. The admissions committee considers each student's academic record, essay, and recommendations, if applicable. Depending on the Admission Type to which you applied - Early Action or Regular Decision - applications are reviewed by the Admissions Committee and decisions announced at the respective notification date.
3. Each accepted applicant should make a $400 confirming deposit to reserve a place in the class and in university housing. This deposit is refundable when requested in writing by May 1 prior to the fall semester of admission. Spring students should inquire about the deposit and refund date.
4. First-year students are required to live on campus their first and second years at St. Thomas unless they are granted an exception to this policy. Transfer students may also have a residency requirement. Residence Life can provide additional information about the policy and the exception process.
5. Each confirmed student is required to provide a final, official high school transcript after graduation prior to your assigned registration date for the second term that you are enrolled at St. Thomas. An official high school transcript must provide the date of high school graduation and come directly from the high school. If the official transcript is not received by this deadline, you will have a registration hold placed on your account that will prevent you from registering for future terms. Additionally, students who choose to have their test score considered as part of their admission application and submit a self-reported standardized test score at time of application will also be required to submit the official test score prior to the first day of classes.

All students born after 1956 who are enrolled in a Minnesota public or private college or university are required by Minnesota law to be immunized against diphtheria, tetanus, measles, mumps and rubella. These immunizations must have been done within a certain time frame. Questions about this requirement and exemptions allowed for by the law should be addressed to Health Services. Details about providing this information can be found at: Immunization Information: https://www.stthomas.edu/center-for-well-being/health-requirements/immunizations/

Credit for Prior Learning

Credit for prior learning (CPL) means academic credit that is awarded to students who successfully demonstrate college-level learning outcomes achieved through previous experiences other than coursework at postsecondary educational institutions. The University of St. Thomas has a CPL policy applicable to both undergraduate and graduate students. Students are responsible for reading and understanding the CPL policy: See **Appendix 3** https://www.stthomas.edu/about/departments/general-counsel/policy-pdfs/credit-for-prior-learning-policy.pdf

The specific CPL methods for undergraduate students along with the academic units that provide these methods are described below.

Note: If a student has a high-enough test score (e.g., AP, CLEP – see our policies below) that they took as part of a dual enrollment course, the student will only get credit for the test score.

Advanced Placement Credits

Students who meet the conditions described in this section for an Advanced Placement (AP) Examination will receive four credits and an "S" grade. This examination must be taken prior to matriculation to a college or university.

African American Studies - A score of 3 or higher equals AMCD 199 (will qualify as an elective for the AMCD major/minor)

Art History – A score of 3 or higher equals ARTH 199 (may fulfill Fine Arts requirement; evaluation based on individual course basis)

Biology – A score of 4 or higher (non-Biology majors) equals BIOL 101. Students intending to major in Biology or related programs who earn a score of 4 equals BIOL 101. BIOL 101 fulfills a core lab science, but will not fulfill a major field requirement in Biology or related programs. Students intending to major in Biology or related programs who earn a score of 5 equals BIOL 243 and fulfills 4 credits towards the Biology major.

Chemistry – A score of 3 or higher may equal CHEM 100 (fulfills Natural Science core requirement), depending on laboratory experience, at the discretion of the chair of the department. A score of 4 or higher may equal CHEM 111 (fulfills Natural Science core requirement), depending on laboratory experience, at the discretion of the chair of the department.

Students will be required to present both coursework from class as well as lab work that includes, but is not limited to, lab notebook, lab reports, experiments, experimental procedures, completed exams, and syllabi.

Chinese – A score of 3 equals CHIN 211 (fulfills Language and Culture requirement); A score of 4 equals CHIN 212; A score of 5 equals CHIN 300

Computer Science – A score of 4 or 5 in Computer Science A equals CISC 130 or 131

Economics – A score of 4 or higher in macroeconomics equals ECON 251; A score of 4 or higher in microeconomics equals ECON 252 (either course fulfills Social Scientific Analysis requirement)

English – A score of 4 or higher in English Language/ Composition equals ENGL 199 (does not fulfill the English requirement); A score of 4 or higher in English Literature/ Composition equals ENGL 121 (fulfills the English requirement)

Environmental Science – A score of 4 or higher equal ESCI 132 and will fulfill the Natural Science core requirement.

French – A score of 3 equals FREN 211 (fulfills Language and Culture requirement); A score of 4 equals FREN 212 (fulfills Language and Culture requirement); A score of 5 equals FREN 300 (fulfills Language and Culture requirement); A score of 3 or higher in French Literature equals FREN 309 (this will count towards the major or minor in French)

Geography – A score of 3 or higher in Human Geography equals GEOG 111 (fulfills Social Scientific Analysis requirement)

German – A score of 3 equals GERM 211 (fulfills Language and Culture requirement); A score of 4 equals GERM 212 (fulfills Language and Culture requirement); A score of 5 equals GERM 300 (fulfills Language and Culture requirement)

History – A score of 4 or higher in European History equals HIST 199 (counts as an elective toward graduation) A score of 4 or higher in U.S. or World History equals HIST 100 (fulfills the Historical Analysis requirement)

Italian – A score of 3 equals ITAL 211 (fulfills Language and Culture requirement); A score of 4 equals ITAL 212 (fulfills Language and Culture requirement); A score of 5 equals ITAL 300 (fulfills Language and Culture requirement)

Japanese – A score of 3 equals JAPN 211 (fulfills Language and Culture requirement); A score of 4 equals JAPN 212 (fulfills Language and Culture requirement); A score of 5 equals JAPN 300 (fulfills Language and Culture requirement)

Latin – A score of 3 or higher equals LATN 212 (fulfills Language and Culture requirement)

Mathematics – A score of 3 or higher in Calc AB = MATH 113 (fulfills Quantitative Analysis); A score of 4 or higher in Calc BC = MATH 113 & 114; AB subscore of 3 or higher in Calc BC = MATH 113.

Music Theory – A score of 3 or higher may be the equivalent of MUSC 113 and a score of 4 or higher may be the equivalent of MUSC 114, however, all students who wish to transfer AP credits are required to take the music theory placement test for official placement. Review sheets and information on taking the test are available from the music department office (does not fulfill Fine Arts requirement)

Physics – Physics B: A score of 3 equals PHYS 101 (satisfies Natural Science requirement); A score of 4 or 5 equals PHYS 109-110 (satisfies Natural Science requirement);

Physics Physics B: A score of 3 equals PHYS 101 (satisfies Natural Science requirement); A score of 4 or 5 equals PHYS 109-110 (satisfies Natural Science requirement);

Physics C1 -Mechanics: score of 3 equals PHYS 101 (satisfies Natural Science requirement); A score of 4

or 5 equals PHYS 211 (satisfies Natural Science requirement); Physics C2 -Electricity and Magnetism: A score of 3 or 4 equals PHYS 199 (satisfies Natural Science requirement); A score of 5 equals PHYS 212 (satisfies Natural Science requirement)

Physics 1: A score of 3 equals PHYS 101 (satisfies Natural Science requirement); A score of 4 or 5 equals PHYS 109 (satisfies Natural Science requirement)

Physics 2: A score of 3 equals PHYS 100 (satisfies Natural Science requirement); A score of 4 or 5 equals PHYS 110 (satisfies Natural Science requirement)

Political Science – A score of 4 or higher in United States Government and Politics equals POLS 199 (does not fulfill Social Scientific Analysis requirement). A score of 4 or higher in Comparative Government and Politics equals POLS 104 (fulfills Social Scientific Analysis requirement).

Precalculus – A score of 4 or higher equals MATH 105 and placement into MATH 113. A score of 3 receives no credit but placement into MATH 108.

Psychology – A score of 4 or higher equals PSYC 111 (fulfills Social Scientific Analysis requirement)

Spanish Language and Culture – A score of 3 equals SPAN 211 (fulfills Language and Culture requirement); A score of 4 equals SPAN 212 (fulfills Language and Culture requirement); A score of 5 equals SPAN 300 (fulfills Language and Culture requirement)

Spanish Literature – A score of 5 equals SPAN 335 (this will count towards the major or minor in Spanish)

Statistics – A score of 4 or higher in Statistics equals DASC 111. If the AP course included a substantial statistical software component, the student should petition the Data Science Program Director to evaluate whether it is equivalent to DASC 120 (which would fulfill the Quantitative Analysis requirement).

Studio Art – A score of 3 or higher in Studio Art equals ARTS 199 (does not fulfill Fine Arts requirement)

AP Seminar - A score of 4 or higher equals IDSC 199 and will count as 4 elective credits with an S grade. There may be instances where these credits would satisfy a major or minor requirement. For programs that would accept these credits, students must consult with the chair of the relevant department to determine if the seminar experience meets the learning outcomes of a required course in the major or minor. During this consultation, students may be asked to submit a syllabus and/or coursework to the department for review.

AP Research - A score of 4 or higher equals IDSC 199 and will count as 4 elective credits with an S grade. There may be instances where these credits might satisfy a major or minor requirement. For programs that would accept these credits, students must consult with the chair of the relevant department to determine if the seminar experience meets the learning outcomes of a required course in the major or minor. During this consultation, students may be asked to submit a syllabus and/or coursework to the department for review.

Cambridge International A Levels

Course	Grade	UST Equivalent Credits Awarded
Accounting (9706)	A, B, or C	ACCT 210 and 215 (8 cr) ACCT 100 and 200 (2019 curriculum)
Biology	A, B, or C	BIOL 207
Business		MGMT 199 (8 cr) BUSN 100 (2019 curriculum)
Chemistry	A, B, or C	CHEM 111, 112 and 201 CHEM 111 and 112
Computer Science	A, B, or C	8 credits of CISC 199
Economics	A, B, or C	ECON 251 and 252 (8 cr)
English Language	A, B, or C	ENG 199 (4 cr)
Geography	A, B, or C	GEOG 111 *Human Geography* and GEOG 113 *Globalization & World Regions*.
History	A, B, or C	HIST 199 (8 cr)
Literature in English	A, B, or C	ENG 121 (4 cr)
Math	A, B, or C	MATH 199 (8 cr)
Math, Further	A, B, or C	2019: Math 298 and Math 240. Math 298 does not count towards the math minor. 2020 and 2021: Math 114 and 210. AS level exam Math 198
Math, Pure	A, B, or C	Math 113 (for AS level if students pass P1 and P2 papers).

		For A level passing P1 and P3 is equivalent to Math 113.
Physics	A, B, or C	PHYS 109 and 110 (8 cr). Is not suitable for students with physics or engineering majors.
Psychology	A, B, or C	PSYC 111 and PSYC 199 (8 credits)
Sociology	A, B, or C	SOCI 199. Can meet Social; Scientific Analysis requirement.

College Level Examination Program (CLEP)

The College Level Examination Program (CLEP) was conceived to serve post-secondary students who have acquired certain kinds of knowledge outside the usual formal educational channels. Students must take CLEP examinations before or during the first semester of college work to receive credit for the CLEP examination from St. Thomas.

Business – A score at the 50th percentile or above in Principles of Marketing=MKTG 200 (fulfills requirement in Business Major.) No other CLEP Exams in Business will earn St. Thomas credit.

English Literature/Composition – A score at the 50th percentile or above in any English Literature or Composition exam will earn ENGL 199 (does not fulfill the English requirement.)

History – A score at the 50th percentile or above in History of the United States I=HIST 113, History of the United States II=HIST 114 (both fulfill the Historical Analysis requirement.) History exams in other areas with a score of 50% or higher need to be evaluated by the department chair.

Mathematics – Students who receive a score greater than 50% on the College Mathematics exam will receive credit for MATH 101 Finite Mathematics (fulfills the core requirement in Quantitative Analysis).

Modern and Classical Languages – No credit will be assigned for the CLEP exam in foreign languages.

Natural Sciences – CLEP Examinations that include Biology, Chemistry and Natural Sciences do not fulfill the laboratory science requirement; A score at the 50th percentile or above will earn elective credit.

Social Sciences – A score at the 50th percentile or above in the following social sciences will earn 4 credits in the following subject areas

CLEP Exam	St Thomas Credit
Princ of Macroecon	ECON 251 (fulfills Social Scientific Analysis)
Princ of Microecon	ECON 252 (fulfills Social Scientific Analysis)
Introductory Psyc	PSYC 111 (fulfills Social Scientific Analysis)
Introductory Soc	SOCI 100 (fulfills Social Scientific Analysis)

Department Examinations

Certain departments in the undergraduate program allow students to obtain credit for specific courses if they can demonstrate that they have mastered the content and method of the courses in question. Those interested in seeking credit in this fashion should contact the department chair of the appropriate department.

The examining faculty member offers no special instruction to the student except to furnish the syllabus of the course. If this is unavailable or of insufficient assistance to the student, the course should be taken as a regular semester offering or on an Individual Study basis.

A student may attempt to earn credit by examination only once for a particular course. Grades for courses taken in this way are usually given on an S/R basis unless the department has decided that a letter grade should be awarded.

Only courses for which credit is awarded will be posted on the transcript. A fee is charged for administering the examination.

The following departments offer the availability of credit by examination for selected courses. Departments not included in the list do not offer any courses under this option.

Business – Examinations may be given with the consent of the chair of the department. Contact the department with questions.

Chemistry – Examinations may be given for CHEM 111 and/or CHEM 112, at the discretion of the chair of the department.

Computer and Information Sciences – The Department of Computer and Information Sciences offers a "Credit by Exam" option to allow students the opportunity to earn course credit for one of the

following four entry-level computing courses at UST:

- CISC 130: Introduction to Programming and Problem Solving in the Sciences
- CISC 131: Introduction to Programming and Problem Solving
- CISC 200: Introductory Computer Technology and Business Applications
- DASC 120: Introduction to Computational Statistics

There will be a unique exam for each course that will evaluate students relative to the specific concepts and skills that are the focus of that particular course. Students will need to obtain a score of at least 80% to receive credit for the course.

Each exam costs $150, payable to the Business Office. An exam may only be taken once; retakes are not permitted.

Engineering – Examinations may be given for all courses, if circumstances warrant it, with the exception of:

- ENGR 480 Engineering Design Clinic I
- ENGR 481 Engineering Design Clinic II

Each case will be considered individually by the department chair.

English – Under extraordinary circumstances, with the consent of the department chair, credit by examination may be sought for English courses with the following exceptions:

- ENGL 121 Critical Thinking: Literature and Writing
- ENGL 201 Text in Conversation: Perspectives on Genre and Craft
- ENGL 202 Texts in Conversation: Interdisciplinary Perspectives
- ENGL 203 Texts in Conversation: Thematic and Intertextual Perspectives
- ENGL 204 Texts in Conversation: Perspectives on Language, Culture, and Literacy
- ENGL 300 Theory and Practice of Writing
- ENGL 421/422 Literary Magazine Practicum
- ENGL 481 or ENGL 482 Capstone Seminar

Geology – GEOL 111 Introductory Geology I

Mathematics – A departmental examination is available for MATH 113 Calculus I with the following qualifications:

- A score of 0 - 59 = no credit;
- A score of 60 -79 = no credit but MATH 113 will be waived as a prerequisite;
- A score of 80 - 100 = credit for MATH 113

Modern and Classical Languages--Examinations may be given for certain courses. Each case will be considered individually by the department chair.

International Baccalaureate

All exams with the exception of foreign languages, must be taken at the higher level. Students who pass the higher level International Baccalaureate (IB) Examination(s) in subjects included in the St. Thomas curriculum with a score of 4 or higher will ordinarily receive 4 credits toward graduation. The specific courses for which credit would be awarded will be determined by the appropriate academic department.

Following is a list of guidelines according to which credit may be obtained through the higher level IB exam in specific departments.

Credit awarded will be assigned an "S" grade (satisfactory).

Biology-- A score of 5 or higher (non-Biology majors) equals BIOL 101. Students intending to major in Biology or related programs who earn a score of 5 equals BIOL 101. BIOL 101 fulfills a core Natural Science requirement, but will not fulfill a major field requirement in Biology or related programs. Students intending to major in Biology or related programs who earn a score of 6-7 equals BIOL 243 and fulfills 4 credits towards the Biology major.

Chemistry-- A score of 4 or higher usually equals CHEM 111. Students with scores of 5 or above should consult with the department chair. Students should consult with department chair if they intend to major in science, especially chemistry.

Economics--A score of 5 or higher on the Higher Level examination equals ECON 251 (fulfills the Social Scientific Analysis requirement).

English--A score of 4 or higher equals ENGL 121 (fulfills 4 credits toward the English requirement).

Foreign Language--Foreign language credit is dependent on the results of the St. Thomas departmental language placement exam typically administered during freshman orientation. Once a language placement exam result is known, IB credit will be granted with a score of 4 or higher.

UST Exam Result	IB Credit Earned
300	212 (fulfills Lang & Culture)
212	211 (fulfills Lang & Culture)
211	112
112	111
111	119 (elective)

History-- A score of 4 or higher in European History equals HIST 199 (with the discretion of the department chair, may fulfill Historical Analysis requirement.) A score of 4 or higher in History of Americas equals HIST 100 (fulfills the Historical Analysis requirement.) A score of 4 or higher in History: Africa equals HIST 100 (fulfills the Historical Analysis requirement.)

Mathematics-- A score of 6-7 on the IB Mathematics: Analysis and Approaches (AA) HL exam gives credit for both MATH 113 and MATH 114. A score of 5 on the IB Mathematics AA HL exam gives credit for MATH 113 and students are encouraged to take the credit by examination test to receive credit for MATH 114. A score of 3-4 on the IB Mathematics AA HL gives students automatic placement into MATH 113, and students are encouraged to take the credit by examination test to receive credit for MATH 113. A score of 5 or higher on the IB Mathematics: Applications and Interpretation (AI) HL exam gives credit for MATH 113. Students with a 7 on either the IB Mathematics: AA standard level (SL) or IB Mathematics: AI SL exam get automatic placement into MATH 113.

Physics--A score of 4 or higher will be considered for the awarding of credit on a case by case basis.

Psychology--A score of 5 or higher equals PSYC 111

Theater--A score of 4 or higher equals THTR 111 (fulfills the Fine Arts requirement).

Minnesota Bilingual Seals

The Department of Modern and Classical Languages recognizes the Minnesota Bilingual Seal as an indicator of language and culture placement or proficiency (depending on the level of the MN seal that a student attains) for the languages that we offer at St. Thomas.

While we do not grant college credit for the MN Bilingual Seal, we accept the MN Bilingual seal in the following way:

- MN World Language Proficiency: placement in to 211
- MN World Language Gold Seal: placement into 212, satisfies the Language and Culture core requirement
- MN World Language Platinum Seal: placement into 300 (for the languages for which 300 exists), satisfies the Language and Culture core requirement.

Waiver of Credits

A waiver of credits does not add any credits to the student's transcript. For example, if a student tests out of the Language and Culture requirement for the core curriculum, a waiver will be noted on the degree evaluation, but no credits are awarded.

International Students

The university welcomes and encourages prospective international students to apply for admission.

International students are classified as students applying for admission to the university who will need to have or already possess a visa to enter the United States. Admission is competitive and requires:

- Application and optional essay
- Secondary school official records with very good to excellent scores
- Proof of English proficiency: https://www.stthomas.edu/admissions/international-students/english-proficiency/index.html
- Additional items may be found at International Application Process: https://www.stthomas.edu/admissions/international-students/application-information/index.html

Priority deadline for applications is January 15.

The University of St. Thomas has international student scholarships available for students with outstanding merit. To qualify for consideration, students must submit a complete University of St. Thomas international student admissions

application. To learn more about international student scholarships, visit our Scholarships page: https://www.stthomas.edu/financial-aid/undergraduate/scholarships/index.html.

For more information, or to arrange to visit, please contact:

International Admissions
https://www.stthomas.edu/admissions/international-students/index.html
University of St. Thomas
MHC 212 Mail 5014
2115 Summit Avenue
St. Paul, MN 55105-1096.

international@stthomas.edu
(651) 962-6650

Non-Degree Students

Non-degree-seeking undergraduate students are individuals who complete courses at St. Thomas without intending to apply any credits earned from those courses toward a degree from St. Thomas. There are three categories of non-degree-seeking undergraduate students: (1) students enrolled in courses via established, university-approved agreements or partnerships; (2) high school students; and 3) all other non-degree-seeking students. Students in the latter two categories of non-degree-seeking students are not eligible for institutional scholarships or federal or state financial aid. All students at St. Thomas, including non-degree-seeking students, are required to follow all academic and non-academic student policies. Academic and disciplinary sanctions including probation, suspension, or dismissal apply to non-degree-seeking students.

(1) Non-degree-seeking students who are attending St. Thomas via university-approved agreements or partnerships are subject to the admission procedures, credit limits, and registration times determined by the agreement or partnership in which they are participating. These students include, but are not limited to, international exchange students and Catholic Enrollment Options students. (St. Thomas does not participate in the Postsecondary Enrollment Options (PSEO) program through the state of Minnesota.)

(2) High school students request approval to take courses at St. Thomas through the Office of Admissions. To be eligible to take courses, they must be a Junior or Senior (or its equivalent) in high school, submit a high school transcript showing a cumulative GPA of 3.5 (weighted if applicable), have an appropriate school administrator submit a Statement of Support Form, and have a parent/guardian submit a Consent Form if the student is under 18 years of age. High school students begin registration five days before the start of each term on a space-available basis. They are limited to enrolling for eight credits during each of the fall and spring semesters, four credits during the January-term, and a combined total of 16 credits during the summer sessions. If a course has prerequisite requirements, high school students may enroll in that course only if they meet all the requirements. Although high school students are not classified as first-year, sophomore, junior, or senior, any courses they complete are part of their permanent postsecondary academic record. High school students who wish to pursue a degree program after high school graduation must make a formal application for admission through the Office of Admissions. For these students, like all other non-degree students below, a maximum of 24 credits taken at St. Thomas may be applied toward a St. Thomas degree program.

(3) All other non-degree students not included in the previous two categories, request approval to take courses at St. Thomas through the Office of Student Data and Registrar. Although they are not seeking a degree, St. Thomas will verify their previous academic enrollment through the National Student Clearinghouse or through a copy of their high school transcript or diploma. These non-degree students begin registration five days before the start of each term on a space-available basis. They are considered non-degree-seeking undergraduate students and are not classified as first-year, sophomore, junior, or senior. These non-degree students are limited to enrolling for eight credits during each of the fall and spring semesters, four credits during the January-term, and a combined total of 16 credits during the summer sessions. A non-degree student who wishes to change status and pursue a degree program must make a formal application for admission through the Office of Admissions. For these students, a maximum of 24 credits taken at St. Thomas may be applied toward a St. Thomas degree program.

Readmission Policies

A student who was formerly enrolled in the university, but is not currently attending, must request reinstatement by calling or writing to Academic Counseling at St. Thomas. The student will be reinstated if the University Student Data & Registrar's verifies that the student left St. Thomas in good academic standing, and if the student is eligible to return to the university as certified by the Dean of Student Life.

However, if the student has been enrolled at another college or university since their last term of enrollment at St. Thomas, an official transcript and a completed Code of Conduct form must be submitted to St. Thomas from that institution. The student will then be reinstated if the transcript indicates work of a C average or better and the Code of Conduct form indicates the student left that institution in good standing.

A student who discontinues his/her enrollment in the university for four consecutive academic years must re-enroll under the terms of the catalog in effect at the time of re-enrollment.

Transfer Application Procedures

Candidates for transfer admission should complete the following steps:

1. Apply for admission. The official undergraduate application for admission is available at our Application Portal and the Common App.

2. Submit high school and college transcripts. Transcripts are required from ALL schools and institutions a student has attempted credits from -including PSEO or dual-enrollment credits and/or your Joint Services Transcript from the military. Unofficial transcripts will be accepted for the admission process, but official transcripts will be required if a student enrolls.

    - A high school transcript is only required from transfer students who have completed fewer than 24 transferable college-level semester (36 quarter) credits after graduating from high school or receiving a High School Equivalency Diploma.

3. Complete the Code of Conduct form (if required). The form collects information about the applicant's disciplinary and behavioral history. Students complete the top half of the form, then have their current or most recent institution complete the bottom half before returning it to the St. Thomas admission office.

    - Students actively serving in the military with no college or university background can have their commanding officer complete the bottom portion of the Code of Conduct Form.
    - Military Veteran Students with no college or university background can submit a copy of their DD 214. The DD 214 must list the reason for separation and the type of discharge from the military.

Previous college work and other academic information will be reviewed as part of the admission decision. All college-level coursework, regardless of grade, is considered in the admission review process. Transfer admissions decisions are released on a rolling basis for both spring and fall application periods.

If admitted, transfer students will also be asked to complete a prior delinquency/criminal history review. Admitted students will be contacted about this review after an offer of admission is extended. All offers of admission are contingent on successful clearance of the prior disciplinary and delinquency/criminal history review, as determined solely by St. Thomas.

Each admitted applicant should make a $200 confirming deposit to reserve a place in the class. Transfer students interested in university housing should make an additional $200 housing deposit.

- Transfer students who completed less than a year of college coursework after high school graduation may be required to complete our residency requirement. Residence Life can provide additional information about the policy and the exception process.
- University housing is not guaranteed for transfer students and is awarded on a first-come, first-served basis.
- Transfer students should contact Undergraduate Admissions about the Confirming and Housing deposit refund date for both fall and spring semesters.

Transfer students who enroll at the university must submit all official final transcripts, including high school transcript(s) (if required), before registering for their second semester of courses at St. Thomas.

Transfer students must fulfill the core curriculum requirements, maintain a GPA of 2.00 in courses taken at St. Thomas, and successfully complete 32 of their last 36 credits at the University.

Only coursework in which the student earned a grade of C- or higher from a regionally accredited college/university will be recognized for credit at St. Thomas. Please see our Credit Transfer page, to

determine if your college/university has regional accreditation.

To stay within enrollment goals, the University reserves the right to adjust published admission applications and standing deposit deadlines when necessary.

Students interested in transferring to the University should contact the Office of Admissions at (651) 962-6150 or (800) 328-6819 ext. 2-6150, or admissions@stthomas.edu.

Veteran Student Admissions

The School Certifying Official in the Office of Student Data and Registrar acts as a liaison between the Dept. of Veterans Affairs and students eligible for VA education benefits. Each student's enrollment for fall and spring semester is automatically certified prior to the start of the term to ensure benefits are received from the VA in timely manner.

The Veterans Resource Center is a gathering place for St. Thomas veterans where they can connect with other veterans, receive academic and career service support, and find information about educational and other resources available to veterans and their families. Veterans Services' mission is to equip each military-affiliated student with the necessary means to succeed at the University of St. Thomas, and beyond, assisting him or her to become "morally responsible leaders who think critically, act wisely, and work skillfully to advance the common good".

For Post 9/11 GI Bill® (Ch 33) students and VA Vocational Rehabilitation and Employment (Ch 31) students, our tuition policy complies with 38 USC 3679(e) which means Post 9/11 and Vocational Rehabilitation and Employment students will not be charged or otherwise penalized due to a delay in VA tuition and fee payments. For eligibility consideration, a Post 9/11 GI Bill student must submit a VA Certificate of Eligibility (COE) and a Vocational Rehabilitation Student must provide a VAF 28-1905 form.

Academic Policies, Processes, and Resources-Baccalaureate

Academic Honors

Aquinas Scholars

The Aquinas Scholars Honors Program is the undergraduate honors program of the University. The program's mission is to enrich the educational experience of academically motivated students by creating a community of scholars dedicated to academic excellence and the ideals of a liberal arts education.

Incoming first-year Aquinas Scholars are required to take four honors courses and three interdisciplinary honors seminars on the standard grading system. Program requirements may be reduced based on incoming credits, DFC transition, or transfer status.

Aquinas Scholars honors courses and honors seminars emphasize depth of learning and encourage discussion. Honors courses or "sections" are distinctive from non-honors courses due to a substantially smaller class size, faculty recognized for excellence in teaching, and an increased focus on student participation and in-depth examination of topics.

Aquinas Scholars honors seminars bring together instructors or topics from different areas of study and students from a variety of disciplines to approach a topic of intellectual interest. This seminar format provides students the opportunity to situate themselves within a broader intellectual community. There is no additional tuition cost for the honors seminars.

The Aquinas Scholars Honors Program also sponsors a variety of co-curricular and extracurricular activities. All St. Thomas undergraduate students maintaining a 3.6 grade point average or higher are eligible to apply to the program. Continuing, transfer, and DFC students must have sufficient courses remaining in their degree plan to complete the program requirements.

For further information, contact Dr. Hugh Smeltekop, Director of the Honors Program, or the program email at aquscholars@stthomas.edu.

Dean's Honor List

A student who attains a grade point average of 3.50 or more at the end of a semester in which they have taken at least twelve credits for regular grades (A, B, C) will be placed on the Dean's Honor List if there are no grades of D or F or marks of I or R. (Evening program students must have taken at least eight credits in a semester and meet the same requirements.

The list is made public and the student receives an e-mail letter of commendation from the Associate

Vice Provost for Undergraduate Student Achievement.

Delta Epsilon Sigma

Delta Epsilon Sigma, a national honor society for students enrolled in Catholic colleges and universities, was established at St. Thomas in 1941. Students become eligible for membership in their junior year. St. Thomas students are admitted into the national organization of Delta Epsilon Sigma after they have been admitted into the University of St. Thomas Alpha Sigma chapter and are nominated for membership in the national organization.

Senior candidates must have earned a cumulative grade point average of 3.50, while junior candidates must have a cumulative 3.75 grade point average. In the case of transfer credits, the St. Thomas grade point average must also satisfy the minimum requirement, with a minimum of twelve St. Thomas credits taken for letter grade. Graduate students are eligible for membership upon completion of one-half of their master's degree requirements. Alumni are eligible if they have graduated with honors or have received a graduate degree.

Student members receive the Delta Epsilon Sigma Journal published by the national society three times each year. In addition, student members may submit articles for publication to the Journal, and apply for senior year and graduate school scholarships. Induction ceremonies are held in the spring semester each year.

Members enjoy the following privileges: no restriction on class loads, attendance as guests of the university at special academic functions, and silver cords for commencement.

Department/College/School Honor Societies

A number of departments offer membership in an honor society for the particular discipline. Each of these is explained in more detail in the description of the department's offerings in the Curricula section of this catalog.

- Aerospace Studies - Arnold Air Society
- Biology –Gamma Tau chapter of Beta Beta Beta
- Busines - Beta Gamma Sigma
- Communication Studies – Beta Chi chapter of Lambda Pi Eta
- Economics – Omicron Delta Epsilon
- English – Sigma Tau Delta
- German - Delta Phi Alpha
- Geography – Mu Alpha Pi
- History – Phi Alpha Theta
- Neuroscience - Nu Rho Psi
- Nursing – Sigma theta Tau
- Political Science – Chi Theta chapter of Pi Sigma Alpha
- Psychology – Psi Chi
- Religious Studies and Theology – Theta Alpha Kappa
- Social Work – Epsilon Zeta Eta Chapter of Phi Alpha
- Sociology and Criminal Justice – Iota chapter of Alpha Kappa Delta
- Women, Gender, & Sexuality Studies - Iota Iota Iota

Latin Honors

Three types of academic honors are conferred upon graduates of the undergraduate program.

All students considered for graduation with Latin honors have a minimum of 52 credits taken for letter grade (A, B, C, D) at the University of St. Thomas.

All students eligible for Latin honors who have applied for graduation will be informed by the Office of the Associate Vice Provost for Undergraduate Student Achievement before mid-term of their final semester that they are eligible for this honor.

Cum Laude

A student whose overall cumulative grade point average and St. Thomas grade point average are both between 3.50 and 3.69 receives the baccalaureate degree Cum Laude.

Magna Cum Laude

A student whose overall cumulative grade point average and St. Thomas grade point average are both between 3.70 and 3.89 receives the baccalaureate degree Magna Cum Laude.

Summa Cum Laude

A student whose overall cumulative grade point average and St. Thomas grade point average are

both 3.90 or higher and who is judged to be outstanding by members of an Honors Oral Examination Committee receives the baccalaureate degree Summa Cum Laude.

Graduating with Summa Cum Laude Latin Honors is one of the highest honors bestowed by the University of St. Thomas and the examination process highlights the ability of students to make connections between diverse disciplines. The examination committee is composed of faculty members. The student should invite a full-time faculty member from the student's major department/program to chair the committee and obtain that faculty member's consent. A student with multiple majors may choose a faculty chair from any of their majors.

In consultation with the selected faculty chair, the student should invite two additional faculty members and obtain their consent to serve on the committee. The faculty chair is charged with ensuring that diverse disciplinary perspectives are represented. With the consent of the faculty chair, this group constitutes a three-person committee that represents three different programs and at least two academic areas of the undergraduate program. The two additional faculty members do not need to be full-time status, but they must be St. Thomas faculty members. In the case of faculty representing interdisciplinary programs (e.g., Family Studies, Neuroscience, etc.), the primary program appointment will determine eligibility (e.g., two from Neuroscience could serve on a summa committee as long as one member is from Biology and one from psychology). Questions about committee membership should be directed to the Associate Vice Provost for Student Achievement who oversees the Summa Committee process and is responsible for ensuring consistency in adherence to guidelines.

For the purposes of the Summa Cum Laude exam, the academic areas are:

1. The Division of Arts and Letters in the College of Arts and Sciences

    - Art History
    - Communication Studies
    - Emerging Media
    - Film Studies
    - English
    - Modern & Classical Languages
    - Music
    - Theatre

2. The Division of Catholic Studies, Justice and Peace Studies, Philosophy, and Theology in the College of Arts and Sciences

    - Catholic Studies
    - Justice and Society Studies (Justice and Peace Studies only)
    - Philosophy
    - Theology

3. The Division of Science and Mathematics in the College of Arts and Sciences, together with the School of Engineering and the Health & Exercise Science and Nursing Departments in the Morrison Family College of Health

    - Biology
    - Chemistry
    - Civil Engineering
    - Computer and Information Sciences
    - Earth, Environment, and Society (Geology and Environmental Science only)
    - Electrical and Computer Engineering
    - Health and Exercise Science
    - Mathematics
    - Mechanical Engineering
    - Nursing
    - Physics

4. The Division of Social Sciences in the College of Arts and Sciences, together with the School of Social Work in the Morrison Family College of Health

    - Earth, Environment, and Society (Geography and Environmental Studies only)
    - Economics
    - History
    - Justice and Society Studies (Sociology and Criminal Justice only)
    - Political Science
    - Psychology
    - School of Social Work

5. The Opus College of Business

    - Accounting
    - Entrepreneurship
    - Ethics and Business Law
    - Finance
    - Marketing
    - Management
    - Operations and Supply Chain Management

6. The School of Education.

In consultation with the faculty chair, the student should choose one of the following three options for structuring the examination, and then inform all faculty examiners which of these options has been selected. For any of the options, students may choose to use or modify papers or projects that are part of the portfolio for the Signature Work requirement.

1. The student selects a central theme for the examination and prepares a five-page paper on that theme, integrating the student's major field with the areas represented by the examiners and, to the extent possible, with the liberal arts more broadly. This paper will be sent by the student to the examiners at least one week prior to the examination date. This paper will be the focus of the examination.

2. The student selects a central theme for the examination and develops an outline of ideas on the theme, integrating the student's major field with the areas represented by the examiners and, to the extent possible, with the liberal arts more broadly. This outline will be made available to the examiners at the time of the oral examination and will be the basis of a twenty-minute oral presentation by the student, which will then become the focus of the remainder of the examination.

3. The student collects three exhibits to be included in a Summa Cum Laude portfolio, representing three disciplines. These exhibits might be papers, projects, lab reports, or other documents illustrating the student's academic achievement at St. Thomas. The exhibits should represent three distinct disciplines. The student also writes a five-page reflective essay that introduces the contents of the portfolio. The essay should explain the contexts in which the exhibits were produced, and why the student believes these materials provide a good picture of their academic achievements at St. Thomas. In addition, the essay should draw connections among the three exhibits, showing how they work together to illustrate intellectual depth, breadth, or growth. The student uploads these materials onto SharePoint in an electronic portfolio. Committee members will have access to these materials at least two weeks before the Summa Cum Laude examination. The three exhibits together with the essay will be the focus of the examination.

Further details concerning the examination will be sent to eligible students and the chairs of their departments by the Office of the Associate Vice Provost for Undergraduate Student Achievement.

If a student who is eligible to graduate Summa Cum Laude chooses not to take the Honors Oral Examination, the student will receive the Magna Cum Laude designation.

Academic Integrity

Students are responsible for reading, understanding, and adhering to the Undergraduate Student Academic Integrity Policy (See **Appendix 2**)

Academic Support-Baccalaureate

Academic Counseling

The Office of Academic Counseling serves as a resource and referral agent for both students and faculty.

Through one-on-one partnerships, academic counselors challenge undergraduate students to determine meaningful academic and life goals by encouraging them to reflect upon their educational experiences and achievements. The Academic Counseling staff offers special support to those students who are experiencing academic challenges, provides assistance with class registration, long term academic planning, individual assistance in study skills improvement, time management, test taking preparation, college reading techniques, and college survival skills.

Academic Development Program

The Academic Development Program (ADP) is a team-taught combination of courses designed to help incoming first year students develop proficiency in reading, writing, library and learning skills necessary for college success.

Students are invited to participate in this program if high school records and entrance exams (such as the ACT) indicate weakness in the areas of reading and writing.

Participants in the program register for twelve or sixteen credits in fall semester: ENGL 110 Intensive Writing; a companion course covering one of the core curriculum requirements; and one or two additional courses of the student's choice.

Academic Support Services for Athletes

Academic Support Services for Athletics (ASSA) provides ongoing academic counseling and support for student-athletes in the areas of first-year scheduling, academic compliance, creating four-year degree completion plans, academic planning for missed class time due to travel, and preparation for registration. ASSA staff are also responsible for monitoring and reporting NCAA progress-toward-degree each semester. Academic Counselors for Athletics act as a resource to connect student-athletes with the Career Development Center, Disability Resources, pre-professional programs, tutoring, study abroad, undergraduate research opportunities, as well as other resources on campus.

Center for Student Achievement (CSA)

The Center for Student Achievement is a collaboration between Academic Affairs and Student Affairs that intentionally integrates resources to empower students as they navigate academic and professional goals. Through the CSA, students can get assistance exploring majors and careers, connect with offices and programs that provide academic support, and learn about opportunities that will enrich their academic experience at St. Thomas. For more information, go to https://www.stthomas.edu/centerforstudentachievement/.

Center for Writing

Writers at all levels of experience use the Center for Writing. Through individualized conferences, peer consultants work with writers to help them focus, develop, and organize their ideas, and revise and edit their drafts. Students can seek assistance on any work in progress before they write, as they write, and after they write. Most writers bring course assignments, including analytical, research, and capstone papers. Those writing essays for application to graduate school or study abroad are also welcome.

The Center is staffed by peer consultants selected each spring through a rigorous application and interview process. The consultants do not edit or proofread, but instead help writers strengthen their approaches to all facets of the writing process.

Conferences with consultants are free and confidential.

Appointments should be made through our website. Online consultations are available through our website as well. For more information on our services, please contact the director, Dr. Susan Callaway, in JRC 361, 651-962-5601.

Consult the website for more information: Writing Center: https://cas.stthomas.edu/departments/areas-of-study/english/center-for-writing

Disability Resources

Students qualify for services from Disability Resources through self-disclosure of a disability. Reasonable academic accommodations are arranged on an individual basis to provide students with disabilities equal access to all university programs. The University of St. Thomas is committed to compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and the Americans with Disabilities Act Amendments Act of 2008.

English Language Consulting

English Language Consulting provides help for undergraduate multilingual and international students to improve language and academic skills. The ELC offers support for vocabulary development, grammar, reading comprehension, note-taking , speaking and listening skills, study skills, and other English as a Second/Additional Language concerns. More information is available through the Center for Student Achievement: https://www.stthomas.edu/center-for-student-achievement/index.html

Faculty Advisors

Full-time faculty members serve as advisors to all students. Faculty advisors assist students with class schedules and enrollment decisions each semester during their first and sophomore years. A student may officially declare an academic major after completing one semester of enrollment. When the student has been accepted as a major in a particular department, the guidance of her or his program is then transferred from the pre-major advisor to a departmental major field advisor. Major field advisors guide their advisees' progress toward a degree by reviewing grade reports and degree evaluations, assisting students with academic challenges, and consulting with them about career decisions.

Innovation & Technology Services

Innovation & Technology Services (ITS) is the University of St. Thomas' technology division. As part of its mission to connect and empower the St. Thomas community, ITS focuses on technology support, academic computing, process improvement, infrastructure services, and security. ITS is charged with developing initiatives that create and reflect best IT practices in higher education while supporting the University of St. Thomas' mission and strategic goals.

ITS provides a variety of software and services to students at no additional cost to support their academic and personal goals while at St. Thomas. All students receive a St. Thomas account upon acceptance to the university that includes email, file storage, on-campus printing, Microsoft Office suite for personal devices, and access to important university-wide systems that allow students to stay on top of their coursework, grades, and campus activities. The Tech Desk also offers free walk-up assistance for general troubleshooting on personal devices, including malware and virus removal.

For more information:
https://www.stthomas.edu/about/departments/innovation-technology-services/index.html

Math Placement Tutoring

All University of St Thomas students must complete at least one math course, as determined by their field of study. After registering for the math placement assessment, students may improve their math placement by working through the online prep and learning material tailored to the areas of math that most challenge them. At St. Thomas, any student who needs further assistance has access to the following free tutoring services:

1. Visit the Math Resource Center during open hours to work with peer tutors.
2. Schedule an appointment with the Math Placement Specialist for a one-on-one tutoring session: Arden Ashley-Wurtmann.

More information is available through the Center for Student Achievement:
https://www.stthomas.edu/center-for-student-achievement/index.html

Mathematics Resource Center

The Mathematics Resource Center (MaRC) provides a variety of resources such as study materials and free peer tutoring during open hours for math courses up to Calculus lll and for math placement assessment preparation.

Consult the website for more information: Math Resource Center:
https://cas.stthomas.edu/departments/areas-of-study/mathematics/mathematics-resource-center

Baccalaureate Information and Policies

The information below contains general undergraduate policies and academic information specific to the Baccalaureate students. Visit the Dougherty Family College (DFC) catalog (https://www.stthomas.edu/catalog/dfc-catalog/index.html) for information specifically applicable to the Associate students in the DFC. Visit the Graduate Catalog (https://www.stthomas.edu/catalog/graduate-catalog/index.html) for all graduate policies and academic information for graduate programs across all schools and colleges.

To see all policies related to students, visit the Policy Repository:
https://www.stthomas.edu/policies/index.html

Major Requirements

Major concentrations or programs of study are listed and described in the Curricula section in this catalog.

St. Thomas students may choose a major area of concentration that is not offered at St. Thomas through any of the four other institutions in the Associated Colleges of the Twin Cities (ACTC) Consortium: Augsburg College, Hamline University, Macalester College and St. Catherine University. The student must be accepted into the major by the appropriate department chair at the school where the major is offered and the proposed program of study must be submitted to the Committee on Undergraduate Studies at St. Thomas for its approval. Curricula involving other institutions in the ACTC consortium are indicated by [ACTC].

An individualized major also may be proposed to the Committee on Undergraduate Studies for acceptance. Guidelines for such a proposal are available from the Academic Counseling.

Regular Majors

After a student has completed 48 semester credits, that student must apply to be admitted to a major in his or her chosen field. Admission to a major field is

necessary if the student wants to continue receiving registration times that coincide with his/her class.

A student must complete one of the regular major concentrations described in the section on Curricula with a grade point average of 2.00 or better in courses taken in the department (Opus College of Business for business majors) of the major required for the major. (See section on Academic Programs for a list of these majors.)

A major in a Bachelor of Arts degree program consists of 30 to 44 credits in the area of concentration plus allied courses as specified by the department in which the major is offered.

A major in a Bachelor of Science degree program (or an Engineering or music program) may require more than 48 semester credits in the field of the major.

Students with transfer courses in the major must also attain a 2.00 grade point average for the courses taken in the department (Opus College of Business for business majors) of the major at St. Thomas. (See section on Requirements for a Degree).

If major field requirements or courses specified in the catalog are no longer available, the chair of the appropriate department will designate acceptable substitutes for the major program.

The department has the right to specify how many courses in the major field (and at what level) must be taken at St. Thomas. Students may earn more than one major.

Procedures for applying to a major are available from the Office of the University Registrar.

Majors at other Associated Colleges of the Twin Cities (ACTC) Institutions

A student wishing to complete a major offered at one of the ACTC schools (and not offered at St. Thomas), must file a petition with the Committee on Studies for approval. In the petition, the student should indicate his/her acceptance for the major by the chair of the department at the other institution, the list of courses that will need to be completed at that institution, and the name of a St. Thomas faculty member in a closely-related field who will act as an adviser. Core curriculum requirements for St. Thomas and any prerequisites for courses in the major program offered at St. Thomas will be taken on the home campus.

Individualized Majors

A student may pursue a major other than one of the regular majors described in the section on Curricula.

An individualized major requires the selection of a faculty adviser, a proposal explaining the rationale for the selection of courses (which should include lower- and upper-division courses), a number of credits in accordance with the guidelines for a regular major, and approval by the Committee on Studies.

Education Co-Majors

Education Co-Majors are listed and described in the Curricula section in this catalog.

Education Co-Majors (with specialty) require a second major. They cannot be "stand-alone" majors.

There are also sets of education majors that constitute a double major when taken together. The education component cannot be a "stand-alone" major.

Minor Requirements

Students may choose to complete a minor in addition to a major. A student may declare more than one minor. Minor concentrations are listed and described in the Curricula section in this catalog.

Regular Minors

A student is not required to complete a minor. A minor consists of 16 to 26 credits in the area of concentration including all prerequisites and allied courses as determined by the department or program offering the minor.

A minimum grade point average of 2.00 is required for the courses in the minor. Transfer students must also attain a minimum grade point average of 2.00 for minor courses taken at St. Thomas.

The department has the right to specify how many courses in the minor field (and at what level) must be taken at St. Thomas.

A student may earn more than one minor.

Minors at other Associated Colleges of the Twin Cities (ACTC) Institutions

A student wishing to complete a minor offered at one of the ACTC schools (and not offered at St. Thomas), must file a petition with the Committee on Studies for approval. In the petition, the student should indicate his/her acceptance for the minor by the chair of the department at the other institution, and the list of courses that need to be completed.

Individualized Minors

A student may propose an individualized minor to meet a specific need or interest, subject to the approval of the Committee on Undergraduate Studies. Guidelines for such a proposal are available from Academic Counseling. A faculty adviser should be chosen for the minor.

Certificate Requirements

Students may choose to complete a certificate in addition to a major. A student may declare more than one certificate. Certificates are listed and described in the Curricula section in this catalog.

A student is not required to complete a certificate. A certificate consists of at least 12 credits in the focus area as determined by the department or program offering the certificate.

A minimum grade point average of 2.00 is required for the courses in the certificate. Transfer students must also attain a minimum grade point average of 2.00 for certificate courses taken at St. Thomas.

The department has the right to specify how many courses in the certificate (and at what level) must be taken at St. Thomas.

A student may earn more than one certificate.

Addition of major, minor, or degree after graduation

A student who has graduated from the University of St. Thomas may add an additional major by fulfilling all remaining requirements of the major. The 32-credit senior residency requirement need not be met a second time. No more than one additional transfer course may be used to meet major and allied requirements.

A student who has graduated from the University of St. Thomas may add a minor by fulfilling all remaining requirements of the minor. The 32-credit senior residency requirement need not be met a second time. No more than one additional transfer course may be used to meet minor and allied requirements.

A student who has graduated from the University of St. Thomas may add a second degree (such as a B.S. added to the original B.A.) by fulfilling all remaining requirements of the degree. The 32-credit senior residency requirement need not be met a second time. The second degree may not be in the same discipline as the original degree.

Core Curriculum-Baccalaureate

Goals of the Core Curriculum

The educational experience of the University of St. Thomas is designed to enable students to grow as reflective, moral persons prepared to advance the common good.

We seek to develop students who:

Understand and synthesize central ideas of liberal arts disciplines:

- Grasp foundational claims and methods of disciplines that ground liberal education
- Integrate principles, theories, and perspectives across disciplines and cultures

Think critically and creatively:

- Think critically, which includes logically evaluating information, arguments and evidence; using sound reasoning to solve problems or address questions; interpreting data by explaining its meaning and significance; and being aware of one's own inferences and biases in order to confirm, correct, or develop ideas
- Think creatively, which includes generating one's own ideas, insightfully evaluating ideas and information, and innovatively applying concepts or ideas

Communicate effectively with diverse audiences:

- Articulate and support positions clearly and persuasively
- Access, evaluate, and use information appropriately
- Know the audience, and apply appropriate approaches and language

Reflect on the ethical and spiritual dimensions of life, and of their own lives, in light of Catholic intellectual tradition:

- Understand foundational claims of Catholic intellectual tradition, including claims that underlie such convictions as: faith and reason are compatible, the common good is to be pursued, and the dignity of the human person is to be respected

- Engage the claims and convictions of Catholic intellectual tradition, through critical reflection and constructive dialogue, in developing a reasoned worldview
- Apply ethical principles and the principles of Catholic intellectual tradition toward resolution of intellectual and social problems for the sake of the common good

Summary of Core Requirements

First Year Experience

- FYEX 100 – Foundations for College Success (1 credit)
- Living-Learning Community or Theme-Based Learning Community (4-8 credits)

Core Area Requirements

- English (4 credits)
- Language & Culture (0-12 credits)
    - Either complete coursework through 211 level (or place at 212 or above via placement test)

      OR take eight credits of the same language
- Natural Science (4 credits)
- Quantitative Analysis (4 credits)
- Historical Analysis (4 credits)
- Fine Arts (4 credits)
- Social Scientific Analysis (4 credits)
- Philosophy & Theology (12 credits)
    - 1 PHIL (4 credits)
    - 1 THEO (4 credits)
    - 1 PHIL or THEO (4 credits)
- Integrations in the Humanities (8 credits)

Flagged Core Area Requirements

Flagged Requirements: provide an added dimension to another course – need not necessarily add to course load

- Writing Across the Curriculum (16 credits)
    - Writing to Learn (4 credits)
    - Writing Intensive (8 credits)
    - Writing in the Discipline (4 credits)
- Global Perspectives (4 credits)
- Diversity, Inclusion, and Social Justice (4 credits)
- Signature Work: (2 or 4 credits)
    - Completed after a student has earned at least 80 credits
    - Often part of a student's major
    - Includes a portfolio of work collected over the student's time at St. Thomas

Non-Overlap of Core Requirements

A course used to satisfy one core-area requirement cannot be used (by the same student) to satisfy a different core-area requirement. Some courses may be chosen either to satisfy one requirement, or to satisfy another, but not both. More specifically, some courses may be counted either for Integrations in the Humanities, or for another core-area listed above, but not both. For example, THEO 221 could meet the requirement for the third Philosophy and Theology course for one student OR it could meet the Integrations in the Humanities for another student.

Courses used to satisfy core-area requirements cannot also be used to satisfy the GP or DISJ flags, except for courses used to satisfy the Integrations in the Humanities requirement.

A course which is designated for Signature Work can meet a core requirement (this applies to all core area and core flagged courses).

A course which is designated for Writing Across the Curriculum (WAC) can also meet a core requirement (this applies to all core area and core flagged courses).

Overview of Requirements

First-Year Experience

Students must take one course:

- FYEX 100

Students must participate in a learning community:

- Living Learning Community

OR

- Two Common Good Learning Community Courses (CGLC)

Courses taken for either learning community can overlap with either major or core area requirements. Both types of learning communities have activity requirements outside of class.

Note: Students must register for the accompanying FYEX 150 Common Good Path course (for activities) concurrently with their two CGLC courses.

For more information, please refer to the First-Year Experience website: https://www.stthomas.edu/academics/core-curriculum/first-year-experience/index.html

English

The study of literature and writing fosters empathy and imagination, critical insight, power of expression, interdisciplinary engagement, cultural awareness, and appreciation for the variety of human experience. Students who study literature and writing learn close observational skills, rhetorical knowledge, and discernment of the relationship between aesthetics and ethics. They develop a repertoire of strategies for thinking critically, analyzing texts, and composing in a variety of genres. They learn how to inhabit different perspectives, examine their values, and envision and create new realities, which helps prepare them to be caring, engaged citizens of their communities and the world.

Students must take one course (depending on placement):

- ENGL 121 or ENGL 190

Language and Culture

Skill in a second language is essential to global citizenship. Such skill is useful in itself; furthermore, acquiring it exercises broad intellectual skills that transfer to other areas. When students' acquisition of proficiency in the target language is supported by an analytic study of the fundamental structures of that language, students are continually challenged to exercise critical thinking while solving language problems. Discussion of the nuances of language helps to improve students' sensitivity to language as a vehicle of expression.

A second language is an integral part of another culture, and second languages need to be studied as such. Students need to consider other cultures in their own terms; they need to recognize the force of locale, time, ideology, and language itself in shaping ways individuals in different cultures perceive human experience. Ultimately, developing a critical perspective with regard to the assumptions of one's own culture may be the greatest benefit to be gained from first-hand contact with another culture through studying its language.

Students who studied a language other than English (and the cultures where it is spoken) for two or more years in high school must take a placement exam if they plan to continue studying that language at St. Thomas, unless they are bringing in college credit for that or other coursework in that language. Students are not permitted to enroll above or below their placement without approval of the Department of Modern and Classical Languages.

The Language and Culture core requirement can be fulfilled in any of the following ways:

- Establish proficiency at the 212 level or higher through completion of a course at that level, proctored placement exam, or the language waiver process (for languages not offered at St. Thomas)
- Place into the 211 level and complete that level
- Place into the 112 level and complete 112 & 211
- Begin a new language, or place into 111 or 122, and complete a two-course sequence

International students who completed their high school education in a language other than English are exempt from this requirement. To be exempt from this requirement, it is the international student's responsibility to provide evidence of enrollment in a non-English language high school, or provide English proficiency documents such as TOEFL, IELTS or Duolingo scores, or report of ELS completion.

Natural Science

Science plays a pervasive and fundamental role in modern society, providing the technological advances that drive our economy and the insights that help us understand ourselves, our environment, and the universe in which we live. Students learning to work toward the common good must have some sense of how scientific reasoning – from observation, to interpretation, to theory formation – allows us to make sense of complex, interacting natural systems that characterize our planet, our home. Without the powerful tools of science, there is little hope of addressing pressing issues such as climate change, water quality, disease, natural disasters, and even

poverty. For all these reasons, the natural sciences are essential to a liberal arts education.

Students will take one core-area course in the natural sciences that includes a hands-on laboratory experience. For students intending to major in a natural science, the core-area course will typically be a foundational course that serves as an introduction to the discipline and provides fundamental skills needed for future courses. For students not intending to major in the natural sciences, courses typically focus more on the importance of science literacy in daily life. Students are asked to critically evaluate scientific arguments by assessing the relevance, reliability, and limitations of scientific knowledge. Through engaging the natural world, students are exposed to the scientific method to illustrate that science is a continually changing process to better understand the world in which we live. The laboratory component of these courses uses an experiential-based approach with opportunities for students to engage in the scientific process.

Students must take one lab science:

- BIOL 101
- BIOL 102
- BIOL 105
- BIOL 106
- BIOL 110
- BIOL 207
- BIOL 208
- BIOL 209
- BIOL 361
- CHEM 100
- CHEM 101
- CHEM 109
- CHEM 111
- CHEM 115
- ENGR 123
- ESCI 132
- GEOL 102
- GEOL 111
- GEOL 114
- GEOL 115
- GEOL 130
- GEOL 161
- GEOL 162
- GEOL 163
- GEOL 211
- GEOL 220
- GEOL 260
- IDSC 150
- NSCI 201
- PHYS 101
- PHYS 104
- PHYS 105
- PHYS 109
- PHYS 110
- PHYS 211
- PHYS 212
- PUBH 200
- PUBH 210

Quantitative Analysis

Tradition has it that the phrase "Let no one ignorant of geometry enter here" was inscribed above the entrance to Plato's Academy. Plato was not obsessed with triangles, but desired his students to be well-versed in a certain way of thinking that the study of geometry, and mathematics in general, conveys.

Mathematics is a cognitive process that requires critical thinking: reading and re-reading, gathering data, formulating an abstract model to understand and solve a problem, assessing various tools and perspectives at one's disposal, and taking a series of small and logical steps to arrive at a solution, or an approximation of a solution, all the while assessing the path one is taking, adjusting or backtracking as necessary, and reformulating or tweaking the model. It is a way of learning, knowing, investigating, describing, predicting, analyzing, and understanding.

The fundamental aim of the requirement in Quantitative Analysis is to help students develop and strengthen their abilities to engage in this deep and broad, deliberate thought process.

Students must take one course:

- MATH 100
- MATH 101
- MATH 109
- MATH 111
- MATH 113
- DASC 120

Historical Analysis

Historical study promotes critical thinking, intellectual resourcefulness, interdisciplinary engagement, and intercultural awareness in ways that are complementary to but distinct from other academic disciplines. Students who study history gain a better knowledge of their own and other people's cultures and traditions. They come to understand how major social, economic, political, religious, and cultural changes over time impact our world today and set the stage for future developments. They also learn to make connections between written and material legacies that offer evidence of lived experience and the circumstances

that produce them in order to become more productive and engaged citizens of our communities and our world.

Students must take one course:

- HIST 111
- HIST 112
- HIST 113
- HIST 114
- HIST 115
- HIST 117
- HIST 118
- HIST 119

Fine Arts

The arts – visual arts, theater, film, dance, music, and creative writing – challenge and extend human experience. They provide means of expression that go beyond ordinary speaking and writing. They can express intimate thoughts and feelings. They are a unique record of diverse cultures and how these cultures have developed over time. They provide distinctive ways of understanding human beings and nature. The arts are creative modes by which all people can enrich their lives both by self-expression and by response to the expressions of others.

Works of art often involve subtle meanings and complex systems of expression. Fully appreciating such works requires the careful reasoning and sustained study that lead to informed insight. Moreover, just as thorough understanding of science requires laboratory or field work, so fully understanding the arts involves first-hand experience with them. [Academic Preparation for College: What Students Need to Know and be Able to Do (New York: College Entrance Examination Board, 1983, p. 16.]

A core-area course in the Fine Arts will enhance the student's understanding of and appreciation for one or more of the fine arts (visual arts, theater, film, dance, music, and creative writing). It will instill in the student an understanding of the role of the fine arts in expressing and maintaining, discovering and questioning a culture's dominant beliefs and ideals. The focus of the course is broad enough to encompass different styles, but also allows an intensive scrutiny of the way in which the work of art is composed and created.

All university students have experienced the arts in one way or another. They have all seen artwork whether it be in advertising or public art or even a visit to a museum. They have heard music almost constantly since they were born. They have experienced theater either as a live performance in a theater, or more likely in film and television. They have read literature, increasingly written expressly for children and young adults, and perhaps have heard creative writers describe their craft at reading events and book signings. The core-area course in the Fine Arts will build on that foundation of knowledge and develop an appreciation for what students already know while exposing them to other levels of the particular art form. In discussing the various art forms across the historical spectrum, students will become more aware of the fact that the arts, and the culture in which those arts were created, have a great deal in common. Students will also discover that certain arts are successfully implemented because they reflect the view of the dominant group within a culture.

The arts can be a focal point of beginning to understand what a culture has to offer. By examining examples from diverse cultures, students will recognize that certain values are held in common, although they may be expressed in different ways.

Students in a Fine Arts course will come away from it with an understanding of the means by which an artist can express an idea, an emotion, or a cultural belief. Such an understanding should include an awareness of the possible variations that exist in style, expression, and symbolic associations that allow for a range in audience reaction and that make a work of art relevant not only to its own world, but also to our own. Students should become aware of the power of communication that goes beyond ordinary language and be able to analyze its structure, message, and effect.

Since many of the ideas and perspectives explored in a Fine Arts core-area course are interdisciplinary in nature, drawing upon history, language, literature, philosophy, and religion, it is recommended that students take some of these courses prior to the Fine Arts course.

Students must take four credits:

	Course Numbers
ARTH	105, 106, 115, 116, 120, 121, 130, 131, 132, 140, 141, 142, 150, 202, 204, 250, 251, 260, 265, 270, 275, 280, 282, 284, 285, 291, 297, 304, 305, 310, 321, 323, 328, 329, 330, 335, 339, 340, 345, 351, 352, 355, 356
COMM	246,248
ENGL	255
FILM	200, 310

MUSC 112, 115, 117, 130, 162, 170, 204, 216, 218, 230, 233, 412

THTR 111, 218, 221, 222, 223, 297, 412

Alternately, students may choose to participate for four semesters in one of the following music ensembles:

- MUSN 173 Guitar Ensemble
- MUSN 181 Orchestra

Or

Students may take a total of four semesters in any combination of choirs:

- MUSN 140 Donne Unite
- MUSN 142 Chamber Singers
- MUSN 143 Liturgical Choir
- MUSN 160 Concert Choir

Or

Students may take a total of four semesters in any combination of bands:

- MUSN 185 Symphonic Band
- MUSN 186 Symphonic Wind Ensemble

Or

Students may take a total of four semesters in 50-minute lessons in the same instrument or lesson (with exceptions granted in consultation with the Chair):

- MUSP 110 Digital Music Lessons
- MUSP 111 Digital Music for Film
- MUSP 121 Harpsichord: Elective
- MUSP 122 Lute: Elective
- MUSP 128 Recorder: Elective
- MUSP 131 Piano: Elective
- MUSP 135 Organ: Elective
- MUSP 136 Flute: Elective
- MUSP 137 Oboe: Elective
- MUSP 138 Bass Clarinet: Elective
- MUSP 138 Clarinet: Elective
- MUSP 139 Bassoon: Elective
- MUSP 141 Saxophone: Elective
- MUSP 144 Trumpet: Elective
- MUSP 145 French Horn: Elective
- MUSP 146 Trombone: Elective
- MUSP 147 Euphonium: Elective
- MUSP 148 Tuba: Elective
- MUSP 149 Percussion: Elective
- MUSP 152 Jazz/Pop Vocal: Elective
- MUSP 153 Jazz Piano: Elective
- MUSP 154 Violin: Elective
- MUSP 155 Viola: Elective
- MUSP 156 Cello: Elective
- MUSP 157 Double Bass: Elective
- MUSP 158 Guitar: Elective
- MUSP 159 Harp: Elective
- MUSP 160 Banjo: Elective
- MUSP 161 Harmonica: Elective
- MUSP 162 Mandolin: Elective
- MUSP 165 Music Composition: Elective
- MUSP 166 Music Composition for Film
- MUSP 168 African Drumming: Elective
- MUSP 187 Electric Guitar: Elective
- MUSP 188 Flamenco Guitar: Elective

Four semesters of music ensembles (MUSN 140, 142, 143, 160, 173, 181, 185, 186) or lessons (MUSP 110, MUSP 111, MUSP 121, MUSP 122, MUSP 128, MUSP 131, MUSP 135, MUSP 136, MUSP 137, MUSP 138, MUSP 139, MUSP 141, MUSP 144, MUSP 145, MUSP 146, MUSP 147, MUSP 148, MUSP 149, MUSP 152, MUSP 153, MUSP 154, MUSP 155, MUSP 156, MUSP 157, MUSP 159, MUSP 160, MUSP 161, MUSP 162, MUSP 165, MUSP 168, MUSP 187, MUSP 182).

Note: A student cannot satisfy the Fine Arts requirement with a combination of ensembles (MUSN) and lessons (MUSP) or another music course (MUSC).

Social Scientific Analysis

The rationale for this requirement is based on two beliefs. The first is that an essential component of a liberal arts education helps students understand and develop the ability to analyze the social world in which they live. The second is that the social sciences provide a distinctive and valuable perspective for understanding human behavior, social interaction, and related issues of social concern. This requirement is intended to ensure that all students develop basic abilities to perform social scientific analysis of patterns of social interaction.

Students must take one course:

- ECON 211
- ECON 251
- ECON 252
- ENVR 151
- GEOG 111
- GEOG 113
- POLS 104
- PSYC 111
- SOCI 100
- SOCI 110

Philosophy & Theology

How do human dignity and the nature of the human person ground ethics? How are people formed to become virtuous and wise? What is the common good? Why should we strive for a just and inclusive society? Is truth knowable? What gives life meaning? Are humans more than matter? Do we have free

will? Is belief in God reasonable, given modern science? What can an agnostic make of traditional arguments for God's existence? What should a person of faith make of the diversity of religions across the globe? How can alleged revelations be tested? What is the nature of evil? Is evil a barrier to belief in a good God? Is faith possible in a state of doubt about evidence? Is redemption possible? What role does community play in redemption? What sense does it make to say that God is all-knowing, or all-powerful, or becomes incarnate? What sense does it make to speak of divine providence?

Catholic intellectual tradition includes rich discussions of all these vitally important questions, and others like them. Through the centuries, the great philosophers and theologians of the tradition have posed the questions, debated them, and studied possible answers from various sources, including reason and natural human experience, along with Scripture and religious doctrine. As a university inspired by Catholic intellectual tradition, St. Thomas asks all its students to explore philosophical and theological foundations of the tradition. Such exploration provides theoretical mooring for the university's convictions and commitments – its conviction, for example, that faith and reason are compatible, and its commitment to the common good and to action for a higher purpose.

All students take a course that introduces the discipline of philosophy and engages philosophical questions central to Catholic intellectual tradition, and all students take a course that introduces the discipline of theology and the Catholic intellectual tradition's theological framework. A deeper, more focused exploration of these foundations is necessary to begin to appreciate the strength of the tradition; thus, all students take a third foundational course in Catholic intellectual tradition in their choice of either the Philosophy Department or the Theology Department.

These three courses in Philosophy and Theology do not constitute the entirety of St. Thomas's treatment of Catholic Intellectual tradition: rather, the three courses root concepts and principles that find their full flowering throughout the university's curriculum.

Students must take these two courses:

- PHIL 110
- THEO 100

And one of the following, either from PHIL or THEO:

- PHIL 210
- PHIL 211
- PHIL 213
- PHIL 218
- PHIL 220
- PHIL 221
- PHIL 230
- PHIL 231
- PHIL 234
- PHIL 235
- PHIL 240
- PHIL 245
- PHIL 250
- PHIL 252
- PHIL 254
- PHIL 255
- PHIL 256
- PHIL 258
- PHIL 260
- PHIL 265
- PHIL 272
- PHIL 301
- PHIL 302
- PHIL 303
- PHIL 340
- THEO 221
- THEO 222
- THEO 223
- THEO 224
- THEO 225
- THEO 226
- THEO 227
- THEO 228
- THEO 229

Diversity, Inclusion, and Social Justice

The study of human diversity, inclusion, and social justice is an important component of a liberal arts education. It exposes us to the richness of human aspirations and achievements, and strengthens our understanding of the essential and equal dignity of all human beings. It provides vantage points for reflection upon our own experiences, beliefs, and practices. It forces us to confront instances of oppression, and to recognize that the experiences, beliefs, and practices of various people and cultures have been at times misrepresented or underrepresented in academic discourse and in the discourse of American society. It shows us how particular interests and privileges may contribute to misrepresentation or underrepresentation. It helps us make the world more just, more peaceful, and more harmonious.

The University of St. Thomas values the study of diversity, inclusiveness, and social justice also because it is basic to Catholic education. Following

the radical call of the gospel, the Church demands justice for the vulnerable and for the economically, socially, and politically oppressed: "Since all men and women possessed of a rational soul and created in the image of God have the same nature and origin," Gaudium et Spes tells us, "the basic equality which they all share needs to be increasingly recognized" and "every type of discrimination affecting the fundamental rights of the person … should be overcome."

Finally, the University of St. Thomas believes it is important for students to explore issues of diversity, inclusion, and social justice because it wants its graduates to be successful, as well as informed and ethical actors in a diverse society. If graduates of St. Thomas are to be successful, they must understand the significance of human diversity, inclusion, and social justice for a wide field of human interactions, from those associated with responsible citizenship to those involved in the practice of their chosen professions and disciplines. DISJ core-flagged courses are part of a series of DISJ touchpoints in the core curriculum stretching from the first days of orientation to reflective capstone work, and including curricular and co-curricular components.

Courses which satisfy the DISJ core-flag requirement devote the majority of course content to exploring topics of diversity, inclusion and social justice specifically in the context of the United States.

A course may satisfy DISJ and the Integrations in the Humanities requirement; however, a single course cannot satisfy both DISJ and a core-area requirement (other than Integrations in the Humanities) for the same student.

Students must take four credits.

Some sections of a course may carry the DISJ flag while others do not. Students should use ClassFinder to determine which course sections satisfy the DISJ requirement in the term for which you are completing the requirement.

Integrations in the Humanities

Liberal arts education takes knowledge to be intrinsically valuable and liberating. It produces understanding that illumines and ennobles. The humanities disciplines are traditionally a subset of the disciplines in the liberal arts. The humanities focus on documenting and understanding the human experience; they help students perceive value, discover and construct meaning, and synthesize various sources of knowledge. Without such synthesis, it is impossible to develop an informed view of the whole.

Courses in the area of "Integrations in the Humanities" show how methods of the humanities help integrate ideas and perspectives across disciplines or across communities.

Integration is a goal of humanistic studies generally and a goal also of a Catholic university. As Ex Corde Ecclesiae says: "A University, and especially a Catholic University, 'has to be a "living union" of individual organisms dedicated to the search for truth … It is necessary to work toward a higher synthesis of knowledge, in which alone lies the possibility of satisfying that thirst for truth which is profoundly inscribed on the heart of the human person'." [Ex Corde Ecclesiae, 16]

A student may elect both of the required IH courses from IH-designated offerings within a single major only if the student has more than one major.

See Summary of Core Requirements section for detail regarding potential overlap with Integrations in the Humanities and core flagged requirements.

Students must take eight credits.

- AMCD 200: American Culture: Power & Identity
- ARTH 202: History of Street Art
- ARTH 204: Typography and Visual Culture
- ARTH 250: Museum Studies: Exhibitions, Collections, Structures
- ARTH 251: Museum Studies: Trends, Practices, Visitors
- ARTH 260: Women in Ancient Art and Culture
- ARTH 265: Art and Archaeology of Ancient Mesoamerica
- ARTH 270: Arts of the Pacific Islands
- ARTH 280: Sacred Architecture & Space
- ARTH 330: Churches and Mosques in the First Millennium
- ARTH 275: Buddhist Art
- ARTH 282: History of American Architecture
- ARTH 304: Typeface Design
- ARTH 305: Greek Art and Archaeology
- ARTH 310: Roman Art and Archaeology
- ARTH 328: Chinese Sculpture and Architecture
- ARTH 329: Chinese Painting
- ARTH 351: Romanticism to Impressionism
- ARTH 352: Art in the United States
- ARTH 356: Modernism in European Art
- BETH 390: Technology, Society and the Human Person
- CATH 205: Crisis and Development in the Catholic Church
- CATH 222: The Catholic Literary Tradition
- CATH 301: The Catholic Vision
- CATH 308: Woman and Man

- CATH 340: Church and Culture: The Social Dimension of Catholicism
- CATH 355: Catholic Studies in Rome
- CATH 405: John Henry Newman
- CATH 406: The Many Worlds of G. K. Chesterton (2 credits)
- CATH 407: The Many Worlds of G. K. Chesterton (4 credits)
- CLAS 225: The Classical Hero, Epic and Film
- CLAS 245: Classical Mythology
- CLAS 325: Greek & Roman Environment
- COMM 246: Communication and Improv
- COMM 248: Communication and Improv II
- COMM 252: High-Impact Storytelling
- COMM 370: Intercultural Communication
- COMM 377: Family Transition – Crisis & Res
- COMM 378: Comm & Underrep Families
- ENGL 201: Texts in Conversation: Perspectives on Genre and Craft
- ENGL 202: Texts in Conversation: Interdisciplinary Perspectives
- ENGL 203: Texts in Conversation: Thematic and Intertextual Perspectives
- ENGL 204: Texts in Conversation: Perspectives on Language, Culture, and Literacy
- ENGL 211: British Authors I
- ENGL 212: British Authors II
- ENGL 214: American Authors I
- ENGL 215: American Authors II
- ENGL 217: Multicultural Literature
- ENGL 218: Literature by Women: Critical History
- ENGL 220: The Classical Tradition
- ENGL 221: The Modern Tradition
- ENGL 222: Catholic Literary Tradition
- ENGL 230: Narrative Medicine
- ENGL 231: Law and Literature
- ENGL 232: Sports & Social Justice
- ENGL 256: Introduction to Professional Writing
- ENGL 305: Linguistics: The English Language
- ENGL 315: Topics in Professional Writing
- ENGL 324: Genre Studies
- ENGL 325: Special Topics in Region, Genre, or Theme
- ENGL 337: Literature of Human Diversity
- ENGL 341: Literature by Women: Critical Questions
- ENGL 360: Chaucer & Medieval Period
- ENGL 361: Shakespeare & Early Modern
- ENGL 362: Milton and 17th-Century British Literature
- ENGL 364: Eighteenth Century British Literature
- ENGL 365: Romantic Literature
- ENGL 366: Victorian Literature
- ENGL 371: Nineteenth Century American Literature
- ENGL 390: Major Literary Figures in Context
- ENGL 395: Issues in Lit. Lang. & Culture
- ENGL 481: Capstone Seminar: Literary Studies Emphasis
- FAST 377: Family Transition – Crisis & Res
- FAST 378: Comm & Underrep Families
- FILM 200: Introduction to Film Studies
- FILM 225: Women and Gender in Film
- FILM 250: Introduction to Italian Cinema
- FILM 300: World Cinema
- FILM 320: Memory and Trauma in Film
- FILM 335: Film Theory and Criticism
- GERM 212: Intermediate German II
- GERM 300: Intro to German Studies
- GERM 330: Intercultural Competence: Prep Study/Work Abroad
- GERM 341: Highlights of German Lit I
- GERM 342: Highlights of German Lit II
- GERM 440: Intro to Business German
- HIST 211: Women and Families in the Americas
- HIST 222: Early Modern Europe: 1450-1750
- HIST 226: Modern Europe Since 1914
- HIST 227: Global History of Genocide and Ethnic Cleansing in the Twentieth Century
- HIST 228: Environmental History
- HIST 292: Topics: Modern Iraq and Iran
- HIST 322: Tudor and Stuart Britain
- HIST 333: East-Centr Eur Monarchy to EU
- HIST 337: History of the First World War
- HIST 349: History of Ottoman Empire
- HIST 353: Colonial Revolutionary America
- HIST 375: Non-State Actors: Insurgents and NGOs in the Islamic World
- HIST 396: Topics: History of the American West
- HONR 480: Art for Just Water
- HONR 480: The Scientific Revolution: When Modern Science Was Born?
- HONR 480: At the Heart of Time
- HONR 480: Improvisation as Equipment for Living
- HONR 480: Matrix of Connectivity: How We Bridge the Gaps
- HONR 480: Seeking Meaning and Money in Life's Work
- HONR 481: Honors Seminar
- IRST 200: Introduction to Irish Studies
- JOUR 270: Media Literacy
- JOUR 372: Environmental Journalism
- JPST 250: Introduction to Justice and Peace Studies
- JPST 275: Qualitative Methods: Research for Social Justice
- JPST 280: Active Nonviolence
- JPST 365: Leadership for Social Justice

- JPST 375: Conflict Analysis and Transformation
- LNGS 325: Language Matters
- LNGS 370: Holocaust in Literature, Film, and Visual Culture
- MUSC 230: Music of the United States
- MUSC 412: Hist & Lit of West European
- PHIL 210: Chinese Philosophy
- PHIL 211: Buddhist Philosophy
- Phil 213: Applied Ethics: East and West
- PHIL 218/219: Philosophy of Sport
- PHIL 220: Logic
- PHIL 221: Critical Thinking and Inductive Reasoning
- PHIL 230: Disability and Human Dignity
- PHIL 231: Philosophies of Social Justice
- PHIL 234: Love, Sex, and Friendship
- PHIL 235: Philosophy of Art and Beauty
- PHIL 240: Faith and Doubt
- PHIL 241: History and Philosophy of Medicine
- PHIL 245: Politics, Law, and the Common Good
- PHIL 250: Christian Mysteries from a Philosophical Viewpoint
- PHIL 252: AI Ethics
- PHIL 254: Biomedical Ethics
- PHIL 255: Technology and Ethics
- PHIL 258: Environmental Ethics
- PHIL 260: Global Philosophy of Religion
- PHIL 265: Minds, Brains, and Computers
- PHIL 272: Evolution and Creation
- PHIL 330: Philosophy of Mind
- PHIL 357: Political Philosophy
- PHIL 359: Philosophy of Law
- PHIL 385: Philosophy of Science
- PHIL 460: Philosophy of God
- SPAN 220: Spanish for Health Care Professions
- SPAN 300: Advanced Spanish Grammar
- SPAN 305: Spanish Oral Expression & Culture
- SPAN 315: Hispanic Linguistics
- SPAN 320: Business Spanish
- SPAN 327: Environment and Health in the Hispanic World
- SPAN 335: Introduction to Spanish Literature
- SPAN 350: Latinx Health and Migration
- SPAN 434: Spanish Applied Linguistics
- STCM 244: Research, Evaluation and Measurement
- STCM 250: Science, Media, & Social Impact
- STCM 272: Advertising Media & Conn Plan
- THEO 221: Bible: [Instructor-Chosen Subtitle]
- THEO 222: History: [Instructor-Chosen Subtitle]
- THEO 223: Belief: [Instructor-Chosen Subtitle]
- THEO 224: Bridges: [Instructor-Chosen Subtitle]
- THEO 225: Faith & Ethics: [Instructor-Chosen Subtitle]
- THEO 226: Spirituality: [Instructor-Chosen Subtitle]
- THEO 227: Contexts: [Instructor-Chosen Subtitle]
- THEO 228: Comparative: [Instructor-Chosen Subtitle]
- THEO 229: Professions: [Instructor-Chosen Subtitle]
- THEO 300: Signature Work: [Instructor-Chosen Subtitle]
- WGSS 225: Women and Gender in Film

Global Perspectives

Global Perspectives courses are designed to introduce students to the opportunities and challenges of living in an increasingly globalized world. As the St. Thomas Strategic Plan notes, our world is "marked by social, cultural, political, technological and economic interdependence and integration across local, national and international boundaries"; thus "understanding and integrating global knowledge, perspectives and intercultural competencies is essential to living, working and serving."

The study of and dialogue with world cultures is central to the idea of a Catholic university. Ex Corde Ecclesiae, for example, calls for an impartial search for truth, "a search that is neither subordinated to nor conditioned by particular interests of any kind." It exhorts Catholic universities to "become more attentive to the cultures of the world today" and to realize that various diverse cultures provide "a wealth for the whole of the human family." [Ex Corde Ecclesiae, 7, 45]

A course may satisfy GP and the Integrations in the Humanities requirement; however, a single course cannot satisfy both GP and a core-area requirement (other than Integrations in the Humanities) for the same student.

Students must take four credits.

Some sections of a course may carry the GP flag while others do not. Students should use ClassFinder to determine which course sections satisfy the GP requirement in the term for which you are completing the requirement.

A study abroad course which spends 20 days abroad (including travel days) will automatically

meet the GP requirement (such a study abroad course may also meet another core-area requirement).

International students are counted as having satisfied the Global Perspectives requirement.

Signature Work

The Signature Work experience advances the mission of St. Thomas by asking upper-class students to integratively engage with a topic that is relevant to the mission, convictions, and vision of St. Thomas. This experience is intended to be a culmination of students' time at St. Thomas: Students showcase their ability to integrate and consciously reflect on their learning from across their years at St. Thomas in an interdisciplinary manner.

The St. Thomas Signature Work experience addresses the Integrative and Applied Learning aspects of the American Association of College and Universities' (AAC&U) Essential Learning Outcomes. Signature Work focuses on "synthesis and advanced accomplishment across general and specialized studies" as "demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems" (Paul Gaston, General Education & Liberal Learning, 2010, p. 9). Culminating experiences such as Signature Work are listed by the AAC&U as high-impact practices.

Students must have already completed 80 credits of course work before taking a Signature Work Course.

In the Signature Work Course, students complete an e-portfolio that includes:

1. at least three pieces of work conducted in courses or non-course activities such as independent research or journalism, a university-recognized study abroad or service-learning activity, or an internship or other community-based activity pre-approved and supervised by a faculty member,
2. at least one of the pieces of work comes from a discipline outside of the student's declared major, and
3. a written reflection of no fewer than 5 pages, reflecting on how this work connects to a problem of interest to them and to the common good and/or the mission and values of St. Thomas.

A student's major may require a specific course which satisfies the Signature Work requirement. However, if a student's major does not require a specific Signature Work course, a student must take a Signature Work course in another field of their choosing.

A Signature Work course may also meet another (any other) core requirement.

Students must take one course:

Some sections of a course may carry the Signature Work flag while others do not. Students should use ClassFinder to determine which course sections satisfy the Signature Work requirement in the term for which you are completing the requirement.

Writing Across the Curriculum

The mission of the Writing Across the Curriculum program is to create a culture of writing at the University of St. Thomas, enabling students to think critically, to engage deeply in their learning, and to write with confidence, precision, and grace.

Writing Across the Curriculum (WAC) classes fall into three categories:

- Writing Intensive (WI)

Students learn to practice writing as a process: generating and developing ideas, offering helpful feedback to others, using feedback from instructors and peers to revise drafts, and editing near-final drafts. This writing process is used to promote critical thinking as well as to produce quality academic writing. WI classes are typically offered in the core curriculum.

- Writing to Learn (WTL)

Students complete a series of informal, low-stakes writing assignments that promote critical thinking and facilitate learning course content. WTL classes are offered throughout the curriculum.

- Writing in the Disciplines (WID)

Students learn the genres and conventions of writing in their major fields of study and the rationales behind them. The writing process is supported at critical stages of development and includes instructor feedback on drafts. WID classes are offered in the major.

Students must complete a minimum of two (2) four-credit Writing Intensive classes, four credits in Writing to Learn, and four credits of Writing in the Disciplines to fulfill the Writing Across the Curriculum requirement.

WAC class offerings vary by term and are identifiable by the section number:

- Writing Intensive sections will begin with a 'W'
- Writing to Learn sections will begin with an 'L'
- Writing in the Disciplines sections will begin with a 'D'

For more information you may also refer to the Writing Across the Curriculum website: http://www.stthomas.edu/wac/

Courses-Baccalaureate

Most undergraduate courses at St. Thomas are 4-credit courses, with some variation across schools and colleges. Each course is assigned a subject-area code consisting of four letters, which designates the department or discipline, followed by a three-digit number. For example, ENGL 121 is the English course numbered 121.

Courses with numbers having either 1 or 2 as the first digit are lower-division courses, and those having 3 or 4 as the first digit are upper-division courses.

First-year students may not register for courses numbered 300 or above unless they meet required prerequisites or have permission from the department chair.

Under certain circumstances, undergraduate students are allowed to register for graduate-level courses (courses numbered 500 or above). These courses must be recommended by the student's department. Undergraduate students registering for a graduate-level course should use the paper add/drop form. Most graduate courses are 3 credits. Undergraduate students are charged the undergraduate per-credit rate for graduate courses.

The number of class meetings for a course varies with the nature of the course. Class Finder indicates the days and times each class meets.

Course Load

The normal course load for fall and spring semesters is 16 credits. During the first semester at the university, a first-year student is limited to 18 credits. Students may take no more than the number of credits listed below without endorsement of their faculty advisor and approval of the relevant dean. Students are advised to seek this approval before registration begins.

Credit Limits

- Fall semester: 21 credits
- January term: 5 credits
- Spring semester: 21 credits
- Summer term: 16 credits (8 credits per summer session)

Credit Hour Definitions

A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that reasonably approximates not less than: (1) one hour (50 minutes) of classroom or faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester of credit, or the equivalent amount of work over a different amount of time; or (2) at least an equivalent amount of work as required in paragraph (1) of this definition for other activities as established by the institution, including laboratory work, internships, practica, and other academic work leading toward the award of credit hours.

Final Examinations

Each fall and spring semester ends with a final examination period. A two-hour final examination session is scheduled for each course. Final exam dates and times are separated from regular class times and posted online to the Final Exam Schedule. Final examinations are not administered other than during final exams week. Students should plan to be available for exams through the end of each final exam period.

Instructors will determine the final examination times for January term and summer term courses.

Generic Courses

Some courses – including topics, experiential learning, seminars, research, and individual study – are offered under the same numbers in all or most academic departments. Additional information on these courses can be found in department course listings.

TOPICS COURSES

The subject matter of the course will vary from year to year but will not duplicate existing courses. Descriptions of these courses are available in Class Finder.

295, 296 Topics (2 credits)

The even number is normally used by the department. The odd number is used if the course

has been approved to fulfill a core curriculum requirement.

297, 298 Topics (4 credits)

The even number is normally used by the department. The odd number is used if the course has been approved to fulfill a core curriculum requirement.

487, 488 Topics (2 credits)

The even number is normally used by the department. The odd number is used if the course has been approved to fulfill a core curriculum requirement.

489, 490 Topics (4 credits)

The even number is normally used by the department. The odd number is used if the course has been approved to fulfill a core curriculum requirement.

EXCHANGE COURSES

Courses taken by undergraduate, degree-seeking St. Thomas students at Augsburg University, Hamline University, Macalester College and St. Catherine University through ACTC cross-registration are called exchange courses. These courses may be substituted for courses at the University of St. Thomas, subject to the following conditions:

1. The course is not one specified by a specific course number in the list of core curriculum requirements; and
2. The student has the written permission of the department chair of the major or minor if the course is in the major or minor concentration and taken to satisfy a particular requirement for that major or minor; and
3. The student consults the University Registrar before registering for more than one course at Augsburg, Hamline, Macalester or St. Catherine University during one semester. This one course limit does not apply to students pursuing a major or minor at these schools.

For exchange courses in the fall and spring semesters, St. Thomas students register at St. Thomas. Grades for these courses are automatically recorded on the St. Thomas transcript.

For courses during the summer sessions, students register at the college offering the courses and have a transcript of the completed work sent to St. Thomas. These summer courses are considered transfer courses.

Exchange courses may be used to fulfill the senior residency requirement.

Grades for exchange courses are included in the computation of the St. Thomas GPA.

Courses taken at Augsburg, Hamline, Macalester and St. Catherine by a student before he or she matriculates at St. Thomas or while the student is not an active student at St. Thomas are treated as transfer courses.

EXPERIENTIAL LEARNING

The University will grant credit for experiential learning to a registered student if the student's proposal for the work receives prior approval of the department involved and the relevant dean, and the student successfully completes the experience agreed upon. Students requesting credit for experiential learning usually will have attained junior or senior status. The most common type of experiential learning is an internship.

Credit granted in this way is graded on an S/R basis (pass/fail). A maximum of eight (8) credits of experiential learning may be counted toward the 129 credits required for graduation. The regular tuition rate for the number of credits is charged.

Prior to the occurrence of the experience for which credit is being sought, a student makes a formal request for one (1), two (2), three (3), or four (4) credits. This request includes:

- A detailed description of the experience for which credit is sought and a statement of its academic significance and validity in the student's program;
- An indication of any supplementary academic requirements to be fulfilled: papers, reports, etc.;
- The name of the person at the University of St. Thomas who will approve the proposal, maintain periodic contact with the off-campus supervisor and student, and corroborate the evaluation of the experience.
- An outline of the evaluation procedures to be used.

The credits allotted will comply with the undergraduate credit hour policy.

# of credits	Total hours*
1	42.5
2	85
3	127.5
4	170

*The total hours reflects a combination of faculty-led instruction, out-of-class work and on-site work.

Required meetings with St. Thomas faculty, the on-site supervisor and evaluation of the project will be determined by the department.

To request credit for experiential learning, students must submit a Internship/Experiential Learning Request (https://www.stthomas.edu/_media-library/_documents/registrar/experiential-learning-credit-request.pdf). Departments may require additional forms. Forms must be signed by the supervising faculty member, the chair of the department and the relevant dean before being submitted to the Office of Student Data and Registrar at the time of registration.

476 Experiential Learning (1-4 credits)

478 Experiential Learning (zero credit)

SEMINARS

Seminars are offered in a number of departments. With the exception of honors seminars in the Aquinas Scholars program (courses with an HONR prefix), regular tuition is charged.

483, 484 Seminar (2 credits)

The even number is normally used by the department. The odd number is used if the course has been approved to fulfill a core curriculum requirement.

485, 486 Seminar (4 credits)

The even number is normally used by the department. The odd number is used if the course has been approved to fulfill a core curriculum requirement.

RESEARCH

Some departments offer the opportunity to do research in the discipline. Students interested in pursuing credit for research should discuss their plans with the appropriate faculty member. When the project has been determined, the student and faculty member should complete the Independent Study Form (https://www.stthomas.edu/_media-library/_documents/registrar/individual-study.pdf). The research contract must be approved by the supervising faculty member, the chair of the department, and the relevant dean and then submitted to the Office of Student Data and Registrar during the registration period. Regular tuition is charged.

Research involving human subjects may not begin prior to review and approval by the Institutional Review Board (IRB). Student researchers are advised to consult with their faculty advisor and secure the needed forms and other information from the IRB website (https://one.stthomas.edu/sites/academic-affairs/institutional-review-board/SitePageModern/84368/home-page) early in the research-planning process.

269 Research (2 or 4 credits)

This research course can be either a 2- or 4-credit course depending on the department and the topic.

389 Research (2 or 4 credits)

This research course can be either a 2- or 4-credit course depending on the department and the topic.

491 Research (2 or 4 credits)

This research course can be either a 2- or 4-credit course depending on the department and the topic.

INDIVIDUAL STUDY

Individual study refers to a type of learning contract in which a registered student and/or faculty member have the responsibility for defining, organizing, and evaluating a special project of limited scope (limited in content and in the time designated for its completion). Individual study provides an opportunity for students (usually at junior or senior status) to receive one-on-one instruction and guidance, while pursuing a subject of special interest. This work is completed independently under the faculty member's personal direction.

Individual study may be pursued for either two (2) or four (4) credits. Determination of the amount of credit awarded is at the discretion of the department but should reflect an academic rigor commensurate with a regularly-offered course for the same amount of credit.

Students interested in pursuing individual study should discuss their plans with the appropriate faculty member. When the project has been determined, the student and faculty member should complete the Independent Study Form. The

individual study contract must be approved by the supervising faculty member, the chair of the department, and the relevant dean and then submitted to the Office of Student Data and Registrar during the registration period. Regular tuition is charged.

The grading for individual study may be standard (A,B,C, etc.) or Pass/Fail (S/R). This selection and an explanation must be indicated on the individual study contract when it is presented to the Office of Student Data and Registrar. (If the course is in the major field, grading must be on the standard system.)

243 Individual Study (2 or 4 credits)

This individual study can be either a 2- or 4-credit course depending on the department and the topic.

393 Individual Study (2 or 4 credits)

This individual study can be either a 2- or 4-credit course depending on the department and the topic.

495 Individual Study (2 or 4 credits)

This individual study can be either a 2- or 4-credit course depending on the department and the topic.

Retaking a Course

A student may retake a course if her or his grade or mark is F, R, D-, D or D+. If the course is retaken at St. Thomas, only the higher grade will be used to compute the GPA. Credit will not be given more than once for the same course. Both notations, however, will remain on the transcript.

If the course is retaken elsewhere, the student must obtain preapproval from the relevant department to confirm that the course is equivalent to the course originally taken at St. Thomas.

If the student earns a C- or higher after taking the off-campus course, the course can transfer to St. Thomas to fulfill a requirement, but credit will not be given for the course the second time and the St. Thomas grade will not be replaced in the GPA. Both notations, however, will be included on the transcript.

Degree Requirements-Baccalaureate

Overview

The University of St. Thomas grants the degrees Bachelor of Arts (B.A.), Bachelor of Music (B.M.), Bachelor of Science (B.S.), Bachelor of Science in Business Administration (B.S.B.A), Bachelor of Science in Civil Engineering (B.S.C.E.) , Bachelor of Science in Computer Engineering (B.S.C.P.E.), Bachelor of Science in Electrical Engineering (B.S.E.E.) and Bachelor of Science in Mechanical Engineering (B.S.M.E.) to individuals who successfully complete its undergraduate degree programs. These undergraduate degrees have three primary components: the core curriculum, the enhanced curriculum, and the major concentration.

To complete the core curriculum, a student takes courses in English; Philosophy and Theology; natural science; quantitative analysis; social scientific analysis; historical analysis; fine arts; language and culture; integrations in the humanities; global perspectives; diversity, inclusion and social justice; signature work; and Writing Across the Curriculum. These courses provide the student with a broad education and with the skills needed for further work in these and other areas. See the section on Core Curriculum for additional details.

A candidate for a degree completes a major concentration in one of the specific academic disciplines represented in the undergraduate program. Alternatively, a student may construct a major concentration to meet a specific need or interest, subject to the approval of the Committee on Undergraduate Studies. This major concentration component of a degree provides students with the opportunity to pursue a limited subject in depth and to prepare for a career. See the section on Major Requirements for additional details.

GPA Requirements

A minimum grade point average (GPA) of 2.00 must be achieved in all of the following categories:

- all credits presented for graduation (including transfer credits)
- all credits earned at St. Thomas
- all credits in the department (Opus College of Business for business majors) of the major field (including transfer credits)
- all credits in the department (Opus College of Business for business majors) of the major field earned at St. Thomas.

If the student has elected to declare a minor field, all credits in the department (Opus College of Business for business minors) of the minor (including transfer credits) and all credits in the department (Opus College of Business for business minors) of the

minor field earned at St. Thomas must have a GPA of 2.00.

Minimum Credit Requirement

To receive a bachelor's degree, a student must successfully complete a minimum of 129 credits and fulfill all degree requirements. One credit can be waived for students who complete a minimum of 128 credits and all other degree requirements.

Students must take a minimum of 64 credits at the 200-level or above. One credit can be waived for students who complete a minimum of 63 credits at 200-level or above and have completed all other degree requirements.

Senior Residency Requirement

Senior residency requires that a graduate have completed thirty-two of the final thirty-six credits at St. Thomas, at one of the other four ACTC colleges, or through an affiliated program.

Maximum Credits in Experiential Learning and Courses Graded Pass/Fail

No more than eight credits in Experiential Learning may be counted toward the minimum 129 credits for graduation.

No more than one-eighth of the courses taken at St. Thomas presented for graduation may be graded on the Pass/Fail system.

Overlapping or Equivalent Courses and Courses Satisfying More Than One Requirement

No two courses may be equivalent or overlapping. (Credit is not given for a course that overlaps a course previously taken or a cross-listed course in another department. Such courses are indicated in the course descriptions by the number of the conflicting courses in parentheses following the title.)

Within the core curriculum, there are only a few instances in which one course may satisfy more than one core requirement for a student. For example a course that fulfills Integrations in Humanities may also fulfill the Global Perspectives flag or the Diversity, Inclusion and Social Justice flag. A course may meet the Signature Work requirement and other core requirements (core area or core flag courses). Also, a course may meet a Writing Across the Curriculum requirement and other core requirements (core area or core flag courses). A study abroad course which spends 20 days abroad (including travel time) may meet Global Perspectives and another core-area requirement.

Enhanced Curriculum

Students will enhance their core and major curricular experience in a reflective manner. Students will do so by completing one of the following (unless exclusions apply):

- A second major (B.A.) in Liberal Studies
- A second B.A., B.M., or B.S. major
- A minor (or minors)
- A certificate
- A guided series of courses, including at least 12 credits outside the primary major:

This option requires students take courses (adding up to 12 credits) related to their field of study, including allied courses that support their major and are outside of their major department; explore outside the boundaries of an established second major or minor; or complete a subset of courses in a second major or minor. Students who elect this option should articulate to their advisors a rationale and plan for the set of courses they select.

- A set of exploratory electives, including at least 12 credits outside the primary major:

This option applies to students exploring their opportunities for a major in an eclectic way. Exploratory electives (adding up to 12 credits) can be taken at any point in a student's education, either at the beginning as a way to explore possible majors or minors, or throughout the student's time simply to explore areas of interest outside their major. Students may choose whatever exploratory elective courses they wish, but they should discuss their chosen exploratory elective courses with their advisors.

Grades-Baccalaureate

Overview

At the end of each semester or term, each student who is registered for a course receives either a grade or a mark in that course. In each case, the grade or mark is one of the following letters: A, B, C, D, F, I, R, S, or W. At the discretion of the instructor, the grade A may be followed by a minus, as A-, and the grades B, C, D may be followed either by a plus, +, or a minus, -. The use of plus and minus indicates performance levels between those suggested by these characteristics:

A	**Excellent Work**
B	Very Good Work
C	Satisfactory Work
D	Poor but Passing Work
F	Failing Work
I	Incomplete
S	Satisfactory
R	Unsatisfactory
W	Withdrawal
NR	Indicates a grade that has not been recorded

Grade Point Value, Grade Point Total, and Grade Point Average

The grades A, B, C, D, either alone or followed by a plus or minus, and the grade F are called regular grades. Each of these grades has an associated grade point value. These values are listed below:

A	4.0	C	2.0
A-	3.7	C-	1.7
B+	3.3	D+	1.3
B	3.0	D	1.0
B-	2.7	D-	0.7
C+	2.3	F	0.0

Marks of W, I, R, and S have no grade point value.

The grade point total is the sum of grade points (multiply each grade point value by the number of credits for the course) for all courses with grade point value.

The grade point average (GPA) is determined by dividing the grade point total by the number of credits with grade point value.

For example, using a standard four-credit course as a basis, if a student received two A's (32 points), one B- (10.8 points), and one C+ (9.2 points) divided by 16 (the number of credits), the GPA would be 3.25. If the student received a grade of F (0 points) in a course, the grade point total would still be divided by 16 credits, and the GPA would be lower.

S-D-R Grading

To encourage a wider choice of courses by lessening the student's concern for the grade point average (GPA), selected courses may be taken using the S-D-R grading option, where:

S: Satisfactory performance - the student would have received a grade of A, B, or C

D: Equivalent to letter grade of D

R: Unsatisfactory (failing) performance

The following rules apply to courses taken on this basis:

1. The S-D-R grading option is not available for courses taken to fulfill a requirement in the core curriculum.
2. No more than one-eighth of the credits taken through the undergraduate program may be taken on the S-D-R grading option.
3. A student must complete a form at the Office of Student Data and Registrar for any course to be taken on this basis. The published deadline date is in the academic calendar for each term. Once a student opts in to the S-D-R option, the student may not revert back to regular grading.
4. If the course is part of the major or minor program (including allied requirements), the signature of the department chair is required.
5. If a student receives a letter grade of C- or above, the mark of S (satisfactory) and credit will be given. If the grade of D, D+, or D- is received, the student has the option of:
    - accepting a mark of R with no effect on the GPA and no credit earned, or
    - earning the credit, with the grade of D, D+, or D- becoming the grade of record and used in computing the GPA.

S-R Grades

1. All experiential learning courses are marked with S for satisfactory work and R for unsatisfactory work.
2. For individual study or research courses, the mark of S is given for satisfactory work and the mark of R for unsatisfactory work. If a student wishes to be graded according to

the regular system (A, B, C, D, F), this choice must be approved by the appropriate faculty supervisor and the department chair.

3. In addition, this choice must be indicated on the form used to outline the individual study project.
   Several other courses in various departments are routinely marked with S for satisfactory and R for unsatisfactory work. The grading system for such courses is indicated as part of the regular course description.

4. Courses that are routinely graded on the S-R system are not counted among the one-eighth of a student's courses for which the S-D-R grading system may be selected.

Mark of Incomplete

The mark of Incomplete ("I") is assigned at the instructor's discretion if the student has not completed the work of the course, has been actively engaged in the course, has good reason for delay, and has made arrangements with the instructor before grades for the course are due. Ordinarily, good reason will involve matters beyond control of the student, such as serious illness, necessary absence, or other extenuating circumstances. The mark of "I" may only be assigned if the student is passing at the time of the request and the student satisfactorily completed a substantial part of the coursework (generally at least 70%). The mark may not be assigned as a substitute for a failing grade or to allow a student to improve a grade by completing additional work over and above that ordinarily expected for the course or by repetition of work already submitted to the instructor. The mark of "I" should not be used without prior arrangement between the instructor and student.

If a mark of "I" is assigned, an Incomplete Grade Form (https://one.stthomas.edu/sites/its/student-data-registrar/SitePageModern/232310/faculty-staff-forms)) must be submitted to the Office of Student Data and Registrar. This form includes the reason for the incomplete, a description of work left to complete, a deadline for completion, a provisional grade based on work the student has completed to date, and confirmation by the instructor that the contents of the form have been clearly communicated to the student.

The student must complete the designated work and submit it to the instructor by the date specified below:

- February 15th – for an incomplete assigned in the Fall semester
- March 15th – for an incomplete assigned in the January term
- July 15th – for an incomplete assigned in the Spring semester
- October 15th – for an incomplete assigned in any summer term

In courses with an experiential, field work, clinical, or community engagement component, the instructor may extend the deadline one time for submission of the designated work to the date specified below:

- May 15th – for an incomplete assigned in the **Fall semester or January term**
- December 15th – for an incomplete assigned in the **Spring semester or any summer term**

The deadline specified on the mark of Incomplete Form may not be extended. If the designated work is not submitted to the instructor before the deadline, the mark of "I" will change to the provisional grade assigned on the form. The instructor may change a provisional grade by means of university grade change policies and procedures (see below).

Change of Grade

An instructor may change a grade or mark by using the Grade Change Form (https://one.stthomas.edu/sites/its/student-data-registrar/SitePageModern/232310/faculty-staff-form) in the following situations:

1. Instructors may change a conventional letter grade only if there has been an error in the computation, transcription, or reporting of the grade.

2. Instructors may change a provisional grade that results from the lapse of a mark of Incomplete ("I").

All changes must be submitted to the Office of Student Data and Registrar within six months of the original grade or mark submission. From six months until one year after the original grade or mark submission, changes require the approval of the department chair and dean. After one year, changes are not allowed.

Changes may not be made on the basis of additional work completed by a student unless all

members of the class had the option to submit additional work.

Grade Reports

Final grades can be accessed by the student through Murphy Online, the St. Thomas student self-service system.

Non-Traditional Grading

St. Thomas will post non-traditional grades that meet our minimum transfer grade policy (these include AB or a grade value of 3.5 and BC or a grade value of 2.5). To be posted, all non-traditional grades must be the equivalent of a C- or higher.

Graduation-Baccalaureate

Catalog of Record

The catalog in effect at the time of matriculation is usually considered the catalog of record and determines the student's graduation requirements. However, a student may wish to choose a later catalog if degree requirements change, and the student would like to take advantage of those changes. Generally speaking, the student may choose any catalog in force during the time the student is enrolled for a degree.

Choosing a new catalog means accepting all changes in that catalog. If there is a change in core curriculum requirements, for example, the student will be responsible for those changes or will need to petition for a waiver. Students should contact Academic Counseling If they wish to change their catalog of record.

Commencement Ceremony

A single commencement ceremony is held in May for all students earning an undergraduate degree each year. Students who complete degree requirements at the end of summer, fall, January, and spring terms participate in the May ceremony following the term in which requirements are completed.

Undergraduate students with senior status who are in good academic standing may choose to participate in a commencement ceremony prior to or after completing all degree requirements. Students may only participate in one commencement ceremony, and that ceremony must be within one academic year of their graduation.

Committee on Undergraduate Studies

The Committee on Undergraduate Studies is charged with interpreting the general academic requirements of the undergraduate program and has the authority to grant exceptions and waivers when warranted. The committee is composed of elected faculty members and a representative from Academic Counseling.

Students begin the petition process by visiting the Director of Academic Support and Compliance in Academic Counseling in the Center for Student Achievement.

Requests concerning major or minor field requirements should be addressed to the appropriate department chair.

Date of Graduation

Degrees are awarded at the end of fall, January, spring, and summer terms. The date of graduation will be the last day of the term in which a student is registered. The degree will not be awarded until the student completes all degree requirements. To be considered completed, all courses must have final grades. An Incomplete (I) or a Not Reported (NR) grade is not considered a final grade and must be changed before the degree will be awarded.

Diploma

One diploma is awarded for each degree earned. Diplomas are distributed to graduates after the university has verified that all requirements for graduation have been met. This may be several weeks after commencement. Diplomas will be sent to the graduate's permanent address by mail. Diplomas will not be released to students who have holds on their record.

The size of all diplomas is 8.5 x 11 inches. Information on the diploma includes the name of the university, the university seal, the graduate's name, the degree represented by the diploma, and the date of graduation.

Transcripts

A transcript of a student's academic record will be issued only upon receipt of a written request from the student.

Alumni and current students may request official electronic and paper transcripts through the Parchment St. Thomas Online Storefront (https://www.parchment.com/u/registration/34843/institution). The University of St. Thomas continues to

offer official paper transcripts at no cost through the Transcript Request Form (https://stthomas.az1.qualtrics.com/jfe/form/SV_3VgGkXrlCz3PpPw). Transcripts will not be issued to students who have active holds on their records.

Progress to Degree-Baccalaureate

Student Classification

Degree Students

A degree-seeking student is one who takes courses for credit toward a degree at the university. A degree-seeking student who takes 12 or more credits during a fall or spring semester is considered a full-time student. A degree-seeking student who takes fewer than 12 credits is considered a part-time student.

A degree-seeking student is ranked by credits successfully completed:

* 27 credits or fewer = freshman
* between 28 and 59 credits = sophomore
* between 60 and 91 credits = junior
* 92 credits or more = senior

Non-Degree Students

A student who takes courses for credit and without expectation of a degree is called a non-degree student.

Auditors

An auditor is a student who takes courses without expectation of credit.

Academic Standing

The student's unofficial transcript indicates the student's academic standing as determined by the student's grades at the end of each fall and spring semester. Academic standing does not change after a January term or summer session.

Good Standing

A student with a University of St. Thomas cumulative grade point average of at least 2.00 is making satisfactory progress toward meeting the minimum grade point average requirement for graduation and is, therefore, in good academic standing.

Academic/Financial Aid Warning

A student who has attempted 12 credits or more at the University of St. Thomas and has not achieved a University of St. Thomas institutional cumulative grade point average of 2.00 or better is put on academic warning. Each student placed on academic/financial aid warning will receive a notification from the Office of Academic Counseling (https://www.stthomas.edu/academics/academic-counseling/index.html).

Students placed on academic/financial aid warning are required to meet with an academic counselor to discuss strategies for improving their academic performance. Engagement with Academic Counseling support during the warning semester will be considered for any suspension and dismissal appeals.

Academic Suspension

A student is suspended from the university for one semester (not a January term or summer session) if the student has not achieved a University of St. Thomas semester grade point average of at least 2.00 for courses taken during a fall or spring warning semester.

Each student suspended will receive a letter from the Office of Student Data & Registrar (https://www.stthomas.edu/registrar/index.html). A student may re-enroll following a semester of suspension but must make an appointment with an academic counselor to do so. In addition, students returning from suspension are required to work with an academic counselor during their first semester after suspension. All students receiving financial aid need to consult with the Undergraduate Financial Aid Office upon re-enrollment. Students returning from an academic suspension are on academic/financial aid warning for their first semester and are limited to 18 credits in the first semester. Students who are suspended may appeal their suspension to the Committee on Undergraduate Studies after consulting with the Director of Academic Support and Compliance. The appeal process will consider students' engagement with Academic Counseling support during the warning semester.

Academic Dismissal

A student is dismissed from the undergraduate program if the student has not achieved a University of St. Thomas semester institutional grade point average of at least 2.00 for courses taken during a fall or spring academic/financial aid warning semester following academic suspension.

Each student dismissed will receive a letter from the Office of Student Data & Registrar. Students who are dismissed may appeal to the Committee on Undergraduate Studies for readmission after consulting with the Director of Academic Support and Compliance. The appeal process will consider students' engagement with Academic Counseling support during the academic warning semester.

Conditions for Readmission after Suspension or Academic Dismissal

Academic suspension applies only to fall and spring semesters. After the semester of suspension, the student is eligible to register for the following term, upon consultation with a counselor in the Office of Academic Counseling. This semester becomes an academic/financial aid warning semester and is subject to the conditions listed above.

If a student is readmitted to the university by the Committee on Undergraduate Studies after academic dismissal, the conditions of readmission will be stated by the Committee. All students receiving financial aid are required to consult with the Undergraduate Financial Aid Office (https://www.stthomas.edu/financial-aid/undergraduate/index.html) upon re-enrollment.

Registration & Attendance Policies- Baccalaureate

Overview

A student must officially register for a course before attending, and will not receive credit unless officially registered.

Students must attend the first day of class in order to secure their place in the course. The instructor has the option to drop a student from the class roster if the student was not in attendance on the first day of the session. Students must not assume they have been dropped if they did not attend the first day of class. To officially withdraw from the class, please see the Withdrawal webpage and linked withdrawal policy.

Advising holds are placed on all student records prior to the early registration time period each semester. This prompts students to meet with their advisors and thoughtfully plan and prepare for course enrollment for the upcoming term. Registration for courses within the cooperating colleges in the Associated Colleges of the Twin Cities (ACTC) must be completed through the Office of the University Student Data & Registrar.

The open registration period for summer session courses is in March. The registration period for fall semester is in April; January term and spring semester in November. Each student is scheduled to register beginning at a specific date and time, based on his/her number of earned credit hours and an alphabetical rotation of surnames.

All seniors are allowed to register for classes, then all student Veterans and/or Service members, then all juniors, then all sophomores, then all freshmen. Because student Veterans and/or Service members can apply before other groups, they are eligible for priority enrollment.

Attendance and Coursework Completion Policy

St. Thomas has an Undergraduate Course Attendance and Coursework Completion Policy that establishes expectations for class attendance and coursework completion in undergraduate courses, defines what can be considered an excused absence from class or the timely completion of coursework, and outlines the process for notification and verification of excused absences. Students are responsible for reading, understanding, and adhering to the Undergraduate Course Attendance and Coursework Completion Policy.

See **Appendix 4**

Auditing a Course

A student may choose to audit a course rather than take it for credit. If attendance is satisfactory, the course number, title and the audit designation will appear on the transcript. If attendance is not satisfactory, the course will not appear on the transcript. In no case may a student receive credit for a course that was audited unless the course is retaken for credit. An instructor or Department chair approval is required to Audit any course.

Students may not switch from credit status to audit status after the last day to withdraw from a class without a grade of F. Students may not switch from audit status to credit status after the last day to register or add a class.

The tuition charged for an audited courses is equivalent to one credit of tuition.

Change in Registration

Adding Courses

Students can add courses to their schedules using the Murphy Online registration system until the published deadline to "add a class without instructor permission". Students must refer to the university's Academic Calendar to see which day is designated as the "Last day to add a class without instructor permission." After the published deadline, additional classes are added by submitting a Change in Registration (Add/Drop) form, which must be signed by the instructor, to the Office of Student Data & Registrar. This form is available at the Office of Student Data & Registrar website.

Dropping or Withdrawing from Courses

St. Thomas has a policy that establishes the conditions and limitations under which students can withdraw from one or more undergraduate courses (also known as "dropping a course"), from all courses within a term, and from the institution. Students are responsible for reading, understanding, and adhering to the Undergraduate Course, Term and Institutional Withdrawal policy located in **Appendix 5.**

Veterans Benefits

The Veterans Benefits and Transition Act of 2018 (Public Law 115-407) was signed into law on December 31, 2018. Beginning on August 1, 2019, the University has a policy in place allowing GI Bill and VR&E beneficiaries (Chapter 33 and Chapter 31 beneficiaries) to attend a course of education for up to 90 days from the date the beneficiary provides a certificate of eligibility, or valid VAF 28-1905. This allows a student to attend the course until VA provides payment to the institution. The University will not impose a penalty, or require the beneficiary to borrow additional funds to cover tuition and fees due to late payments from VA.

New Student Scheduling

Registration for new freshmen and entering transfer students is coordinated by the Office of Academic Counseling.

Freshmen who begin their studies at the university in the fall receive a pre-registration packet containing course information and a description of the registration process which occurs during Summer Orientation.

New transfer students meet individually with an academic counselor to interpret their transfer credit evaluation and select appropriate courses related to their interests.

At this meeting, transfer students should identify any transfer courses they think should count as fulfilling particular core requirements. The academic counselor will assist the transfer student with a petition form used to request consideration of one or more transfer courses for fulfillment of core requirements. The petition form should be submitted to the Faculty Director of Transfer Courses during the first semester of enrollment at St. Thomas.

Upper division transfer students are encouraged to declare a specific major field. Separate summer orientation programs are held for new freshmen and transfer students.

All students are assigned academic advisors.

Withdrawal

St. Thomas has a policy that establishes the conditions and limitations under which students can withdraw from one or more undergraduate courses (also known as "dropping a course"), from all courses within a term, and from the institution. Students are responsible for reading, understanding, and adhering to the Undergraduate Course, Term and Institutional Withdrawal policy located in **Appendix 5.**

Other Related Policies

- Financial Aid Withdrawal Policy: Undergraduate Students: https://www.stthomas.edu/financial-aid/undergraduate/policies/withdrawal/index.html
- Tuition Insurance Plan https://www.stthomas.edu/about/departments/business-office/tuition-fees-charges-related-payment-options/tuition-insurance-plan/index.html
- Military Withdrawal Policy: See **Appendix 7** https://www.stthomas.edu/about/departments/general-counsel/policy-pdfs/military-withdrawal-policy.pdf

Transfer Credit Policies- Baccalaureate

Transfer Courses

Transfer courses are courses accepted for credit at St. Thomas and taken at another postsecondary institution that is accredited by an organization recognized by the Council for Higher Education

Accreditation. Exchange courses, as described above, are not transfer courses.

Students who are seeking admission to the University of St. Thomas must have official transcripts of all previous college work sent to the Office of Admissions for evaluation by the University Registrar.

Students who have matriculated at St Thomas must forward transcripts from any other institution attended to the Office of Admissions for evaluation by the University Registrar.

All paper transcripts should be mailed directly from the institution of study to the following address:

University of St. Thomas
Admissions, Mail #5017
2115 Summit Ave
St. Paul, MN 55105-1078

All links and passwords to electronic PDF transcript downloads should be emailed directly from the institution of study to the following email address: admissions@stthomas.edu.

The Faculty Director of Transfer Courses oversees the process for transfer credit determinations, with relevant academic units being the decision-makers about transfer credit equivalencies. The University Registrar records the transfer course decisions. Students may be asked to provide additional materials for transfer course decisions. The university may require transcripts from foreign schools to be submitted to an evaluation service for processing before considering them. A fee may be charged for this service.

The information about transfer courses that is provided in the "Transfer Credit Tool" (https://www.stthomas.edu/admissions/undergraduate/transfer/credit-transfer/index.html) applies to transfer courses taken both prior to matriculation as well as after matriculation. If a student has matriculated at St. Thomas and thereafter wishes to enroll in a course that is not in the Transfer Credit Tool, the determination of whether a post-matriculation transfer course fulfills the criteria for a core requirement or for a major or minor field requirement must be made by the appropriate academic unit; this pre-approval should be determined prior to the student enrolling in the course. Though academic units are encouraged to use course descriptions for making transfer course determinations, an academic unit may require students to submit the syllabus for any potential transfer course they hope to apply to a major, minor, certificate, or core requirement.

In some cases, if a transfer student is bringing in a significant amount of transfer courses, and if the course-by-course evaluation leaves many potentially relevant courses evaluated only as elective credits, the student's transcript may be holistically evaluated by the Faculty Director of Transfer Courses, consulting with faculty and deans to determine if a group of courses could collectively meet the spirit of a particular requirement (major, minor, certificate, or core)

Post-Matriculation Transfer Credit Limit

Students who first become degree-seeking at St. Thomas beginning with the fall 2013 semester and for all subsequent semesters may count a maximum of 8 additional transfer credits taken after the date of matriculation at St. Thomas toward core requirements, with no more than 4 of those credits counting toward any one core requirement area (for instance, Language and Culture or Literature and Writing). This limit applies only to post-matriculation transfer credits and therefore does not apply to courses taken through a UST study abroad program or through the ACTC.

Minimum Transfer Grade Requirement

St. Thomas will accept only transfer courses in which the student has received a minimum grade of C- (1.7 value) or higher.

When a transfer student matriculates at St. Thomas, all transfer courses accepted for credit at St. Thomas will be posted to the student's academic history for the first term of enrollment at St. Thomas. When any St. Thomas student transfers credits to St. Thomas after the student's first term of enrollment, the transfer courses will be posted to academic history for the term in which it was taken at the transfer institution.

Quarter Credit to Semester Credit Conversions

St. Thomas will convert all transfer credits taken from quarter system academic institutions to semester credit using the following conversion scale (dividing the number of quarter credits by 1.5).

Quarter Credits	Semester Credits
6	4
5	3.3
4	2.7
3	2

2	1.3
1	0.7

FYE Requirement for Transfer Students

The First-Year Experience (FYE) requirement described below applies specifically to transfer students, defined as students who have taken college credit after high school graduation in a traditional fall or spring term. The FYE requirement that applies to First-Time First Year students, defined as students who have *not* taken college credit after high school graduation in a traditional fall or spring term, is described in the Core Curriculum's First-Year Experience.

The FYE requirement for transfer students is the following:

- Transfer students with 27 or fewer credits (the credit classification for a freshmen student) will complete the full FYE requirement including the learning community requirement and the 1-credit FYEX-100 course.
- Transfer students with 28 or more credits will be exempt from the FYE requirement but will complete the 0-credit FYEX 001, which will be Canvas modules that introduce students to our mission, values, convictions, and important resources on campus. Registration holds will be used to ensure these students complete this in a timely manner.

Transfer Block Agreements

The University of St. Thomas has two transfer block agreements: one regarding the Minnesota Transfer Curriculum and another addressing associate degrees earned at institutions in specific states. The transfer block agreements apply to students matriculating to St. Thomas in Fall 2021 and beyond.

The transfer block agreements address how the Minnesota Transfer Curriculum and associate degrees (specified below) relate to the core curriculum of the St. Thomas undergraduate baccalaureate degrees. In situations where additional evaluation is needed (e.g., the course is a major or allied requirement and is not on the Transfer Credit Tool), the relevant academic unit will make this determination.

Minnesota Transfer Curriculum

The Minnesota Transfer Curriculum is (MnTC) is a set of general education curricular requirements in all two- and four-year public colleges and universities in Minnesota, including schools within the Minnesota State Colleges and Universities system (30 two-year colleges and seven state universities) as well as those within the University of Minnesota system.

All students who complete the MnTC before matriculating to St. Thomas as a baccalaureate-degree-seeking student will be deemed to have completed the St. Thomas undergraduate core curriculum requirements after satisfying these additional requirements:

- Complete two additional courses, one designated by the Philosophy department and one designated by the Theology department.
- Complete an FYEX course.
    - If the student is a first-time first-year (FTFY) student, they will take FYEX 100. FTFY students are those who have not taken college credit after high school graduation in a traditional fall or spring term.
    - If a student is a transfer student, they take a student-specific alternative (FYEX 001).
- Complete the core curriculum's Signature Work requirement.

Associate Degrees

All students who complete an Associate of Arts (AA) degree from an accredited institution in Minnesota, Wisconsin, Iowa, Illinois, and North Dakota before matriculating to St. Thomas as a baccalaureate-degree-seeking student will be deemed to have completed the St. Thomas undergraduate core curriculum requirements after satisfying these additional requirements:

- Complete two additional courses, one designated by the Philosophy department and one designated by the Theology department.
- Complete an FYEX course.
    - If the student is a first-time first-year (FTFY) student, they will take FYEX 100. FTFY students are those who have not taken college credit

after high school graduation in a traditional fall or spring term.

    - If a student is a transfer student, they take a student-specific alternative (FYEX 001).

- Complete the core curriculum's Signature Work requirement.

All students who complete an Associate of Science (AS) degree from Minnesota and also complete the 40-credit Minnesota Transfer Curriculum before matriculating to St. Thomas as a baccalaureate-degree-seeking student will be deemed to have completed the St. Thomas undergraduate core curriculum requirements after satisfying these additional requirements:

- Complete two additional courses, one designated by the Philosophy department and one designated by the Theology department.
- Complete an FYEX course.
    - If the student is a first-time first-year (FTFY) student, they will take FYEX 100. FTFY students are those who have not taken college credit after high school graduation in a traditional fall or spring term.
    - If a student is a transfer student, they take a student-specific alternative (FYEX 001).
- Complete the core curriculum's Signature Work requirement.

Special Academic Programs-Baccalaureate

Special Curricula

The undergraduate program offers several programs that a student may pursue in addition to a major concentration.

These include:

- Air Force (https://cas.stthomas.edu/departments/areas-of-study/aerospace-studies-afrotc), Army, and Navy ROTC
- Certificate In Lay Ministry (https://cas.stthomas.edu/departments/areas-of-study/theology/lay-ministry)
- Community Engagement (https://www.stthomas.edu/center-for-common-good/academic-community-engagement/index.html)
- Study Away Programs (https://www.stthomas.edu/academics/study-abroad/index.html)

Associated Colleges of the Twin Cities (ACTC)

The University of St. Thomas has joined with four other private colleges in the Twin Cities to form the Associated Colleges of the Twin Cities (ACTC), a legal entity designed to facilitate cooperative activities among the five benefiting institutions. Augsburg College in Minneapolis and Hamline University, Macalester College and St. Catherine University in St. Paul are the other institutions that make up this consortium with the University of St. Thomas. These colleges possess a long history of cooperative academic activity.

Full-time, degree-seeking undergraduate students in the day division are eligible to register for exchange courses in the fall and spring semesters. Students are limited to one exchange course each semester. An exception to this are students majoring in Social Work which is a joint program with St. Catherine University, and students with a declared ACTC major or minor.

Exchange courses are not transfer courses, and thus courses taken through the ACTC are considered St. Thomas courses and will count towards the senior residency requirement.

Note: courses taken during the summer sessions at an ACTC institution are considered transfer work. Students register and pay tuition at the college offering the courses and must have a transcript of the completed work sent to St. Thomas.

In addition to the course exchange, St. Thomas students may choose a major or minor area of concentration at any of the other four institutions. The student must be accepted into the major or minor by the appropriate department chair at the school where the program is offered. Not all programs offered by other ACTC universities are available through the ACTC: for instance, Nursing at Saint Catherine University is not available to St. Thomas students or other ACTC students per Saint Catherine University's policy. The proposed program must be approved by the Committee on Studies at St. Thomas. For additional information please consult our Office of Academic Counseling,

located in MHC room 110. Counselors may be reached at 651-962-6300.

Parents-on-Campus Program

Parents of full-time students in the undergraduate day program are eligible to take up to two undergraduate courses (or eight credits) on a space-available basis in fall and spring semesters without tuition charge. The dependent daughter/son must be a full-time day student taking at least twelve credits.

Parents may audit courses or take them for credit. Parents may be non-degree or degree-seeking students. If the parent chooses to become a degree-seeking student, an application must be made through the Office of Undergraduate Admissions.

Fees will be charged for books, music lessons, laboratory charges, individual studies, and experiential learning. There is a fee charged for all business courses.

Not included in this program are: Graduate courses, courses at ACTC schools, courses taught in January term or summer sessions, and study abroad courses.

Registration for Parents-on-Campus (non-degree and degree-seeking) will begin five business days prior to the start of the term.

Additional information on this program can be obtained from the Office of Student Data & Registrar.

Washington Semester

Cross-College Program

High-Pippert (POLS), adviser

The University of St. Thomas is affiliated with American University's Washington Semester Program, Washington, D.C. Students do need to apply through the Office of Study Abroad, and will need to meet with an advisor in our office to access the application.

Students selected from across the nation to participate in the program have the option of studying in various subject areas that have included: American Politics, Economic Policy, Foreign Policy, Gender and Politics, Information Technology and Telecom, International Business and Trade, International Environment and Development, Journalism, Justice, Law Enforcement vs. Liberty, Peace and Conflict Resolution, Public Law, and Transforming Communities. Program areas are subject to change.

The Washington Semester involves seminars, research and internships drawing on governmental and private organization resources in the Washington area. Nominations to participate are made by the university, with final acceptance decided by American University.

Upon successful completion of four courses, 16 semester credits are earned and transferred to St. Thomas.

Current Curricula: 2025-2026

Welcome to the University of St. Thomas's undergraduate catalog. Within these pages, you'll find a wealth of opportunities designed to support your intellectual curiosity and empower you to become a successful undergraduate student. Explore courses, degree programs, and pathways for academic exploration by refining your search below.

This catalog is accurate to the best of our knowledge and ability at the time of publication, but is subject to change. It is the student's responsibility to know and meet graduation requirements and academic policy.

See the Undergraduate Program Finder to find your major or minor.

DOUGHERTY FAMILY COLLEGE

Liberal Arts Major (A.A.)

Program Overview

THM (301), 651-962-8017

Fernandes, Gaalaas, Gibson, McCann, Rosado, Smith, Trost

All students must complete the requirements outlined below.

Unless specifically noted, all courses are four credits each.

64 credits total

Requirements to be completed by the end of the first year:

Complete at least two courses

All students must complete:

- FYEX 120: First Year Seminar: Leading & Serving (2-credits per semester, must enroll for both semesters of first year)

Choose at least four (4) credits from:

- HLTH 250: Personal Health and Wellness (2 credit sections only)
- HLTH 275: Lifelong Stress Management (2 credits)
- HLTH 296: Topics (2 credits)
- PHED 101: Physical Fitness (2 credits)

Literature, Writing, Communication

Complete all four courses*

- ENGL 110: Intensive writing [*Students may place out of 110, please see your advisor. If you do not take this course you must take an additional 4-credits from Fine Arts]
- ENGL 121: Critical Thinking: Literature and Writing
- ENGL 203: Texts in Conversation, Writing Intensive
- COMM 100: Public Speaking

Natural and Physical Sciences

Complete two courses

Choose one from:

- BIOL 101: General Biology
- BIOL 102: Conservation Biology*
- BIOL 105: Human Biology

Choose one from:

- CHEM 100: Chemistry in Our World*
- CHEM 101: Environmental Chemistry*
- GEOL 115: Environmental Geology
- ENGR 123: Energy and the Environment

*Students who take CHEM 100 or CHEM 101 must then take BIOL 102

Math and Quantitative Literacy

Complete one course

Choose one from:

- MATH 101: Finite Mathematics
- MATH 105: Precalculus

History and Social Science

Complete three courses

- SOCI 100: Introduction to Sociology
- HIST 112: The History of the Modern World since 1550
  OR HIST 115: The World Since 1900
- PSYC 111: General Psychology
  OR ECON 251: Principles of Macroeconomics

Faith, Social Responsibility, and Human Diversity

Complete all three courses:

- THEO 101: The Christian Theological Tradition
- PHIL 115: Philosophy of the Human Person
- JPST 250: Introduction to Justice and Peace Studies

Fine Arts

Complete one course (* an additional 4 credits are required if ENGL 110 was waived)

Choose one from:

- ARTH 110: Introduction to Art History
- MUSC 115: Understanding Music & Culture
- MUSC 130: Introduction to World Music
- MUSC 162: The Roots of Blues, Rock, and Country Music

Additional Requirements, to be completed by the end of the first year:

Complete at least two courses

All students must complete:
FYEX 120: First Year Seminar: Leading & Serving (2-credits per semester, must enroll for both semesters of first year)

Choose at least four (4) credits from:
HLTH 250: Personal Health and Wellness (2 credit sections only)
HLTH 275: Lifelong Stress Management (2 credits)

HLTH 296: Topics (2 credits)
PHED 101: Physical Fitness (2 credits)

A.A. Courses

BIOL 101 General Biology (0-4 credits)
Emphasizing biology as a creative, investigative process and its relevance in today's world, this course provides an overview of cell biology, genetics, physiology, and human impact on the environment. Two laboratory hours per week. Not open to biology majors, pre-professional students, or students who have completed BIOL 105 or BIOL 106.

BIOL 102 Conservation Biology (0-4 credits)
An introduction to the basic concepts of conservation biology, including the history of conservation, the value of biological diversity, threats to biodiversity, conservation at the population, species, and community levels, and applications to human activities. Laboratories will emphasize data collection and analysis, and the practical application of conservation practices. This course is designed to meet the needs of the Environmental Studies major for a core course in environmental biology. Two laboratory hours per week.

BIOL 105 Human Biology (0-4 credits)
An introduction to cells, genetics, development and the human body, and the impact of humans on the environment. Laboratories will emphasize investigative scientific problem solving and creative thinking. Three laboratory hours per week. Not open to students who have completed BIOL 101 or BIOL 106.

CHEM 100 Chemistry in Our World (0-4 credits)
An introduction to chemistry and its applications to modern society and personal life. The course is intended for non-majors and satisfies a general requirement for one semester of a laboratory science course. The chemistry studied includes the structure of matter, elements and compounds, chemical bonding, reactions, energy changes and an introduction to organic chemistry. The emphasis in the course is the relevance of chemistry in everyday life, and the applications studied will include various topics such as environmental problems, energy resources, chemistry and health, and consumer chemistry. Lecture plus three laboratory hours per week. Offered fall semester. NOTE: Students who receive credit for CHEM 100 may not receive credit for CHEM 101.

CHEM 101 Environmental Chemistry (0-4 credits)
An introduction to chemistry with particular emphasis on environmental science. Basic chemistry topics covered include the structure of matter, elements, compounds, reactions, energy and energy changes. These fundamentals lead to the study of currently relevant environmental problems and their proposed solutions, for example the depletion of ozone in the stratosphere, global warming, acid rain, smog, waste disposal, water pollution and the study of energy resources. Lectures and laboratory. NOTE: Students who receive credit for CHEM 101 may not receive credit for CHEM 100.

ECON 251 Prin of Macroeconomics (4 credits)
An introduction to macroeconomics: national income analysis, unemployment, price stability, and growth; monetary and fiscal policies; international trade and finance; application of economic theory to current problems. Students who enroll in this course are expected to be able to use high-school algebra.

ENGL 110 Intensive Writing (4 credits)
The course provides students with intensive practice in writing, enabling them to adapt to the demands of differing rhetorical contexts. Emphasis on understanding writing processes and learning to respond thoughtfully to writing at various stages. Critical reading will be practiced as an integral part of the writing process. Prerequisite: participation in the Academic Development Program

ENG 121 Critical Thinking: Lit/Writing (4 credits)
Students will read and write about literary texts critically and closely. The course emphasizes recursive reading and writing processes that encourage students to discover, explain, question and clarify ideas. To this end, students will study a variety of genres as well as terms and concepts helpful to close analysis of those genres. They will practice various forms of writing for specific audiences and purposes. Students will reflect on and develop critical awareness of their own strengths and weaknesses as readers and writers. The writing load for this course is a minimum of 12 pages of formal revised writing.

ENGL 190 Adv Crit Thinking: Lit&Writing (4 credits)
English 190 is a core course in literature and writing for specially qualified students who show greater aptitude and preparation than typical first-year students or those whose pre-matriculation credits cover some, but not all, of the content of ENGL 121. The learning goals are the same as those for ENGL 121; however, writing, critical thinking, and textual analysis are taught at a higher level and with increased complexity in this course.

ENGL 203 Thematic/Intertextual Perspect (0 OR 4 credits)
With its focus on thematic and intertextual

perspectives, the readings in this course might be ordered any number of ways: according to theme, an idea that develops across genres or literary periods, or by their incorporation of specific oral or textual precedents (e.g. mythology, the Bible, classical writings, legends, or folklore). The writing load for this course is a minimum of 15 pages of formal revised writing.

ENGR 123 Energy and the Environment (0 OR 4 credits)
The course examines the core concepts of energy and power technologies. A hands-on laboratory will examine how refrigerators, swamp coolers, generators, turbines, car engines and solar panels work. The class covers how electricity from fossil fuels is generated and transported, and the status of the technology behind harnessing geothermal resources, solar power, fuel cells, wind power, and biomass energy. Students will be introduced to the 1st and 2nd laws of thermodynamics, trade-off charts and the design process. The cultural, social, and economic impacts of energy production are discussed as well as their effects on the environment. (This course is limited to non-majors or students with Freshman or Sophomore standing.)

GEOL 115 Environmental Geology (0 OR 4 credits)
This course emphasizes the interactions between humans and their environment, focusing on those processes and issues that are fundamentally geological in nature. Early in the course, students will be introduced to basic geoscience concepts and principals, the scientific method, plate tectonics, and earth materials (rocks and minerals). The remainder of the course will focus on specific topics at the interface between humans and their environment, including volcanic and earthquake hazards, human impacts on the hydrological cycle, surface and groundwater contamination, climate and the carbon cycle, nuclear waste storage, soil erosion, non-renewable resources, and slope stability. NOTE: Students who receive credit for GEOL 115 may not receive credit for GEOL 102, 110, 111, or 114.

HIST 112 Hist Mod World Since 1550 (4 credits)
Introduces students to historical reasoning. Students learn to analyze evidence from the past in context in order to explain how the past produced the ever-changing present. This course surveys the foundation and expansion of global networks from the sixteenth-century exploration to the contemporary world, and it examines the resulting breakthrough in communication and cultural exchanges between Europe and Africa, Asia, Latin America and the Middle East. Key aspects of the modern world are explored, such as state power and citizenship, economic systems and human labor, ideas about belonging and community, and the relationships and activities that constitute daily life.

HIST 115 The World Since 1900 (4 credits)
Introduces students to historical reasoning. Students learn to analyze evidence from the past in context in order to explain how the past produced the ever-changing present. This course examines the origin, development, reception, alteration, and rejection of various ideologies—including, but not limited to, nationalism, imperialism, communism, liberalism, fascism and Nazism—and the political, social, economic, and cultural changes that they produced. Through a close examination of the twentieth century, students gain appreciation for the intricate nature of power and dependency that characterizes the modern world.

HLTH 250 Personal Health & Wellness (2 OR 4 credits)
This course will entail an examination of the components of a healthful lifestyle. The interrelationship of physical, intellectual, spiritual and emotional health will be the focal point. Specific areas such as mental health, stress and coping, human sexuality, resiliency enhancement, disease prevention, aging, grief and loss will be addressed.

HLTH 275 Lifelong Stress Management (2 credits)
The focus of the course is on exploration of effective, healthful strategies of stress management. This course is an opportunity to expand ones understanding of how to redirect stress responses into positive sources of energy. For those going into health education either in the field or for licensure, there will be ample items that you could adopt into your own teaching and classroom. This course is open to students from all fields.

IDSC 120 First Year: Leading & Serving (0 OR 2 credits)
The purpose of this course is to integrate scholars into the life and culture of the University of St. Thomas and prepare them with the foundations for academic and professional success. The course will focus on leadership competencies such as written and oral communication, team building, career and professional development, financial literacy and information literacy. In addition, the course will introduce students to the key principles of Social Justice Leadership.

JPST 250 Intro to Justice & Peace (4 credits)
Major aspects of world and local conflict, theories of social science relating to conflict and violence, and various proposals for solutions. Among the aspects of conflict studied are cultural differences, scarcity of resources, economic and social structures,

international trade, the arms race, corruption, oppression and war. Proposed solutions assessed include development, structural changes, world governance, multinational agencies, military power, civilian-based defense, active nonviolence for social change, conflict resolution, disarmament, cultural exchange, religious revival and prayer. These topics are considered in the light of theory, history, and literature. Students apply these concepts by investigating one country or geographic area in depth through a semester long research project. Usually offered every semester.

MATH 101 Finite Mathematics (4 credits)
Elementary set theory, linear equations and matrices, linear programming (optional), finite probability, applications primarily in business and the social sciences. Offered Fall, J-Term, Spring and Summer.

MATH 105 Precalculus (4 credits)
The real numbers; basic algebra; analytical treatment of the elementary functions emphasizing the exponential, logarithmic and trigonometric functions and their graphs. (This course is intended as preparation for 113 and does not fulfill a general graduation requirement.) Prerequisite: Placement at MATH 105 or above. NOTE: Students who receive credit for MATH 105 may not receive credit for MATH 108 or 109.

MUSC 115 Understanding Music&Culture (4 credits)
This survey course explores the classics of European and American music in their historical, cultural and social contexts. It will investigate the many ethnic, religious, political, philosophical, economic and scientific influences that have shaped these traditions. This course is designed to enable students, regardless of musical background, to increase their understanding of music. The listening skill and knowledge acquired will provide a foundation for students to become more critical and discerning listeners of music of all types. NOTE: Students who receive credit for MUSC 115 may not receive credit for MUSC 118 or 119.

MUSC 117 Survey Music in West Culture (2 credits)
This fully online survey course explores the historical foundations of western European concert music traditions. It will explore the various ethnic, religious, political, economic, and scientific influences that have shaped our understanding of "classical" western music into stylistic periods or eras – Medieval, Renaissance, Baroque, Classical, Romantic, and Twenty/Twenty-First Century. Students will conduct listening fieldwork by attending live concert events as approved by the instructor. The listening skills and knowledge gained in this course will provide an essential foundation for students seeking a degree in music.

MUSC 130 Introduction to World Musi (4 credits)
This course provides students a foundation for developing critical thinking and self-analysis, by way of exploring the diversity of musical traditions across the world. Students will develop attentive listening skills and analytical perspectives that engage with music's distinctive sounds, settings, and meanings. Students will gain awareness and appreciation of music as expressions of human experience at the individual, community, and global level.

MUSC 162 Roots of Blues, Rock, Country (4 credits)
This course traces the development of American popular music from its roots through multiple genres such as minstrelsy, jazz, big band, swing, crooning, jump blues, gospel, rhythm and blues, country, western, folk/protest, and rock 'n' roll, concluding with the British Invasion. Popular music development is critically examined through four interrelated driving forces: identity (ethnicity, gender, culture, generation), centers vs. peripheries (the established vs. the innovative), technology (impact on musical performance and listening), and business/law (commercial competition and development). Multimedia presentations include extensive audio and video support. Designed for the Popular Music minor.

PHED 101 Physical Fitness (2 credits)
A physical activity course that will cover planned, structured and repetitive instruction to improve or maintain one or more components of physical fitness. These activity courses are also designed to improve proficiency in a selected physical activity. Students will learn basic skills, strategy and rules of the activity. Students will also learn how physical fitness can contribute to personal lifelong health and wellness through assessment, monitoring and discipline. There will be a written test(s) along with proficiency test(s) depending on the type of physical activity. Credits may be earned twice (for a maximum of 4 credits) under this number for different activities. For further descriptions, please see the Online Printable Schedule.

PHIL 115 Philosophy of Human Person (0 TO 4 credits)
An examination of fundamental conceptions of the human person in ancient, medieval and modern philosophy. Possible topics include: the existence and immortality of the human soul, free will and determinism, the immateriality of the intellect, the relationship between mind and body, and the relevance of different conceptions of the human person for ethics and religion. Attention is given to relevant issues of human diversity. The development

of logical and critical thinking receives special attention.

PSYC 111 General Psychology (4 credits)
An introduction to the research questions, concepts, theories, methods, and findings of psychological science. Although the selection varies with instructor, topics include brain function, psychological testing, sensation and perception, cognition (learning, memory, language), states of consciousness, motivation, human development, personality, origins and treatment of disorders, social behavior, stress and health, and applied psychology (workplace, community, environment).

SOCI 100 Intro to Sociology (4 credits)
Introduction to the concepts, theories, methods and applications of the scientific study of society and social concerns. Enables students to understand the connections between the individual and larger social and cultural forces. Heightens awareness of the diversity of American and other societies.

COLLEGE OF ARTS AND SCIENCES

Actuarial Science

Program Overview

College of Arts and Sciences, Interdisciplinary Program

O'Shaughnessy Science Hall (OSS) 201, (651) 962-5495
Axtell (MATH), Falconbury (MATH) director, Kang (MATH), Kroschel (MATH), Stolarska (MATH), Tang (MATH)

Department Web Site: https://www.stthomas.edu/academics/undergraduate/actuarial-science-major-and-minor

The Bachelor of Science in Actuarial Science is an interdisciplinary degree program offered through the Department of Mathematics. (See also the Department of Mathematics in this catalog.)

Actuarial science education equips students with strong mathematical problem-solving skills that can be applied to business careers. The major requirements consist of courses in mathematics, actuarial science, computer science, business, economics and a course in communication. Coupled with a firm foundation in the liberal arts, this major provides a sound grounding in analytical problem-solving and communication skills.

This program prepares students for a variety of careers with insurance companies, consulting firms, financial institutions, industrial corporations, or government agencies. It also provides a good preparation for non-actuarial careers in banking, finance, or insurance. In addition, the statistical background developed by an actuarial student is valuable in a variety of other fields.

Students graduating with a major in Actuarial Science will become proficient in basic mathematics through multivariate calculus and probability together with basic notions of insurance and risk management. They will demonstrate the ability to think clearly and critically in solving problems related to the analysis and management of risk. They will be able to effectively communicate technical and non-technical information to their peers and to non-specialists in their work environment.

To be certified as a Fellow or an Associate by either the Society of Actuaries or the Casualty Actuarial Society, one must pass a series of rigorous examinations. The earlier examinations are focused on mathematics and statistics and can be taken while a student. The later examinations cover aspects of business, economics, and the regulatory climate.

A careful selection of courses from a variety of departments helps a student to prepare for many excellent professional opportunities in this field. Students should see the director of the Actuarial Program for advice in selecting courses for a particular purpose.

Within the Department of Mathematics, the Center for Applied Mathematics provides opportunities for actuarial science students to work on significant mathematical problems of current interest to business, industry, and government.

Admission Guideline:
Due to the demanding nature of the Actuarial Science Program and the difficulty of the examinations required for professional designation, it is strongly suggested that prospective majors have a minimum Math GPA of 3.0. Most students who have been successful in this program and actuarial examinations have had GPA's considerably higher than 3.0.

Certificate in Risk Management and Insurance

See Certificate in Risk Management and Insurance: https://www.stthomas.edu/catalog/curricula/risk-management-and-insurance/index.html

Major in Actuarial Science (B.S.)

- ACCT 100 Principles of Accounting I (4 credits)
- ACSC 220 Risk Management and Insurance (4 credits)
- ACSC 264 Theory of Interest (4 credits)
- ACSC 375 Short-term Actuarial Models (4 credits)
- FINC 310 Core Financial Management (2 credits)
- FINC 311 Advanced Financial Management (2 credits)
- MATH 113 Calculus I (4 credits)
  or (MATH 108 and MATH 109)
  or (MATH 111 and MATH 112)
- MATH 114 Calculus II (4 credits)
- MATH 200 Multi-Variable Calculus (4 credits)
- MATH 240 Linear Algebra (4 credits)
- STAT 313 Probability (4 credits)
- STAT 314 Mathematical Statistics (4 credits)
- STAT 333 Predictive Modeling (4 credits)

Complete one of the following two advanced course sequences (8 credits)

- Life & Health Sequence:
  - ACSC 451 Foundations of Actuarial Mathematics (4 Credits)
  - ACSC 452 Actuarial Contingencies (4 credits)

  Note: ACSC 452 has prerequisites of a grade of C- or above in ACSC 351 or ACSC 451

- P&C/Data Analytics Sequence:
  - STAT 370 Bayesian Statistical Models and Credibility Theory (4 credits)
  - One of DASC 360, DASC 400, STAT 413

  Note: DASC 360 and DASC 400 require CISC 130 or 131

Allied Requirement:

- CISC 131 Intro to Programming and Problem Solving (4 credits)
  or CISC 260 Data Fundamentals and Applications (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- COMM 100 Public Speaking (4 Credits)
  or COMM 105 Communication in the Workplace (4 credits)
  or ENGL 315 Topics in Pro. Writing (4 credits)

(Note: Students wishing to take the P&C/Data Analytics and/or double major in STAT should take CISC 131)

Suggested Electives:

- BLAW 301 Legal Environment of Business (4 credits)
- CISC 230 Object-Oriented Design and Programming (4 credits)
- CISC 450 Database Design I (4 credits)
- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 351 Macroeconomic Theory (4 credits)
- ECON 352 Microeconomic Theory (4 credits)
- ECON 355 Game Theory (4 credits)
- FINC 400-level Investment Courses (4 credits)
- MBIS 701 Insurance Seminar (3 credits)
- MKTG 300 Principles of Marketing (4 credits)

Minor in Actuarial Science

- ACSC 220 Risk Management and Insurance (4 credits)
- ACSC 264 Theory of Interest (4 credits)
- MATH 113 Calculus I (4 credits)
  or MATH 108 Calculus with Review I (4 credits)
  or MATH 109 Calculus with Review II (4 credits)
- MATH 114 Calculus II (4 credits)

Plus eight credits from the following:

Note: At least four credits must not satisfy the student's major field requirement (including allied requirements)

- ACCT 100 Principles of Accounting I (4 credits)
- ACCT 200 Principles of Accounting II (2 credits)
- ACSC 451 Foundations of Actuarial Mathematics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- FINC 300 Finance for non-Business Majors (4 credits)
- MATH 200 Multi-Variable Calculus (4 credits)

- STAT 313 Probability (4 credits)
  or MATH 303 Statistics for the Applied Sciences (4 credits)

Actuarial Science Undergraduate Courses

ACSC 220 Risk Management & Insurance (4 credits)
This course introduces students to the subjects of insurance--theory and practice--and corporate risk management. In addressing these subjects, students will receive exposure to risk theory, insurance pricing, contract analysis, insurance company operations, reinsurance, regulation and the concepts and principles of business risk management. Offered fall semester. Prerequisite: Sophomore standing

ACSC 243 Individual Study (2 or 4 credits)

ACSC 264 Theory of Interest (4 credits)
A survey of topics in the mathematical analysis of financial transactions which involve payments made over time. Specific areas of concentration will include the time value of money, the analysis of annuities, amortization and sinking funds, and the pricing and rates of return on investments. Both continuous time and discrete time problems will be considered. Offered spring semester. Prerequisite: a grade of C- or above in MATH 114

ACSC 269 Research (2 or 4 credits)

ACSC 300 Internship (0 credits)
This zero-credit course is for co-curricular practical training in actuarial science and insurance for undergraduate students.

ACSC 375 Short-term Actuarial Models (4 credits)
This course provides a thorough introduction to the area of short-term actuarial mathematics utilized in the Property & Casualty field as well as some areas in the Life & Health field. Topics include severity, frequency and aggregate loss models, risk measures, construction and selection of parametric models, pricing and reserving for short-term insurance coverages. Prerequisites: A grade of C- or better in both of STAT 313 and STAT 314, or a grade of C- or better in STAT 303. Enrollment via consent by the instructor is also an option.

ACSC 389 Research (2 or 4 credits)

ACSC 393 Individual Study (2 or 4 credits)

ACSC 402 Advanced Topics in RM&I (2 credits)
This course serves as, partly, a Capstone course for the Actuarial Science major and one of the tracks in the Risk Management & Insurance Certificate, but also presents some flexibility for focusing on timely and relevant topics in the field. As such, there is an expectation that some topics will change over time to reflect current issues of importance. Nevertheless, the general thematic structure of this course is to examine risk management and insurance 'in action.' On the risk management side of the course this will mean examining risk management program operations and will entail some case study activity. Such topics could include problems in managing work-related injury; managing risks in global firms; and alternative risk financing. On the insurance side of the course, the intention is to consider insurance industry challenges and problems. Such topics could include the effects of climate change on the insurance contract; insuring driverless vehicles; and an examination of the reinsurance sector. Prerequisites: ACSC 220 or FINC 2XX (crosslisted course equiv. to ACSC 220) and either ACSC 264 and STAT 313 or FINC 301, FINC 302, and FINC 303

ACSC 451 Foundations: Actuarial Math (4 credits)
The course covers the theory and applications of contingency mathematics in the area of life and health insurance, annuities and pensions from both the probabilistic and deterministic approaches. Topics will include: survival distributions, actuarial notation, life insurance and life annuities, net premiums and reserves. Offered fall semester. Prerequisite: a grade of C- or above in ACSC 264 and MATH 313

ACSC 452 Actuarial Contingencies (4 credits)
Extension of the analysis of ACSC 451 to multiple life functions and multiple decrement theory. Topics will include: multiple life functions and multiple decrement models, valuation of pensions, insurance models including expenses, non-forfeiture benefits and dividends. Offered spring semester. Prerequisite: a grade of C- or above in ACSC 451

ACSC 476 Experiential Learning (1 to 4 credits)

ACSC 478 Intern/Experiential Learning (0 credits)
This zero-credit course is for practical training for undergraduate students.

ACSC 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online,

ACSC 491 Research (2 or 4 credits)

Aerospace Studies

Program Overview

College of Arts and Sciences, Department of Aerospace Studies
Murray-Herrick LL-4 (MHC), (651) 962-6320
Meyer (chair), Johnson, Corcoran, Larson

The Department of Aerospace Studies at the University of Saint Thomas is the home of the Air Force Reserve Officer Training Corps (Air Force ROTC) program. Aerospace Studies is a dynamic discipline designed to give students the opportunity to complete the necessary Air Force ROTC coursework for a minor in Aerospace Studies while concurrently completing the coursework for their chosen degree. This enables participants (called Cadets) to qualify for a commission as a Second Lieutenant in either the United States Air Force or the United States Space Force upon successful completion of their bachelor's degree requirements. The Air Force ROTC program offers Cadets the opportunity to broaden their perspective, demonstrate responsibility, develop their organizational, followership, and leadership skills, and increase their self-confidence and will ultimately develop them into leaders of character in their respective fields.

While the Aerospace Studies program does not require a student to major in any certain field, Cadets may choose to use their Aerospace Studies credits as elective credits. These courses are offered at the University of St. Thomas, but students at any of the five Associated Colleges of the Twin Cities (ACTC) consortium – St. Thomas, St. Catherine, Augsburg, Hamline, and Macalester –may attend. Through cross-town agreements, students at Bethel University, Century College, Concordia – St. Paul, North Central University, University of Northwestern-St. Paul, Mitchell Hamline School of Law, University of Wisconsin-Stout, as well as Anoka-Ramsey, Inver Hills, Normandale and North Hennepin Community Colleges are also eligible to take Aerospace Studies courses.

The Aerospace Studies curriculum is divided into two phases: the General Military Course (GMC) in the freshman and/or sophomore years, and the Professional Officer Course (POC) during the junior and senior years. Cadets in the GMC do not owe a service commitment until/or unless they activate an Air Force ROTC scholarship. Any Cadet seeking a commission must attend Field Training in the summer between sophomore and junior year to qualify for the POC training. (Field Training is the basic military training for cadets and is held at Maxwell Air Force Base, AL.) Once a Cadet is accepted into the POC, s/he will be obligated to serve as an officer for a minimum of four years on active duty after commissioning, depending on the career field to which they are assigned.

Most students complete Air Force ROTC via the four-year program. However, even if a student does not enroll until sophomore year, it is still possible to complete the 100- and 200-level GMC courses concurrently during sophomore year, allowing them to attend Field Training, and therefore be eligible to become a POC and commission as a Second Lieutenant upon graduation.

For all Cadets, there are three mandatory components of the Aerospace Studies program: successful completion of 22 credits of Aerospace Studies coursework (AERO), Leadership Laboratory, and Physical Training. AERO courses are intended to be taken sequentially however, students may complete the requirements by taking more than one AERO class per term, with the permission of the department chair. Leadership Laboratory involves the study of Air Force and Space Force customs and courtesies, drill and ceremonies, and career opportunities for Air Force and Space Force junior officers. Physical Training is planned and executed by the cadet wing with guidance and oversight by the Cadre (Active-Duty military members in charge of the Detachment), utilizing a progression of experiences designed to improve fitness and develop teamwork and leadership skills. Cadets will be required to pass physical fitness assessments each semester, which is comprised of aerobic fitness, strength fitness and body composition.

The Air Force ROTC program can offer four-, three-, or two-year college scholarships to qualified Cadets. See "Scholarships not awarded by the university" in the Financial Services section of this catalog.

St. Thomas offers many recipients of an Air Force ROTC scholarship financial assistance, up to a full subsidy (room and board and remaining tuition) on almost every Air Force ROTC scholarship awarded. For information on Air Force scholarships, call the Detachment 410 Recruiting Officer at 651-962-6329. For information on related University of St. Thomas subsidies, contact the University financial aid office.

Students who are seeking a minor in Aerospace Studies but are not seeking an Air Force or Space Force commission, may enroll in the necessary classes below with the permission of the Aerospace Studies department chair. A minor in Aerospace Studies is open to all undergraduate students at the University of St. Thomas who have completed twenty credits in AERO.

Any student or Cadet seeking a minor in Aerospace Studies must be complete one of the following sequences:

Minor Options

Option 1: (20 credits – open to all undergraduate students)

- AERO 111 Heritage and Values I (1 credit)
- AERO 112 Heritage and Values II (1 credit)
- AERO 211 Team and Leadership Fundamentals I (1 credit)
- AERO 212 Team and Leadership Fundamentals II (1 credit)
- AERO 321 Leading People and Effective Communication I (4 credits)
- AERO 322 Leading People and Effective Communication II (4 credits)
- AERO 421 National Security and Leadership Responsibilities I (4 credits)
- AERO 422 National Security and Leadership Responsibilities II (4 credits)

Option 2: (22 credits – AFROTC cadets only)

- AERO 111 Heritage and Values I (1 credit)
- AERO 112 Heritage and Values II (1 credit)
- AERO 200 Leadership Laboratory (0 credits)
- AERO 201 AFROTC Physical Fitness Laboratory (0 credits)
- AERO 211 Team and Leadership Fundamentals I (1 credit)
- AERO 212 Team and Leadership Fundamentals II (1 credit)
- AERO 321 Leading People and Effective Communication I (4 credits)
- AERO 322 Leading People and Effective Communication II (4 credits)
- AERO 421 National Security and Leadership Responsibilities I (4 credits)
- AERO 422 National Security and Leadership Responsibilities II (4 credits)
- AERO 450 Field Training (2 credits)

Aerospace Studies Undergraduate Courses

AERO 111 Heritage and Values (1 credit)
This course introduces the Air Force, and allows students to examine general aspects of the Department of the Air Force, Air Force Leadership, Air Force benefits, and opportunities for Air Force officers. The course also lays the foundation for becoming an Airman by outlining our heritage and values, and provides a historical perspective such as lessons on war and US military, AF operations, principles of war, and air power. Students will learn about the Air Force way of life and gain knowledge on what it means to be an Airman.

AERO 112 Heritage and Values II (1 credit)
Continuation of AERO 111 Prerequisite: AERO 111 or permission of instructor

AERO 199 LD Aerospace (4 credits)

AERO 200 Leadership Lab (0 credits)
Leadership Laboratory is mandatory for AFROTC cadets (e.g., students pursuing an officer's commission in the USAF) every fall and spring semester unless excused by the department chair for an authorized period of non-attendance. Leadership Laboratory complements each of the courses listed below by providing cadets with leadership and followership experiences.

AERO 201 AFROTC Phys Fitness Lab (0 credits)
AFROTC Physical Fitness Laboratory is mandatory for AFROTC cadets (e.g., students pursuing an officer's commission in the USAF) every fall and spring semester unless excused by the department chair for an authorized period of non-attendance. AFROTC Physical Fitness Laboratory complements each of the courses listed below by providing cadets with leadership, followership, and teambuilding experiences while teaching them to maintain physical fitness required for military service. AFROTC cadets must attend two sessions per week to pass the course. In order to remain in the program and gain a commission, cadets must pass a physical fitness assessment each term.

AERO 211 Team & Leadership Fundamentals (1 credit)
This course provides a fundamental understanding of both leadership and team building. Students are taught from the beginning there are many layers to leadership, including aspects that don't always jump to mind like listening, understanding themselves, being a good follower, and problem solving efficiently. The students will apply these leadership perspectives when completing team building activities and discussing things like conflict management. Students will demonstrate basic verbal and written communication skills.
Prerequisite: AERO 112 or permission of instructor

AERO 212 Team & Lead Fundamentals II (1 credit)
Continuation of AERO 211 Prerequisite: AERO 211 or permission of instructor

AERO 243 Individual Study (2 or 4 credits)

AERO 269 Research (2 or 4 credits)

AERO 299 LD Aerospace Exch Course (4 credits)

AERO 321 Lead People & Effective Com I (4 credits)
This course builds on the leadership fundamentals taught in AERO 211 and 212. Students will gain a more in-depth understanding of how to effectively lead people, gain experience applying leadership tools, and receive ethics training that will prepare them for becoming an officer and a supervisor. Additionally, students will continue to hone their writing and briefing skills. Prerequisite: AERO 212

AERO 322 Lead People & Effective Com II (4 credits)
Continuation of AERO 321. Prerequisite: AERO 321 or permission of instructor

AERO 389 Research (2 or 4 credits)

AERO 393 Individual Study (2 or 4 credits)

AERO 421 Nat Security & Lead Resp I (4 credits)
This course introduces the basic elements of national security policy and process. Students will learn about air and space operations, the role of the military in society, and current domestic and international issues affecting the military profession. Additionally, students will discuss the responsibility, authority, and functions of an Air Force commander and selected provisions of the military justice system. Prerequisite: AERO 322 or permission of instructor

AERO 422 Nat Security & Lead Resp II (4 credits)
Continuation of AERO 421. Prerequisite: AERO 421

AERO 450 Field Training (2 credits)
The Field Training (FT) course is an integral component of the AFROTC curriculum and serves to transition cadets from the General Military Course (GMC) into the Professional Officer Course (POC). It is a unique and transformational experience aimed at evaluating and preparing cadets to succeed and lead at their AFROTC Detachments. This seminal event drives the cycle of AFROTC cadet leadership development by giving purpose and focus to detachment-level cadet operations. The post-FT cadets in the POC, under the guidance of detachment cadre, plan and execute leadership laboratories and training events to prepare, mentor, and train GMC cadets to succeed. Successful completion of Field Training is mandatory for completing the AFROTC program and obtaining a commission in the Air Force. Prerequisite: AERO 212

AERO 451 Cadet Training Assistant (2 credits)
A cadet who previously completed Field Training and who successfully competes to be assigned as a staff member in a 4- or 6-week field Training. Discharges staff responsibilities to meet the objectives described in AERO 450.

AERO 452 Professional Devel Training (1 credit)
The objective of PDT is to provide opportunities to cadets to gain knowledge and appreciation for the human relations and leadership challenge encountered by junior Air Force officers. Further, the program is designed to motivate cadets in their pursuit of an Air Force career. Normally open to junior and senior contracted cadets who have completed Field Training. However, selected AERO 100 cadets may participate in some of the PDT programs.

AERO 476 Experiential Learning (1 to 4 credits)

AERO 478 Intern/Experiential Learning (0 credits)
This zero-credit course is for practical training for undergraduate students.

AERO 491 Research (2 or 4 credits)

AERO 495 Individual Study (2 or 4 credits)

American Culture and Difference

Program Overview

College of Arts and Sciences, Interdisciplinary Program
John Roach Center for the Liberal Arts (JRC) 339, (651) 962-5649
Contact: Kanishka Chowdhury

Department Web Site: https://www.stthomas.edu/academics/undergraduate/american-culture-and-difference-minor

American Culture and Difference is an interdisciplinary minor that offers students a critical perspective on the diversity of "American culture." Students consider ways in which music, film, advertisements, folklore, literature, television, and art shape daily life in the United States, form cultural and national identity, construct racial and ethnic identity, and create a sense of "high" and "low" culture. Drawing on perspectives from a number of participating departments and programs (e.g. Art History, Communication Studies, Journalism, English, History, Music, Political Science, Sociology, Theater, Theology, and Women, Gender, and Sexuality Studies), the American Culture and Difference minor examines the symbols, practices, and histories which contribute to the complexity and variety of the American experience. In addition to making connections between disciplines, students

will be encouraged to engage in analysis that discovers linkages and tensions between vernacular and elite culture, as well as among diverse and multiple cultural identities and affiliations.

The minor re-examines representations of mainstream American culture and the productions of alternative and oppositional cultures, highlighting the experiences and struggles of communities that have been historically marginalized because of their class, gender, racial or sexual identities. Put simply, American Culture and Difference emphasizes diversity as a defining element of American culture. Given its emphasis on the diversity and multiplicity of cultural experience and its interdisciplinary focus on the various strands that comprise the fabric of a given culture, the minor in American Culture and Difference is particularly suited to provide students with the critical framework necessary to be effective and ethical participants in an increasingly globalized civic and economic environment.

Minor in American Culture & Difference

- AMCD 200 American Culture and Difference: Power and Identity (4 credits)
- AMCD 450 American Culture and Difference Capstone (0 credits)
- Plus twenty (20) additional credits (with no more than eight credits from a single department) from the list below. At least 4 credits must be at the 300 level or higher. No more than 8 credits from 100-level courses.

Elective Options:

- ARTH 120 Intro to Aztec Art (2 credits)
- ARTH 121 Intro to Mayan Art (2 credits)
- ARTH 202: History of Street Art
- ARTH 251 Museum Studies: Practices
- ARTH 282 History of American Architecture
- ARTH 284 Arts of the African Diaspora (4 credits)
- ARTH 321 The Art and Culture of Modern Mexico (1824-1940) (4 credits)
- ARTH 323 Colonial Art of Latin America
- COMM 326 Communication in Pop Culture (4 credits)
- COMM 328 Communication of Race, Class, and Gender (4 credits)
- COMM 332 Documentary: American Culture (4 credits)
- COMM 338 Political Communication (4 credits)
- COMM 340 Television Criticism (4 credits)
- COMM 378 Communication and Underrepresented Families
- DIMA 342 Media, Culture and Society (4 credits)
- ENGL 214 American Authors I (4 credits)
- ENGL 215 American Authors II (4 credits)
- ENGL 373 Contemporary American Literature (4 credits)
- ENGL 395 Issues in Literature, Language, and Culture (4 credits)
- FILM 225 Women and Gender in FIlm
- FILM 230 Race in Contemporary U.S. Film
- GEOG 340 Geography of the U.S. and Canada (4 credits)
- HIST 113 Early America in Global Perspective (4 credits)
- HIST 114 Modern U.S. from a Global Perspective (4 credits)
- HIST 117 Latin America in Global Perspective (4 credits)
- HIST 207 Slavery in the Americas (4 credits)
- HIST 211 Women and Family in the Americas (4 credits)
- HIST 216 African-American History (4 credits)
- HIST 303 History of Modern Brazil (4 credits)
- HIST 309 History of Urban Latin America
- HIST 340 The Long Emancipation
- HIST 355 The Civil War Era
- JOUR 262 Literary Journalism (4 credits)
- JPST 280 Active Nonviolence (4 credits)
- JPST 355 Public Policy (4 credits)
- JPST 365 Leadership for Social Justice (4 credits)
- JPST 375 Conflict Analysis and Transformation (4 credits)
- MUSC 162 Roots of Blues, Rock, Country (4 credits)
- MUSC 216 Jazz in America (4 credits)
- MUSC 230 Music of the Americas (4 credits)
- POLS 205 U.S. Policy Making (4 credits)
- POLS 301 Political Identity and Participation (4 credits)
- POLS 302 Gender and Politics (4 credits)
- POLS 306 Campaigns and Elections
- POLS 314 Constitutional Rights & Liberties
- SOCI 110 Social Problems (4 credits)
- SOCI 251 Race and Ethnicity (4 credits)
- SOCI 275 Born This Way?
- SOCI 280 Hate Crimes
- SOCI 350 Social Inequality: Privilege and Power (4 credits)
- SOCI 354 Sex in Society

- SPAN 332 Latin American Culture and Civilization (4 credits)
- THEO 224 Bridges: Theology and Mass Media (4 credits)
- THTR 223 American Theater (History of Theater III) (4 credits)

American Culture & Difference Undergraduate Courses

AMCD 199 LD American Culture: Elective (3 to 6 credits)

AMCD 200 American Culture: Power/Identity (4 credits)
In AMCD 200, students learn about the historical and theoretical foundations of Cultural Studies as an academic discipline and use cultural theory to analyze a variety of cultural products and representations. In this course, students look specifically at dominant and subversive constructions of gender, race, ethnicity, national and sexual identities, and how these constructions are deployed through cultural practices and productions such as sports, film and television, folklore and popular culture, youth subcultures, music, and so on. For example, the course may contain units on "nation" and the creation of American mythologies; the process of hero-making in American history; stereotypes and the representation of race and ethnicity in television and film; representations of gender and sexuality in advertising; as well as a section on American music from jazz, blues, folk and roots music, to rock and roll, punk, and hip-hop.

AMCD 450 Capstone Project (0 credits)
The American Culture and Difference Capstone Project will integrate learning from the Introduction to American Culture and Difference course and elective courses that compose each student's ACD Minor. The capstone experience will articulate and enhance the interdisciplinary studies of an ACD minor and synthesize that learning in a culminating project. Two capstone seminars will provide structure for students to transition from knowledge acquisition to knowledge production (i.e.: article, essay, or research) or cultural production (i.e.: music, poetry, visual art, creative writing), and provide guidance from ACD Faculty to complete a capstone project and presentation. Registration is restricted to American Culture and Difference minors in their senior year. Prerequisite: AMCD 200.

AMCD 476 Experiential Learning (1 to 4 credits)

AMCD 478 Intern/Experiential Learning (0 credits)
This zero-credit course is for practical training for undergraduate students.

American Sign Language

The American Sign Language program offers elementary and intermediate core classes on a yearly basis (111, 112 and 211). Students interested in pursuing higher-level courses can do so through the ACTC consortium or other approved programs in consultation with the department.

The primary goal of the American Sign Language program at St. Thomas is to provide students with the opportunity to:

1. Learn elementary signing skills in order to be able to both produce and understand the language.
2. Develop cultural knowledge and intercultural skills
3. Equip students with the skills needed to interact with the deaf and hard of hearing community in the United States.
4. Explore the study of American Sign Language and culture as an integral part of a liberal arts education

Amer. Sign Language Undergraduate Courses

AMSL 111 Elem American Sign Language I (4 credits)
This course is designed for students with little or no previous knowledge of American Sign Language. Students will acquire basic grammatical skills and vocabulary that will enable them to communicate in routine social or professional situations within an authentic cultural context. Registration by placement into AMSL 111 or department permission. AMSL 111 cannot be taken if credit for a more advanced AMSL course has already been received.

AMSL 112 Elem American Sign Language II (4 credits)
A continuation of AMSL 111, students in this course will advance their communicative proficiency in both social and professional contexts as well as increase their cultural knowledge of the Deaf community. Pre-requisite of AMSL 111 or its equivalent with a grade of C- or better.

AMSL 211 Interm American Sign Lang I (4 credits)
AMSL 211 is the third course in a three-course sequence in ASL offered at the University of St. Thomas. This course is designed for students with

substantial previous knowledge of American Sign Language. Students will build on basic grammatical skills and vocabulary through the study of intermediate ASL grammatical structures and the development of more in-depth sign vocabulary. This, in turn, will allow students to achieve intermediate productive and receptive signing skills. They will also further develop cultural knowledge and intercultural skills, cultivate the skills needed to interact with the Deaf community in the United States, and explore the study of American Sign Language and culture as an integral part of a liberal arts education. Prerequisites: AMSL 112 or equivalent completed with a C- or better

AMSL 476 Experiential Learning (1 TO 4 credits)

AMSL 478 Intern/Experiential Learning (0 credits)
This zero-credit course is for practical training for undergraduate students.

Arabic

The Arabic program offers elementary and intermediate-level core classes on a yearly basis (111 and 211 in the fall, 112 in the spring). Students interested in pursuing higher-level courses can do so through study abroad and/or the ACTC consortium in consultation with the department.

The primary goal of the Arabic program at St. Thomas is to provide students with the opportunity to:

1. Learn basic and intermediate levels of Modern Standard Arabic through speaking, listening, writing and reading activities
2. Develop cultural knowledge and intercultural skills
3. Explore the study of Arabic language and cultures as an integral part of a liberal arts education
4. Prepare for study abroad opportunities

Arabic Undergraduate Courses

ARAB 111 Elementary Arabic I (4 credits)
The first year of elementary Arabic is designed for non-native beginners in the Arabic language to primarily learn the formal form of Arabic also known as Modern Standard Arabic. During the year, students will learn how to express basic communication idioms and needs in Arabic. The year begins with learning the alphabet and progresses into learning how to read elementary level Arabic, writing simple sentences, and speaking basic and introductory idioms. Listening drills and exercises are also practiced in class and in the language lab.

ARAB 112 Elementary Arabic II (4 credits)
Continuation of ARAB 111. Prerequisite: ARAB 111 or equivalent completed with a C- or better

ARAB 211 Intermediate Arabic I (4 credits)
Intermediate Arabic I is a continuation of Elementary Arabic II. It is designed to further develop language proficiency in Modern Standard Arabic in the four language skills. In speaking, the focus is on the use of everyday expressions through discussion and presentations. In reading, the focus is on reading authentic materials from Arabic journals and homework assignments. Listening exercises and drills are utilized in class as well as in the language lab by listening and watching audio and video materials. The course is also aimed at familiarizing students with the cultures of Arab world.

ARAB 212 Intermediate Arabic II (4 credits)

ARAB 243 Individual Study (2 OR 4 credits)

ARAB 298 Topics Course (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ARAB 393 Individual Study (2 OR 4 credits)

ARAB 476 Experiential Learning (1 TO 4 credits)

ARAB 478 Intern/Experiential Learning (0 credits)
This zero-credit course is for practical training for undergraduate students.

ARAB 495 Individual Study (2 OR 4 credits)

ARAB 498 Advanced Arabic (4 credits)

Art History

Program Overview

College of Arts and Sciences, Department of Art History
44 N. Cleveland Ave., (651) 962-5560
Shirey (chair), Barnes, Eliason, Kindall, Nygaard, Stansbury-O'Donnell, Young

Department Web Site:
https://cas.stthomas.edu/departments/areas-of-study/art-history/index.html

The Art History Department at St. Thomas explores the many dimensions of art in a broad range of periods and worldwide cultures. The courses, programs, and faculty of the department prompt students to become investigators, learning to ask and answer questions about art, from pottery to painting, from bronzes to buildings. Students are encouraged to conduct independent research and to present their findings to a broader audience and to make art accessible inside and outside of the classroom.

Art history embodies the study of the liberal arts by considering the work of art and architecture within its broader cultural and social context, including religion, economic production, politics, gender, and social identification. The liberal arts and interdisciplinary nature of the major can be combined effectively with other majors such as theology, history, philosophy, or with programs emphasizing professional skills, including journalism, communication, or elementary education. Recent graduates of the Art History program have pursued careers in education, art conservation, historic preservation, museum education and curatorship, art gallery direction, publishing and interior design.

The department offers a number of courses for the non-major to fulfill the Fine Arts, Human Diversity, and Writing Across the Curriculum components of the core curriculum.

Major in Art History

- ARTH 150 Explorations in Art History (4 credits)
- ARTH 211 Methods, Approaches, and Problems in Art History (4 credits)
- ARTH 481 Senior Paper and Presentation (4 credits)

Plus eight credits chosen from two of the following three areas:

Ancient Art

- ARTH 260 Women in Ancient Art and Culture (4 credits)
- ARTH 305 Greek Art and Archaeology (4 credits)
- ARTH 310 Roman Art and Archaeology (4 credits)
- or equivalent

Medieval Art

- ARTH 330 Churches and Mosques in the First Millennium (4 credits)
- ARTH 335 Cathedrals, Monasteries, and Caliphates (4 credits)
- or equivalent

Renaissance & Baroque Art

- ARTH 340 Southern Renaissance Art and Society (4 credits)
- ARTH 345 Baroque and Rococo Art (4 credits)
- or equivalent

Plus eight credits of Global Art chosen from the following courses:

- ARTH 265 Art of Mesoamerica (4 credits)
- ARTH 270 Pacific Art (4 credits)
- ARTH 275 Buddhist Art (4 credits)
- ARTH 284 Arts of the African Diaspora (4 credits)
- ARTH 285 Arts of Africa (4 credits)
- ARTH 291 Topics in Non-Western Art (4 credits)
- ARTH 321 The Art and Culture of Modern Mexico (1824-1940)
- ARTH 323 Colonial Art of Latin America (4 credits)
- ARTH 328 Chinese Sculpture & Architecture (4 credits)
- ARTH 329 Chinese Painting (4 credits)
- or equivalent

Plus four credits of Modern Art, chosen from the following courses:

- ARTH 202 History of Street Art (4 credits)
- ARTH 321 The Art and Culture of Modern Mexico (1824-1940)
- ARTH 351 Romanticism to Impressionism (4 credits)
- ARTH 352 Art in the United States (4 credits)
- ARTH 356 Modernism in European Art (4 credits)
- ARTH 361 Contemporary Art (4 credits)

Plus four credits of Media Studies (architecture and media other than painting and sculpture), chosen from the following courses:

- ARTH 204 Typography and Visual Culture (4 credits)
- ARTH 206 Cultural History Photography (4 credits)
- ARTH 270 Pacific Art (4 credits)
- ARTH 280 Sacred Architecture and Space (4 credits)
- ARTH 282 The History of American Architecture (4 credits)

- ARTH 285 Arts of Africa (4 credits)
- ARTH 339 Western Costume's Design and Visual Representation in Context (4 credits)
- or equivalent

Note: A single course may fall into more than one area, but may only be applied to a single area. Students taking courses abroad may also substitute one course taken abroad for one of the advanced studies course areas (with the exception of global art) with prior approval of the chair of the department.

Plus four credits meeting one of the following criteria:

- 4 additional credits in Art History (ARTH)
- an internship or other form of experiential learning, including research and preparation of exhibits
- an art history course taken abroad
- a studio art course

Minor in Art History

- ARTH 150 Explorations in Art History (4 credits)
- Sixteen (16) credits chosen with the approval of the department chair or a department adviser.
- At least eight credits must be taken at the 200-level or above

Minor in Museum Studies

- ARTH 250 Museum Studies: Exhibitions, Collections, Structures (4 credits)
- ARTH 251 Museum Studies: Trends, Practices, Visitors (4 credits)
- 4 credits from the list of approved courses titled Business & Communications & Social Science
- 4 credits from the list of approved courses titled Arts & Humanities & Education
- 4 credits from either list of designated classes

Notes: Students are responsible for any prerequisites required for all classes listed as part of the minor. Art History majors may have up to two courses count for both major and Museum Studies minor requirements.

Arts & Humanities & Education

Rationale: To explore individualized projects, writing, and visitor-centered topics from a variety of arts, humanities, and educational perspectives.

- ARTH 243/393/495 Individual Study (2 or 4 credits)
- ARTH 475/476 Experiential Learning (2 credits)
- ARTH 477/478 Experiential Learning (4 credits)
- MUSC 160 Introduction to Music Business
- MUSC 363 Emerging Models in the Music Industry
- HIST 208 History of the Roman World
- HIST 210 Modern Latin America, 1800 to present
- HIST 222 Early Modern Europe, 1450-1750
- HIST 262 American Colonial History
- HIST 335 Nazi Germany and the Holocaust
- HIST 355 The Civil War Era
- HIST 386 Historical Archaeology
- ENGL 256 Introduction to Professional Writing
- ENGL 304 Analytical and Persuasive Writing
- ENGL 315 Topics in Professional Writing
- EDUC 210 Education's Place in Society and Field
- EDUC 329 Diverse Learners and Families
- EDUC 330 Psychology for Teaching and Learning

Business & Communications & Social Science

Rationale: To explore the administrative, technology-based, and communication strategy aspects of the museum field through the business and social science perspectives.

- BLAW 301 Legal Environment of Business
- BETH 301 Business Ethics
- COMM 328 Comm of Race, Class Gender
- COMM 370 Intercultural Communication
- DIMA 256 Design Concepts of Communication
- DIMA/JOUR 232 Visual Media in Theory and Practice
- DIMA 342 Media, Culture and Society
- ENTR 260 Entrepreneurial Thinking
- ENTR 340 Social Entrepreneurship
- ENTR 360 Creativity and Change
- ENTR 380 Entrepreneurship in Practice
- JPST 250 Introduction to Justice and Peace Studies
- MKTG 300 Principles of Marketing
- MKTG 380 Interactive Marketing
- MGMT 305 Management and Organizational Behavior
- PSYC 206 Brain and Human Behavior
- PSYC 315 Cognition
- SOCI 251 Race and Ethnicity

- SOCI 350 Social Inequality: Privilege and Power
- SOCI 366 Self and Society
- STCM 344 Writing for Strategic Communication
- STCM 346 Digital Content Strategy in Strat. Comm.

.

Art History Undergraduate Courses

ARTH 105 Art and the Environment (4 credits)
An exploration of how concepts like nature, wilderness, and landscape have been incorporated into art. Cross-cultural instances of landscape painting will be placed in their historical contexts. We will then explore artists who incorporate the land into their art, from the site-specific artists of the late twentieth century to artists addressing the ecological concerns of the present day. We will consider Chinese literati painting, European Romanticism, frontier painting and regionalism in the United States, Earthworks, and recent artistic responses to global climate change and the exploitation of natural resources. We will consider how visual arts can not only reflect but also alter societal attitudes and practices.

ARTH 106 Global Photography (2 credits)
Global Photography provides an overview of the development of photography--from its origins in the 1830s to the present. In this course, we seek to understand why the photographic is image so compelling, to what degree photographs are really "truthful," and, above all, how photographs shape our understanding of the world. Although photography was invented in Europe, it was quickly embraced and put to use in multiple ways around the world. This course investigates photography from a global perspective, specifically focusing on documentary, portraiture, and landscape from around the world, engaging with questions regarding the ethics of photography throughout.

ARTH 115 Intro to Renaissance Art (2 credits)
An introduction to art history that takes as its focus the art of Europe from the fourteenth to sixteenth centuries. Painting, sculpture, and printmaking will be considered. Particular attention will be paid to humanism and classicism, patronage, and the legacy of an art-historical canon. We will investigate the works of Giotto, Jan van Eyck, Donatello, Botticelli, Leonardo da Vinci, Raphael, Titian, Michelangelo, Bosch, and Durer, among others.

ARTH 116 Intro to Baroque Art (2 credits)
An introduction to art history that takes as its focus the art of Europe from the sixteenth to seventeenth centuries. Painting, sculpture, and printmaking will be considered. Particular attention will be paid to national schools of painting, and how social structure and religious strife shaped art in the Baroque period. We will investigate the works of Bernini, Caravaggio, Artemisia Gentileschi, Rubens, Rembrandt, Vermeer, and Poussin, among others.

ARTH 120 Intro to Aztec Art (2 credits)
Suitable for students new to art history, this two-credit course focuses on the art and culture of the Aztecs, whose empire of splendor, hegemony, and military prowess collapsed among the chaos of the Aztec-Spanish war. Interdisciplinary in nature, the class investigates what Aztec art, material culture, architecture, and even civic planning can tell us about Aztec religion, political ideology, literature, and social systems. As well, it addresses both to the ancient Central Mexican predecessors of the Aztecs and the colonial aftermath of the Spanish arrival.

ARTH 121 Intro to Maya Art (2 credits)
Suitable for students new to art history, this course serves as an introduction to the art, architecture, and culture of the ancient Maya, whose city states flourished in southeastern Mexico, Guatemala, Belize, and Honduras from the close of the first millennium BC to the end of the tenth century AD. Interdisciplinary in nature, the class investigates what Maya material culture, art, writing, and architecture can tell us about their society, religious beliefs, political ideology, and literature. As well, it introduces students to Maya hieroglyphics and the Maya calendar and addresses the history of scholarship in this area.

ARTH 130 Introduction to Asian Art (4 credits)
This course offers a selective introduction to the artistic concepts and visual art of India, China, and Japan. The course will examine visual expression in Asia from the Neolithic period to the 20th century. The purpose of the course is to provide students with the basis for a life-long appreciation of the arts and cultures of South and East Asia through examinations of varying aesthetic viewpoints and critical and creative interpretations of artistic expression.

ARTH 131 Mod and Contemp Chinese Art (2 credits)
This course offers a selective introduction to the artistic concepts and visual art produced in the Republic of China and the People's Republic of China between 1911 and today. The course will introduce students to methodologies and art-historical concepts such as formal analysis, Marxism, reception, iconography/iconology, and cultural/historical studies. The purpose of the course is to introduce students to the varying aesthetic

viewpoints and critical and creative interpretations of artistic expression that have defined modern and contemporary China over the course of the past two centuries.

ARTH 132 Arts of Japan (2 credits)
This course offers a selective introduction to the artistic concepts and visual art of Japan. The course will examine visual expression in Japan in the form of painting, sculpture, calligraphy, architecture, and gardens from the Neolithic period to the 19th century. The course will introduce students to methodologies and art-historical concepts such as formal analysis, patronage, reception, iconography/iconology, and cultural/historical studies. The purpose of the course is to provide students with the basis for a life-long appreciation of the arts and culture of Japan through examinations of varying aesthetic viewpoints and critical and creative interpretations of artistic expression.

ARTH 140 Architecture & Art St. Thomas (4 credits)
Using art, archives, and architecture at the University of St. Thomas, this course will increase a student's visual literacy as well as an understanding of their place of higher learning. Students will analyze style, subject, and patronage and will explore the relationship of art and architecture to religion, campus and city planning, societal concerns, technology, landscapes, marketing, and image making. Site visits and meetings with key stakeholders will supplement classroom and archive work. Connections will be made throughout the course to the history of art and architecture beyond our campus.

ARTH 141 Building Minnesota (2 credits)
This course will increase a student's visual literacy as well as provide an understanding the history of architecture throughout time in Minnesota. Students will analyze style, subject, and patronage and will explore the relationship of buildings to religion, city planning, societal concerns, landscapes, technology, marketing, and sustainability. Site visits will be an important supplement classroom work. Connections will be made throughout the course to the history of architecture in the United States and beyond.

ARTH 142 Building St. Thomas (2 credits)
This course will use the architecture of the University of St. Thomas as a classroom in which to understand broader themes in architectural history including style, designers, patrons, economics, landscapes, sustainability, technology, materiality, and identity. Site visits and meetings with key stakeholders will supplement classroom and archive work. Connections will be made throughout the course to the history of architecture in Minnesota and beyond.

ARTH 150 Explorations in Art History (4 credits)
Through a series of case studies, this course examines the importance of art as cultural expression across time and from a global perspective. In each course section, students will analyze the style, subject, and patronage of works of art, and will explore art's relationship to religion, ideology, society and economy, gender roles, and the interaction of cultures. Case studies will include architecture, sculpture, painting, and other arts, such as ceramics, textiles, and photography. This course fulfills the Fine Arts and Human Diversity core requirement. Some sections will meet the Global Perspectives requirement. Consult the department website for details about the specific sections offered.

ARTH 202 History of Street Art (4 credits)
Street art—including graffiti, murals, and other installations in public space—provides expressive avenues for marginalized voices, shapes urban space, and promotes competing visions of community development. In contrast to art that is created for museums or the commercial art market, street art is uniquely positioned to engage with social issues from a critical perspective. This class will involve an analysis of street art projects from the United States, situated in comparison with projects from around the world. Topics to explored include the history of street art over time (from its origins in graffiti to contemporary mural festivals); the impetus for street art in communities in the USA and globally; models for creating, preserving, and presenting street art; the institutionalization of street art; street art as it relates to diversity and inclusion; and, ultimately, the potential for street art to play a role in social change.

ARTH 204 Typography and Visual Culture (4 credits)
An investigation of the history of typography and type design from the earliest developments of movable type to the global digital typography of the present day. We will look at what needs typography served in the broader culture, and how the forms of letters and their arrangements reflected those needs. We will learn about the changing technologies of type-founding and printing, and how they shaped the designs of letterforms and pages. Throughout the course we will contextualize typeforms within their contemporary visual culture, drawing relationships to fine arts, popular arts, and the broader design world.

ARTH 206 Cultural History Photography (4 credits)
The invention of photography and its dissemination throughout the world coincided with an explosive time in the development of American culture and identity. Probing the medium of photography as it

relates to structures of power, constructs of race, and issues of social justice, this course surveys the cultural history of photography with a special emphasis on photography in the United States. This course does not have any prerequisites and it provides an overview of the development of photographic techniques and applications from the origins of photography in the 1830s to the present as well as a critical focus on photography and issues of diversity, inclusion and social justice from an art historical perspective.

ARTH 211 Methods/Approaches/Problems (4 credits)
An introduction to the methods and problems of art history, including the theoretical approaches to art and its history, the examination and analysis of the work and its medium, the role of the museum and gallery in the study of art, and bibliographic tools of the different disciplines of the field. Prerequisite: ARTH 110 (or 151 or 152 from earlier catalogs) or permission of chair

ARTH 243 Individual Study (2 or 4 credits)

ARTH 250 Museum Studies: Collections (4 credits)
In this course, museum successes and failures will be examined in relation to the broad topics of exhibition design, collecting, politics, tourism, museum organizational structures, architecture, and education. The course combines thematic and theoretical classroom discussions with practical and experiential museum components. This course will provide an opportunity for discussions with museum professionals. Partnerships with regional museums will provide hands-on project opportunities during the semester.

ARTH 251 Museum Studies: Practices (4 credits)
This course provides an investigation of the critical issues facing museums in the 21st century. Museum missions, practices, and resources will be interwoven with a discussion of audience, communication, and collaboration. This course will provide an opportunity for discussions with museum professionals. Partnerships with regional museums will provide hands-on project opportunities during the semester.

ARTH 260 Women in Ancient Art & Culture (4 credits)
The history of the ancient world-its politics, philosophy, and literature is mostly silent or slanderous about the lives of women. In most times and places their role in public life and their ability to express themselves were severely circumscribed. However, a study of archaeological material, representations in art and literature, and the occasional writing of women themselves allows us to look behind the curtain that veiled their lives. This class will examine the evidence to reconstruct a picture of what the life of women was like in Egyptian, Greek, and Roman culture throughout the ancient Mediterranean.

ARTH 265 Art/Archaeology Ancient Meso (4 credits)
ARTH 265 Art and Archaeology of Ancient Mesoamerica: This course introduces students to the art, architecture, and archaeology of the Aztecs, Maya, Olmec, Zapotecs, and their contemporaries in Pre-Columbian America. Participants will explore the rich cultural history of this region (that includes parts of Mexico, Guatemala, Belize, Honduras, and El Salvador), and investigate how the art, architecture, and archeological remains of Mesoamerican peoples can be used to expand our knowledge of their religious practices, ideology, and societal institutions

ARTH 269 Research (2 or 4 credits)

ARTH 270 Pacific Art (4 credits)
This course surveys historical and contemporary art forms of Oceania, a region that includes Melanesia, Micronesia, and Polynesia. Sculpture, painting, architecture, and body arts will be explored in relation to gender roles, identity, repatriation, and Western influence. Students will learn how material culture, along with the concepts of mana and tapu, sustained highly stratified cultures in places such as Hawaii and New Zealand. We will also study egalitarian societies in which a balanced relationship is maintained with natural environments through daily practices and spiritual beliefs. Students will work with objects from the American Museum of Asmat Art at the University of St. Thomas (AMAA@UST). Films and other digital resources will be used to illustrate how Pacific cultures have changed over time.

ARTH 275 Buddhist Art (4 credits)
Following a brief introduction to the origins of Buddhist art in India, this course will examine a selection of primary monuments and objects associated with Buddhism as practiced in China and Japan. The historical context, iconography, style and religious function of individual sites and objects will be considered in roughly chronological order. Larger topics relating to the production and reception of Buddhist art, such as its functional/ritual context, patronage and iconographical development, will be examined in class discussions of select articles. The goal of this course is to provide students with a foundational knowledge of the art and issues associated with the practice of Buddhism in traditional China and Japan.

ARTH 280 Sacred Architecture & Space (4 credits)
Throughout history, humans have set aside spaces for religious purposes. Frequently these are the most visible remains or representatives of a culture and are keys to understanding the place of humans within the world and universe. This course examines sacred architecture and spaces from a variety of perspectives, including materials and structure, ritual function and liturgy, decoration, symbolism, physical context, and social/religious context. The course will examine not only Christian churches but will also examine non-Christian and non-western traditions of religion and architecture.

ARTH 282 History of Amer Architecture (4 credits)
A survey of high style and vernacular architecture in the United States from the Native Americans to the present day. Upon completion of this course, the student will be able to: identify the major themes and styles in American architecture; recognize major monuments and their designers; and understand how an American identity was projected in architecture. This includes understanding American architecture and its relationship to corresponding developments in art, landscape, and the urban fabric. Emphasis will be placed on structures in Minnesota and the upper Midwest.

ARTH 284 Arts of the African Diaspora (4 credits)
This course surveys the diverse arts produced by people of African descent in the Diaspora (Suriname, Brazil, Cuba, Haiti, the United States and England) from the Colonial period to the present. An examination of selected West and Central African cultural practices and art forms will serve as a basis for an understanding of creative transformations in the African Diaspora. Important issues to be addressed include art and resistance, survivals and transformations, and the construction of race and diasporic identity.

ARTH 285 Arts of Africa (4 credits)
The continent of Africa presents a world of contrasts: from the powerful trading empires of the Sahel to the small scale, nomadic societies of the Kalahari. This course will survey the arts and cultures of sub-Saharan Africa, drawing on recent breakthroughs in archaeology, anthropology and art history to explore the diversity and creativity of past and present African artists. This course will explore material culture in its original context and seek to understand the social roles that art plays in all aspects of life, from religion and politics to personal relationships.

ARTH 291 Topics in Non-Western Art (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the searchable class schedule on Murphy Online.

ARTH 295 Topics (2 credits)
The subject matter of these courses will vary from year to year but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ARTH 296 Topics (2 credits)
The subject matter of these courses will vary from year to year but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ARTH 297 Topics (4 credits)
The subject matter of these courses will vary from year to year but will not duplicate existing courses. Descriptions of these courses are available in the Online Printable Schedule

ARTH 298 Topics (4 credits)
The subject matter of these courses will vary from year to year but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ARTH 301 Art History Signature Work (4 credits)
ARTH 301 is a signature work course in art history. Topics vary from section to section, but all art history Signature Work courses focus on interdisciplinary perspectives in the field of art history, the integration of learning, and the relevance of our work as art historians to the university's mission. The various sections focus on and gaining an understanding of art through a careful exploration of the historical, social, and cultural context of its production. This course calls upon students to reflect on knowledge they have built throughout their academic careers and to explore and integrate their learning in an interdisciplinary fashion. Prerequisites: 4 credits in ARTH coursework and at least 80 credits completed by the start of the course

ARTH 304 Typeface Design (4 credits)
This course focuses on the process of creating a digital typeface design. Students will invent a design brief—a description of the need that their font will serve—and then, letter by letter, create a typeface. Along the way, students will investigate the history of type design, reflect on both the functional and expressive aspects of type designs, and receive feedback on their work in progress. No previous experience is required.

ARTH 305 Greek Art and Archaeology (4 credits)
A survey of the art and architecture of ancient Greece from the fall of the Bronze Age civilizations to the end of the Hellenistic period. Particular

attention will be given to sculpture, vase painting, and the relationship of art to the broader culture, to the art of the ancient Near East and Egypt, and to gender relations in ancient Greece.

ARTH 310 Roman Art and Archaeology (4 credits)
A survey of the art of the Roman Republic and Empire to the emperor Constantine in the early fourth century C.E. Issues include the use of art and architecture as an expression of imperial political programs, the creation of urban architecture and the everyday environment of the Romans, and Rome's relationship to Greece and the Near East.

ARTH 321 Art/Cultr-Mod Mexico 1824-1940 (4 credits)
This course examines the art and culture of Mexico from Independence through the Revolutionary and post- Revolutionary periods (c. 1824-1940). Painting, sculpture, architecture and popular arts are investigated in the context of broader political and intellectual movements during this period of tremendous societal change. The class begins with an overview of art history from the pre- Hispanic and Colonial periods. The core course content focuses on academic and popular arts following Mexico's independence; in this context we discuss the intense search for national identity, or mexicanidad, that marks the modern era. This class also explores the impact of the Mexican Revolution on the work of Diego Rivera, David Alfaro Siqueiros, José Clemente Orozco, Frida Kahlo and other artists of the period. Through critical readings of the biographies and autobiographies of Kahlo and Rivera alongside scholarly and popular texts, the course raises questions about the role of artist biography in our understanding of art works. In this course, Mexico is not seen in isolation; readings and discussions also investigate the work of Mexican-born artists in the United States and Europe as well as the ways in which outsiders conceived of and represented Mexico during the Revolutionary Period.

ARTH 323 Colonial Art of Latin America (4 credits)
This course is designed to provide an understanding of the foundation of the arts of Spanish-speaking Latin America. Its focus will be the development of the arts from the time of the Spanish entrada in the late 15th century through the time of the independence movements of the 19th century and beyond. In general, it will focus on Early Colonial and Viceregal New Spain and Peru. At the close of this course participants will be expected to approach any period of Latin American art with a deeper awareness of its historical context and an increased sense of analytical confidence.

ARTH 328 Chinese Sculpture & Architect (4 credits)
This course will examine the historical development of Chinese sculpture and architecture from the Neolithic period to the 21st century. The issues to be addressed will include possible functions and the development of early tombs, sculpted burial goods and imperial spirit roads; patronage, iconographic, and reception studies of Buddhist cave shrines and sculpture; the stylistic development of figural and animal sculpture; the development of both secular and religious Chinese architecture and garden design; the major figures and the "monuments" of sculpture and architectural studies; the development of Daoist sculpture; and the role of modern and contemporary sculpture and architecture in the public and private sphere.

ARTH 329 Chinese Painting (4 credits)
The goal of this course is to engage students in a comprehensive examination of the historical development of Chinese painting from the Paleolithic period to the 20th century. The issues to be addressed will include the stylistic development of figure and landscape painting; the major figures and the "monuments" of painting; the influence of format on Chinese painters; the early emergence of art history in Chinese painting and its later effects; changes in the socio-political influences on painters and their work; and methodological differences between modern Chinese and Western art historians.

ARTH 330 Churches/Mosques 1st Millen (4 credits)
This course examines the formation and development of the first Christian and Islamic art and architecture during the first millennium C.E. of Europe and the Mediterranean. The class will examine the development of religious structures for these new religions, the role of visual images in both religious and secular contexts, and the influences that these cultures exerted on each other. Areas to be covered include: the Early Christian period; the Germanic, Celtic, Anglo-Saxon, Scandinavian cultures of the sixth to eighth centuries; the Carolingian and Ottonian periods; Byzantine art and architecture; Islamic art and architecture.

ARTH 335 Cathedral,Monastery,Calipha (4 credits)
A survey of the arts in Europe during the Romanesque and Gothic periods, c. 1000-1400. Emphasis will also be given to contemporaneous currents in Byzantine and Islamic art and their influence on the art of the West.

ARTH 339 Costume Design and Reps. (4 credits)
Clothing is not simply functional, but is also an expression of body ideals, class structure, gender, and historical development of technical and artistic change. This course looks at the materials, design, and use of textiles and garments from the early to the contemporary period in the West, with special

stress on understanding the role of artistic representation and methodology in defining social status and standards of beauty. Attention will also be paid to the treatment of historic dress, both by authors of the period, and in popular culture.

ARTH 340 Southern Renaissance Art (4 credits)
A survey of the art and architecture of Italy, Spain and Portugal from the fourteenth through the sixteenth centuries. The course will focus on issues of style, patronage and iconography

ARTH 345 Baroque and Rococo Art (4 credits)
A survey of the art and architecture of western Europe in the seventeenth and eighteenth centuries. Emphasis will be given to issues of iconography, patronage, and style.

ARTH 351 Romanticism to Impressionism (4 credits)
This course will investigate the history of European painting and sculpture from 1800 to 1880. It will consider the major trends of Neoclassicism, Romanticism, Realism, and Impressionism. It will also address art's response to and role in a European society marked by colonialism, industrialization, and the rise of urban mass culture.

ARTH 352 Art in the United States (4 credits)
This course will investigate the history of the visual arts (primarily painting and sculpture) in the United States from 1776 to 1960. Artists to be considered include colonial portraitists; Romantic landscape painters; Neoclassical sculptors; Realist, Luminist, and Impressionist painters; artists associated with New York Dada and the Harlem Renaissance; Precisionists, Regionalists and Social Realists; and Abstract Expressionists. Participants will consider artists' responses to key historical developments such as the founding of the nation, westward expansion, the Civil War, industrialization, and emergence as a superpower. Several issues will run throughout the course: What is the relationship between the art of Euro-Americans and that of Europe? and that of Native Americans? Is there something "American" about American art? How do the visual arts reinforce or challenge our sense of American history and identity?

ARTH 355 20th C:Cubism to Installati (4 credits)
Twentieth Century art will examine the stylistic, thematic and iconographic aspects of the modern movements in Europe, beginning with Fauvism and other manifestations of European Expressionism, Cubism, Orphism, Futurism, De Stijl, Dada, Surrealism, Art Informal and Tachisme, Optical and Pop Art, Photo-Realism, Conceptual Art, and Neo-Expressionism.

ARTH 356 Modernism in European Art (4 credits)
Modernist artists strove to find a visual language of expression appropriate to their time; yet many contemporaries found their works incomprehensible, as do many people today. An open-minded and historically informed investigation of modern art helps to make sense of it. This course will explore the history of European painting and sculpture from 1880 to 1940. It will consider the many movements that characterized modernism, such as Post-Impressionism, Symbolism, Fauvism, Cubism, Futurism, Expressionism, Dada, Surrealism, and Constructivism. Issues to be addressed include the rejection of tradition, the development of abstraction, the impact of World War I and its aftermath, the influence of science and technology on art, and the fate of modernism under Hitler's and Stalin's regimes. Particular attention will be paid to the theoretical underpinnings of modern art.

ARTH 389 Research (2 or 4 credits)

ARTH 393 Individual Study (2 or 4 credits)

ARTH 476 Experiential Learning (1 to 4 credits)
These courses allow students to gain credit for certain non-classroom experiences. (These do not include studio art courses.) Normally open to junior and senior students. Permission of the department chair is required. Credit for experience is normally sought prior to its occurrence. the complete description of these courses at the beginning of the "Curricula" section of this catalog. Prerequisite: previous course or courses in art history

ARTH 478 Intern/Experiential Learning (0 credits)
This zero-credit course is for practical training for undergraduate students.

ARTH 481 Senior Paper Presentation (4 credits)
During the senior year, art history majors are expected to write a major research paper with an abstract and to describe the results of their research in an oral presentation to a departmental symposium to be held prior to graduation. The purpose of this paper and presentation is to allow the student to demonstrate competency in art historical methodology and to gain experience from presenting the results to a group of peers and faculty. The topic and instructor must be chosen in consultation with the department chair during the semester prior to writing the senior paper. Prerequisite: ARTH 110 (or 151 and 152 from previous catalog) and 211

ARTH 483 Seminar (2 credits)

ARTH 484 Seminar (2 credits)

ARTH 485 Seminar (4 credits)

ARTH 486 Seminar (4 credits)

ARTH 487 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ARTH 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ARTH 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ARTH 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ARTH 491 Research (2 or 4 credits)

ARTH 495 Individual Study (2 or 4 credits)

Biochemistry

Program Overview

College of Arts and Sciences, Interdisciplinary Program
O'Shaughnessy Science Hall (OSS) 402, Chemistry Department, (651) 962-5580
Verhoeven (BIOL) committee chair; Advisory committee: Ismat (BIOL), Popescu (CHEM), Marsh (CHEM)

Department Web Site: https://www.stthomas.edu/academics/undergraduate/biochemistry-major/index.html

Biochemistry is an interdisciplinary major that draws upon faculty and courses in the departments of Biology and Chemistry. The major is administered by a committee of representatives from both departments and is designed to meet the needs of students interested in gaining an understanding of the chemistry of life processes. Students who fulfill the requirements will receive a Bachelor of Science (B.S.) degree in biochemistry. The program is appropriate for students pursuing graduate studies in biochemistry, medicine, or related fields. The major is also suitable for students interested in positions in biotechnology after graduation.

Entering students interested in this major should inform Academic Counseling. Students are advised to begin their introductory biology, chemistry, and mathematics coursework in their freshman year. The Biochemistry Committee will coordinate advising. Students should talk with an adviser as soon as possible following their freshman year in order to select the elective courses that will be most appropriate to their interests. A research course in either biology or chemistry can be counted as one of the electives and is highly encouraged if the student will be seeking admission to a graduate program in biochemistry or molecular biology.

All graduating seniors are required to take achievement exams in both biology and chemistry for purposes of assessment of the major and College accreditation. Students choosing this major may not take a second major or a minor in either biology or chemistry.

Graduation with Honors in Biochemistry

Students graduating with a B.S. in biochemistry may also qualify for honors. Students interested in this designation must consult with the chair of the Biochemistry Committee one year or more prior to graduation.

Requirements include:

- An overall minimum cumulative GPA of 3.25.
- A cumulative GPA of 3.50 in the courses in both biology and chemistry combined.
- Completion of four credits in research. This may consist of a 4-credit course or two 2-credit courses in either biology or chemistry.
- Preparation of a written thesis in the form of the primary literature.
- Successful defense of the thesis before an examining panel which includes the thesis director, a representative from each of the departments of biology and chemistry, a faculty member from outside the departments of chemistry and biology and a faculty member from another institution. The panel members should be selected in consultation with the thesis adviser.
- Presentation of the research at an off-campus meeting.

Note: All requirements should be completed by April 20 for a spring graduation, or by November 15 for a fall graduation.

Major in Biochemistry (B.S.)

- BIOL 207 Genetics, Ecology, and Evolution (4 credits)
- BIOL 208 Biological Communication and Energetics (4 credits)
- BIOL 209 Biology of Sustainability (4 credits)

Plus:

- CHEM 111 General Chemistry I (4 credits) and CHEM 112 General Chemistry II (4 credits)

or

- CHEM 115 Accelerated General Chemistry (4 credits)

Plus:

- CHEM 201 Organic Chemistry I (4 credits)
- CHEM 202 Organic Chemistry II (4 credits)
- CHEM 440 Biochemistry I (4 credits)
- CHEM 442 Biochemistry II (4 credits)

Plus four credits from the following:

- CHEM 331 Chemical Thermodynamics and Reaction Dynamics (4 credits)
- CHEM 332 Quantum Chemistry and Molecular Spectroscopy (4 credits)

Plus:

- Twelve (12) additional credits numbered BIOL 295 or higher, excluding BIOL 340 Principles of Biochemistry.
  Note: Four (4) credits must be at the BIOL 400-level.
- Four (4) additional credits in CHEM, selected in consultation with the adviser.
  Note: CHEM 300 is strongly recommended for this elective.

Plus:

- BCHM 301 Biochemistry Seminar (2 credits)

Allied requirements

- MATH 113 Calculus I (4 credits) (or equivalent)
- MATH 114 Calculus II (4 credits)
- PHYS 211 Introduction to Classical Physics I (4 credits)
- PHYS 212 Introduction to Classical Physics II (4 credits)

Biochemistry Undergraduate Courses

BCHM 243 Individual Study (2 or 4 credits)

BCHM 269 Research (2 or 4 credits)

BCHM 389 Research (2 or 4 credits)

BCHM 393 Individual Study (2 or 4 credits)

BCHM 476 Experiential Learning (1 to 4 credits)

BCHM 478 Intern/Experiential Learning (0 credits)
This zero-credit course is for practical training for undergraduate students.

Biology

Program Overview

College of Arts and Sciences, Department of Biology
Owens Science Hall (OWS) 352, (651) 962-5220

Jennifer McGuire Illig (Chair)

Department Web Site: https://cas.stthomas.edu/departments/areas-of-study/biology/index.html

Mission statement: The Biology Department is a professionally engaged community that equips undergraduate students to find their passions, embark on meaningful careers, and become responsible, scientifically literate citizens through authentic experiences in science.

Modern biology encompasses an extraordinary range of disciplines, from molecular genetics to global health and sustainability. The biology curriculum at St. Thomas reflects this diversity, providing the foundation of experience that students need in their freshman and sophomore years with the depth that they value as juniors and seniors. Courses at all levels of the curriculum emphasize two fundamentals: mastering the essential material of each discipline and developing the intellectual skills needed to do science – asking the right questions, developing methods to answer these questions and critically evaluating the results of these investigations. As well as providing a broad-based liberal arts education in the biological sciences, the biology program serves as an excellent basis for students planning careers in academia, agriculture, bioinformatics and genomic research, biotechnology, biomedical research, conservation biology, environmental science, forestry and wildlife management, medicine, dentistry and other health professions, and veterinary medicine.

A principle objective of the Department of Biology is to provide students with an excellent preparation for post-graduate pursuits. Graduates of the program command an understanding of core concepts in biology as well as an ability to design and implement studies of biological questions. The department evaluates its success in achieving these objectives using several tools, including assessments of all students as they progress through our programs.

The curriculum for a major in biology is divided into three levels, offering increasing challenges, greater emphasis on independent work, and more extensive use of the primary literature. All biology majors take an introductory series of twelve credits (BIOL 207, 208, and 209) in the first of these tiers. These core courses cover the central concepts of modern biology and provide a foundation for more specialized study at higher levels of the curriculum.

The second-tier courses (BIOL 301-399) all require successful completion of the introductory series and build on this foundation and offer a broad range of topics at an intermediate level, including research (BIOL 391-392).

All third-tier courses (BIOL 401-498) require the completion of specific second-tier courses and involve advanced scholarship, independent research projects, and extensive use of the primary literature. Research courses (BIOL 269, 389, 491) are available to students wishing to pursue in-depth studies in laboratory and/or field situations. Individual Study courses (BIOL 495) allow for tutorial study in a specialized subject area of the student's choosing that is not otherwise available. Additional offerings in the form of Topics (BIOL 298, 398, 490) courses are available from time to time. Courses numbered between BIOL 483-498 (excluding 476 and 478) may, with approval of the department chair, be used to fulfill the 400-level requirement for the major.

Courses numbered BIOL 101-199 are intended for students of majors other than those in the sciences and cannot be used to fulfill either the major or minor requirements in biology. All of these courses fulfill the laboratory science requirement in the core curriculum.

Students planning to enter graduate school or a professional program after leaving St. Thomas should consult the entrance requirements of these programs while planning their choice of undergraduate courses. Students are strongly encouraged to consult with their biology academic adviser while making these plans.

Courses taken at other colleges by students already matriculated at St. Thomas may be credited toward the requirements of the major only with prior and explicit written approval of the departmental transcript evaluator. Approval will be granted only to reconcile schedule conflicts which otherwise would be unavoidable, to provide opportunities to enroll in appropriate courses that are not available in the St. Thomas curriculum, or to rectify problems arising from other special circumstances. These limitations apply to all requirements of the major, including courses in the allied requirements.

Transfer students desiring credit toward the major for work completed prior to matriculation at St. Thomas should contact the transcript evaluator in the Office of the University Registrar before seeking departmental approval. For biology courses numbered higher than BIOL 209, no more than 12 transfer credits can be counted towards the major. Of these 12, no more than 8 credits can be from academic institutions within the U.S.A, and no more than 12 credits can be from study abroad courses registered through St. Thomas.

Students who receive at least a score of 4 on the Biology or Environmental Science Advanced Placement Exam or at least a score of 5 on the International Baccalaureate exam will receive 4 college credits in biology. Students not intending to major in biology will receive credit for BIOL 101 (fulfills a natural science with laboratory course requirement). Students intending to major in biology or related programs who score 4 on the AP exam will receive credit for BIOL 101, which will fulfill a core lab science requirement but will not fulfill a major field requirement. Students intending to major in biology or related programs who score 5 on the AP exam or 5-7 on the IB exam will receive 4 credits for BIOL 243, which counts toward the biology major.

Students may also be interested in related majors such as Biochemistry, Environmental Science, and Neuroscience.

Extracurricular Expectations

All students are expected to participate in departmental assessment activities and complete the departmental Senior Survey in the spring of their final year. All students are also strongly encouraged to attend the Biology Seminar Program on a regular basis.

Departmental Participation

Students are encouraged to further engage the discipline of biology by participating in various

departmental activities. Valuable experiences in the department include both paid and volunteer roles as research assistants (with ongoing faculty projects), teaching assistants, lab preparers, and biology tutors. Together with off-campus internships, membership in the Biology Club and the Beta Beta Beta National Biology Honor Society, as well as the Biology Seminar Program and various special events, these opportunities offer many ways to explore the vast discipline of biology and become better acquainted with department members and other students.

Biology Honor Societies

Beta Beta Beta, the national biology honor society, chartered the Gamma Tau chapter at St. Thomas in 1990. The purpose of this organization is to recognize and encourage excellence in the study of biology, and to sponsor events and services of interest to biology students. The organization has a particular interest in promoting and recognizing student research, and encouraging students to consider vocations in the field of biology. Beta Beta Beta provides opportunities for presenting and publishing student work on a regional and national level.

Students are eligible for full membership when they have completed the introductory twelve credits in the department, and at least four credits at the 300-level, and have a grade point average of 3.0 or better in biology department courses. Associate membership in the chapter is available to all interested students.

Biology Honors Program

Candidates for graduation with honors in biology must complete four credits in 400-level biology Research (491), present and defend a thesis based on their work; achieve a final cumulative grade point average of at least 3.50 in biology department courses, 3.25 in biology and allied courses and 3.00 overall; and present their research at a scientific meeting beyond the St. Thomas community. Students interested in this program should begin planning early and in consultation with their academic advisor.

Interdisciplinary Programs

The Department of Biology participates in three interdisciplinary degree programs, each of which leads to a Bachelor of Science degree: Biochemistry (with Chemistry), Environmental Science (with Chemistry and Geology), and Neuroscience (with Psychology). These programs are described elsewhere in the catalog. Students interested in concentrating in biology as part of the environmental studies major listed in this catalog should consult with a Department of Biology adviser to select appropriate courses.

Pre-Health Professions Programs

Students interested in a career in the health professions should consult the university's pre-health professions advising committee.

See Pre-Professional Programs in this catalog for coursework suggestions, internships, and other information.

Life Science Education

For information on the teaching licensure program in Life Science, see the Education section of this catalog. Students interested in specializing in biology at the elementary school level should consider the integrated major in Science and Mathematics for Elementary Education (SMEE), also described in the Education section. See Life Science Education: https://www.stthomas.edu/catalog/curricula/life-science-9-12/index.html

Teacher Licensure

- Elementary Education with a Co-major in Science and Mathematics for Elementary Education
- Elementary Education with a Specialty in Science (5-8)
- Co-major in Science (5-8) – Life Science (9-12) and a Co-major in Secondary Education

Major in Biology (B.A.)

4 credits from the following list:

- BIOL 101: General Biology
- BIOL 102: Conservation Biology
- BIOL 105: Human Biology
- BIOL 106: Women, Medicine and Biology
- BIOL 110: Genetics and Society
- BIOL 207: Genetics, Ecology, and Evolution

Plus

- BIOL 208: Biological Comm & Energetics
- BIOL 209: Biology of Sustainability

Plus

- 14 BIOL credits from courses numbered BIOL 210 and above
- *No more than 4 credits from courses between BIOL 210-298.
- *8 credits must be from courses with labs.
- Students are encouraged to explore opportunities for Experiential Learning and Independent Research.

Plus

- 4 credits from BIOL 400 and above

Plus 4 credits from the following list:

- CHEM 100: Chemistry in Our World (4 credits)
- CHEM 101: Environmental Chemistry (4 credits)
- CHEM 108: Chemistry for Nursing (4 credits)
- CHEM 109: General Chemistry for ENGR (4 credits)
- CHEM 111: General Chemistry I (4 credits)
- CHEM 112: General Chemistry II (4 credits)
- CHEM 115: Accelerated General Chemistry (4 credits)

Plus

- DASC 120: Intro to Computational Stat (4 credits)

Major in Biology (B.S.)

- BIOL 207 Genetics, Ecology, and Evolution (4 credits)
- BIOL 208 Biological Communication and Energetics (4 credits)
- BIOL 209 Biology of Sustainability (4 credits)
- Plus twenty-eight (28) credits from the list below. Sixteen (16) of those twenty-eight must come from any of the following: BIOL 210, 211 or courses from the below list that include a lab component. At least four credits must be completed at the 400 level; typically taken during the senior year.

Note: The normal expectation is that students will complete BIOL 207, 208, and 209 by the end of their sophomore year.

Elective List:

- BIOL 210 Introduction to Laboratory Research (2 credits)
- BIOL 211 Introduction to Field Research (4 credits)
- BIOL 256 Microbiology Health Focus (4 credits)
- BIOL 275 Born this way? (4 credits)
- BIOL 287 Biology of HIV and AIDS (2 credits)
- BIOL 292 Topics without laboratory (4 credits)
- BIOL 296 Topics (2 credits)
- BIOL 298 Topics (4 credits)
- BIOL 302 Animal Diversity (4 credits)
- BIOL 303 Animal Diversity (without lab)
- BIOL 315 Plants, Food and Medicine (4 credits)
- BIOL 316 Plants, Food and Med (no lab)
- BIOL 320 Plant Physiology (4 credits)
- BIOL 328 Environmental Toxicology and Health (4 credits)
- BIOL 330 Animal Behavior (4 credits)
- BIOL 331 Animal Behavior (no lab)
- BIOL 333 Ecology (4 credits)
- BIOL 335 Conservation Biology (4 credits)
- BIOL 336 Conservation Biology (no lab)
- BIOL 340 Principles of Biochemistry (4 credits)
- BIOL 349 Comparative Anatomy and Physiology: Locomotion and Systems Regulation (4 credits)
- BIOL 350 Comparative Anatomy and Physiology: Energy Acquisition and Processing (4 credits)
- BIOL 353 Microscopic Anatomy (4 credits)
- BIOL 354 Neurobiology (4 credits)
- BIOL 355 Neurobiology (without lab)
- BIOL 356 Microbiology (4 credits)
- BIOL 358 Microscopic Anatomy (no lab)
- BIOL 360 Genetics (4 credits)
- BIOL 361 Medical Geology (4 credits)
- BIOL 363 Immunology (4 credits)
- BIOL 364 Immunology (no lab)
- BIOL 365 Developmental Biology (4 credits)
- BIOL 366 Developmental Biology (no lab)
- BIOL 368 Genetics (no lab)
- BIOL 371 Cell Biology (4 credits)
- BIOL 372 Cell Biology (no lab)
- BIOL 375 Endocrinology (4 credits)
- BIOL 377 Endocrinology (no lab)
- BIOL 389 Research (2 or 4 credits)*
- BIOL 393 Individual Study (2 or 4 credits)*
- BIOL 396 Topics (2 credits)
- BIOL 398 Topics (4 credits)
- BIOL 415 Plant Physiology and Adaptations to Stress (4 credits)
- BIOL 430 Evolutionary Ecology (4 credits)
- BIOL 435 Aquatic Biology (4 credits)

- BIOL 462 Molecular Biology (4 credits)
- BIOL 464 Bioinformatics (4 credits)
- BIOL 467 Biology of Emerging Infectious Diseases (4 credits)
- BIOL 471 Evolution (4 credits)
- BIOL 472 Evolution, Medicine, and Psychology (4 credits)
- BIOL 476 Experiential Learning (2 credits)
- BIOL 478 Experiential Learning (4 credits)
- BIOL 480 Urban Ecosystem Ecology (4 credits)
- BIOL 484 Seminar (2 credits)
- BIOL 486 Seminar (4 credits)
- BIOL 488 Topics (2 credits)
- BIOL 490 Topics (4 credits)
- BIOL 491 Research (2 or 4 credits)*
- BIOL 495 Individual Study (2 or 4 credits)*
- CHEM 440 Biochemistry I (4 credits)**
- ESCI 310 Environmental Problem Solving (4 credits)**

*A maximum of eight credits in Research and/or Individual Study will be credited towards the requirements of the major.

**CHEM 440 and ESCI 310 may be counted towards the major as 300-level elective courses.

Allied requirements

- CHEM 111 General Chemistry I (4 credits) and CHEM 112 General Chemistry II (4 credits)
  or CHEM 115 Accelerated General Chemistry (4 credits)
- MATH 109 Calculus with Review II (4 credits)
  or MATH 113 Calculus I (4 credits)
- DASC 120 Into to Computational Statistics I (4 credits)
  or DASC 210 Biostatistics (4 credits)
  or MATH 303 Statistics for the Applied Sciences (4 credits)

Note: It is highly recommended that students complete the above allied requirements by the end of the sophomore year.

Plus courses from the following list of other requirements to a total of 24 credits; alternative courses to satisfy allied requirements may be proposed by to the student for approval by the department chair:

- CHEM 201 Organic Chemistry I (4 credits)
- CHEM 202 Organic Chemistry II (4 credits)
- CHEM 300 Quantitative Analysis (4 credits)
- CHEM 444 Advanced Metabolism (2 credits)
- CISC 131 Intro-Programming&Prob Solving (4 credits)
- CISC 260 Data Fundamentals and Apps (4 credits)
- CISC 360 Data Visualization (4 credits)
- CISC 342 Computer Applications in Experimental Sciences (4 credits)
- ENGR 350 Introduction to Electronics (4 credits)
- EXSC 213 Human Anatomy (4 credits)
- EXSC 214 Human Physiology (4 credits)
- GEOL 113 Earth's Record of Climate (4 credit)
- GEOL 115 Environmental Geology (4 credits)
- GEOL 130 Earth History (4 credits)
- GEOL 162 The Earth's Record of Climate (4 credits)
- GEOG 223 Remote Sensing (4 credits)
- MATH 114 Calculus II (4 credits)
- MATH 315 Applied Mathematics and Modeling I (4 credits)
- MATH 316 Applied Mathematics and Modeling II (4 credits)
- PHYS 109 Physics for Life Sciences I (4 credit) or PHYS 211 Classical Physics I (4 credits)
- PHYS 110 Physics for Life Sciences II (4 credit) or PHYS 212 Classical Physics II (4 credits)
- PSYC 206 The Brain and Human Behavior (4 credits)
- PSYC 207 Drugs and Behavior (4 credits)
- PSYC 401 Physiological Psychology (4 credits)
- PUBH 300 Epidemiology (4 credits)
- DASC 240 Statistics II (4 credits)

Minor in Biology

- BIOL 207 Genetics, Ecology, and Evolution (4 credits)
- BIOL 208 Biological Communication and Energetics (4 credits)
- BIOL 209 Biology of Sustainability (4 credits)
- Eight (8) additional credits in biology courses numbered 200 or above, selected in consultation with the department chair.

Note: CHEM 440 Biochemistry I cannot be counted towards the Biology minor.

Biology Undergraduate Courses

BIOL 101 General Biology (0-4 credits)
Emphasizing biology as a creative, investigative process and its relevance in today's world, this course provides an overview of cell biology, genetics, physiology, and human impact on the environment. Two laboratory hours per week. Not open to biology majors, pre-professional students, or students who have completed BIOL 105 or BIOL 106.

BIOL 102 Conservation Biology (0-4 credits)
An introduction to the basic concepts of conservation biology, including the history of conservation, the value of biological diversity, threats to biodiversity, conservation at the population, species, and community levels, and applications to human activities. Laboratories will emphasize data collection and analysis, and the practical application of conservation practices. This course is designed to meet the needs of the Environmental Studies major for a core course in environmental biology. Two laboratory hours per week.

BIOL 105 Human Biology (0-4 credits)
An introduction to cells, genetics, development and the human body, and the impact of humans on the environment. Laboratories will emphasize investigative scientific problem solving and creative thinking. Three laboratory hours per week. Not open to students who have completed BIOL 101 or BIOL 106.

BIOL 106 Women, Medicine and Biology (0-4 credits)
This course addresses issues of biology from the perspective of women. The focus of the course will be to learn basic principles of biology in areas such as anatomy, physiology, genetics, cell biology, and microbiology in the context of issues relevant to women and women's health. Two laboratory hours per week. Not open to Biology majors or students who have completed BIOL 101 or BIOL 105.

BIOL 110 Genetics and Society (0-4 credits)
Genetics is a rapidly evolving field of science that is continually changing the face of medicine, agriculture, and environmental health. In this course, students explore this area by learning the basic principles of genetics, modern technologies and practices, and its societal applications and implications. Two laboratory hours per week. Not open to biology majors or students who have completed BIOL 101, BIOL 105, or BIOL 106.

BIOL 161 Medical Geology (0-4 credits)
This course explores the effects of geologic materials and processes on human health. Topics include exposure to or deficiency of trace metals and minerals, inhalation of ambient and anthropogenic mineral dusts and volcanic emissions; transportation, modification and concentration of organic compounds; and exposure to radionuclide's, microbes and pathogens in various geologic settings. The knowledge and skills covered in this course will provide an understanding of the geological and biological processes controlling various public health concerns and thus provides a preparation to contribute to important societal questions.

BIOL 195 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online.

BIOL 196 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online.

BIOL 197 Topics (0 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online.

BIOL 198 Topics (0 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online.

BIOL 200 First Year Seminar in Biology (1 credit)
This seminar is intended to provide an introduction to the Biology department for incoming students. Through various topics, student will explore what it means to be a biologist. How do scientists approach problems? How do students of biology understand and critically analyze science as it is portrayed in the media and discussed in other courses? How can students best take advantage of their four years as a biology student? Faculty teaching the seminar will serve as academic advisors to the students in the seminar. Students will have opportunities to discuss course and curricular questions. Seminar topics will vary depending on instructor. One hour per week. Pass/Fail grading.

BIOL 207 Genetics Ecology Evolution (0-4 credits)
This course lays a foundation on which to build both concepts and skills in biology. We explore genetics, evolution, and ecology, demonstrating within each of these disciplines the importance of diversity in

supporting life. Topics include: Mendelian genetics, molecular genetics, selection theory and the process of evolution, speciation, and population, community, and global ecology. Emphasis on applications of these topics to current issues related to human health and sustainability. Laboratory work (3 hours per week) consists of authentic research projects that require creating hypotheses, designing experiments, analyzing and interpreting data, and making new contributions to science.

BIOL 208 Biological Comm & Energetics (0 or 4 credits)
The purpose of this course is to introduce the structure and function of cells, and how structure and function drives organismal physiology and diversity. By the end of this course, through lecture and laboratory exercises, students should have an understanding of the basic components of cells, how cells and organisms transfer genetic information to future generations, how communication is integral to cellular and organismal function, and how cells and organisms generate and process energy to drive physiological functions. In addition, students will continue to improve skills for scientific inquiry through activities designed to increase familiarity with the scientific literature and science terminology, improve skills to design and critically analyze experiments, foster ability to work with a scientific team, and provide opportunities to improve scientific writing. Any one topic covered in this course has enough material for a course of its own. However, this course will give basic overview of a series of selected topics that are meant to introduce students to the vast field of cellular and organismal biology and the use of biological science in life. Prerequisite: c- or above in BIOL 207 or a C- in any BIOL 100 level course.

BIOL 209 Biology of Sustainability (4 credits)
Influences of humans on the global environment have reached unprecedented levels, increasing the need for society to strive to live in a sustainable manner. Many issues facing the environment have a biological basis. Thus, an understanding of basic biology is necessary to understand and address many environmental issues. This course will cover the fundamental biology involved with five environmental issues at the global scale: climate change, excessive nutrient loading into ecosystems, agricultural production, chemical contaminants, and loss of biodiversity. Specific biological principles to be covered include energy and nutrient mass balance by organisms and ecosystems, homeostasis and organismal physiology, and population dynamics and conservation biology. Prerequisite: Completion of BIOL 207 or BIOL 208 or any 100 level GEOL or CHEM 112 or CHEM 115 or permission of the instructor.

BIOL 211 Intro to Field Research (0 to 4 credits)
This course is an introductory experience in field-based research problems in biology. Students will work individually or in small teams to define appropriate questions, design research methods, collect and analyze data, and present oral and written reports. Emphasis is on the application of the scientific method to biological problem solving and the communication of findings to others as the end product of science. Areas of investigation vary with the interests of the students and instructors and with the availability of research organisms. Generally offered in January term. Field trip of 2-3 weeks to a tropical site (Mexico, Belize, Ecuador, Jamaica, or Costa Rica) and additional fees required. Prerequisites: Open to biology majors or prospective majors. Preference is given to students in their first or second year of study in the discipline.

BIOL 243 Individual Study (2 or 4 credits)

BIOL 256 Foundations of Microbio/Health (0 or 4 credits)
This interdisciplinary course focuses on infectious pathogens of humans, including their genetics, physiology, host pathogenicity, evolution and epidemiology. Major pathogens of concern for clinicians and healthcare workers are surveyed. Impacts of infectious diseases on society will also be explored. This introductory course is designed to serve students form biology and non-biology majors interested in entering the health professions, including nursing, physician assistant, medical or veterinary school, dental-related professions etc. Lab consists of acquiring foundational skills necessary to understand how we study human pathogens from the molecular through ecosystem level. Four laboratory hours per week. Students may not receive credit for both BIOL 256 and BIOL 356. Prerequisites: C- or better in CHEM 100 or CHEM 108 or CHEM 111 or CHEM 112 or CHEM 115, AND C- or better in BIOL 101 or BIOL 105 or BIOL 207

BIOL 269 Research (2 or 4 credits)

BIO 275 Born this way? (4 credits)
While discussions of gender and its social construction have become common in our culture, there is less discussion of whether there are actually binary “biological sexes” that impact those conversations. In addition, while we have made many inclusive efforts in understanding the LGBTQIA+ community, our larger society correlates sexual orientation to biology leaving us to ask: are queer folks born that way and does it stay fixed throughout our lives? This course explores the

convergence of sociology and biology in how we define gender, sex, sexual orientation, and sexual behavior as continua instead of binaries as once previously believed. Topics are examined in developmental order from conception to adulthood and include current issues relevant to the LGBTQIA+ community and society at-large. The course also considers these topics in non-human animals to ask 'what is normal?' in nature. This will be a BIOL - SOCI crosslisted course.

BIOL 287 Biology of HIV and AIDS (2 credits)
The HIV/AIDS pandemic is now 30 years old. Remarkable progress has been made in learning about and combating this virus, but HIV/AIDS has proved more difficult to treat successfully than many other diseases. This class will focus on why HIV/AIDS has been such a monumental scientific and social challenge. This course will include aspects such as the molecular biology of the HIV virus and its effects on human cells, a basic view of how the immune system works and how HIV disrupts that function, how epidemiological methods helped identify HIV as the causative agent of AIDS, and what social, political and economic challenges have been and are currently important in fighting the pandemic. We will approach these topics through discussion and investigation. All students will be expected to participate actively in class discussions.
Prerequisites: BIOL 208

BIOL 295 Topics (0 to 2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BIOL 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BIOL 297 Topics (0 to 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BIOL 298 Topics (0 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BIOL 302 Animal Diversity (0 or 4 credits)
This course emphasizes the variety of morphological and physiological solutions that have evolved to satisfy the requirements of life as an animal in water and on land. Students have access to marine and freshwater aquaria and to natural habitats for class study and individual projects. Four laboratory hours per week. Prerequisite: BIOL 101 OR 102 OR 105 OR 207, AND BIOL 208, AND a minimum grade of C- in BIOL 209. Credit will not be given for both this course and BIOL 303.

BIOL 303 Animal Diversity (without lab) (4 credits)
This course emphasizes the variety of morphological and physiological solutions that have evolved to satisfy the requirements of life as an animal in water and on land. Prerequisite: BIOL101 or BIOL102 or BIOL105 or BIOL207, BIOL208 and a minimum grade of C- in BIOL209. Credit will not be given for both this course and BIOL 302.

BIOL 315 Plants, Food and Medicine (0 or 4 credits)
This course explores the biology of plants from the perspective of our use of plants as a source of food and medicine. Major topics include the overall structure and function of plants, the diversity of plants, and the role of plants as a food source, as well as a source of medicine. Four laboratory hours per week. Prerequisite: BIOL 208, and a minimum grade of C- in BIOL 209. Credit will not be given for both this course and BIOL 316.

BIOL 316 Plants, Food and Med (no lab) (4 credits)
This course explores plant biology through the lens of how plants are used as food and medicines. Course content includes plant structure, physiology and diversity as well as topics related to sustainable agriculture, nutrition, and ethnobotany.
Prerequisites: BIOL208 and minimum grade of C- in BIOL209. Credit will not be given for both this course and BIOL 315.

BIOL 320 Plant Physiology (0 or 4 credits)
The goals of this course are to introduce essential topics within the field of plant physiology, and to engage the theme of sustainability in agriculture as an important global issue with numerous plant physiological applications. The course content includes photosynthesis and other biochemical processes of plants, water transport and nutrient uptake, plant interactions with the environment and hormonal regulation of plants. Four laboratory hours per week. Prerequisite: BIOL 207, BIOL 208 and a minimum grade of C- in BIOL 209

BIOL 328 Envr. Toxicology and Health (0 or 4 credits)
There is increasing public interest and concern over the connections between environmental quality and human health. This course will explore these connections by providing an introduction to the multidisciplinary field of environmental toxicology- the study of the adverse effects of chemical,

biological, and physical agents in the environment on living organisms, including humans. Topics will cover global and local problems including issues of environmental justice and future approaches to sustainably mitigate the major environmental health problems in industrialized and developing countries. Four laboratory hours per week. Prerequisite: (BIOL 101 OR 102 OR 105 OR 207, BIOL 208 and a minimum grade of C- in BIOL 209) OR ESCI 310 OR PUBH 300 OR Completion or co-enrollment in ENGR 368 OR Completion or co-enrollment in ENGR 361 OR Completion or co-enrollment in CISC 260 OR CISC 360 OR DASC 240 OR STAT 333 OR ECON 315 OR Permission of the instructor plus 80 completed credits.

BIOL 330 Animal Behavior (0 or 4 credits)
This course includes the study of animal behavior at multiple levels connecting neural, hormonal, and genetic mechanisms of behavior to an evolutionary perspective. The adaptive value of behaviors such as display, habitat selection, foraging pattern, and mating system is examined. Theoretical analysis of sexual selection and the evolution of cooperation and altruism are considered. Laboratory work emphasizes the measurement and analysis of animal behavior under natural conditions. Four laboratory hours per week. Prerequisites: BIOL 101 OR 102 OR 105 OR 207, AND BIOL 208, AND a minimum grade of C- in BIOL 209; DASC 120 or MATH 303 recommended. Credit will not be given for both this course and BIOL 331.

BIOL 331 Animal Behavior (no lab) (4 credits)
The purpose of this course is to provide students with an introduction to the study animal behavior at multiple levels of analysis. Principles related to the neural, hormonal, genetic and developmental mechanisms of behavior will be covered using an evolutionary perspective. And, the adaptive value of behaviors such as social display, habitat selection, foraging patterns, and mating systems will be examined. Additionally, theoretical analysis of antipredator adaptations, sexual selection, and the evolution of cooperation and altruism will be considered. Prerequisites: BIOL101 or BIOL102 or BIOL105 or BIOL207, BIOL208 and a minimum grade of C- in BIOL209. Credit will not be given for both this course and BIOL 330.

BIOL 333 Ecology (0 or 4 credits)
This course is an exploration of the major concepts in modern ecology, including eco-physiology and adaptation, population growth and regulation, community and ecosystem ecology, and biodiversity and conservation biology. Laboratory and fieldwork will complement these topics and will emphasize careful experimental design and statistical analysis of data. Four laboratory hours per week. Prerequisite: BIOL 101 or 102 or 207, and a minimum grade of C- in 209. DASC 120 or MATH 303 recommended.

BIOL 335 Conservation Biology (0 or 4 credits)
Using approaches from ecology and evolutionary biology, this course examines processes affecting populations of rare and endangered species, as well as control of introduced or pest species. Ecosystem and community-level management projects are addressed in addition to projects directly focused on individual species. Topics include population viability analysis, metapopulations and the geographical structure of populations, genetic diversity within populations, the interaction between populations ecology and population genetics, and biological control of pests. Laboratory work includes field and laboratory study of species with broad ecological implications for the ecosystems and biological communities of the Upper Midwest. Four laboratory hours per week. Prerequisites: BIOL 101 or BIOL 102 or BIOL 105 or BIOL 207, and a minimum grade of C- in BIOL 209. Credit will not be given for both this course and BIOL 336.

BIOL 336 Conservation Biology (no lab) (4 credits)
Using approaches from ecology and evolutionary biology, this course examines processes affecting populations of rare and endangered species, as well as control of introduced or pest species. Ecosystem and community-level management projects are addressed in addition to projects directly focused on individual species. Topics include population viability analysis, metapopulations and the geographical structure of populations, genetic diversity within populations, the interaction between populations ecology and population genetics, and biological control of pests. Prerequisites: BIOL101 or BIOL102 or BIOL105 or BIOL207 and a minimum grade of C- in BIOL209. Credit will not be given for both this course and BIOL 335.

BIOL 340 Principles of Biochemistry (4 credits)
Principles of Biochemistry examines the chemistry underlying biological phenomena and emphasizes the importance of biochemistry in fields ranging from agriculture to medicine. Major topics include the structure and function of biological molecules; the critical role of enzymes; the generation, storage and regulation of metabolic energy. Prerequisites: CHEM 201, AND a minimum grade of C- in BIOL 209. For all life science majors besides biochemistry, students may not take CHEM440 in addition to this course and receive BIOL credit for CHEM440. For biochemistry majors, this course does not fulfill a BIOL3XX requirement.

BIOL 349 Comp Anat/Phys: Loco &Syst Reg (0 or 4 credits)
This course includes an examination of the functional morphology of the vertebrate skeletal, muscular, nervous, and sensory systems. Emphasis will be placed upon the evolution, development and function of these systems as well as the control and integration of all organ systems in vertebrates. This course may be taken as part of a two-semester sequence with BIOL 350 but may also be taken alone. Four laboratory hours per week. Prerequisites: BIOL 207, BIOL 208 and a minimum grade of C- in BIOL 209

BIOL 350 CompAnat/Phys: EnergyAcq&Proc (0 or 4 credits)
This course includes an examination of the functional morphology of the vertebrate endocrine, cardiovascular, respiratory, renal, digestive and reproductive systems, including control and integration of organ systems, as well as adaptation to the environment and evolutionary history. Laboratory work will emphasize functional comparisons of vertebrate organ systems and an experimental approach to physiological problems. Four laboratory hours per week. This course may be taken as a part of a two-semester sequence with BIOL 349 or may be taken alone. Prerequisite: BIOL 207, BIOL 208 and a minimum grad of C- in BIOL 209.

BIOL 353 Microscopic Anatomy (0 or 4 credits)
Microscopic structure and its relationship to physiological function among the basic tissue types and in selected organ systems. Focus includes levels of biological organization from subcellular to organismal, with emphasis on humans and other mammals. Special consideration is given to the organization and function of integrating systems, including glandular, vascular, and neural, and to the molecular structure of, and functional integration among, cellular junctions and transport mechanisms, cytoskeletal components, and extracellular matrices. Opportunities for participation in experimental or other investigative projects are available. Four laboratory hours per week. Prerequisites: BIOL 208. Credit will not be given for both this course and BIOL 358.

BIOL 354 Neurobiology (0 or 4 credits)
This course is an introduction to the study of neuroscience from the cellular, systems, and behavioral perspectives. Topics will include how neural tissues carry information, the ionic basis for neuronal potentials, neurotransmitters and synaptic transmission, sensory and motor systems, and the neural mechanisms of learning, memory and behavior. Four laboratory hours per week.

Prerequisites: BIOL 101 OR 102 OR 105 OR 207, AND BIOL 208, AND a minimum grade of C- in BIOL 209

BIOL 355 Neurobiology (without lab) (4 credits)
This course is a classroom-based introduction to neurobiology, with special emphasis on exploring the molecular, cellular and systems aspects of neurons and neural circuitry. We will look at the anatomy and physiology of nerve cells, the mechanisms that underlie neural function, and how these mechanisms allow organisms to function in their environment. Topics will include the ionic basis for neuronal signaling, neurotransmitters and synaptic function, how information is encoded and transmitted by neural tissues, and neural mechanisms that serve as the basis for sensation, learning and memory. Prerequisite: BIOL101 BIOL102 or BIOL105 or BIOL207, BIOL208 and a minimum grade of C- in BIOL209. Credit will not be given for both this course and BIOL 354.

BIOL 356 Microbiology (0 or 4 credits)
The in-depth study of microorganismal biology is directed at gaining an understanding of the mechanisms that underlie the functions of bacteria. The importance of microorganisms as they relate to human disease, industry and the environment will be explored through lectures, readings from the literature and discussions. Laboratory includes an independent research project done in collaboration with the professor and peers. Four laboratory hours per week. Prerequisites: BIOL 207, AND BIOL 208, AND a minimum grade of C- in BIOL 209, AND either: CHEM 111 AND CHEM 112, OR CHEM 115

BIOL 358 Microscopic Anatomy (no lab) (4 credits)
This course provides an introduction to the microscopic anatomy of cells, tissues, and major organs that constitute the mammalian organism. The animal body is composed of a vast diversity of cell types, which are in turn organized into tissues and organs that carry out the complex functions of life. Microscopic anatomy is the study of the cellular architecture of tissues and provides deep insights into the workings of the body. Emphasis is placed on structural-functional correlates at both the light and electron microscopic levels. Students also will explore alterations in normal histology through disease or injury to provide an understanding of the etiology of various disease states. Prerequisite: minimum grade of C- in BIOL208. Credit will not be given for both this course and BIOL 353 Microscopic Anatomy.

BIOL 360 Genetics (0 or 4 credits)
This course focuses on a detailed consideration of specific topics in transmission, molecular, and population genetics. Eukaryotic and prokaryotic

systems are discussed and genetic reasoning and analysis will be emphasized. Four laboratory hours per week. Prerequisites: A minimum grade of C- in BIOL 207 or BIOL 101 or 105 or BIOL 110, AND BIOL 208, or a permission of the instructor. Students who get credit for this course will not be able to get credit for BIOL 368 and vice versa.

BIOL 361 Medical Geology (0 or 4 credits)
This course explores the effects of geologic materials and processes on human health. Topics include exposure to or deficiency of trace metals and minerals, inhalation of ambient and anthropogenic mineral dusts and volcanic emissions, transportation, modification and concentration of organic compounds, and exposure to radionuclides and microbes and pathogens in various geologic settings. The knowledge and skills covered in this course will provide an understanding of the geological and biological processes controlling various health concerns and thus provides a preparation to contribute to important societal questions. Prerequisites: BIOL 101 OR 102 OR 105 OR 207, AND BIOL 208, AND a minimum grade of C- in BIOL 209.

BIOL 363 Immunology (0 or 4 credits)
This course studies the mammalian immune system emphasizing the genetic and cellular basis of the immune response. Basic immunological concepts will be used to explore the mechanisms of transplantation rejection, autoimmunity, AIDS, and other topics of interest. Four laboratory hours per week. Prerequisites: BIOL 101 OR 102 OR 105 OR 207, AND BIOL 208, AND a minimum grade of C- in BIOL 209. Credit will not be given for both this course and BIOL 364.

BIOL 364 Immunology (no lab) (4 credits)
This course will examine the molecular, cellular, and organismal aspects of the human immune system. The goal is to arrive at a clear, memorable understanding of how the immune system protects us from disease, and what can go wrong when it is either overly active or not active enough. The format will consist of less traditional lecturing and more active learning, supported by the instructor. Classroom periods will involve collaborative and creative work by and among students to collectively improve everyone's learning and understanding. A significant amount of independent work outside the classroom is also required. This course does not include a laboratory component. Prerequisite: BIOL101 or BIOL102 or BIOL105 or BIOL207, BIOL208 and a minimum grade of C- in BIOL209. Credit will not be given for both this course and BIOL 363 Immunology.

BIOL 365 Developmental Biology (0 or 4 credits)
An examination of current molecular mechanisms underlying morphogenic processes during enbroyogenesis using a wide variety of animal model systems and the experimental basis for those concepts. Laboratory work may include an experimental investigation culminating in a written report in scientific format based on that investigation and grounded in relevant primary literature. Four laboratory hours per week. Prerequisites: BIOL 208, and a minimum grade of C- in BIOL 209. Credit will not be given for both this course and BIOL 366.

BIOL 366 Developmental Biology (no lab) (4 credits)
Developmental Biology studies the mechanisms involved in growth and development of complex organisms. This course aims to provide an examination of current cellular and molecular mechanisms underlying major developmental processes using a wide variety of animal model systems, and the experimental basis for those concepts. We will explore how the body axes are established, how organs are formed, how does the brain develop, what is sex determination, and what role do embryonic and adult stem cells play during development. Prerequisite: BIOL 208 and a minimum grade of C- in BIOL 209. Credit will not be given for both this course and BIOL 365

BIOL 368 Genetics (no lab) (4 credits)
This course focuses on a detailed consideration of specific topics in transmission, molecular, and population/quantitative genetics. Eukaryotic and prokaryotic systems are discussed, and emphasis is placed on addressing how geneticists study biological problems. Genetic reasoning and analysis will be highlighted. Prerequisites: BIOL101 or BIOL105 or BIOL110 or BIOL207,and a minimum grade of C- in BIOL208 (or permission from course instructor). Students who get credit for this course will not be able to get credit for BIOL360 and vice versa.

BIOL 371 Cell Biology (0 to 4 credits)
An advanced investigation of topics in cell structure and the regulation of cellular activities, including signal transduction, protein transport, cell-cycle regulation, and cellular movement, emphasizing molecular mechanisms, current concepts and their experimental basis. Includes significant use of the primary literature. Four laboratory hours per week. Prerequisite: BIOL 208, and a minimum grade of C- in BIOL 209. Credit will not be given for both this course and BIOL 372.

BIOL 372 Cell Biology (no lab) (4 credits)
An advanced investigation of topics in cell structure and the regulation of cellular activities, including signal transduction, protein transport, cell-cycle

regulation, and cellular movement, emphasizing molecular mechanisms, current concepts and their experimental basis. Includes significant use of the primary literature. Prerequisites: BIOL 208 and a minimum grade of C- in BIOL 209. Credit will not be given for both this course and BIOL 371.

BIOL 375 Endocrinology (0 or 4 credits)
This course is intended to give an overall introduction to the major endocrine systems of vertebrates and their involvement in the control of physiological functions. Major principles involved in signaling by hormones, the integration of hormonal mechanisms to maintain homeostasis, and the evolution of endocrine systems will be covered. Emphasis will be placed on similarities and differences among vertebrate groups, but focus will be primarily mammalian endocrinology. The primary objective is to highlight the complexity of control and integration of physiological functions by chemical signals such as hormones. Prerequisites: BIOL 101 OR 102 OR 105 OR 207, AND BIOL 208, AND a minimum grade of C- in BIOL 209. Credit will not be given for both this course and BIOL 377.

BIOL 377 Endocrinology (no lab) (4 credits)
This course is intended to give an overall introduction to the major endocrine systems of vertebrates and their involvement in the control of physiological functions. Major principles involved in signaling by hormones, the integration of hormonal mechanisms to maintain homeostasis, and clinical aspects of endocrine systems will be covered. Emphasis will be placed on mammalian endocrinology, highlighting normal and pathological conditions in humans to understand the complexity of control of physiological functions by chemical signals such as hormones. Prerequisite: BIOL101 or BIOL102 or BIOL105 or BIOL207, BIOL208 and a minimum grade of C- in BIOL209. Credit will not be given for both this course and BIOL 375.

BIOL 389 Research (2 or 4 credits)
Original laboratory, field, library or other analytical investigation under the direction of a member of the biology faculty, culminating in either a written research paper or an oral presentation. Upper class standing not required. Prerequisites: BIOL 207, BIOL 208 and a minimum grade of C- in BIOL 209, permission of the instructor and the department chair.

BIOL 391 Research (0 to 4 credits)
Original laboratory, field, library or other analytical investigation under the direction of a member of the biology faculty, culminating in either a written research paper or an oral presentation. Upper-class standing not required. Prerequisite: BIOL 201

BIOL 392 Research (2 credits)
Original laboratory, field, library or other analytical investigation under the direction of a member of the biology faculty, culminating in either a written research paper or an oral presentation. Upper-class standing not required. Prerequisite: BIOL 201

BIOL 393 Individual Study (1 to 4 credits)

BIOL 395 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BIOL 396 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BIOL 397 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BIOL 398 Topics (0 to 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BIOL 415 Plant Physiology & Stress (0 or 4 credits)
This course examines fundamental principles in plant physiology, such as photosynthesis and plant water transport. In addition, special focus will be given to understanding how plants survive and adapt to adverse environmental conditions, e.g. drought, nutrient limitation, and extreme temperatures. Four hours laboratory per week. The laboratory will include an independent research project. Prerequisites: A minimum grade of C- in BIOL 209; any 300-level BIOL course

BIOL 420 Sustainable Food Systems (0 or 4 credits)
Our food system is under extreme duress; urbanization, agricultural intensification, and climate change are contributing to an increasingly vulnerable food system. BIOL 4xx - Sustainable Food Systems will help students summarize existing information about our current food system, identify key research gaps, and assess its scalability and sustainability from a biological perspective. The lab (4 hrs per week) will provide students with a variety of independent opportunities to contribute to a more sustainable food system. Prerequisites: At least two BIOL 3xx electives. Alternative

prerequisites may be accepted with the permission of the instructor.

BIOL 430 Evolutionary Ecology (0 or 4 credits)
The influence of natural selection on behavior in relation to ecological conditions. Emphasis is on integration of theoretical and experimental methods. Includes critical reading of papers from the primary literature and completion of a significant independent research project. Four laboratory hours per week. Prerequisites: A minimum grade of C- in BIOL 330 or 333, or in any two 300-level biology courses; DASC 120 or MATH 303 strongly recommended

BIOL 432 Inf. Disease Dynamics/Control (0-4 credits)
An in-depth exploration of the latest scientific research into the spread and management of infectious diseases. Emphasis is on applying quantitative reasoning to address pressing public health issues. Topics include infectious disease modeling, molecular epidemiology, and disease control strategies. Class format combines lecture and student-led discussions of the primary literature. Lab involves student projects developing computer simulations to predict the ability of a public health intervention (mass vaccination, quarantine, etc.) to reduce disease burden. Prerequisites: Math109 OR MATH 113 and DSCI 120 OR DSCI 112 OR STAT 201 OR STAT 220 or MATH114 or Instructor Permission.

BIOL 435 Aquatic Biology (0 or 4 credits)
Characteristics of lakes, streams and other aquatic habitats; including plant and animal communities, water chemistry and productivity. Use of recent primary literature to learn and evaluate field techniques, data collection and data analyses. Both individual and class research projects focus on aquatic systems. Four laboratory hours per week. Prerequisites: A minimum grade of C- in BIOL 330 or 333, or in any two 300-level biology courses; DASC 120 or MATH 303 strongly recommended

BIOL 460 Cancer Biology (0 or 4 credits)
Cancer Biology focuses on the molecular and cellular events that contribute to cancer. Topics include oncogenes and tumor suppressors, apoptosis, cancer stem cells, angiogenesis, and tumor metastasis. The laboratory will focus on independent research utilizing cellular and molecular techniques widely used in cancer research. Four laboratory hours per week. Prerequisites: At least one of the following: BIOL 340 (Principles of Biochemistry), BIOL 349 and 350 (Comparative Anatomy and Physiology), BIOL 354 (Neurobiology), BIOL 356 (Microbiology), BIOL 360 (Genetics), BIOL 363 (Immunology), BIOL 371 (Cell Biology); or permission from instructor

BIOL 462 Molecular Biology (0 or 4 credits)
An investigation of current concepts in molecular biology including gene expression and its regulation, the organization of genetic information, recombinant DNA techniques, oncogenes and genetic engineering. The laboratory consists of a collaborative research project. Four laboratory hours per week. Prerequisites: A minimum grade of C- in BIOL 356, 360, or 371. Alternative prerequisites may be accepted with the permission of the instructor.

BIOL 464 Bioinformatics (0 or 4 credits)
Bioinformatics is an emerging field in the sciences that arises from interactions between biology, biochemistry, and computational science. The goal of bioinformatics is to find ways to sort, compare, and decode nucleotide and protein sequences to identify underlying similarities and patterns that are biologically relevant. This knowledge of bioinformatics along with the advent of genome sequencing has changed how scientists investigate problems. Instead of looking at how one gene or protein is affected by a particular problem, we now look at how the entire genome (genomics) or the entire organism (proteomics) responds. This course will introduce you to the tools that are available for these types of analyses and how the information gained from these tools is used to generate hypotheses in all areas of biological science. Four laboratory hours per week. Prerequisites: Any two 300-level biology course (one of which can be CHEM 440).

BIOL 467 Emerging Infectious Diseases (0 to 4 credits)
This course focuses on emerging infectious diseases from many different perspectives with particular attention to the ways in which human behavior is altering the ecology of infectious disease transmission, thereby promoting emergence of these diseases as a major global health threat. The course will be a seminar format designed around case studies, discussion, guest speakers, and student projects. Laboratory will consist of an independent research project done in collaboration with the professor and peers. Four laboratory hours per week. Prerequisites: Two biology courses at the 300-level or above

BIOL 470 Microbiomes in Changing World (0 or 4 credits)
An advanced exploration of how soil, oceanic, and human microbiomes are adapting to changes in global climate, modern ways of life, and increased global connectivity. The course will focus on the role of microorganisms in greenhouse gas production, carbon sequestration in the soil and ocean, global ecosystem stability, and biofuel production, in

addition to the role of climate and land use changes on the transmission of infectious disease. Implications for food security, policy, and medicine will also be discussed. This will be a seminar-style course focused on primary literature and will include an independent laboratory research project. Four laboratory hours per week. Prerequisites: A minimum grade of C- in BIOL 209 and any two 300-level BIOL courses. ESCI 310 may substitute for one of the 300-level BIOL courses.

BIOL 471 Evolution (0 or 4 credits)
This course is an advanced exploration of the major concepts in modern evolutionary biology, including adaptation and natural selection, evolutionary genetics and microevolution, macroevolution, and molecular evolution. Applications of evolutionary thinking to such topics as medicine, aging, life history patterns, and behavior will be major foci. Four laboratory/recitation hours per week. Prerequisites: A minimum grade of C- in BIOL 209; any 300-level BIOL course

BIOL 472 Evolution Medicine Psychology (0 or 4 credits)
This course explores how the principles of evolutionary biology can be used to enhance our understanding of human disease and social psychology. In the first half of the course we will explore such topics as the evolution of virulence in pathogens, the persistence of genetic diseases in human populations, the evolutionary basis of aging, and the disease consequences of mismatches between our current environment and the environment in which humans evolved. In the second half of the course we will study the relationships between human social psychology and social interactions and will consider such topics as mate choice, parent-offspring relations, selfishness and altruism, and the possible evolutionary basis of various mental illnesses. Four laboratory/recitation hours per week. Prerequisites: A minimum grade of C- in BIOL 209; any 300-level BIOL course.

BIOL 474 Biology of Global Health Sem (0 or 4 credits)
This seminar, required for all senior Biology of Global Health majors, challenges students to examine the multiple aspects of global health in a unifying manner. In this seminar, students will integrate experiential learning with current research and broad applications of global health, and will complete a capstone project focusing on a global health issue. This senior capstone course allows students majoring in Biology of Global Health to analyze specific issues and problems using the knowledge and understanding gained by completing the other required courses in the program. This course does not fulfill the Biology B.A. or Biology B.S. requirement for a 400-level course. Prerequisite: Senior status as a declared Biology of Global Health major.

BIOL 476 Experiential Learning (1 to 4 credits)

BIOL 478 Intern/Experiential Learning (0 credits)
This zero-credit course is for practical training for undergraduate students.

BIOL 480 Urban Ecosystem Ecology (0 or 4 credits)
In 1800, there were around 1-billion people on the planet, and only three percent lived in urban areas. Today we are approaching 8-billion humans, and more-than half live in cities. This course explores how cities function as ecosystems and shape local, regional, and global ecological and biogeochemical processes. We will examine how carbon, nutrients, and energy enter the city in the form of food and other resources, and exit as waste, and will use this conceptual framework to assess opportunities to move towards sustainability. We will make extensive use of primary literature and apply ecological network analysis tools to contrast human-dominated ecosystems with natural ecosystems. Students will design and implement independent research projects, and will work collaboratively to apply knowledge and skills to real-world urban sustainability problems. Prerequisite: C- or better in at least two 300-level BIOL courses.

BIOL 484 Seminar (2 credits)
Investigation of selected problems in biology at an advanced level, involving student presentations based on the primary literature. The subject will vary and will be announced in the annual Class Schedule. Prerequisite: Upper-class standing and 80 completed credits.

BIOL 485 Seminar (4 credits)
Investigation of selected problems in biology at an advanced level, involving student presentations based on the primary literature. The subject will vary and will be announced in the annual Class Schedule.. These courses may, with approval of the department chair, be used to fulfill the 400-level requirement for the major. Prerequisite: Upper-class standing and permission of the instructor and 80 completed credits.

BIOL 486 Seminar (0 or 4 credits)
Investigation of selected problems in biology at an advanced level, involving student presentations based on the primary literature. The subject will vary and will be announced in the annual Class Schedule. These courses may, with approval of the department chair, be used to fulfill the 400-level requirement for the major. Prerequisite: Upper-class standing

BIOL 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BIOL 489 Topics (0 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BIOL 490 Topics (0 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BIOL 491 Individual Research (2 or 4 credits)
Same as for BIOL 493 and 494, except that written research paper is not a formal research paper.

BIOL 492 Individual Research (2 credits)
Same as for BIOL 493 and 494, except that written research paper is not a formal research paper.

BIOL 493 Individual Research (4 credits)
Original laboratory, field, library, or other analytical investigation under the direction of a member of the faculty, culminating in the writing of a formal research paper in standard scientific format that incorporates a review of the appropriate literature. Oral or poster presentation of the work at a research symposium required. Students hoping to take a Research course for credit must make arrangements with the faculty supervisor at least one semester before the course is to be taken. Research proposal forms must be completed and approved by the faculty member, the department chair, and the dean of the College prior to registration. These courses may, with approval of the department chair, be used to fulfill the 400-level requirement for the major. Prerequisite: Upper-class standing and permission of the instructor and the department chair

BIOL 495 Individual Study (2 or 4 credits)
These courses provide a means for obtaining credit on a tutorial basis for courses not otherwise available at UST or other institutions in the ACTC consortium, and are intended to satisfy unusual needs and circumstances. Students interested in Individual Study should discuss their plans with the faculty member most likely to be their tutor at least one semester before the course is to be taken. Individual Study proposal forms must be completed and approved by the faculty member, the department chair, and the dean of the College prior to registration. These courses may, with approval of the department chair, be used to fulfill the 400-level requirement for the major. Prerequisite: Permission of the instructor and the department chair

BIOL 496 Individual Study (1 to 2 credits)
These courses provide a means for obtaining credit on a tutorial basis for courses not otherwise available at UST or other institutions in the ACTC consortium, and are intended to satisfy unusual needs and circumstances. Students interested in Individual Study should discuss their plans with the faculty member most likely to be their tutor at least one semester before the course is to be taken. Individual Study proposal forms must be completed and approved by the faculty member, the department chair, and the dean of the College prior to registration. These courses may, with approval of the department chair, be used to fulfill the 400-level requirement for the major. Prerequisite: Permission of the instructor and the department chair

Biology of Global Health

Major Overview

Note: A student cannot simultaneously major in the Biology of Global Health and either major or minor in Biology (B.A. or B.S.), Biochemistry, or Neuroscience.

- BIOL 207 Genetics, Ecology, and Evolution (4 credits)
- BIOL 208 Biological Communication and Energetics (4 credits)
- BIOL 209 Biology of Sustainability (4 credits)
- BIOL 328 Environmental Toxicology and Health (4 credits)
- BIOL 474 Senior Seminar in Global Health (4 credits)

Plus:

- 16 BIOL credits from courses numbered BIOL 210 and above
- *No more than 4 credits from courses between BIOL 210-298
- *Students are encouraged to explore opportunities for Experiential Learning and Independent Research*

Allied Requirements:

- CHEM 111 General Chemistry I (4 credits) and CHEM 112 General Chemistry II (4 credits)
  or CHEM 115 Accelerated General Chemistry (4 credits)
- PUBH 300 Intro into Epidemiology (4 credits)

- DASC 120 Statistics (4 credits)
- DASC 210 Biostatistics (4 credits)

Plus 12 credits selected in consultation with their academic advisor and approved by the Biology Department Chair:

1. The courses must be cohesive and clearly related to each other as a block; however, they may be interdisciplinary and must be outside of Biology.
2. The block of courses must be clearly related to the Biology of Global Health major.
3. Students must submit a written proposal for these 12 credits that clearly describes how they are related to each other, how they are related to the BOGH major, and how they fit into post-graduation plans. The department chair ;must approve the proposal. The student may register for no more than one third of the credits prior to receiving approval of the proposal.

Catholic Studies

Program Overview

College of Arts and Sciences, Department of Catholic Studies
Sitzmann Hall,(55S) (651) 962-5703
Boyle (Chair), Junker, Kennedy, Kidd, Naughton, Schlag, Thompson

Department Web Site:
https://cas.stthomas.edu/departments/areas-of-study/catholic-studies/index.html

The Department of Catholic Studies is an interdisciplinary program that brings students to an encounter with the breadth and diversity of Catholic culture as an historic reality, shaped by and expressed in philosophy, literature, theology, and the arts, and lived in community. By examining the role it has played in various cultures, students are challenged to engage critically Catholicism's transforming power in every aspect of intellectual, spiritual, and social life.

Faculty are united by a deep respect for both the depth and the breadth of the Catholic Tradition and are committed to a high degree of interaction among themselves as well as with students. Students enter into a community at once faithful and intellectual.

The curriculum can appeal to students of any faith tradition who seek to deepen their knowledge of Catholicism's rich and living heritage. The interpersonal approach of the program and the opportunities for sustained reflection on important issues invite students to a more profound and mature experience of faith.

Students graduated with a major in Catholic Studies will have engaged major Catholic figures from a variety of cultural and historical settings and explored a broad range of resources from the Catholic intellectual tradition. This will permit them to reflect critically upon the history and contemporary significance of Catholicism and to appreciate the complex and broad history of the tradition and the faith that has shaped it.

Requirements for the major and minor

The major consists of 32 or 36 credits: 12 credits in required core courses, 20 credits in distribution area electives, with an additional 4 credits in electives required for single-majors. At least 7 courses (28 credits) must have a CATH designation.

The minor consists of 20 credits: 8 credits in required core courses, 12 credits in distribution area electives. At least 16 credits (4 courses) must have a CATH designation.

Students who participate in the Catholic Studies Rome program may use up to three courses towards their major or minor course of studies.

Beyond the first course (CATH 101), courses in Catholic Studies are grouped into three categories.

- 2XX-level courses are "Traditions" courses, which explore and reflect critically upon the reality of the Church in its intellectual and practical dimensions and as a community situated in time and place. These courses tend to focus on historical periods, events, or distinct locations in which the Church has taken root.
- 3XX-level courses are "Concepts" courses, which explore and reflect critically upon important themes and ideas in the life of the Catholic Church from an interdisciplinary perspective.
- 4XX-level courses are "Persons" courses, which focus on the work of one person, or on a group of persons, of significance for the Catholic tradition, which could include persons whose work is in dialog or tension with that tradition. These courses would ordinarily require junior standing.

Fast Track B.A./M.A. in Catholic Studies

Students may choose to, in consultation with the department, to enroll in graduate level catholic studies courses (CSMA) and have those courses count towards electives in the B.A. in Catholic Studies as well as count towards the M.A. in Catholic Studies when applying for admission.

Major in Catholic Studies

- CATH 101 The Search for Happiness (4 credits)
- CATH 205 Crisis and Development in the Church (4 credits)
- CATH 301 The Catholic Vision (4 credits)

Plus:

- At least four credits at the 2XX-level ("Traditions" courses)
- At least four credits at the 3XX-level ("Concepts" courses)
- At least four credits at the 4XX-level ("Persons" courses)

Plus:

- Eight credits in CATH electives or a suitable course from another department approved by the chair of Catholic Studies. (Students majoring only in Catholic Studies must take 12 credits)

Minor in Catholic Studies

- CATH 101 The Search for Happiness (4 credits)
- CATH 205 Crisis and Development in the Church (4 credits)
  or CATH 301 The Catholic Vision (4 credits)

Plus:

- Twelve credits in CATH electives not all at the same level

Catholic Studies Undergraduate Courses

CATH 101 The Search for Happiness (4 credits)
This course provides a critical investigation into the quest for meaning and happiness as found in the Catholic tradition. Beginning with fundamental Catholic claims about what it means to be a human being, this course explores the call to beatitude in materials from several disciplines, including theology, philosophy, literature, and art, as well as ancient, medieval, and contemporary sources. Topics explored include a consideration of human persons in relation to divine persons, the supernatural end to human life, the human person as experiencing desire and suffering, the Christian paradox that joy may be found in the giving of one's self, and the search for happiness through friendship and love. Through all these topics, the course particularly examines the question, "What is the specifically unique character of Christian happiness?"

CATH 201 Path/Expres/Pract in Cath Spir (4 credits)
This course provides an investigation into the various forms and expressions of spirituality which derive their inspiration from a common origin in Christian Revelation and the teachings of the Catholic Church. We will examine in depth a selection of topics and themes having to do with differing expressions and practices of Catholic spirituality across a number of historical eras and cultures. Possible topics include prayer and contemplation; the varieties of lay and religious spiritualities in both their solitary and communal dimensions; virtue; and vocation and work. Interdisciplinary course materials will draw on sources in theology, philosophy, history, literature, and art or music.

CATH 205 Crisis and Development (4 credits)
This course explores from an interdisciplinary perspective the history of the Catholic Church as it interacts with the secular world and is shaped by its dominant personalities and events. No other institution in history has survived, and flourished, for so long and in the face of so many challenges. This course will critically reflect upon the history of the Church, from its origins in the Apostolic Age to the modern period, as a series of cycles with a common pattern of creativity, achievement, and retreat. Students may expect to complete the course with an awareness and understanding of the major personalities and events, secular and ecclesial, that have shaped the life of the Church.

CATH 222 Catholic Literary Tradition (4 credits)
What makes a text a work of Catholic literature? How do Catholic writers struggle with the existential questions of meaning, purpose, or suffering in a unique fashion? How do the themes they engage—such as forgiveness, redemption, or the power of grace in the world—place them within the Catholic tradition? Is there a sacramental imagination or incarnational theology at the root of a work of Catholic literature? Such questions will be explored in a chronological framework through extensive readings of representative texts of Catholic literature in both English and translation from the medieval era through the present. Prerequisites: ENGL 201, 202, 203, or 204.

CATH 225 Metaphysical Poetry (4 credits)
Much lyric poetry of late 16th-17th century England

is known as "metaphysical" poetry because of its breadth and ambition. This poetry is able to link anything to anything else, and everything to God. The metaphysical poets wrote about love: friendship, marriage, sex, and the soul's love of God. They often did this all in the same poem. They also wrote at a time of religious and political crisis in England as the Reformation unsettled everything. They wrote about that too and often in the same poems. This course will read selected poems of Donne, Herbert, Crashaw, Marvell and others with an eye to how their poetry weaves themes of love and faith together in a time of religious and spiritual crisis. No previous experience in reading poetry needed.

CATH 230 American Catholicisms (4 credits)
This course explores a variety of Catholic identities that have emerged over the course of American history. We will not only grapple with the distinct historical experiences, spiritual and social practices, and cultural expressions of these identities, but will also try to grasp their fundamental unity as manifestations of the universal Church. We will particularly focus upon historically marginalized or underrepresented Catholic identities in the context of the United States, and the significance of their contributions to the nation and the Church. Our method will be interdisciplinary: students may expect to encounter literature, history, theology, political philosophy, film, visual art, and music.

CATH 243 Individual Study (2 or 4 credits)

CATH 269 Research (2 or 4 credits)

CATH 280 Mary, Mother of God (4 credits)
This course takes an interdisciplinary look at one of the most important figures of Catholicism—Mary, the Mother of God. Drawing on philosophy, theology, poetry, music, and the visual arts, we will focus on three key moments in Mary's life as mother: the Annunciation, the Nativity, and the Stabat Mater (Mary at the foot of the cross). These culturally and historically diverse depictions of Mary set the stage for an investigation into the meaning of her role, within Catholicism as a whole and within the lives of individual Christians.

CATH 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CATH 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CATH 297 Topics: Tradition (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CATH 298 Topics: Tradition (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CATH 301 The Catholic Vision (4 credits)
At the center of the Catholic vision are the two great works of divine love: creation and redemption. This course considers the implications of these divine works for a radical reconsideration of the world and the human person. Students will examine characteristic Catholic approaches to and emphases concerning creation, redemption and ecclesiology, and discuss how Catholic understandings of creation and redemption inform, respond to, and critique Catholic practices in various cultural settings. In addition, the course will compare and contrast contemporary Catholic cultural monuments with that produced in earlier eras, and compare and contrast Catholic Christianity with other forms of Christian and non-Christian belief and practices. In illustrating its themes, the course draws upon sources in art, literature, history, philosophy, and theology with special attention given to the intellectual, spiritual, and cultural consequences of Catholic doctrine. Prerequisites: CATH 101

CATH 308 Sex, Gender, and Catholicism (4 credits)
This course examines the topics of sex, gender, and Catholicism at various points of intersection. Drawing on a variety of Catholic and non-Catholic historical, philosophical, and literary lenses on these topics, this course gives special attention to under-represented voices, as well as to the teachings, practices, and institutional reality of the Catholic Church. Readings may cover topics such as friendship, sexuality, priestly ordination, marriage, erotic desire, parenthood, and more. Readings offer an opportunity to examine preconceptions, stereotypes, and assumptions surrounding these topics. Attention is also given to the exercise of power (including institutional power, and power based on gender), both historically and in contemporary culture. This course aims to deepen, diversify, and inform students' imaginations on these topics and their connection to diversity, inclusion, and social justice. Prerequisite: CATH 101.

CATH 321 Modernity and the Church (4 credits)
It is hard to overestimate the impact of the striking changes that have occurred in the world during the last two hundred years, changes that have had their focal point in European civilization. These have also been years of great moment for the Catholic Church. This course aims both at dealing with key people, events and developments in the Church in its relation to Europe since the French Revolution, beginning with an overview of the Ancien Regime and examining the social, political and ecclesiastical changes that came about through Enlightenment thought, political revolution, and scientific discovery. At the same time we will investigate what it means to do history and to do history from a Catholic perspective. We will pay particular critical attention to the historical vision of Christopher Dawson, and will read mostly from primary sources. Students will write weekly short assignments and one longer paper. Prerequisite: CATH 101 or permission of the instructor

CATH 334 Lit/Christian Perspective (4 credits)
This course provides an in-depth exploration of how literature engages Christian thought, experience, and practice and how a reader engages works of imaginative literature from an intellectually serious Christian perspective. The course will also provide an introduction to theories in the interdisciplinary field of religion and literature. Religious themes studied will come from a variety of literary forms, including those of myth, history, parable, short story, essay, children's literature, poem, and novel. The literature chosen may reflect a variety of cultural backgrounds so that, among other things, we may consider how meaning may be affected by changes in worldview. Specific topics vary; accordingly, credit may be earned more than once for this course number. Prerequisites: ENGL 201, 202, 203, or 204.

CATH 340 Church&Culture:Soc Dim of Cath (4 credits)
This course provides an investigation into the ways in which Catholicism is inherently social and ecclesial. Its specific focus is on the Christian engagement with the world. The course's framework will be taken from the analysis of society into three spheres of action (culture, politics, and economics) as described in Centesimus annus. We will examine the ways that Revelation, the sacramental life, and the teachings of the Church call Catholics to seek holiness and to witness to their faith in the world. Specific topics may include social and economic justice, politics and public policy, lay and religious apostolates, education, and marriage and family. Course materials may include resources from philosophy, theology, history, economics, and political science.

CATH 355, Catholic Studies in Rome (4 credits)
The city of Rome is a city rich in history and religion both pagan and Catholic. This is seen in the physical and spiritual reality of the city, in its geography, in its streets and their layout, in its ruins and churches and monuments. As part of the Catholic Studies Rome program, this course engages the physical and spiritual reality that is the city of Rome in an interdisciplinary way (e.g., history, theology, art history, literature, philosophy) so as to help students understand more deeply and more richly Rome's unique place in the Roman Catholic Church. As Rome is a spiritual and cultural reality, this course may well engage other parts of Italy and Italian history and culture beyond the physical confines of the geographical city of Rome, but with an eye to how the city might illuminate such further points of study and experience. Prerequisite: CATH 101

CATH 380 Church Leadership (4 credits)
In the vision of the Second Vatican Council, clergy and laity together compose the Church but each is called to play a different role in the practical working out of the Church's mission in the world. That mission is not limited to the activity of the Church as an organization but encompasses the lay vocation to bring the Gospel to the world of work and social life. This course will consider both vocations, giving attention to management in a parish context (as a clerical function) but also to the vocation of the laity to management as this plays out in a variety of Church related organizations. Students will critically engage principles and practices of organizational operation, management, and leadership as they are shaped and applied to the specific needs and realities of Church related institutions. Students can expect to take away from the course a fundamental understanding of the structure and essential operations of organizations associated with the Church and a basic grasp of management principles and skills as informed by the Catholic Intellectual tradition and the Catholic understanding of vocation.

CATH 389 Research (2 or 4 credits)

CATH 393 Individual Study (2 or 4 credits)

CATH 395 Topics (2 credits)

CATH 396 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CATH 397 Topics: Concepts (4 credits)
This course will examine in detail a small focused set of questions arising from one or more areas of the

interdisciplinary program in Catholic Studies. Topics will vary from year to year but will not duplicate existing courses. The selection in any given semester will depend upon the interest of the students and instructors and on the availability of community resources (for example, guest lecturers). Some examples of subject matter include: Is Christian tragedy possible? Does Catholic belief conflict with the findings of modern science? What is the relationship of Catholicism to various economic systems? The odd number is used if the course fulfills a core curriculum requirement. Please see here for the searchable class schedule on Murphy Online

CATH 398 Topics: Concepts (4 credits)
This course will examine in detail a small focused set of questions arising from one or more areas of the interdisciplinary program in Catholic Studies. Topics will vary from year to year but will not duplicate existing courses. The selection in any given semester will depend upon the interest of the students and instructors and on the availability of community resources (for example, guest lecturers). Some examples of subject matter include: Is Christian tragedy possible? Does Catholic belief conflict with the findings of modern science? What is the relationship of Catholicism to various economic systems? The odd number is used if the course fulfills a core curriculum requirement. Please click here to view the Searchable Class Schedule on Murphy Online

CATH 402 Dante's Divine Comedy (4 credits)
This interdisciplinary Catholic Studies/literature course explores Dante Alighierl's Divine Comedy in its literary, historical, theological, religious, political, and linguistic contexts. The course studies in critical detail the complete text of the Commedia in English as well as portions of related works such as Dante's La Vita Nuova. Throughout the course, particular attention will be paid to the Divine Comedy's Catholic Christian themes.

CATH 405 John Henry Newman (4 credits)
John Henry Newman has been called, somewhat misleadingly, the father of the Second Vatican Council. According to Jarsoslav Pelikan, "(n)ot only to his latter day disciples, ...but to many of those who have drawn other conclusions from his insights, John Henry Newman has become the most important theological thinker of modern times." T.S. Eliot had insisted that he is one of the two most eloquent sermon writers in the English language. Pope Benedict XVI stressed his importance as the theologian of conscience when he presided at his beatification in England. In this course we will examine not only Cardinal Newman's most important theological works focusing on the development of doctrine and the role of conscience in relation to Church authority, but also his philosophical works addressing the relations of faith and reason, his work on university education and selected poetry, meditations and devotions, and sermons.

CATH 406 The Many Worlds of Chesterton (2 credits)
A natural controversialist, G. K. Chesterton (1874-1936) seemed to write about everything: Christian apologetics, philosophy, social issues, politics, literature and art. He was also a poet, short story writer, and novelist. In the course of his life he was an atheist, a Protestant, and finally a Catholic. In all things, he brought his own peculiar joyful genius to his writings. In this course, we will study representative samples of Chesterton’s voluminous writings both to understand and evaluate his approach to many different areas of study, and also to see how, ultimately, his Christian faith provided a unifying intellectual vision of reality. Works to be studied could include Orthodoxy, The Everlasting Man, The Thing, St. Francis, The Man who was Thursday, and What's Wrong with the World.

CATH 407 The Many Worlds of Chesterton (4 credits)
A natural controversialist, G. K. Chesterton (1874-1936) seemed to write about everything: Christian apologetics, philosophy, social issues, politics, literature and art. He was also a poet, short story writer, and novelist. In the course of his life he was an atheist, a Protestant, and finally a Catholic. In all things, he brought his own peculiar joyful genius to his writings. In this course, we will study representative samples of Chesterton’s voluminous writings both to understand and evaluate his approach to many different areas of study, and also to see how, ultimately, his Christian faith provided a unifying intellectual vision of reality. Works to be studied could include Orthodoxy, The Everlasting Man, The Thing, St. Francis, The Man who was Thursday, and What's Wrong with the World.

CATH 410 English Writers in CATH Trad (4 credits)
English authors writing in the Catholic tradition have been a small minority in modern England, but have produced an extraordinary number of first-rank writers. Coincidence? Or is there something about the Catholic position in England that has attracted a certain kind of artists and thinkers? We will attempt to look at crucial historical questions concerning modern England and English Catholicism using the lens of literature, paying special attention to: the rise of romanticism and its relationship to classicism, the emerging challenge of modernity and the Church's

place in responding to that challenge, and the personalities of certain important literacy figures. Possible authors may include Wordsworth, Coleridge, John Henry Newman, Gerard Hopkins, Alice Meynell, Robert Hugh Benson, Ronald Knox, Hilaire Belloc, G.K. Chesterton, T.S. Elliot, C.S. Lewis, Graham Greene, Evelyn Waugh, and J.R.R. Tolkein.

CATH 476 Experiential Learning (1 to 4 credits)

CATH 486 Seminar (4 credits)

CATH 487 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CATH 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CATH 489 Topics: Persons (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CATH 490 Topics: Persons (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CATH 495 Individual Study (2 or 4 credits)

Chemistry

Program Overview

College of Arts and Sciences, Department of Chemistry
O'Shaughnessy Science Hall (OSS) 402, (651) 962-5575
Fort (Chair), Borgerding, Dittmer, Donato, Gengenbach, Ippoliti, Layfield, Marsh, McCue, Ocampo, Ojala, Pardini, Popescu, Prevette, Uzcategui, Wammer

The Department of Chemistry at the University of St. Thomas educates future scientific leaders in an inclusive, supportive, and collaborative community. Through impactful experiences and mentorship, we empower undergraduate students to find success and to solve challenging problems in service of the common good.

Department Web Site:
https://cas.stthomas.edu/departments/areas-of-study/chemistry/index.html

The Department of Chemistry is accredited by the American Chemical Society (ACS) for the professional training of chemists.

The Department of Chemistry offers three degree programs in the field of chemistry:

- Bachelor of Science (B.S.) degree
    - The B.S. degree is certified by the American Chemical Society.
    - The B.S. has either a chemistry or a biochemistry concentration option.
- Bachelor of Arts (B.A.) degree
- Biochemistry B.S. degree, offered in partnership with the Department of Biology

The B.S. degree is recommended for students who plan to pursue graduate study or research in academic, industrial, or government laboratories.

The B.A. degree requires fewer chemistry courses and offers flexibility for completing additional majors to enhance a student's curriculum.

Students graduating with a major in chemistry will have the necessary knowledge to prepare them for a career in chemistry, its many related fields, and graduate school. They will have developed the skills necessary to analyze data and to draw conclusions from it. They will have the ability to read, comprehend, write, and speak with clarity and understanding in technical areas. They will apply critical thinking to their reading of the technical literature. They will have developed good laboratory skills and be familiar with modern instrumentation and technology used in related fields.

Chemistry is an excellent major for students interested in chemistry, biochemistry, medicine, pharmacy, dentistry, pharmaceutical chemistry, food science, forensic science, patent law, materials science, environmental science, and many other interdisciplinary fields. When paired with course work aligned with a pre-health track, a Chemistry degree provides academic preparation for a variety of graduate programs in health care. The major is also suited to students with a complementary interest in other sciences, engineering, data science, education, economics, or business.

Major in Chemistry (B.S.)

(ACS-certified)

- CHEM 111 General Chemistry I (4 credits) and CHEM 112 General Chemistry II (4 credits)
  or CHEM 115 Accelerated General Chemistry (4 credits)

Plus:

- CHEM 201 Organic Chemistry I (4 credits)
- CHEM 202 Organic Chemistry II (4 credits)
- CHEM 220 Foundations in Inorganic Chemistry (4 credits)
- CHEM 300 Quantitative Analysis (4 credits)
- CHEM 320 Instrumental Analysis (4 credits)
- CHEM 331 Chemical Thermodynamics and Reaction Dynamics (4 credits)
- CHEM 332 Quantum Chemistry and Molecular Spectroscopy (4 credits)
- CHEM 440 Biochemistry I (4 credits)
- CHEM 481-484 Student Seminar Sequence (2 credits total)

Plus six credits from:

- CHEM 250 Organometallic Chemistry (2 credits)
- CHEM 295 Topics (2 credits)
- CHEM 296 Topics (2 credits)
- CHEM 298 Topics (4 credits)
- CHEM 340 Organic Spectroscopy (2 credits)
- CHEM 391, 392 Research (1 credit each)
- CHEM 400 Advanced Inorganic Chemistry (2 credits)
- CHEM 404 Advanced Organic Chemistry (2 credits)
- CHEM 420 Bioanalytical and Forensic Chemistry (2 credits)
- CHEM 430 Polymer Chemistry (2 credits)
- CHEM 442 Biochemistry II (4 credits)*
- CHEM 444 Advanced Metabolism (2 credits)
- CHEM 450 Metals in Biology (2 credits)
- CHEM 487, 488 Topics (2 credits each)
- CHEM 491 Research (2 or 4 credits)
  Note: Only 4 credits of research may be applied to the degree.

*required for a B.S. in Chemistry with a biochemistry concentration, plus a research project in biochemistry

Plus:

- A research requirement that can be satisfied by taking CHEM 491 Research (2 or 4 credits) in the list above or by completing a summer research project approved by the department.

Allied Requirements

- MATH 113 Calculus I (4 credits)*
- MATH 114 Calculus II (4 credits)
- PHYS 211 Introduction to Classical Physics I (4 credits)
- PHYS 212 Introduction to Classical Physics II (4 credits)

Note: *Students not placing into MATH 113 must take MATH 108, 109 and 114 in order to satisfy the overall calculus requirement.

Strongly recommended:

- MATH - additional courses numbered 200 or above (MATH 200 and 240 are highly recommended).

Course Sequence

All chemistry majors are advised to take General Chemistry (CHEM 111-112 or CHEM 115) and MATH 113-114 (Calculus) during the freshman year, then CHEM 201, 202, 220 and PHYS 211-212 (Introductory Physics) during the sophomore year. (Note that PHYS 109-110 is not acceptable for the chemistry major). Other sequences of math and physics require additional planning. If staring with MATH 108 in the fall of the first semester freshman year and MATH 109 in the second semester (combined MATH 113) or if MATH 113 is started in the second semester of freshman year; then MATH 114 can be taken concurrently with PHYS 211 during first semester sophomore year.

Major In Biochemistry (B.S.)

See Biochemistry

Concentration in Biochemistry

Students may receive a biochemistry concentration if they meet the requirements for the B.S. in Chemistry and complete the following:

Required Courses:

- CHEM 440 Biochemistry I (4 credits)
- CHEM 442 Biochemistry II (4 credits)
- Biochemistry Research Project: In consultation with the Chemistry department

Major in Chemistry (B.A.)

- CHEM 111 General Chemistry I (4 credits) and CHEM 112 General Chemistry II (4 credits)
  or CHEM 115 Accelerated General Chemistry (4 credits)

Plus:

- CHEM 201 Organic Chemistry I (4 credits)
- CHEM 202 Organic Chemistry II (4 credits)
- CHEM 300 Quantitative Analysis (4 credits)
- CHEM 320 Instrumental Analysis (4 credits)
- CHEM 481-484 Seminar (2 credits total)

Plus four credits from the following:

- CHEM 331 Chemical Thermodynamics and Reaction Dynamics (4 credits)
- CHEM 332 Quantum Chemistry and Molecular Spectroscopy (4 credits)

Plus at least eight credits in courses chosen from the following list:

- CHEM 220 Foundations in Inorganic Chemistry (4 credits)
- CHEM 250 Organometallic Chemistry (2 credits)
- CHEM 295 Topics (2 credits)
- CHEM 296 Topics (2 credits)
- CHEM 331 Chemical Thermodynamics and Reaction Dynamics (4 credits)
- CHEM 332 Quantum Chemistry and Molecular Spectroscopy (4 credits)
- CHEM 340 Organic Spectroscopy (2 credits)
- CHEM 391, 392 Research (1 credit)
- CHEM 400 Advanced Inorganic Chemistry (2 credits)
- CHEM 404 Advanced Inorganic Chemistry (2 credits)
- CHEM 420 Bioanalytical and Forensic Chemistry (2 credits)
- CHEM 430 Polymer Chemistry (2 credits)
- CHEM 440 Biochemistry I (4 credits)
- CHEM 442 Biochemistry II (4 credits)
- CHEM 444 Advanced Metabolism (2 credits)
- CHEM 450 Metals in Biology (2 credits)
- CHEM 487, 488 Topics (2 credits each)
- CHEM 491 Research (2 or 4 credits)
  Note: Only 4 credits of research may be applied to the degree.

Note: * For students matriculating Fall 2019. All students matriculating prior to Fall 2019 have CHEM 332 as prerequisite for CHEM 400.

Allied Requirements

- MATH 113 Calculus I (4 credits) and MATH 114 Calculus II (4 credits)*
- PHYS 211 Introductory Physics I (4 credits) and PHYS 212 Introductory Physics II (4 credits)

*Students not placing into MATH 113 must take MATH 108, 109 and 114 to satisfy the allied mathematics requirement. Additional MATH courses numbered 200 or above (MATH 200 and 240 are highly recommended).

Note: Math and physics requirements are specified above. MATH 200 and 240 are highly recommended.

Minor in Chemistry

A minor in chemistry shall consist of 24 credits in chemistry courses. A minimum of 8 credits in chemistry must be successfully completed at St. Thomas to earn a minor in the field.

- CHEM 111 General Chemistry I (4 credits) and CHEM 112 General Chemistry II (4 credits)
  or CHEM 115 Accelerated General Chemistry (4 credits)
- CHEM 201 Organic Chemistry I (4 credits)

Plus sufficient credits from the following to yield a total of 24:

Note: Some of these courses have prerequisites beyond the core, or require permission of the instructor.

- CHEM 202 Organic Chemistry II (4 credits)
- CHEM 220 Foundations in Inorganic Chemistry (4 credits)
- CHEM 250 Organometallic Chemistry (2 credits)
- CHEM 295 Topics (2 credits)
- CHEM 296 Topics (2 credits)
- CHEM 298 Topics (4 credits)
- CHEM 300 Quantitative Analysis (4 credits)
- CHEM 320 Instrumental Analysis (4 credits)
- CHEM 331 Chemical Thermodynamics and Reaction Dynamics (4 credits)
- CHEM 332 Quantum Chemistry and Molecular Spectroscopy (4 credits)
- CHEM 340 Organic Spectroscopy (2 credits)
- CHEM 400 Advanced Inorganic Chemistry (2 credits)
- CHEM 404 Advanced Organic Chemistry (2 credits)

- CHEM 420 Bioanalytical and Forensic Chemistry (2 credits)
- CHEM 430 Polymer Chemistry (2 credits)
- CHEM 440 Biochemistry I (4 credits)
- CHEM 442 Biochemistry II (4 credits)
- CHEM 444 Advanced Metabolism (2 credits)
- CHEM 450 Metals in Biology (2 credits)
- CHEM 487, 488 Topics (2 credits each)
- CHEM 491 Research (2 or 4 credits)*

*A student may take four credits of research for the minor with the approval of the department chair.

Chemistry Honors

Students graduating with a B.A. or B.S. degree in chemistry may also qualify for departmental honors. Students interested in this designation should consult with the department chair one year prior to their graduation date.

Requirements include:

- a minimum cumulative GPA of 3.25 and a major field GPA of 3.50;
- completion of four credits of research (CHEM 491) or the equivalent in paid research (up to two credits). Research must be completed at least one semester before graduation.
- preparation of a written thesis in the format of a primary literature article;
- successful defense of the thesis before a panel composed of:
    - thesis director (chair of committee)
    - two additional UST chemistry faculty
    - one UST faculty member outside the chemistry department
    - one faculty member from another institution selected in consultation with the thesis adviser
- presentation of research at regional or national meeting of chemistry professionals
- All requirements must be completed early enough to allow for proper notification of the registrar and academic dean for the graduating term.

Interdisciplinary Programs:

The Departments of Chemistry and Biology jointly offer a B.S. degree in "Biochemistry". Students interested in teacher licensure should consider science offerings from "School of Education". Students interested in "Data Analytics" and "Environmental Science" can find a chemistry track within the majors.

Transfer Students and Non-majors:

In order to receive a degree in chemistry from the University of St. Thomas, transfer students must complete a minimum of sixteen credits in chemistry at the university in addition to the two-credit seminar sequence (CHEM 481-484).

The department offers a number of courses for non-majors to fulfill the laboratory science component of the core curriculum (CHEM 100, 101, 109, 111, and 115).

Teacher Licensure

- Elementary Education with a Co-major in Science and Mathematics for Elementary Education
- Elementary Education with a Specialty in Science (5-8)
- Co-major in Science (5-8) – Chemistry (9-12) and a Co-major in Secondary Education

See Education

Chemistry Undergraduate Courses

CHEM 100 Chemistry in Our World (0-4 credits)
An introduction to chemistry and its applications to modern society and personal life. The course is intended for non-majors and satisfies a general requirement for one semester of a laboratory science course. The chemistry studied includes the structure of matter, elements and compounds, chemical bonding, reactions, energy changes and an introduction to organic chemistry. The emphasis in the course is the relevance of chemistry in everyday life, and the applications studied will include various topics such as environmental problems, energy resources, chemistry and health, and consumer chemistry. Lecture plus three laboratory hours per week. Offered fall semester. NOTE: Students who receive credit for CHEM 100 may not receive credit for CHEM 101.

CHEM 101 Environmental Chemistry (0-4 credits)
An introduction to chemistry with particular emphasis on environmental science. Basic chemistry topics covered include the structure of matter, elements, compounds, reactions, energy and energy changes. These fundamentals lead to the study of currently relevant environmental problems and their proposed solutions, for example the depletion of ozone in the stratosphere, global warming, acid rain, smog, waste disposal, water

pollution and the study of energy resources. Lectures and laboratory. NOTE: Students who receive credit for CHEM 101 may not receive credit for CHEM 100.

CHEM 108 Nursing Chemistry (0 or 4 credits)
This lecture with laboratory course introduces the fundamental principles of chemistry and measurements with an emphasis on chemical bonding, reactions, properties of solutions and gases, and concepts from organic and biochemistry that are needed by students interested in careers in nursing and allied health professions. It is designed as a stand-alone course intended for those nursing and allied health students who do not plan to take additional courses in chemistry. Prerequisites: MATH 100 placement or higher or completion of MATH 005 or higher. NOTE: Students who receive credit for CHEM 108 may not receive credit for CHEM 100, 101, 111 or 115. This course is not equivalent to CHEM 109, CHEM 111, CHEM 112 or CHEM 115 and will not substitute for them.

CHEM 109 General Chem for ENGR (0-4 credits)
Principles of chemistry and the properties of matter explained in terms of modern chemical theory with emphasis on topics of general interest to the engineer. Topics include atomic structure, chemical bonding, solids, liquids, gases, acids and bases, thermodynamics, kinetics, polymer chemistry and materials science. This is an accelerated course requiring excellent preparation in math and science and is a terminal course intended only for those engineering students who do not plan to take additional courses in chemistry. Prerequisites: ENGR 100 and MATH 109 or higher (or concurrent enrollment in MATH 109). NOTE: Students who receive credit for CHEM 109 may not receive credit for CHEM 100, 101, 111 or 115. This course is not equivalent to CHEM 111, CHEM 112 or CHEM 115 and will not substitute for them.

CHEM 110 Introduction to Chemistry (1 credit)
An introduction to fundamental concepts in chemistry with an emphasis on problem solving. Topics to be covered include measurement in scientific study, the fundamentals of the periodic table, chemical bonding, chemical equations, and stoichiometry. This course is designed as a preparatory course for students who do not pass the chemistry placement exam but wish to eventually enroll in CHEM 111. Prerequisite: Math placement at 108 or above.

CHEM 111 General Chemistry I (0-4 credits)
This course, together with CHEM 112, provides a two- semester introduction to chemistry. Topics include atomic structure, molecular structure, chemical bonding, the periodic table, states of matter, reaction types, stoichiometry, thermochemistry, intermolecular forces, and properties of the common elements and their ions in aqueous solution. Lecture plus four laboratory hours per week. Offered fall and spring semesters. Prerequisite: Math placement at 108 or above, and completion of CHEM 110 or placement at or above CHEM 111 NOTE: Students who receive credit for CHEM 111 may not receive credit for CHEM 100, 101, 109 or 115.

CHEM 112 General Chemistry II (0-4 credits)
This course continues the study of chemistry begun in 111. Topics include thermodynamics, kinetics, equilibrium, acid- base chemistry, electrochemistry, and nuclear chemistry. Lecture plus four laboratory hours per week. Offered spring semester and summer (when enrollment allows). Prerequisite: A minimum grade of C- in CHEM 111 NOTE: Students who receive credit for CHEM 112 may not receive credit for CHEM 115.

CHEM 115 Accelerated General Chemistry (0-4 credits)
A one semester general chemistry class that blends significant topics from CHEM 111 and 112 for very strong students interested in majoring in science or engineering. Approximately one-third of the course content is drawn from CHEM 111 with the balance coming from CHEM 112. Topics include atomic theory, stoichiometry, gas laws, phases of matter, atomic and molecular structure, bonding, kinetics, thermodynamics, equilibrium, electrochemistry, nuclear chemistry, and descriptive chemistry. Lecture plus four laboratory hours per week. Offered fall semester. Prerequisite: Math placement at the 113 level, high school chemistry, and satisfactory performance on the chemistry placement examination. NOTE: Students who receive credit for CHEM 115 may not receive credit for CHEM 100, 101, 109, 111, or 112.

CHEM 201 Organic Chemistry I (0-4 credits)
Study of the various families of organic compounds. Emphasis is placed on structure determination, reaction mechanisms, stereochemistry and spectroscopy in addition to a survey of various reaction types. An introduction to biochemical topics is included. Lecture plus four laboratory hours per week. Offered fall semester. Prerequisite: A minimum grade of C- in CHEM 112 or 115

CHEM 202 Organic Chemistry II (0-4 credits)
Continuation of CHEM 201. Offered spring semester. Prerequisite: A minimum grade of C- in CHEM 201

CHEM 220 Foundations in Inorganic Chem, (0-4 credits)

This is a foundational course that provides breadth in the inorganic chemistry sub-discipline and lays the groundwork for advanced study in inorganic chemistry. Students will learn the preparation, structure and bonding of inorganic compounds. Selected topics include atomic structure and bonding theories, symmetry operations and point groups, simple crystalline solids and energetics, periodicity, descriptive chemistry, and coordination chemistry. The course will also introduce students to materials science concepts and the bio-inorganic field. Lecture plus four laboratory hours per week. Prerequisites: C– in CHEM 112 or CHEM 115 or CHEM 109.

CHEM 243 Individual Study (2 or 4 credits)

CHEM 250 Organometallic Chemistry (2 credits)
A study of the structure, bonding, and reactions of compounds that contain direct metal-carbon bonds. Emphasis is placed on the role these compounds play as stoichiometric and catalytic reagents in organic and inorganic synthesis. Additional topics include electronic and structural theory, reaction mechanisms, and the role of organometallics in biochemistry and material science. Offered alternate January terms. Prerequisite: CHEM 201

CHEM 269 Research (2 or 4 credits)

CHEM 296 Topics (0-2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CHEM 297 Topics (0-4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CHEM 300 Quantitative Analysis (0 or 4 credits)
An introduction to quantitative chemical analysis. Topics include sample treatment, the statistical handling of data, equilibria governing acid/base chemistry and complex formation, and fundamentals underlying measurements using the following techniques: titrimetry (using acid/base, complexation and redox reactions), spectrophotometry (atomic absorption and emission spectroscopy and molecular absorption spectroscopy), and analytical separations (GC, HPLC, and capillary electrophoresis). Lecture plus four laboratory hours per week. Offered fall and spring semesters. Prerequisite: A minimum grade of C- in CHEM 112 or 115

CHEM 320 Instrumental Analysis (0-4 credits)
Principles and techniques of operation of modern chemical instrumentation not covered in CHEM 300. Topics include the capabilities, limitations and data interpretation of advanced optical spectroscopies (luminescence, Raman, etc.), voltammetry, potentiometry, differential scanning calorimetry, thermal gravimetric analysis and mass spectrometry. Fundamentals of signal processing, basic circuitry and optical components are also included. The laboratory consists of both structured exercises and a student designed project and report based on an industrial problem or on an analysis problem of interest to the student. Lecture plus four hours of lab each week. Offered spring semester. Prerequisites: CHEM 202, 300

CHEM 331 Chem Thermodynamics/Reactio (0 or 4 credits)
Physical chemical introduction to the fundamentals of kinetic-molecular theory, statistical thermodynamics, classical thermodynamics, and chemical reaction dynamics. Emphasis on the in-depth study of chemical reaction equilibria, phase equilibria, and chemical reaction kinetics in gaseous, liquid and solid systems. Laboratory work involves modern computational methods in physical chemistry, as well as physicochemical measurements related to thermodynamics and reaction dynamics. Lecture plus six laboratory hours per week. Offered fall semester. Prerequisites: CHEM 202, MATH 114 and PHYS 111 or 211

CHEM 332 Quantum Chem/Molecular Spec (0 or 4 credits)
Study of chemical systems from the point of view of molecular theory. Introduction to the fundamentals of quantum chemistry and atomic/molecular spectroscopy. Laboratory work involves computational methods in molecular quantum mechanics and spectroscopic measurements of atomic/molecular systems. Lecture plus six laboratory hours per week. Offered spring semester. Prerequisites: CHEM 202, MATH 114 and PHYS 112 or 212

CHEM 340 Organic Spectroscopy (2 credits)
A more detailed study of various spectroscopic methods, especially as they are employed to determine structures of organic molecules. Coverage includes H-1, F-19, and C-13 NMR, mass spectrometry, ultraviolet and visible and infrared spectroscopies. Offered spring semester. Prerequisite: A minimum grade of C- in CHEM 202

CHEM 389 Research (2 or 4 credits)

CHEM 391 Research (1 credit)
Work on a problem under the direction of the staff.

Primarily literature work. Prerequisite: Permission of the department chair

CHEM 392 Research (1 credit)
Work on a problem under the direction of the staff. Primarily laboratory work. Prerequisite: CHEM 391

CHEM 393 Individual Study (2 or 4 credits)

CHEM 400 Adv Inorganic Chemistry (0-4 credits)
A study of the preparation, structure, bonding and reactions of inorganic compounds. Selected topics include group theory, bonding theories, reactions and mechanisms of transition metals, and advanced topics in inorganic chemistry such as organometallic chemistry and catalysis, parallels between main group and organometallic chemistry, bioinorganic chemistry, etc. Prerequisites: C- or better in CHEM 202 and 220, or permission of the instructor

CHEM 404 Adv Inorganic Chemistry (0 or 2 credits)
This course will focus on modern approaches to synthesis for organic chemistry. Topics will include reaction mechanisms, reagents, stereocontrol, and other techniques for the design of organic molecules. The course will primarily consist of lecture, reading and discussing current literature, and solving synthetic problems with a particular emphasis on developing synthetic routes utilizing newly learned techniques. Prerequisite: minimum C- in CHEM 202 or permission of the instructor.

CHEM 420 Bioanalytical/Forensic Chem (0 or 2 credits)
The chemistry behind criminal investigations as well as some developments in analysis of biologically important molecules. Topics to be covered include enzyme and DNA analysis, mass spectrometry and spectral interpretation, the detection and identification of explosives and fire accelerants, methods of connecting the suspect to the scene of a crime (analysis of fingerprints, fibers, glass fragments, soil and gunshot residue), the analysis of drugs and poisons, and the detection of forgeries using ink, paint and materials analysis. The course is designed to have a lab component that uses both instrumental and "wet chemical" methods of analysis. Offered alternate January terms. Prerequisite: CHEM 201

CHEM 430 Polymer Chemistry (2 credits)
An introduction to the science associated with polymers accomplished by discussing some of the fundamental aspects of polymer science and engineering. Three general subject areas will be addressed: 1) polymer synthesis and characterization, 2) polymer structure including melt, glassy, semicrystalline, rubbery, and solution states, and 3) selected physical properties (e.g. viscoelasticity, toughness, failure, permeability) and processing characteristics. Prerequisite: CHEM 202

CHEM 440 Biochemistry I (0 or 4 credits)
The first course in a two-semester sequence examining the chemistry underlying biological processes. The topics addressed include a review of the properties of aqueous solutions and buffers; the structure and function of proteins with an introduction to the properties, reaction kinetics and catalytic mechanism of enzymes; qualitative and quantitative models of bioenergetics; and an introduction to primary metabolic pathways of carbon through oxidative phosphorylation and photosynthesis. Lecture plus four laboratory hours per week. Offered fall and spring semester (when enrollment allows). Prerequisite: A minimum grade of C- in CHEM 202

CHEM 442 Biochemistry II (0-4 credits)
The second course in a two-semester sequence examining the chemistry underlying biological processes. Topics include a continued investigation of bioenergetics focusing on the primary metabolism of nitrogenous biomolecules and integration of metabolic pathways followed by pathways of information metabolism; nucleic acid structure and function, regulation of gene expression; protein synthesis; and methods in genetic engineering. Lecture plus four laboratory hours per week. Offered spring semester. Prerequisite: A minimum grade of C- in CHEM 440

CHEM 444 Advanced Metabolism (2 credits)
This course is designed to offer senior students an introduction to current research topics in biochemistry. The goal of the course is to increase exposure to a wide variety of topics through discussions of the biochemical principles associated with each one. The course material will focus on advanced topics in metabolism including secondary metabolite production, biochemical pathways associated with disease, biochemistry of biofuel production, and applied biotechnology to generate novel biochemical pathways. Prerequisite: A C- or better in CHEM 442, or a C- or better in CHEM 440 with instructor permission.

CHEM 450 Metals in Biology, (2 credits)
The course provides an introduction to the field of bioinorganic chemistry as a lens of viewing life processes. Students learn elements of bioinorganic chemistry and their application to metallo-enzymes and metallo-proteins. Emphasis will be placed on analyzing mechanisms and structures containing metals, such as iron and copper, etc., that are central to life, in an effort to unify knowledge from classical sub-disciplines into central paradigms in the mechanisms of life processes. Students will engage

in reading and discussing the primary literature, and on writing and presenting at the professional standards of the discipline. Prerequisites: A grade of C- or better in CHEM202 (Organic Chemistry 2) is required; CHEM 220 and 300 are recommended.

CHEM 476 Experiential Learning (1 to 4 credits)

CHEM 478 Experiential Learning (0 credit)

CHEM 481 Student Seminar (1 credit)
This sequence of courses begins in the fall semester of the junior year and progresses for a total of four semesters. The first (CHEM 481) and last (CHEM 484) courses are each one credit and are graded on the usual letter grade scale. The interior two courses (CHEM 482, 483) are zero credit and are graded on a pass-fail basis (S/R). Seminars are presented by guest speakers, St. Thomas faculty, and St. Thomas students throughout all four courses. In CHEM 481, juniors are introduced to the chemical literature, literature search techniques including use of computer databases, and write a short paper based on literature research. In CHEM 483 seniors meet in small groups with faculty and discuss articles from the current literature. In CHEM 484, seniors research a topic from the chemical literature and present it in both written and oral formats. Information about career opportunities for students holding a chemistry degree is presented throughout the seminar sequence. Required of all chemistry majors. Offered fall semester.

CHEM 482 Student Seminar (0 credits)
This sequence of courses begins in the fall semester of the junior year and progresses for a total of four semesters. The first (CHEM 481) and last (CHEM 484) courses are each one credit and are graded on the usual letter grade scale. The interior two courses (CHEM 482, 483) are zero credit and are graded on a pass-fail basis (S/R). Seminars are presented by guest speakers, St. Thomas faculty, and St. Thomas students throughout all four courses. In CHEM 481, juniors are introduced to the chemical literature, literature search techniques including use of computer databases, and write a short paper based on literature research. In CHEM 483 seniors meet in small groups with faculty and discuss articles from the current literature. In CHEM 484, seniors research a topic from the chemical literature and present it in both written and oral formats. Information about career opportunities for students holding a chemistry degree is presented throughout the seminar sequence. Required of all chemistry majors. Offered spring semester.

CHEM 483 Student Seminar (0 credits)
This sequence of courses begins in the fall semester of the junior year and progresses for a total of four semesters. The first (CHEM 481) and last (CHEM 484) courses are each one credit and are graded on the usual letter grade scale. The interior two courses (CHEM 482, 483) are zero credit and are graded on a pass-fail basis (S/R). Seminars are presented by guest speakers, St. Thomas faculty, and St. Thomas students throughout all four courses. In CHEM 481, juniors are introduced to the chemical literature, literature search techniques including use of computer databases, and write a short paper based on literature research. In CHEM 483 seniors meet in small groups with faculty and discuss articles from the current literature. In CHEM 484, seniors research a topic from the chemical literature and present it in both written and oral formats. Information about career opportunities for students holding a chemistry degree is presented throughout the seminar sequence. Required of all chemistry majors. Offered fall semester.

CHEM 484 Student Seminar (1 credit)
This sequence of courses begins in the fall semester of the junior year and progresses for a total of four semesters. The first (CHEM 481) and last (CHEM 484) courses are each one credit and are graded on the usual letter grade scale. The interior two courses (CHEM 482, 483) are zero credit and are graded on a pass-fail basis (S/R). Seminars are presented by guest speakers, St. Thomas faculty, and St. Thomas students throughout all four courses. In CHEM 481, juniors are introduced to the chemical literature, literature search techniques including use of computer databases, and write a short paper based on literature research. In CHEM 483 seniors meet in small groups with faculty and discuss articles from the current literature. In CHEM 484, seniors research a topic from the chemical literature and present it in both written and oral formats. Information about career opportunities for students holding a chemistry degree is presented throughout the seminar sequence. Required of all chemistry majors. Offered spring semester.

CHEM 487 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CHEM 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CHEM 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses.

Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CHEM 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CHEM 491 Individual Research (2 or 4 credits)

CHEM 492 Individual Research (2 credits)

CHEM 494 Individual Research (4 credits)

CHEM 495 Individual Research (2 or 4 credits)

Chemistry (9-12)

Co-Major – See Education

Chinese

Program Overview

The Chinese program offers elementary and intermediate-level core classes on a yearly basis (111 and 211 in the fall, 112 in the spring). Students interested in pursuing higher-level courses can do so through study abroad and/or the ACTC consortium in consultation with the department.

The primary goal of the Chinese program at St. Thomas is to provide students with the opportunity to:

1. Learn basic and intermediate levels of Mandarin Chinese through speaking, listening, writing and reading activities
2. Develop cultural knowledge and intercultural skills
3. Explore the study of the Chinese language and culture as an integral part of a liberal arts education
4. Prepare for study abroad opportunities

Chinese Undergraduate Courses

CHIN 111 Elementary Chinese I (4 credits)
Introduction to fundamentals of Chinese (Mandarin) language structure and vocabulary. Practice in speaking, reading, writing and listening/understanding. Basic rules of grammar will be introduced, along with instruction of approximately 300 words.

CHIN 112 Elementary Chinese II (4 credits)
Continuation of CHIN 111. Introduction to fundamentals of Mandarin (Chinese) language structure and vocabulary. Practice in speaking, reading, writing and listening/ understanding. Basic rules of grammar will be introduced, along with instruction of approximately 300 words.
Prerequisite: CHIN 111 or equivalent with a C- or better

CHIN 211 Intermediate Chinese I (4 credits)
Continuation of CHIN 112. Introduction to fundamentals of Mandarin (Chinese) language structure and vocabulary. Practice in speaking, reading, writing and listening/ understanding. Basic rules of grammar will be introduced, along with instruction of approximately 300 words.
Prerequisite: CHIN 112 or equivalent with a C- or better

CHIN 212 Intermediate Chinese II (4 credits)

CHIN 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CHIN 476 Experiential Learning (1 TO 4 credits)

Classics

Program Overview

College of Arts and Sciences, Interdisciplinary Program

O'Shaughnessy Education Center (OEC) 320-M, (651) 962-5163

Quartarone, director

Major in Classics - Culture Track

The study of Classical civilization – the cultures of ancient Greece and Rome and their relationship to the societies of the Mediterranean and the Near East – is the origin and foundation of the modern university. To this day, it continues to be a model of an interdisciplinary approach to the study of culture, combining fields of literature and language, history, archaeology and art history, religious studies, and philosophy.

As a major or minor field of study at St. Thomas, Classics provides the opportunity for students to include various disciplines under one rubric, thus allowing them to explore their talents and demonstrate their versatility. It also enhances students' understanding of the origins of modern

Western culture - including its relationship to the ancient Near East -- while training them to work as different disciplines require. The senior paper required for the major will be composed in consultation with the program director.

The Classics major (Culture Track)

The Classics major (culture track) consists of 40 credits (10 courses) total.

Students will establish a minimum proficiency in either Latin or Greek in one of two ways:

- Completing the 212 course OR by completing at least 12 credits (3 courses) in sequential courses in one language. (e.g., 111-112-211 OR 112-211-212 OR 211-212 plus one upper division course of the 300 or 400 level)

The remaining credits/courses will be selected from the approved list of language and culture courses (listed below).

Major in Classics - Language Track

The language track of the Classics major engages students in the study of the languages, literatures and cultures of two ancient civilizations that have left a lasting impact upon the modern world: classical Greece and Rome. This major prepares students to read either Latin or both Latin and Greek, depending on the student's interests. Courses in either language introduce the significant works of essential authors, and provide analytical tools for examining the relationship between language and the unique identity of either culture. Upper division courses in Latin also focus on developing fluency through the use of Latin as a communicative tool; hence, students will develop skills in speaking, listening and writing as well as reading in Latin.

Major in Classics (Language Track)

The Classics major (language track) consists of 40 credits (10 courses) total.

- Students will take a minimum of 28 credits (7 courses) in language (Latin and/or Greek) courses, with at least 8 credits (2 courses) at the 300 level
- the remaining credits/courses will be selected from the approved list of language and culture courses.

Minor in Classics - Culture Track

The Classics minor (culture track) consists of 20 credits (5 courses) total.

Students will establish a minimum proficiency in either Latin or Greek, achieved by completing either:

- Latin or Greek at the 211 level OR by taking at least 2 sequential language courses (e.g., 111-112).
- The remaining courses will be selected from the approved list of language and culture courses.

Of the 20 credits, at least 8 credits (2 courses) must be at the 200 level or above.

Study abroad courses are eligible for inclusion; syllabi must be submitted to the program director for approval.

Minor in Classics - Language Track

The Classics minor (language track) consists of 16 credits (4 courses) total.

- Students will take at least 12 credits (3 courses) in one language (Latin or Greek), and may select the fourth course from the approved list of culture or language courses.
- All 16 credits (4 courses) must be above the 100 level, and include at least 4 credits (1 course) in Latin at the 300 level or Greek 212 (to establish minimum proficiency in one language).

For administrative purposes, students may be asked to complete assessment measures in their 212 course and will be asked to complete them during their final semester.

Approved list of courses

All Latin and Greek language courses (4 credits each):

- GREK 111 Elementary Classical Greek I (4 credits)
- GREK 112 Elementary Classical Greek II (4 credits)
- GREK 211 Intermediate Classical Greek I (4 credits)
- GREK 212 Intermed Classical Greek II (4 credits)
- GREK 243 Individual Study (2 or 4 credits)

- GREK 269 Research (2 or 4 credits)
- GREK 393 Individual Study (2 or 4 credits)
- LATN 111 Elementary Latin I (4 credits)
- LATN 112 Elementary Latin II (4 credits)
- LATN 211 Intermediate Latin (4 credits)
- LATN 212 Intermediate Latin II (4 credits)
- LATN 243 Individual Study (2 to 4 credits)
- LATN 255 Latin: Old/New Testament (4 credits)
- LATN 269 Research (2 or 4 credits)
- LATN 296 Topics(2 credits)
- LATN 298 Topics(4 credits)
- LATN 305 Introduction to Medieval Latin (4 credits)
- LATN 311 Latin Composition (4 credits)
- LATN 320 St. Augustine (4 credits)
- LATN 360 Topics Phil & Scientific Latin (4 credits)
- LATN 393 Individual Study (2 or 4 credits)
- LATN 421 Vergil(4 credits)
- LATN 430 Caesar and Cicero (4 credits)
- LATN 490 Topics(4 credits)
- LATN 495 Individual Study (2 or 4 credits)

Classical Culture Courses (4 credits each):

- ARTH 260 Women in Ancient Art and Culture (4 credits)
- ARTH 305 Greek Art and Archaeology (4 credits)
- ARTH 310 Roman Art and Archaeology (4 credits)
- CLAS 225 The Classical Hero, Epic and Film (4 credits)
- CLAS 245 Classical Mythology (4 credits)
- CLAS 397 Topics (4 credits)
- CLAS 480 Senior Paper (0 credits)
- ENGL 220 The Classical Tradition (4 credits)
- HIST 203 Ancient Egypt and the Near East (4 credits)
- HIST 205 The Ancient Greek World (4 credits)
- HIST 208 History of the Roman World (4 credits)
- HIST 209 Historical Archaeology (4 credits)
- PHIL 200 Ancient Philosophy (4 credits)

Classical Civilization Undergraduate Courses

CLAS 225 Classical Hero & Film (4 credits)
This Course focuses on analyzing and understanding Classical epic poetry, the ancient presentation of heroic figures and heroic exploits, and recognizing the influence of epic/heroic literature on the modern storytelling device of film. While the genre of epic is central to the course, other genres (both literary and cinematic) which present he-roic figures, e.g., tragedy, history, comedy, action, fantasy, will also be explored. Analyzing the works read or viewed via writing and class discussion will constitute the primary course activities; students will engage in reading, viewing and writing outside of class, while class time will include some writing, viewing and discussion. In order to allow am-ple time for discussion and analysis, the majority of films in their entirety will be viewed outside of class. The course grade will be based substantially on written analysis (i.e., essays, papers) of the texts and films studied. ENGL 203 may also be substituted for this course.

CLAS 243 Individual Study (2 OR 4 credits)

CLAS 245 Classical Mythology (4 credits)
Mythology is the embodiment and encoding of the beliefs, principles, and aspirations of ancient cultures. This course provides an interdisciplinary introduction to mythology as an introduction and foundation to Classical civilization. Both Greek and Roman myths will be examined from a variety of theoretical perspectives, including aetioligical, structuralist, and psychological theories. Consideration will also be given to the study of literature in translation, art history, religion, and history. The course grade will be principally based on writing assignments and class discussions. ENGL 203 may also be substituted for this course.

CLAS 269 Research (2 or 4 credits)

CLAS 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online.

CLAS 325 Greek & Roman Environment (4 credits)
Through lenses both ancient and modern, this course will examine how the ancient Greeks and Romans imagined, sought to understand, appreciated and utilized the earth and its natural resources. Focal points will include ancient concepts of and attitudes toward the environment, the interconnection and interdependency between natural elements as well as between humans and the earth, appreciation for the landscape, and awareness of environmental issues and sustainability. Material remains will include representations of the earth, animals and nature in myth, art, literature & currency. Every module and assignment will include both ancient and modern sources to examine. Prerequisites: Senior, Junior or Sophomore Standing.

CLAS 389 Research (2 or 4 credits)

CLAS 393 Individual Study (2 or 4 credits)

CLAS 397 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule in Murphy Online,

CLAS 480 Senior Paper (0 credits)
During the senior year or earlier majors are expected to write a major research paper with an abstract and to describe the results of their research in a short oral presentation to a panel of faculty. Normally this requirement is accomplished by rewriting and submitting a paper from one of the major field courses. The topic should be chosen in consultation with the program director and should be completed no later than 6 weeks prior to graduation. Papers will be presented to students and faculty at least annually at a symposium

Communication Arts & Literature (5-12)

Co-Major – See Education

Communication Studies

College of Arts and Sciences, Department of Communication Studies

The communication Studies program at St. Thomas examines how communication shapes relationships, organizations, media, and culture. Students develop skills in public speaking, storytelling, writing, and critical analysis while working closely with faculty who are both accomplished scholars and dedicated teachers. Mentoring and collaboration are central to the department's mission.

Graduates are prepared for careers in public relations, marketing, nonprofit leadership, human resources, media, and event planning, as well as for graduate study in communication, law, and related fields. The program emphasizes applied learning through internships, community-engaged projects, and coursework that connects theory with practice. Specialized classes in storytelling, improvisation, media, and sport communication give students unique opportunities to refine their skills and interests, At St. Thomas, Communication Studies helps students develop into confident communicators, creative problem-solvers, and effective leaders prepared to succeed in any field.

Major in Communication Studies

This is a distinct major from Strategic Communication, a description of which can be found here:
https://www.stthomas.edu/catalog/current/stcm/

All majors are required to take five courses for a total of 20 credits:

- COMM 100: Public Speaking (4 credits)
- COMM 220: Interpersonal Communication (4 credits)
- COMM 328: Communication of Race, Class Gender (4 credits)
- COMM 366: Persuasion and Social Influence (4 credits)
- COMM 480: Capstone: Communication Ethics (4 credits)

Additionally, majors must take 16 credits from the following course electives:

- COMM 105: Workplace Communication (4 credits)
- COMM 212: Communication Criticism (4 credits)
- COMM 242: Health Communication (4 credits)
- COMM 244: Sport Communication 2-credit (2 credits)
- COMM 246: Building Communication Skills Though Improvisation (2-credit)
- COMM 248: Building Communication Skills Through Improvisation II (2 credits)
- COMM 252: High-Impact Storytelling at Work (2 credits)
- COMM 264: Media Communication Skills (4 credits)
- COMM 274: Small Group Communication (4 credits)
- COMM 320: Organizational Communication (4 credits)
- COMM 324: Communication and Leadership (4 credits)
- COMM 326: Communication and Popular Culture (4 credits)
- COMM 332: Documentary in American Culture
- COMM 338: Political Communication (4 credits)
- COMM 370: Intercultural Communication (4 credits)
- COMM 372: Communication and the Environment (4 credits)
- COMM 373 Approaches to Crisis Communication (4 credits)

- COMM 374: Family and Couple Communication (4 credits)
- COMM 378 Communication and Underrepresented Families (4 credits)
- Internships/Study Abroad/Experiential Learning
- ENGL 256: Intro to Professional Writing (4 credits)
  or ENGL 318: Business Writing (4 credits)
- DIMA 240: Digital Imagery and Sound(4 credits)

Minor in Communication Studies

- COMM 100: Public Speaking 4 credits

plus:

- 12 additional credits in COMM

Majors must complete a minimum of eighteen credits in Communication Studies at St. Thomas.

Communication Studies Undergraduate Courses

COMM 100 Public Speaking (4 credits)
Preparation, presentation, and evaluation of original speeches by each student throughout the semester; special emphasis given to selecting and researching topics, organizing evidence, analyzing audiences, sharpening style and tone, communicating ethically and listening critically.

COMM 105 Communication in Workplace (4 credits)
Introduction to basic communication theories and skills as they pertain to the business setting. Text, lecture, class discussion and exercises, and individual and group presentations will better prepare students to become more effective communicators at work. The course will focus on presentational skills, dyadic communication and interviewing, and group communication.

COMM 212 Communication Criticism (4 credits)
This course teaches students to become more critical consumers and producers of public messages. Students will examine a mix of historical and contemporary examples of persuasive communication in order to develop an awareness of the rhetorical power of messages in everyday life. Critical tools will be covered to help the student learn how to approach a communicative act systematically, identifying crucial interactions and suggesting ways of understanding how those interactions function. The emphasis on critical consumption also enables students to become more effective creators of public messages.

COMM 220 Interpersonal Communication (4 credits)
Theory and practice of interpersonal communication, including how self-concept, language, nonverbal communication, and relationships effect and are affected by communication. Common problems in interpersonal communication, options for managing these problems, and ethical issues in interpersonal communication are examined. Students apply theory and concepts through class exercises, simulations and individual projects.

COMM 242 Health Communication (4 credits)
This course includes major current areas of interest in the field of health communication, including: interpersonal health communication issues, challenges, and complexities; communication aspects of health behaviors and conditions; organizational issues in health communication; global health communication challenges; and technology, media, and eHealth. Special attention will be given to culture and health communication and the creation of health communication campaigns.

COMM 244 Sport Communication (2 credits)
This course examines how we communicate about sport, how sport is communicated to us, what is communicated by sports, and what sport communication careers are available. This course provides a survey of the many communication approaches to sport, focusing on interpersonal, mediated, organizational, and public communication to assist us in understanding historic and contemporary sport communication. Guest presenters will provide insights into sport communication careers.

COMM 246 Communication and Improv (2 credits)
This course focuses on building a range of communication skills through improvisation activities. Students explore theatrical techniques that teach listening, collaboration, spontaneity, team building, emotional intelligence, storytelling, and confident public speaking with connections to academic, professional, and personal situations. In addition to participating in improvisation activities, students will read the works of expert theorists and practitioners of applied improvisation in corporate and professional settings. No previous improvisation experience necessary.

COMM 248 Communication and Improv II (2 credits)
Building Communication Skills through Improvisation II is the second of the two-course sequence that introduces you to the world of applied improvisation. It is a cutting-edge course designed to help you continue building on the communication skills acquired and developed in

COMM 246: Building Communication Skills through Improvisation. Unlike its predecessor, COMM 248:Building Communication Skills through Improvisation II is tailored more specifically for the professional world, training students to use improvisation as a tool for human communication, business, and organizational development. It uses different readings, higher-level assignments, and more complex improvisational techniques while maintaining its core focus on teamwork, creative problem-solving, oral communication, nonverbal communication, audience analysis, clarity, and adaptability.

COMM 252 High-Impact Storytelling (2 credits)
This is a course for anyone wishing to thrive in public and professional life. Business, science, engineering, and health professionals have always used stories to improve their communication with a variety of audiences such as employees, patients, investors, clients, consumers, and other key stakeholders. However, in recent years, the role of storytelling in professional settings has become even more critical. Today it is one of the most important tools at the disposal of people working in business, science, engineering, and health professions. This course invites students to explore, illustrate, and apply narrative theory to inform practice. Students will learn how stories can enhance clarity and optimize persuasion, how they can foster synergy and motivation, and how they may build healthy organizational cultures. Students also will explore, illustrate, and apply how stories can design brand identity, attract investors, allay concerns, and help resolve crises. Equipped with the practical power of storytelling, students will develop skills that will help their careers and enable them to effectively advance the common good.

COMM 264 Media Communication Skills (4 credits)
The components and requirements of effective media performance are addressed. Development of critical assessment skills is emphasized via the evaluation of news, commercial and informational broadcasts in both the audio and video media. Particular attention is given to students' development of performance techniques, emphasizing the use of voice, interviewing, ad-libbing and TelePrompTer use. Application and evaluation of performance choices are achieved through the production of video and audio projects.

COMM 274 Small Group Communication (4 credits)
This course covers the theory and principles of communication in task-oriented small groups, including role emergence and functions, leadership development, stages of decision-making, and development and effects of group culture. Students apply theory through participation in small group class projects.

COMM 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

COMM 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

COMM 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

COMM 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

COMM 320 Organizational Communication (4 credits)
This course will examine organizational structures and the dynamics of the communication process. Major components of this class include the analysis of organizational communication including culture, socialization, roles, leadership, formal and informal communication structures, and issues of cultural diversity. Students will be involved in activities such as applying theories, examining case studies, and analyzing communication in real-life organizations.

COMM 324 Communication and Leadership (4 credits)
In Communication and Leadership students learn how to communicate clearly and persuasively, in a way that inspires action within the organization that they lead. They learn how to tailor their communication to a diversity of audiences, apply the principles of effective and ethical communication in structuring their communication, and, to connect authentically with their audience through their unique leadership style. Students will create compelling, high-impact presentations and communications, in face-to-face and mediated communication settings.

COMM 326 Communication in Pop Culture (4 credits)
This course focuses on the creation and use of rhetoric in public persuasion settings, including social movements and political campaigns. The

diversity of rhetorical acts examined may include campaign ads, speeches, films, advertisements, music, memorials, architecture and other nonverbal strategies. Topics of study may include: The rhetoric of domination and resistance, national identity formation, and the rhetoric of public memory.

COMM 328 Comm of Race, Class & Gender (4 credits)
This course focuses on theories and research of the historical and contemporary correlation between gender, race, class, and communicative practices, including rhetorical practice and mass communication content. It includes the influence of gender and racial stereotypes on public speech and debate, political campaigns and communication, organizational leadership, news coverage and advertising. Topics include: gendered perceptions of credibility; who is allowed to communicate and who is silenced due to class and racial privilege; and the impact of gender, race and class stereotypes about human nature, expertise, and abilities on individuals and groups that want to participate in public culture and communication. Students analyze and evaluate their own communicative styles in light of course readings and activities.

COMM 332 Documentary - American Culture (4 credits)
This course provides an overview of documentary television and film as part of American culture. Class sessions will focus on how to analyze and interpret claims particular documentaries make, while providing a foundation for understanding aesthetic, rhetorical, and political economic conventions that help shape the meaning of each documentary. To this end, this course will center on current theoretical dilemmas and debates in documentary filmmaking, including questions of how to define documentary, what constitutes the ethical treatment of documentary subjects and subject matter, and how documentaries construct and position audiences. We will explore the concepts of reality, truth and authority, through a variety of readings and viewings.

COMM 338 Political Communication (4 credits)
Political Communication is a survey of how politicians use various communication strategies, particularly during campaigns, in local, state and national elections to influence public and legislative audiences. Examination of oral presentations, electronic media, written materials, and web-based appeals will be central to the course. Students will apply theory to specific political situations and candidates, will conduct interviews, and will write papers and make presentations on their findings.

COMM 340 Television Criticism (4 credits)
This course will provide students with the opportunity to understand television as a text situation in a cultural context. It will examine television from a critical perspective, review a wide variety of program genres and incorporate several theoretical orientations to the qualitative analysis of TV. Students, along with reading about and discussion of critical perspectives, watch programs such as comedies, dramas, news, advertisements, miniseries, etc., and write several critical analyses of the programs.

COMM 366 Persuasion & Social Influence (4 credits)
Study of the various strategies used to influence choice in modern society, including sources, content (such as evidence and argumentation) and audience factors (such as beliefs, attitudes, and values) that influence the persuasive process. Ethical consideration of persuasive tactics will be discussed. Students apply theory through analysis of, and practice in, written, mediated and oral forms of persuasion. A final project in applied persuasion is developed in the course.

COMM 370 Intercultural Communication (4 credits)
This course examines the influence of culture on our own and others' communication. Students will be introduced to different aspects and levels of culture, including basic principles and theories that explain cultural differences on the group level, and challenges in intercultural communication, such as stereotypes, ethnocentrism, conflicting ethical standards, and racial disparities. Through lectures, discussions and first-hand practice, students are expected to form global perspectives and become more competent in intercultural communication. Students are advised to take the course either during or after the sophomore year.

COMM 372 Communication & Environment (4 credits)
The focus on environmental communication in this course is consistent with the definition provided by the International Environmental Communication Association (IECA): "In the simplest terms, environmental communication is communication about environmental affairs. This includes all of the diverse forms of interpersonal, group, public, organizational, and mediated communication that make up the social debate about environmental issues and problems, and our relationship to the rest of nature." Communication about the environment is occurring all around us and the ways we learn and talk about the environment are changing. Our understanding of the environment and our ability to work together to respond to environmental challenges can't be separated from the need to

communicate with others, thus readings, activities, assignments, and guest presentations will provide a broad-based approach to diverse communication contexts. We will draw upon other academic disciplines, including psychology and environmentalism and science and environmental communication. Guest presenters will provide insights into environmental communication careers and sustainability campaigns.

COMM 373 Approaches to Crisis Comm (4 credits)
The course explores the issues that develop in pre, during and post-crisis phases, competencies for communicating with various stakeholders, the stories individuals tell, and the dynamics of managing a crisis with an integrated crisis communication plan. Integrating communication theories and methods with principles of crisis communication, this course provides students with a step-by-step method for analyzing and critiquing examples of crises in organizations, advertising, and public relations, entertainment, sports, and politics.

COMM 374 Family & Couple Communication (4 credits)
Examination of communication dynamics within the family system. Patterns of interaction, message exchange, developmental stages, and satisfaction and stability will be explored in light of today's ever-changing family structure. Focus will include traditional (nuclear) and non- traditional family types.

COMM 377 Family Transition—Crisis & Res (4 credits)
Families inevitably experience periods of transition. From serious illness, to infidelity, to natural disasters, and through identity shifts, we often turn to communication as a source of strength to help navigate relational struggle and strength during times of challenge. This course examines critical events which can lead to family crises as well as how crises can act as a catalyst for growth and change. Further, this course explores theoretical considerations for how families construct resilience following disruption, loss, trauma, and/or disaster. Prerequisites: At least 80 credits completed. **Note: This course is a cross-listed course. It counts towards elective credit for Communication majors and minors, as well as Family Studies majors and minors.

COMM 378 Comm & Underrep Families (4 credits)
Given that demographic changes, immigration patterns, transnational adoption, new U.S. Supreme Court rulings impacting LGBTQ+ families, and the addition of a multiracial option on the 2010 Census have all contributed to changes in the ways that individuals and families identify, are formed, and are (re)negotiated, it is of critical importance to examine scholarship highlighting these diverse (and often underrepresented) family forms. Families in the United States today are faced with opportunities and challenges that have never been experienced by families before. The first 21 years of this century have produced large social, civil, and technological changes that impact not only the communication among family members, but has also impacted larger societal discourses about what constitutes "family." Although family communication scholars have long called for the inclusion of more diverse samples in family research, to date this research remains very limited in the understanding of family functioning, relationships, and processes in families of color, LGBTQ families, transnational and neo-ethnic families, discourse dependent families, and other family forms. To this end, this course examines the communicative experiences of contemporary and underrepresented families.

COMM 393 Individual Study (1 to 4 credits)

COMM 476 Experiential Learning (1 TO 4 credits)

COMM 480 Capstone: Communication Ethics (4 credits)
This capstone seminar for graduating seniors explores ethical issues that confront communication professionals and audiences. Students explore theoretical perspectives on communication ethics, work from case studies to understand professional ethical standards, discuss current ethical issues in communication, work in teams to perfect oral and written ethical analysis skills, and write an individual thesis paper. Prerequisite: senior standing

COMM 487 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

COMM 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

COMM 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

Computer Sciences

Program Overview

College of Arts and Sciences, Department of Computer and Data Sciences

O'Shaughnessy Science Hall (OSS) 402, (651) 962-5470

Sawin (Chair), Akram, Bowe, Hardt, E. Hoefer, M. Hoefer, Jimenez, Marrinan, Miracle, Salisbury, Werness, and Yilek

In recognition of the ubiquitous nature of computing and the importance of being able to analyze data in the modern world, the Computer and Data Sciences (CSDS) department offers majors in Computer Science (BS) and Data Science (BS).

Computer Science majors develop the knowledge and skills required to design and build software and to create efficient solutions to real-world problems. Our major is designed to develop well-rounded students who can succeed in the challenging and continually changing field of technology. Our curriculum includes a wide variety of cutting-edge topics including, software design and implementation, computer architecture, database design, algorithms, computer networking, computer security, and artificial intelligence. Our graduates have started their careers in prominent local, national, and international businesses, as well as government organizations. Others have gone on to pursue careers in academia at top-ranked universities.

The Data Science major is offered through a joint program between the Computer and Data Sciences department and the Mathematics department. The curriculum of this program is oriented toward real-world applications of data science and analytics and the development of skills in statistical problem solving and modeling, statistical software use and programming, data mining and machine learning, and the communication of analytical results to diverse audiences. Graduates of the Data Science major are fully prepared to apply their knowledge and skills in myriad careers and graduate programs, including those found in business and marketing, the health sciences, education, government, and the social and behavioral sciences.

The department encourages Computer Science and Data Science majors to obtain a minor in a complementary discipline. Students interested in teacher licensure should see the various science and mathematics programs in the Department of Teacher Education section of this catalog. A dual undergraduate degree program with Engineering is also available, which is described in the catalog section under School of Engineering.

Senior Residency

Students majoring in computer science must have a minimum of 32 credits of STAT/CISC courses from St. Thomas. CISC minors need a minimum of 12 CISC/DASC credits from St. Thomas

Major in Computer Science (B.S.)

Computer Science is a foundation for many different computing careers. Computer scientists design and build software and create efficient solutions to real-world problems in such fields as artificial intelligence, computer architecture, software engineering, and computer security.

Required courses:

- CISC 131* (or CISC 130*) Introduction to Programming and Problem Solving (4 credits)
- CISC 230* Object-Oriented Design and Programming (4 credits)
- CISC 231* Data Structures Using Object-Oriented Design (4 credits)
- CISC 340* Computer Architecture (4 credits)
- CISC 350* Information Security (4 credits)
- CISC 380* Algorithms (4 credits)
- CISC 480* Senior Capstone (4 credits)
- DASC 120* (or DASC 112*) Introduction to Computational Statistics I (4 credits)

* Note: A grade of C- or above must be earned by majors in these courses.

Note: CISC 131 is recommended for this major

Plus 16 credits from the following:

- CISC 259 Creative Coding (4 credits)
- CISC 310 Operating Systems (4 credits)
- CISC 342 Computers in Experimental Sciences (4 credits)
- CISC 369 Computer Science Research (2-4 credits))
- CISC 370 Computer Networking (4 credits)
- CISC 375 Web Development (4 credits)
- CISC 401 Approved Study Abroad Course (2-4 credits)
- CISC 402 Approved Study Abroad Course (2-4 credits)
- CISC 403 Approved Study Abroad Course (2-4 credits)
- CISC 404 Approved Study Abroad Course (2-4 credits)
- CISC 405 Approved Study Abroad Course (2-4 credits)
- CISC 410 Advanced Information Security (4 credits)
- CISC 420 Computer Graphics (4 credits)

- CISC 440 Artificial Intelligence (4 credits)
- CISC 450 Database Design I (4 credits)
- CISC 451 Database Design II (4 credits)
- CISC 489 Topics (4 credits)
- CISC 490 Topics (4 credits)
- DASC 360 Multivariate Statistics and Data Analysis (4 credits)
- DASC 400 Data Mining and Machine Learning (4 credits)

Allied Requirements:

- MATH 113* Calculus I (or MATH 109* or MATH 112*) (4 credits)
- DASC 240 Applied Regression Analysis (or MATH 114 Calculus II) (4 credits)
- MATH 128* Introduction to Discrete Mathematics (4 credits)

* Note: A grade of C- or above must be earned by majors in these courses.

*Note: DASC 240 is recommended for this major.

Minor in Computer Science

20 credits

- CISC 131* (or CISC 130) Intro Programming and Problem Solving (4 credits)
- CISC 230 Object-Oriented Design and Programming (4 credits)
- CISC 231 Data Structures Using Object-Oriented Design (4 credits)
- Any additional 4-credit CISC course numbered 300 or above.

*Note: A grade of C- or above must be earned by minors in these required courses.

Plus four additional credits from the following electives:

- Any additional CISC course(s) numbered 200 or above (totaling 4 credits)
- BIOL 464 Bioinformatics (4 credits)
- DIMA 346 Game Production (4 credits)
- DIMA 358 Writing/Designing for the Web (4 credits)
- ENTR 371 Silicon Valley & Entr Thinking (4 credits)
- ENGR 230 Digital Design (4 credits)
- ENGR 331 Designing with Microprocessors (4 credits)
- ENGL 294 Writing Video Games (4 credits)
- GEOG 421Applied Geographic Info Sys (4 credits)
- MATH 315 Applied Math & Modeling I (4 credits)
- MATH 316 Applied Math & Modeling II (4 credits)
- MATH 385 Math Meths/Numerical Anal (4 credits)
- NSCI 340 Computational Neuroscience (4 credits)
- PHIL 220 Logic (4 credits)
- PHYS 323 Methods of Exp. Physics (4 credits)
- PHYS 325 Methods of Comp. Physics (4 credits)
- DASC 336 Data Comm and Visualization (4 credits)
- DASC 360 Multivariate Statistics and Data Analysis (4 credits)
- DASC 400 Data Mining & Machine Learning (4 credits)
- STCM 346 Digital Content and Strategy (4 credits)

Note: Students should choose an elective course appropriate to their major field of study or area of interest in consultation with the department chair or a member of the CISC department faculty.

Note: Elective courses may have additional pre-requisites.

Teacher Licensure

Elementary Education with a co-major in Science, Technology, Engineering, and Mathematics for Elementary Education

See Education

Computer & Information Sciences Undergraduate Courses

CISC 120 Computers in Elementary Educ (4 credits)
This course is intended for elementary education majors. Topics include the role of the computer in elementary and middle-school education, computer applications in science and mathematics, data analysis, software packages for use in elementary and middle-school classrooms, Computer-Assisted-Instruction (CAI), multimedia, electronic portfolios, telecommunication and software creation using tools such as MicroWorlds, Scratch, and HTML. Prerequisite: Elementary Education or SMEE major

CISC 130 Intro-Program&Prob Solving-Sci (0 or 4 credits)
Introduction to problem solving with computers, using programming languages common to science and engineering disciplines; logical thinking, design and implementation of algorithms; and basic

programming structures. Introduction to hardware and software: how computers acquire, store, process, and output information; how computer systems are designed, programmed, and tested. Students will use both a scientific programming language and an application package designed to implement programming features at a level more accessible to non-programmers. This course is designed for students majoring in Engineering or the sciences. Majors in the Department of Computer and Information Sciences should take CISC 131. Please see your academic advisor to ensure you select the appropriate class. Lab included. NOTE: Students who receive credit for CISC 130 may not receive credit for CISC 131. Prerequisite: Placement into MATH 108 or higher or completion of DASC 120 or DASC 112 with a C- or better, or completion of one of: MATH 006, 007, 108, 109, 113, 114, or 200.

CISC 131 Intro-Programming&Prob Solving (0 or 4 credits)
This course is designed for students with majors in the Department of Computer and Information Sciences and focuses on logical thinking, the design and implementation of algorithms in a procedural language, testing, correctness, and the use of common programming structures such as arrays. In addition, basic machine concepts are covered including hardware organization and representation of information in the machine. The typical student will be adept at using the computer but will have no prior programming experience. Engineering and science majors should take CISC 130. Please see your academic advisor to ensure you select the appropriate class. Lab included. NOTE: Students who receive credit for CISC 131 may not receive credit for CISC 130. Prerequisite: Placement into MATH 108 or higher or completion of DASC 120 or DASC 112 with a C- or better, or completion of one of: MATH 006, 007,108, 109, 113, 114, or 200.

CISC 200 Intro-Computer Tech & Bus Appl (4 credits)
This course will prepare students to use computers in a business environment and in daily life. It will provide an introduction to programming and problem solving for non-majors. Spreadsheet and database software will be used to solve problems related to business. The course includes an overview of hardware and software, how computers acquire and process information, and related topics. NOTE: Students who receive credit for CISC 200 may not receive credit for CISC 110 or 216.

CISC 201 Approved Study Abroad Course (2 to 4 credits)
The subject of this course will vary depending upon the study abroad program selected.

CISC 202 Approved Study Abroad Course (2 to 4 credits)
The subject of this course will vary depending upon the study abroad program selected.

CISC 203 Approved Study Abroad Course (2 to 4 credits)
The subject of this course will vary depending upon the study abroad program selected.

CISC 204 Approved Study Abroad Course (2 to 4 credits)
The subject of this course will vary depending upon the study abroad program selected.

CISC 205 Approved Study Abroad Course (2 to 4 credits)
The subject of this course will vary depending upon the study abroad program selected.

CISC 216 Quantitative Techniques - Busn (2 credits)
(Formerly QMCS 216) The use of microcomputer spreadsheet software to aid in solving quantitative business problems. This course is to be taken by students who have been given transfer credits for the equivalent of some part but not all of CISC 200 and who are required to take CISC 200. NOTE: Students who receive credit for CISC 216 may not receive credit for CISC 110 or 200.

CISC 230 Object Oriented Design & Prog (4 credits)
(Formerly QMCS 281) Programming and problem solving using an object-oriented approach. Builds on the procedural language foundation developed in CISC 130 or 131. Topics include: how procedural design differs from object-oriented design, algorithms, modeling, design requirements and representation, Uniform Modeling Language specification, implementation of object-oriented models, testing, and verification, and elementary design patterns. Lab included Prerequisites: A minimum grade of C- in CISC 130 or 131

CISC 231 Data Structures-Object Design (4 credits)
Presents the fundamental suite of data structures and the algorithms used to implement them. Topics include: abstract data types, algorithm development and representation, searching, sorting, stacks, queues, lists, trees, measuring algorithm complexity, object-oriented design and implementation of moderately large and complex systems. Course assumes the student has proficiency in object-oriented specification, design, and implementation. Prerequisites: A minimum grade of C- in CISC 230

CISC 259 Creative Coding (4 credits)
This course examines the application of new and

emerging technologies in creative and interactive media production and development. Modern audiovisual, music, and interactive projects benefit from the expressive use of coding, visual programming environments, microcontrollers, sensors, data visualization, data sonification, automated fabrication, and open-source platforms. As technologies advance, these tools have become more common, less expensive, and easier to use. Students will put several of these recent technologies into practice through several assignments including a final project publicly exhibited or performed at the end of the class. Prerequisites: A minimum grade of C- in CISC 130 or CISC 131

CISC 260 Data Fundamentals and Apps (4 credits)
This course will prepare students to apply fundamental tools that are used to manipulate data. It will provide an introduction to spreadsheets, database technologies, and programming. Students will learn how to employ these tools to solve problems related to business, life sciences, and actuarial sciences.Prerequisites: Math placement at level of MATH 111 or above; or MATH 100, 101, 105, 108, 109, 111 or 113 NOTE: Students who receive credit for CISC 260 may not receive credit for CISC 200, 110 or 216.

CISC 269 Computer Science Research (2 or 4 credits)
Prerequisite: Permission of CISC faculty member and CISC department

CISC 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CISC 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CISC 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CISC 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CISC 305 Internship (0 credits)
This zero-credit course is for co-curricular practical training in computer and information sciences for undergraduate students.

CISC 310 Operating Systems (4 credits)
The basic principles of designing and building operating systems. Sequential versus concurrent processes, synchronization and mutual exclusion, memory management techniques, CPU scheduling, input/output device handling, file systems design, security and protection. Prerequisite: A minimum grade of C- in CISC 340 or ENGR 330

CISC 320 Systems Analysis and Design I (4 credits)
A study of systems analysis methodologies used in the analysis and design of information systems. Emphasis on data, process, and modeling by use of a CASE tool: entity relationship diagrams and data normalization, data flow diagrams, use case diagrams, and data dictionaries. This is a "hands on" course where students form teams to analyze the needs of a business client in the community. Prerequisite: A minimum grade of C- in CISC 230

CISC 321 Systems Analysis and Design II (4 credits)
Continuation of CISC 320. Concentration on user-centered design (UCD), physical design, low- and high- fidelity prototyping, and agile methods. Emphasis on managerial problems in systems development. Continued use of CASE and project-management tools. A "real world" design and prototyping project is an integral part of this course. Prerequisite: CISC 320

CISC 340 Computer Architecture (4 credits)
Introduction to the design and organization of computer systems. Topics covered in this course include digital logic, machine data and instruction representations, computer arithmetic, instruction sets and assembly language, ALU and CPU design, pipelining, cache systems, memory, performance metrics, and parallelism. Prerequisites: a minimum grade of C- in CISC 230

CISC 342 Data Acquisition and Analysis (4 credits)
Introduction to the use of computers to collect, analyze, and interact with real-world information. The course is designed to meet the needs of students with interests in using computing devices to interact with the physical world. Emphasis is placed on application of concepts and techniques in addition to microcontroller programming. Topics include laboratory device interfacing, analog signal acquisition and processing, frequency transformations, data analysis, and image processing. Lab included. Prerequisites: A minimum grade of C- or better in CISC 130 or 131; C- or

better in MATH 109 or 111 or 113; and a C- or better in DASC 120 or DASC 112.

CISC 350 Information Security (4 credits)
(Formerly CISC 210) An introductory course in computer security. Topics include operating system security, cryptography, user authentication, application security, secure programming, web security and privacy issues, and ethical issues in the field of computer security. Emphasis is on understanding the technical aspects of how adversaries exploit systems and the techniques for defending against these attacks. Prerequisites: MATH 128 (may be taken concurrently), and a minimum grade of C- in CISC 230

CISC 360 Data Visualization (4 credits)
In this course, students will focus on computer-based design approaches and techniques for manipulating and visualizing data. A variety of data sources and corresponding visualization techniques will be examined. Particular attention will be given to effective visual communication of the meaning behind the data. Additionally, students will investigate the theme of storytelling with data. Prerequisites: A minimum grade of C- in CISC 130 or 131 and either CISC 260 or CISC 450.

CISC 369 Computer Science Research (2 or 4 credits)
Prerequisite: Permission of CISC faculty member and CISC department

CISC 370 Computer Networking (4 credits)
An introduction to computer networking. covering theory and implementation of basic networking concepts including communication protocols, local area networks, http protocol and client-server and peer-to-peer computing. Prerequisites: A minimum grade of C- in CISC 231

CISC 375 Web Development (4 credits)
(Formerly CISC 270) This course examines the theory and practice of developing applications for the World Wide Web. Students will learn practical technique for designing and implementing Web applications, with a particular emphasis on server-side processing and data-driven Web sites. Prerequisite: A minimum grade of C- in CISC 230

CISC 380 Algorithms (4 credits)
Introduction to the design and analysis of algorithms. Course topics include the following algorithm design paradigms: divide and conquer, graph algorithms, dynamic programming, and greedy algorithms. The course will also give an introduction to computational complexity, including NP-completeness and the P versus NP problem. Prerequisites: A minimum grade of C- or better in: MATH 113 (or MATH 109 or MATH 112), MATH 128, CISC 230, and CISC 231

CISC 393 Individual Study (2 or 4 credits)

CISC 401 Approved Study Abroad Course (2 to 4 credits)
The subject of this course will vary depending upon the study abroad program selected.

CISC 402 Approved Study Abroad Course (2 to 4 credits)
The subject of this course will vary depending upon the study abroad program selected.

CISC 403 Approved Study Abroad Course (2 to 4 credits)
The subject of this course will vary depending upon the study abroad program selected.

CISC 404 Approved Study Abroad Course (2 to 4 credits)
The subject of this course will vary depending upon the study abroad program selected.

CISC 405 Approved Study Abroad Course (2 to 4 credits)
The subject of this course will vary depending upon the study abroad program selected.

CISC 410 Advanced Information Security (4 credits)
A more in-depth study of security issues than CISC 350 (formerly CISC 210). This course will focus on modern attack techniques and defenses in the areas of application security, network security, cryptographic protocols, and web security. Prerequisite: A minimum grade of C- in CISC 350 (formerly CISC 210)

CISC 419 Accounting Information Systems (4 credits)
This course is designed to provide students with knowledge of concepts and practices of accounting information systems and the ability to work effectively with computer specialists and management in organizations. Major topics include accounting systems fundamentals, cybersecurity, enterprise risk management and internal controls, business data and process management, enterprise systems, data analytics, and emerging technologies. Prerequisites: CISC 200 and ACCT 311.

CISC 420 Computer Graphics (4 credits)
This course introduces the principles of interactive computer graphics. Computer graphics serves as the foundation for many areas, such as computer animation, video game design, and data visualization. Topics covered in this course include raster vs. vector techniques and hardware, 2-dimensional and 3-dimensional rendering, and

shading and illumination models. Prerequisites: C- or better in CISC 230 and a C- or better in MATH 128. It is recommended that you also have knowledge of vector and matrix math.

CISC 440 Artificial Intelligence (4 credits)
This course focuses on the fundamental ability of intelligent systems, including problem-solving, reasoning, decision-making, and learning. It further examines the logical and probabilistic foundations that support these processes. The topics include problem formulation, search strategies, state spaces, applications of logic, knowledge representation, planning, and diverse application domains. Prerequisites: A minimum grade of C- or better in MATH 113 (or MATH 109 or MATH 112), MATH 128, DASC 120 (or DASC 112), CISC 230, and CISC 231

CISC 450 Database Design I (4 credits)
This course introduces the fundamental concepts of database management, including aspects of data models, database languages, database design, indexing, and other topics in the field. Emphasis on general purpose relational database management systems using Relational Algebra and SQL. Prerequisites: MATH 128 and a minimum grade of C- in CISC 230

CISC 451 Database Design II (4 credits)
Advanced database analysis, design, and implementation including data warehousing, distributed databases, materialized views, grid computing, and replication. Storage and efficient retrieval of temporal data, objects, and non-textual information. Prerequisite: A C- in CISC 450

CISC 460 Senior Project (4 credits)
Work on a software analysis, design, and implementation project or on a computer support project under the direction of a faculty member. Prerequisite: Senior standing and permission of the instructor

CISC 469 Computer Science Research (2 or 4 credits)
Prerequisite: Permission of CISC faculty member and CISC department

CISC 476 Experiential Learning (0 to 4 credits)

CISC 478 Experiential Learning (0 credits)

CISC 480 Senior Capstone (4 credits)
The senior capstone course provides computer science majors the opportunity to integrate the knowledge that they have gained from across the curriculum. Students will work in groups to design, document, and implement a large-sized software project. During this process, students will be exposed to programming team organization, software development practices, as well as tools that facilitate the development of software systems. Prerequisites: Senior standing and a minimum grade of C- or better in: CISC 350, CISC 340, and CISC 380 (which 380 may be taken concurrently)

CISC 483 Seminar (2 credits)

CISC 484 Seminar (2 credits)

CISC 485 Seminar (4 credits)

CISC 486 Seminar (4 credits)

CISC 487 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CISC 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CISC 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CISC 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

CISC 491 Research (1-4 credits)

CISC 495 Individual Study (2 or 4 credits)

Criminal Justice

Program Overview

College of Arts and Sciences, Department of Justice and Society Studies
O'Shaughnessy Education Center (OEC) 431, (651) 962-5630
Klein (Chair)

Department of Justice and Society Studies Website: https://cas.stthomas.edu/departments/areas-of-study/justice-society-studies/index.html

Students who graduate with a major in criminal justice will know the main components of the criminal and juvenile justice systems and will know the basics of criminal law and criminal procedure in

the U.S. justice system. They will have the tools to understand the long standing and current dilemmas faced by society in trying to develop and maintain an effective and just criminal justice system. They will be prepared for employment in the field of criminal justice, including corrections or law enforcement. Students will also be prepared to work as a crime victim advocate, crime research analyst, or work in agencies focused on social injustice work related to the criminal justice field.

Criminal justice majors pursue graduate and professional degrees in criminology, as well as business, law, public health, public policy, social work, and other fields. The Department of Justice and Society Studies faculty also provide intensive support for students who wish to engage in individual research and preparation for graduate and professional school, as well as internships and career development.

At least 16 credits in the major must be taken at St. Thomas. Criminal justice minors need a minimum of 8 credits from St. Thomas.

Co-Major with Criminal Justice and Social Work

See Social Work

Major in Criminal Justice

The program in criminal justice provides students with an understanding of the entire criminal justice system while at the same time allowing them to take specific courses in an area of special interest.

The program emphasizes the interrelationships among the various components of the criminal justice system (e.g., law enforcement, prosecution, courts and corrections) and examines how they deal with adult offenders and juvenile delinquents.

The major reflects the interdisciplinary nature of criminal justice. It provides a concentration of courses which prepares students for careers in such areas as policing, private security, probation, parole and corrections. It also prepares students for advanced study in criminology, criminal justice and law.

The criminal justice program at St. Thomas, in conjunction with Alexandria Technical College, is accredited by the Minnesota Board of Peace Officer Standards and Training (POST). This program prepares students for the peace officer licensing examination. Students who intend to take the examination must also complete SOCI 251 and PSYC 111. Please contact the department's Law Enforcement Education Coordinator for more information.

- SOCI 100 Introduction to Sociology (4 credits)
- SOCI 200 Introduction to Criminal and Juvenile Justice (4 credits)
- SOCI 210 Research Methods in Sociology (4 credits)
- SOCI 220 Sociological Analysis (4 credits)
- SOCI 312 Crime and Delinquency (4 credits)
- SOCI 344 Police and Society (4 credits)
- SOCI 346 Corrections in America: Prisons, Probation and Parole (4 credits)
- SOCI 480 Seminar in Criminal Justice (4 credits)
- CJUS 342 Criminal Law and Criminal Procedure (4 credits)

Electives -- Plus eight credits (two courses) from the following (at least one course must be SOCI or CJUS):

- SOCI 130 Homicide (4 credits)
- SOCI 251 Race and Ethnicity (4 credits)
- SOCI 280 Hate Crimes (4 credits)
- SOCI 297 Special Topics (4 credits) (topics will vary; can only register for the same topic once)
- SOCI 478 Experiential Learning (4 credits)
- SOCI 495 Individualized Study (4 credits)
- CJUS 345 Police Operations (4 credits)
- CJUS 347 Correctional Practice and Administration (4 credits)
- SOWK 291 Anatomy of Violence (4 credits)
- PSYC 207 Alcohol, Other Drugs and Behavior (4 credits)
- PSYC 301 Psychopathology (4 credits)
- POLS 312 Judicial Process (4 credits)
- POLS 314 Constitutional Rights and Liberties (4 credits)

Strongly recommended:

- SOCI 251 Race and Ethnicity (4 credits)

In addition, it is recommended that students take the following courses in this order:

- MATH 101 Finite Mathematics (4 credits) (or adequate substitute) in the first year
- SOCI 210 Research Methods in Sociology (4 credits) in first semester sophomore year
- SOCI 220 Sociological Analysis (4 credits) in second semester sophomore year

Note: Students with a double major in sociology and psychology who have completed SOCI 210, PSYC 212 and DASC 120 may contact the department

chair to waive SOCI 220.

Note: Students choosing to double major in sociology and criminal justice are limited to five courses that can be applied to both majors. Only the following courses may count toward requirements in both majors: SOCI 100, 200, 210, 220 and one of the following 312, 344, 346.

Minor in Criminal Justice

- SOCI 100 Introduction to Sociology (4 credits)
- SOCI 200 Introduction to Criminal and Juvenile Justice (4 credits)
- SOCI 312 Crime and Delinquency (4 credits)

Plus eight credits from the following, at least four of which must be in sociology:

- SOCI 130 Homicide
- SOCI 280 Hate Crimes
- SOCI 297 Special Topics (topics will vary; may not enroll in same topic course more than once)
- SOCI 344 Police and Society
- SOCI 346 Corrections in America: Prisons, Probation and Parole
- CJUS 342 Criminal Law and Criminal Procedure
- CJUS 345 Police Operations
- CJUS 347 Correctional Practices and Administration
- POLS 312 Judicial Process

Note: Students wishing to combine a major in either Sociology or Criminal Justice with a minor in the other field may do so. However, the major and minor may not have more than eight credits or two courses in common. Non-majors can also earn a minor in Sociology and minor in Criminal Justice. However, the two minors many not have more than eight credits in common.

Criminal Justice Undergraduate Courses

CJUS 342 Criminal Law and Procedure (4 credits)
This course provides an overview of the key elements of criminal law and criminal procedure. Topics include the purpose of criminal law, criminal responsibility and intent. In addition, the legal elements of crimes will be addressed. The course also examines the importance of due process and constitutional protections for persons accused and convicted of crime. A major focus of the course is Minnesota statutes and procedures.

CJUS 345 Police Operations (4 credits)
An overview of police organization and practices with a special emphasis on policing in the state of Minnesota. Topics include patrol practices, criminal investigation, crime scene investigation, crisis intervention, use of force , and ethical codes in law enforcement. This course is designed for students who are completing POST requirement to become a licensed police officer in the state of Minnesota. Prerequisite: SOCI 200

CJUS 347 Correctional Practice (4 credits)
This course examines the role of court services and corrections practitioners in the criminal justice system from presentence evaluations to ultimate release in the community. The focus is on corrections practices and the management of offenders within both institutional and community correctional settings and the administration of these organizations. There is a special emphasis on corrections in the state of Minnesota. Topics include correctional management, risk and needs assessment, programming options, and ethical codes in corrections. Prerequisite: SOCI 200

CJUS 476 Experiential Learning (1 TO 4 credits)
This course is for practical training for undergraduate students. Prerequisites: Permission of instructor

CJUS 478 Experiential Learning (0 credits)

CJUS 495 Individual Study (2 OR 4 credits)

Data Analytics

Program Overview

College of Arts and Sciences, Interdisciplinary Program

Director: Kim (ECON); Advisory Committee: Barlow (OPMT), Clark (MATH), Dwyer (CISC), Hoefer (CISC), Kelley (EES), Layfield (CHEM)

website:
https://www.stthomas.edu/academics/undergraduate/data-analytics-major/index.html

Contact: dataanalytics@stthomas.edu

Data Analytics is the practice of using data to drive strategy and decision-making. Data analysts use cutting-edge statistical and technological tools to discover trends and predict outcomes in nearly every sphere of contemporary life, including healthcare, social media, education, public policy, business, politics, climate change, criminal justice, insurance, travel, and recreation.

The defining characteristic of the interdisciplinary Data Analytics major is the explicit emphasis that statistical, computational, and context-specific knowledge jointly contribute to effective data analysis. Hence, the purpose of the Data Analytics major is three-fold:

1. To equip students with the statistical and computational tools to conduct meaningful data analyses;
2. To provide students with the disciplinary-specific context to articulate and comprehend the meaningful data analytic questions within a domain;
3. To encourage students to develop their skills to effectively communicate data-driven insights.

Major in Data Analytics (B.S.)

Around 63 credits

Core Requirements*:

The major core requirements in computer science and statistics equip students with the analytical methods and techniques required to formulate and conduct meaningful data analyses.

- CISC 131* (or CISC 130*) Introduction to Programming and Problem Solving (4 credits)
- CISC 260*^ Data Fundamentals and Applications (4 credits)
  or CISC 450* Database I (4 credits)
- DASC 120* Introduction to Computational Statistics (4 credits)
  or DASC 111* and 112* Introduction to Computational Statistics (8 credits)
  or STAT 314* Mathematical Statistics (4 credits)
- DASC 240* Applied Regression Analysis (4 credits)
  or STAT 333* Predictive Modeling (4 credits)
  or ECON 315* Introduction to Econometrics (4 credits)
- DASC 336* Data Communication and Visualization (4 credits)
  or CISC 360* Data Visualization (4 credits)
- DASC 360* Multivariate Methods in Statistics (4 credits)
- DASC 400* Data Mining and Machine Learning (4 credits)
- DATA 200* Data Analytics Seminar (1 credit)
- DATA 400* Data Analytics Capstone (2 credits)

*Note: CISC 131 is recommended for this major.

*Note: A grade of C- or above must be earned by majors in all these required courses.

^Note: Students who receive credit for CISC 260 may not receive credit for CISC 200, CISC 110, or CISC 216.

Note: Students in most domains are strongly encouraged to take DASC 120 with the R lab and should consult with their advisors to determine which DASC 120 lab is appropriate.

Allied Requirements:

- MATH 113* Calculus I (4 credits)
  or MATH 108* and 109* Calculus with Review (8 credits)
  or MATH 111* and 112* Calculus for Business (6 credits)
- COMM 100 Public Speaking (4 credits)
  or COMM 105 Communication in the Workplace (4 credits)
  or STCM 111 Introduction to Journalism and Mass Media (4 credits)
- ENGL 256 Introduction to Professional Writing (4 credits)

*Note: A grade of C- or above must be earned by Majors in these allied courses.

Domain requirements

A domain is an area of application for data analytics; its purpose is to provide students the disciplinary-specific context to articulate and understand meaningful questions within a domain that can be addressed using data analytics. Therefore, each student must select a domain to develop a theoretical foundation to engage their statistical and technological competencies.

A domain will typically consist of 16–20 credits; the exact number of required credits depends on the domain. Each domain consists of the relevant introductory and upper-level courses for building a domain-oriented lens for data analysis. In addition, each domain must provide their students an opportunity for applied data analysis within the context of the domain. Furthermore, students are required to present their analysis in some formal manner (i.e., visual, written, and/or oral). Domain departments are responsible for the implementation and approval of any domain-related requirements.

The suitability and availability of domain courses that support the major potentially varies—both across domains and over time. Therefore, domain courses must be chosen in consultation with, and approved by, the student's domain advisor or the domain department chair to ensure the selection of the most appropriate courses.

Domain courses marked with * may have formal pre-requisites or co-requisites that may be waived on a case-by-case basis in consultation with the student's domain department chair.

Actuarial Science [20 credits]

Introductory Courses:

- MATH 114 Calculus II (4 credits)
- MATH 200 Multi-Variable Calculus (4 credits)

Upper-Level Courses:

- ACSC 264 Theory of Interest (4 credits)
- or ACSC 220 Risk Management and Insurance (4 credits)
- MATH 240 Linear Algebra (4 credits)

Applied Data Analysis:

- DASC 460 STAT & Data Science Practicum (4 credits)

Note: Students following the Actuarial Science domain are strongly encouraged to DASC 120 core requirement (please see Data Analytics program director). In addition, students are strongly encouraged to take STAT 333 in the core. Both of these recommendations are meant to take advantage of the existing actuarial focus that occurs in the recommended courses mentioned.

American Politics [16-20 credits]

Introductory Courses:

- POLS 104 Government and Politics (4 credits)
- POLS 205 Citizen Participation and Public Policy (4 credits)

Upper-Level Courses—choose two of the following:

- POLS 301 Political Identity and Participation (4 credits)
- POLS 305 Congress and the Presidency (4 credits)
- POLS 306 Campaigns and Elections (4 credits)
- POLS 312 Judicial Process and Politics (4 credits)

Applied Data Analysis—choose one of the following:

- POLS 404 Seminar in American Politics (4 credits)
- POLS 495 Individual Study (4 credits)
- Other approved undergraduate research opportunity (e.g., Young Scholars)

Biology [16 credits]

Introductory Course—choose one of the following, or consult with Biology Department Chair or Biology Domain Advisor for additional options:

- BIOL 101 General Biology (4 credits)
- BIOL 102 Conservation Biology (4 credits)
- BIOL 105 Human Biology (4 credits)
- BIOL 110 Genetics and Society
- BIOL 162 Medical Geology (4 credits)
- *BIOL 207 Genetics, Ecology Evolution (4 credits)
- *BIOL 208 Biological Communication and Energetics (4 credits)
- *BIOL 209 Biology of Sustainability (4 credits)

Upper-Level Courses to be determined in consultation with Biology Department Chair or Biology Domain Advisor:

- One BIOL 200- or 300-level course (4 credits)
- One BIOL 300-level course (4 credits). Likely course options include:
    - *BIOL 391 Research (4 credits)
    - *BIOL 398 Darwin's Algorithms (4 credits)
    - *ESCI 310 Environmental Problem Solving (4 credits)

Applied Data Analysis:

- One BIOL 400-level course (4 credits) that fulfills the "applied data analysis" requirement to be determined in consultation with Biology Department Chair or Biology Domain Advisor. Likely course options include:
    - *BIOL 464 Bioinformatics (4 credits)
    - *BIOL 467 Emerging Infectious Disease (4 credits)

- *BIOL 480 Urban Ecosystem Ecology (4 credits)
- *BIOL 486 Seminar (4 credits)
- *BIOL 491 Research (4 credits)

Note: Courses marked with * may have pre-requisites or co-requisites. These requirements can be waived in some cases. Students should consult Biology Department Chair or Course Instructor for waiver options.

Chemistry [16-20 credits]

Students complete one of the following introductory course options and choose sufficient upper-level courses that focus on a sub-discipline (analytical, organic, physical, or biochemistry) to yield a total of 16 credits of introductory and upper-level courses.

Introductory Courses—choose one of the following options:

- CHEM 111 General Chemistry I (4 credits) and CHEM 112 General ChemistryII (4 credits)
- CHEM 115 Accelerated General Chemistry (4 credits)
- CHEM 109 General Chemistry for Engineering (4 credits)

Note: The introductory course requirement may be waived for students with sufficient chemistry background, in which case additional upper-level courseswill be required to reach 16 credits.

Upper-Level Courses—select from the following:

- *CHEM 201 Organic Chemistry II (4 credits)
- *CHEM 202 Organic Chemistry II (4 credits)
- *CHEM 300 Quantitative Analysis (4 credits)
- *CHEM 320 Instrumental Analysis (4 credits)
- *CHEM 331 Chemical Thermodynamics and Reaction Dynamics (4 credits)
- *CHEM 440 Biochemistry I (4 credits)
- *Other approved CHEM courses at the 200-level or above

Applied Data Analysis—choose one of the following:

- CHEM 491 Individual Research (2 credits) and CHEM 492 Individual Research(2 credits)
- Other approved CHEM course that applies data analytics in chemistry

Note: The applied data analysis credit requirement may be waived for students conducting paid research through Young Scholars grant or similar paid research experience.

Criminal Justice [20 credits]

Introductory courses:

- SOCI 100 Introduction to Sociology (4 credits)
- SOCI 200 Introduction to Criminal Justice (4 credits)

Upper-level courses:

- SOCI 210 Research Methods in Sociology (4 credits)
- SOCI 312 Crime and Delinquency (4 credits)

Applied data analysis—choose one of the following:

- SOCI 491 Individual Study (4 credits)
- Other approved undergraduate research opportunity (e.g., Young Scholars)

Economics [20 credits]

Introductory courses:

- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)

Upper-level courses:

- ECON 351 Macroeconomic Theory (4 credits) or
  ECON 352 Microeconomic Theory (4 credits)
- One ECON 300- or 400-level field course (i.e., not ECON 311, ECON 315, ECON 351, or ECON 352)

Applied Data Analysis:

- ECON 311 Forecasting (4 credits)
  or ECON 315 Introduction to Econometrics and Causal Inference (4 credits)

Note: ECON 315 may not satisfy both the domain requirement and the DASC 240/STAT 333 requirement.

Environmental Science [16 credits]

Introductory Courses – choose one course each from two of the following categories:

- Environmental Science
  - ESCI 132 Introduction to Environmental Science (4 credits)
- Biology
  - BIOL 101 General Biology (4 credits)
  - BIOL 102 Conservation Biology (4 credits)
  - BIOL 105 Human Biology (4 credits)
  - BIOL 162 Medical Geology (4 credits)
  - BIOL 207 Genetics, Ecology Evolution (4 credits)
  - BIOL 209 Biology of Sustainability (4 credits)
- Chemistry
  - CHEM 100 Chemistry in Our World (4 credits)
  - CHEM 101 Environmental Chemistry (4 credits)
  - CHEM 109 General Chemistry for ENGR (4 credits)
  - CHEM 111 General Chemistry I (4 credits)
  - CHEM 115 Accelerated General Chemistry (4 credits)
- Geology
  - GEOL 111 Introductory Physical Geology (4 credits)
  - GEOL 114 The Science of Natural Disasters (4 credits)
  - GEOL 115 Environmental Geology (4 credits)
  - GEOL 162 The Earth's Record of Climate (4 credits)

Upper-Level Course–choose one of the following:

- ESCI 310 Environmental Problem Solving (4 credits)
- ESCI 389 Research (4 credits)

Applied Data Analysis:

- ESCI 430 Senior Research Seminar (4 credits)
- ESCI 491 Research (4 credits)

NOTE: Because suitability of ESCI 310 and ESCI 430 for Data Analytics major will vary(course projects may or may not lend themselves to data analytics) students should consult ESCI Program Director or ESCI Domain Advisor to select the most appropriate courses.

Geographic Information Systems [16 credits]

Introductory course:

- GEOG 321 Geographic Information Systems (4 credits)

Upper-level courses:

- GEOG 331 Conservation Geography (4 credits)
- GEOG 350 Geography of Global Health (4 credits)

Applied Data Analysis:

- GEOG 421 Applied Geographic Information Systems (4 credits)

Geology [16 credits]

Introductory Course–choose one of the following:

- GEOL 111 Introductory Physical Geology (4 credits)
- GEOL 115 Environmental Geology (4 credits)
- GEOL 162 The Earth's Record of Climate (4 credits)

Upper-Level Course–choose one of the following:

- GEOL 252 Earth Surface Processes and Geomorphology (4 credits)
- GEOL 260 Regional Geology and Geological Field Methods (4 credits)

Applied Data Analysis:–choose two of the following, at least one at the 400-level:

- GEOL 252 Earth Surface Processes and Geomorphology (4 credits) [If not taken to satisfy the upper-level course requirement above]
- GEOL 220 Oceanography (4 credits)
- GEOL 410 Hydrogeology (4 credits)
- GEOL 462 Advanced Earth's Record of Climate (4 credits) [If GEOL 162 not taken for introductory course]

Information Systems [17 credits]

Introductory Courses:

- CISC 230 Object-Oriented Design and Programming (4 credits)

- CISC 231 Data Structures Using Object-Oriented Design (4 credits)

Upper-Level Courses:

- SEIS 615 DevOps and Cloud Infrastructure (3 credits)
- SEIS 630 Database Management Systems and Design (3 credits)

Applied Data Analysis:

- SEIS 632 Data Analytics and Visualization (3 credits)

Note:

- Students in the Information Systems domain are strongly encouraged to take the R lab option with DASC 120.
- DASC 120 with the R lab will count as SEIS 631: Foundations of Data Analysis for domain courses that have SEIS 631 listed as a pre-requisite.
- CISC 131 will count as SEIS 603: Foundations of Software Development for domain courses that have SEIS 603 listed as a pre-requisite.
- FastTrack to Master of Science in Data Science: Students who complete the Bachelor of Science in Data Analytics with an Information Systems domain have the option to pursue a graduate degree in Data Science through Graduate Programs in Software at the University of St. Thomas. Eight additional graduate courses, beyond those required for the Bachelor of Science in Data Analytics with an Information Systems domain, are required for a Master of Science in Data Science degree. Please see MS in Data Science for additional details.

Physics [16 credits]

Introductory Courses:

- PHYS 211 Classical Physics I (4 credits)
- PHYS 212 Classical Physics II (4 credits)
- MATH 114 Calculus II (4 credits)

Upper-Level Courses—choose one of the following:

- PHYS 215 Foundations of Modern Physics (4 credits)
- PHYS 225 Applications of Modern Physics (4 credits)

Applied Data Analysis—choose one of the following:

- PHYS 323 Methods of Experimental Physics (4 credits)
- PHYS 325 Methods of Computational Physics (4 credits)

Psychology [16-20 credits]

Introductory Courses:

- PSYC 111 General Psychology (4 credits)
- PSYC 212 Research Methods in Psychology (4 credits)

Upper-Level Courses

- One PSYC 200- or-300- or 400-level course from one of the PSYC perspective-based course lists (4 credits)
- One PSYC 300- or 400-level course (4 credits)

Applied data analysis—choose one of the following:

- One PSYC 300- or 400-level course with lab from the same perspective-based course list as above (4 credits)
- Other approved undergraduate research opportunity (e.g., Young Scholars)

Public Health [16 credits]

Introductory Courses—choose *two* of the following courses:

- PUBH 200 Emerging Infectious Disease and Global Health (4 credits)
- PUBH 210 One Health: Humans, Animals and the Environment (4 credits)
- PUBH 220 Introduction to Public Health and Social Justice (4 credits)
- PUBH 225 Global Health and Development (4 credits)

Upper-Level Course:

- One PUBH 300-level course (4 credits) to be determined in consultation with Health Sciences Chair or Public Health Domain Advisor.

Likely course options include:

- PUBH 300 Introduction to Epidemiology (4 credits)

Applied Data Analysis:

- One 400-level PUBH course (4 credits) to be determined in a consultation with Health Sciences Chair or Public Health Domain Advisor. Likely course options include:
    - PUBH 465 Public Health Research Methods (4 credits)
    - PUBH 470 Experiential Learning in Public Health (4 credits)
    - PUBH 491 Research (4 credits)

Sociology [16 credits]

Introductory Course:

- SOCI 100 Introduction to Sociology (4 credits)

Upper-Level Courses:

- SOCI 210 Research Methods in Sociology (4 credits)
- * SOCI 474 Sociological Theory and Praxis: The Capstone Experience (4 credits)
- One SOCI 200 or 300-level course (4 credits)

Applied Data Analysis-Choose one of the following:

- SOCI 491 Individual Study (4 credits)
- Other approved undergraduate research opportunity (e.g., Young Scholars)

Strategic Communication [20 credits]

Introductory courses:

- STCM 234 Principles of Strategic Communication (4 credits)
- STCM 244 Research, Measurement, and Evaluation (4 credits)

Upper-level courses:

- STCM 344 Writing for Strategic Communication (4 credits)
- STCM 346 Digital Content and Strategy in Strategic Communication (4 credits)

Applied data analysis:

- STCM 480 Capstone: Strategic Communication Campaigns (4 credits)

Data Analytics Undergraduate Courses

DATA 200 – Data Analytics Seminar (1 credit)
This seminar is designed to facilitate students' exploration of their domain fields as they relate to Data Analytics. It brings together students from all domain areas to improve their data communication skills and broaden their understanding of data analytics. The seminar primarily focuses on the communication and dissemination of data analytic work, which may vary by domain. Prerequisites: Junior standing and one of the following: DASC 120, DASC 112, STAT 314, or STAT 303.

DATA 400 Data Analytics Capstone *(2 credits)*
This seminar is designed to fulfill the senior capstone experience in Data Analytics. It brings together students from all domain areas to fine-tune their data communication skills, broaden their understanding of data analytics, and produce a portfolio of work. The seminar primarily focuses on the communication and dissemination of data analytic work, which may vary by domain. This course should be completed in the final Spring semester prior to graduation. Prerequisites: Senior standing, DATA 200, COMM 100, and one of the following: DASC 240, STAT 333, or ECON 315.

DATA 478 Experiential Learning (0 Credits)

Data Science

Program Overview

College of Arts and Sciences, Interdisciplinary Program

Director: Berg (CISC)
Advisory Committee: Curran (CISC), Dragovic (MATH), Dwyer (CISC), McNamara (CISC), Shemyakin (MATH), Werness (CISC)

Data Science is an interdisciplinary field that uses scientific methods, processes, algorithms, and systems to extract knowledge and actionable insights from noisy, structured, or unstructured data. Data scientists use techniques and theories drawn from many fields within the context of mathematics, statistics, and computer science.

Major in Data Science (B.S.)

56 credits

Data Science is a foundation for many different data-focused careers, including Data Scientist, Machine Learning Engineer, Data Engineer, Statistician, Data Analyst, and Infrastructure Architect.

Required Courses:

- DASC 120* (or DASC 112*) Introduction to Computational Statistics (4 credits)
- DASC 130* Introduction to Data Science (4 credits)
- DASC 240* Applied Regression Analysis (4 credits)
- DASC 336* Data Communication and Visualization (4 credits)
- DASC 360* Multivariate Statistics and Data Analysis (4 credits)
- DASC 400* Data Mining and Machine Learning (4 credits)
- DASC 460* Statistics and Data Science Practicum (4 credits)

* Note: A grade of C- or above must be earned by majors in these required courses

Plus 8 credits from the following:

- DASC 210 Biostatistics (4 credits)
- DASC 380 Spatial Statistics (4 credits)
- DASC 420 Network Science and Graph Theory (4 credits)
- DASC 296 (or STAT 296) Topics (2 credits)
- DASC 298 (or STAT 298) Topics (4 credits)
- DASC 488 (or STAT 488) Topics (2 credits)
- DASC 490 (or STAT 490) Topics (4 credits)
- STAT 370 Bayesian Statistical Models (4 credits)
- STAT 413 Generalized Linear Mixed Models (4 credits)
- CISC 451 Database II (4 credits)

Allied Requirements:

- MATH 113* (or MATH 109* or MATH 112*) Calculus I (4 credits)
- MATH 128 Introduction to Discrete Mathematics (4 credits)
- CISC 131* (or CISC 130*) Introduction to Programming and Problem Solving (4 credits)
- CISC 230 Object Oriented Design and Programming (4 credits)
- CISC 450 Database I (4 credits)

* Note: A grade of C- or above must be earned by majors in these allied courses

Minor in Data Science

24 credits

A minor in Data Science allows students to pursue an interest in fundamental concepts critical for data-driven research and careers.

Required courses:

- DASC 120* (or DASC 112*) Introduction to Computational Statistics (4 credits)
- DASC 130* Introduction to Data Science (4 credits)
- DASC 240* Applied Regression Analysis (4 credits)

* Note: A grade of C- or above must be earned by students in these required courses

Plus 8 credits from the following:

- DASC 210 Biostatistics (4 credits)
- DASC 336 Data Communication and Visualization (4 credits)
- DASC 360 Multivariate Statistics and Data Analysis (4 credits)
- DASC 380 Spatial Statistics (4 credits)
- DASC 400 Data Mining and Machine Learning (4 credits)
- DASC 420 Network Science and Graph Theory (4 credits)
- DASC 460 Statistics and Data Science Practicum (4 credits)
- DASC 296 (or STAT 296) Topics (2 credits)
- DASC 298 (or STAT 298) Topics (4 credits)
- DASC 488 (or STAT 488) Topics (2 credits)
- DASC 490 (or STAT 490) Topics (4 credits)
- CISC 450 Database I (4 credits)

Allied Requirements:

- CISC 131* (or CISC 130*) Introduction to Programming and Problem Solving (4 credits)

* Note: A grade of C- or above must be earned by students in these allied courses

Data Science Undergraduate Courses

DASC 112 Intro to Computational Stat II (2 credits) This course provides students who already have a solid conceptual understanding of statistics the opportunity to apply their knowledge to analyzing data using modern statistical software. Topics include data visualization, inference for one and two samples, analysis of variance, chi-square tests for goodness of fit and association, and simple and multiple linear regression. Prerequisites: DASC 111 or AP Statistics Credit. Note, students who receive credit for DASC 112 may not receive credit for DASC 120.

DASC 120 Intro to Computational Stat (0 or 4 credits)

This course is composed of an in-depth study of the processes through which statistics can be used to learn about environments and events. There will be an intensive focus on the application, analysis, interpretation, and presentation of both descriptive and inferential statistics in a variety of real world contexts. Topics include data collection, research design, data visualization, sampling distributions, confidence intervals and hypothesis testing, inference for one and two samples, chi-square tests for goodness of fit and association, analysis of variance, and simple and multiple linear regression. Extensive data analysis using modern statistical software is an essential component of this course. Prerequisites: Math placement at level of MATH 108 or above; or completion of MATH 006, 007, 100, 101, 103, 104, 105, 108, 111, or 113. NOTE: Students who receive credit for DASC 120 may not receive credit for DASC 111 or DASC 112.

DASC 130 Introduction to Data Science (4 credits)
This course provides students with an introduction to the field of data science. Students learn foundational skills, including basic data visualization, data wrangling, descriptive modeling techniques, and simulation-based inference. All material is grounded in contextual data examples, and consideration of data context and ethical issues is paramount. Prerequisites: Math placement at level of MATH 108 or above; or completion of MATH 006, 100, 101, 103, 104, 105, 108, 111, or 113.

DASC 199 LD Data Science Elective (1 to 4 credits)

DASC 210 Biostatistics (4 credits)
In this course, students acquire the knowledge and skill required to effectively apply intermediate statistical methods in biology, medicine, public health, and other health-related fields. There is an emphasis on the following inferential statistical techniques: one-way and factorial ANOVA, interactions, repeated measures, and general linear models; logistic regression for cohort and case-control studies; nonparametric and distribution-free statistics; loglinear models and contingency table analyses; survival data, Kaplan-Meier methods, and proportional hazards models. Prerequisites: DASC 112, DASC 120, STAT 303, or STAT 313.

DASC 240 Applied Regression Analysis (4 credits)
This course provides students with the knowledge to effectively use various forms of regression models to address problems in a variety of fields. Students learn both simple and multiple forms of linear, ordinal, nominal, and beta regression models. There is an emphasis on simultaneous inference, model selection and validation, detecting collinearity and autocorrelation, and remedial measures for model violations. Students are also introduced to the use of time series and forecasting methods. Prerequisites: Grade of C- or higher in DASC 112 or DASC 120.

DASC 299 LD Data Science Elective (1 to 4 credits)

DASC 336 Data Comm and Visualization (4 credits)
This course will prepare students to effectively communicate the insights from data analysis. The course will cover the three main methods of communicating information about data – visually, orally, and in writing. Students will learn to tailor their communication to their audience and create publication-ready and boardroom-ready presentations of their results. Prerequisites: CISC 130 or CISC 131; and DASC 112, DASC 120, STAT 303, or STAT 314.

DASC 360 Multivariate Data Analysis (4 credits)
This course introduces students to advanced computational methods in statistics and data analysis that require a thorough knowledge of a programming language such as Python or R. There will be an intensive focus on investigating the correlation and covariance structure of data, including data extraction and modification, dimensionality reduction, and structural equation modeling. Prerequisites: Grades of C- or higher in CISC 130 or 131 and in MATH 109 or 112 or 113 and in DASC 240, STAT 303, STAT 314, or ECON 315.

DASC 380 Spatial Statistics (4 credits)
This course provides students with the background necessary to investigate spatially referenced data and processes. There is an emphasis on specifying and fitting hierarchical models to represent geostatistical or point-referenced data, lattice or aerial data, and point process data. Students will also be introduced to the use of formal spatial data structures, point pattern analysis and cluster detection, spatial interpolation and kriging, spatial autocorrelation and variogram analysis, and spatial autoregressive models. Prerequisites: DASC 240, STAT 303, or STAT 314.

DASC 399 UD Data Science Elective (1 to 4 credits)

DASC 400 Data Mining & Machine Learning (4 credits)
In this course students will learn methods for working with massive and complex data. They will explore these topics from both statistical and computational perspectives. Topics include data preparation, defining and exploring data sources, pattern discovery, cluster analysis, decision trees, regression, neural networks, memory-based reasoning, survival analysis, and genetic algorithms. Software used in the course includes, but is not limited to, JMP, Excel, Java, R, Python, and Minitab.

Prerequisites: Grades of C- or higher in CISC 130 or 131 and in MATH 109 or 112 or 113 and in DASC 240, STAT 333, or ECON 315.

DASC 420 Network Science & Graph Theory (4 credits)
This course provides a systematic approach to the use of network modeling in the understanding and prediction of complex social, technological, and biological systems such as the emergence of fake news, the exchange of information across network routers, and the spread of infectious diseases. There will be an emphasis on efficient numerical methods for describing, visualizing, constructing, and simulating processes across both directed and undirected networks that may be static or dynamic in nature. Prerequisites: CISC 130 or CISC 131 and DASC 240, STAT 303, or STAT 314

DASC 460 STAT & Data Science Practicum (4 credits)
This course provides students the opportunity to develop and pursue an advanced statistical data analysis with real world relevance and application. In addition to working with a faculty instructor, students are also given the opportunity to collaborate with professional mentors from various industries and to participate in national competitions. Previous sponsors include the Minnesota Department of Natural Resources, the Travelers Companies, U.S. Bancorp, SCOR Reinsurance, Drake Bank, and numerous professors from other departments at St. Thomas.
Prerequisites: Grade of C- or higher in DASC 360 and senior standing.

DASC 476 Experiential Learning (1 to 4 credits)

DASC 495 Individual Study (2 or 4 credits)

Digital Media Arts

Program Overview

College of Arts and Sciences, Department of Emerging Media

The Digital Media Arts program offers foundational and advanced skills and knowledge about the planning, creation, influence, and critique of media content such as media production, web design, image composition, game design, and emerging technologies. Digital Media Arts graduates will be able to analyze, produce, and develop audiovisual content in its digital media forms.

Students begin the major by learning foundational skills and theories in a combination of courses, giving them a broad understanding of media and society, visual media theory, and how stories are created and how audiences are persuaded by still and moving imagery.

Majors select an area of emphasis in either Media Production or Media Design. Media Production focuses primarily on the purposes, methods and processes for creating audio-visual messages in diverse mass media formats like television programs, documentaries, news, video games, interactive video, web video and live streaming, educational and social video, and promotions or advertising. Students take introductory and advanced courses in this discipline, including courses in film, video, and audio theory and production. Media Design focuses primarily on the purposes, methods and processes for creating still and interactive audio-visual content, including web design, print design, game design, user-friendly design, and creative coding. Some courses count for both tracks.

Digital Media Arts curriculum also draws on courses from many disciplines, including Journalism, Advertising and Public Relations, Computer Science, Communication Studies, Visual Arts, Performing Arts, Film Studies, English, and Music. Many courses in the major are cross-listed or have a home in those areas.

Digital Media Arts minors take the same foundational courses as majors and build on that foundation by taking additional courses in either or both concentrations.

This major emphasizes both the encoding and decoding sides of media literacy: how the circulation loop of media producers, content, and audiences create and shape our understanding of the world. Students experience working with clients in crafting creative media content for small and big screens, including projects like industrial videos, interactive web design, socially engaged games, projects involving community outreach, recruiting videos, promotions, advertisements, live events, documentaries, and short films.

Students learn to consider the purpose of a message, how to write or design its creative content, and how to produce that content using both basic media technologies like smartphones and advanced media technologies like EFP video cameras, drone cameras, and motion graphics applications.

While in these courses, students may get hands-on media experience with opportunities at UST at organizations like TommieMedia, KUST, the university's multimedia studio, the Playful Learning Lab, and STELAR.

All students will complete the program with a community-focused capstone project course, ensuring that they have a strong portfolio in preparation for career and personal life upon graduation as a media-savvy citizen, creator, and learner.

Students graduate with the essential skills needed to work in the digital arts: producing for visual media like film, television, and computer-based audio/video and interactive media. Students will have the skills needed to plan, coordinate, and execute media projects as producers and to evaluate media messages as consumers.

Major in Digital Media Arts

All majors must take at least 11 courses totaling 44 credits.

All students in the program must complete:

- DIMA/JOUR 111 Introduction to Mass Media +
- DIMA/JOUR 232 Visual Media in Theory and Practice +
- DIMA 240 Digital Imagery and Sound (WI)
- DIMA 480 Capstone: Digital Media for the Common Good (WID)

Electives in Digital Media Arts (16 credits):

No more than 8 elective credits can come from a single non-Emerging Media (JOUR, STCM, or DIMA) subject code. Electives can include individual study, experiential learning, study abroad or topics courses. At least one elective 4-credit course must be at the 300/400 level.

- AMCD 200 American Culture: Power and Identity
- ARTH 204 Typography and Visual Culture
- ARTH 206: A Cultural History of Photography
- ARTH 304 Typeface Design
- CISC 131 Introduction to Programming and Problem Solving
- CISC 360 Data Visualization
- CLAS 225 The Classical Hero in Myth and Film
- COMM 326 Comm. & Popular Culture
- COMM 332 Documentary in American Culture
- COMM 340 TV Criticism
- DIMA 246 Game Design
- DIMA 256 Graphic Design
- DIMA 259 Creative Coding
- DIMA 262 Audio Production
- DIMA 312 Motion Graphics and Digital Visual Effects
- DIMA 342 Media, Culture and Society
- DIMA 346 Game Production
- DIMA 358 Web Design
- DIMA 360 Videography
- DIMA 456 Graphic Design Studio
- DIMA 460 Advanced Videography
- DIMA 475 Experiential Learning 2 cr
- DIMA 476 Experiential Learning 2 cr
- DIMA 477 Experiential Learning 4 cr
- DIMA 478 Experiential Learning 4 cr
- DIMA 487 Topics 2 cr
- DIMA 488 Topics 2 cr
- DIMA 489 Topics 4 cr
- DIMA 490 Topics 4 cr
- DIMA 491 Research 2 OR 4 cr
- DIMA 495 Individual Study 2 OR 4 cr
- ENGL 204 Texts in Conversation: Perspectives on Language, Culture and Literacy
- ENGL 255 Intro to Imaginative Writing
- ENGL 294 Writing Video Games
- ENGL 322 Writing Fiction
- FILM 200 Intro to Film Studies
- FILM 297 Screenwriting
- FILM 300 World Cinema
- FILM 310 Filmmaking
- FREN 490 French Cinema
- JOUR 251 Multimedia Reporting
- JOUR 270 Media Literacy
- JOUR 330 Media History
- JOUR 336 Media Law
- JOUR 355 Sports Broadcasting
- JOUR 451 Advanced Multimedia Reporting
- MUSC 170 Music of Film
- MUSC 205 Advanced Studio Recording
- MUSP 110 Digital Music Lessons
- SPAN 415 Hispanic Cinema
- STCM 234 Principles of Strategic Communication
- STCM 250 Science, Media, and Social Impact
- STCM 344 Writing for Strategic Communication
- STCM 346 Digital Content & Strategy in Strat. Comm.

Students will also select a major concentration.

Media Production concentration

Required courses

- DIMA 262 Audio Production
- DIMA 360 Videography

- DIMA 460 Advanced Video Production

Media Design concentration

Required courses

- DIMA 256 Design Concepts
- DIMA 358 Web Design
- DIMA 456 Graphic Design Studio

Minor in Digital Media Arts

20 credits

All minors must take the following two required courses:

- DIMA/JOUR 111 Introduction to Mass Media
- DIMA 240 Digital Imagery and Sound

Minors must receive 4 credits in each of the following three categories:

1. DIMA-related theory course [select from the following]:

- AMCD 200 American Culture: Power and Identity
- ARTH 204 Typography and Visual Culture
- ARTH 206 A Cultural History of Photography
- CLAS 225 The Classical Hero in Myth and Film
- COMM 326 Comm. & Popular Culture
- COMM 332 Documentary in American Culture
- COMM 340 TV Criticism
- DIMA 232 Visual Media Theory and Practice
- DIMA 342 Media, Culture and Society
- ENGL 204 Texts in Conversation: Perspectives on Language, Culture and Literacy
- ENGL 255 Intro to creative Writing
- ENGL 322 Writing Fiction
- FILM 200 Intro to Film Studies
- FILM 300 World Cinema
- JOUR 270 Media Literacy
- JOUR 330 Media History
- JOUR 226 Media Law
- MUSC 205 Advanced Studio Recording
- SPAN 415 Hispanic Cinema
- STCM 234 Principles of Strategic Communication
- STCM 250 Science, Media and Social Impact

2. DIMA-related 200-level production course [select from the following]:

- DIMA 246 Game Design
- DIMA 256 Graphic Design
- DIMA 262 Audio Production
- DIMA 259 Creative Coding
- ENGL 294 Writing Video Games
- FILM 297 Screenwriting
- JOUR 251 Multimedia Reporting

3. Any additional DIMA-related 300/400-level production course [select from the following]:

- ARTH 304 Typeface Design
- CISC 360 Data Visualization
- DIMA 312 Motion Graphics and Digital Visual Effects
- DIMA 346 Game Production
- DIMA 358 Web Design
- DIMA 360 Videography
- DIMA 456 Graphic Design Studio
- DIMA 460 Advanced Videography
- DIMA 475 Experiential Learning 2 cr
- DIMA 476 Experiential Learning 2 cr
- DIMA 477 Experiential Learning 4 cr
- DIMA 478 Experiential Learning 4 cr
- DIMA 487 Topics 2 cr
- DIMA 488 Topics 2 cr
- DIMA 489 Topics 4cr
- DIMA 490 Topics 4cr
- DIMA 491 Research 2 OR 4 cr
- DIMA 495 Individual Study 2 OR 4 cr
- FILM 310 Filmmaking
- JOUR 355 Sports Broadcasting
- JOUR 451 Advanced Multimedia Reporting
- STCM 344 Writing for Strategic COmmunication
- STCM 346 Digital Content & Strategy in Strat. Comm.

Courses that are not currently on this list of electives for majors or minors may be accepted on a case-by-case basis by the program director. This list will be revised as courses are added to departments' curricula.

Minor in Game Design

20 credits

The Game Design minor provides skills, theoretical knowledge, and experience in making interactive digital media that they may apply to jobs in advertising, public relations, journalism, digital art, and the entertainment industries, among others. Digital games are critical to media culture, and they can do more than provide entertainment: teachers use games in their classrooms, news organizations create interactive experiences to explain complicated phenomena, and artists make game to

express personal stories and critique social issues. The wide and varied impact of games requires that we train game designers in the common good: courses in the minor address critical ethical questions regarding identity representation, accessibility for people with disabilities, and making games more inclusive, uplifting spaces.

The minor includes core courses: an introduction to game design theory and practice in DIMA 246 Game Design, principles of programming in CICS 131 Introduction to Programming and Problem Solving, and an upper-level course DIMA 346 Game Production. Students will also take additional elective courses that will allow them to broaden their understanding and application of game design as a digital media art.

Required courses:

- DIMA 246 Game Design (4 credits)
- CISC 130 or 131 Introduction to Programming and Problem Solving (4 credits)
- DIMA 346 Game Production [prerequisites: DIMA 246 and CISC 131, or instructor permission] (4 credits)

Eight credits from the following elective courses:

- DIMA 256 Design Concepts
- DIMA 262 Audio Production
- DIMA 358 Web Design
- ENGL 294 Writing Video Games

The following stipulation applies only to Digital Media Arts majors looking to minor in Game Design: No more than eight (8) credits may overlap between the Game Design minor and DIMA major. Note: For Media Design majors these will be DIMA 256 and 358, meaning the required courses for the minor cannot count towards DIMA electives. For Media Production majors these will most likely be DIMA 262 and 246.

Students may not seek both a DIMA minor and a Game Design minor. They would need to choose one or the other.

Courses that are not currently on this list of electives for the minor may be accepted on a case-by-case basis by the program director. This list will be revised as courses are added to departments' curriculum. For example, ENGL 204 or DIMA 298 could be accepted as minor electives if the subject matter of these topics-oriented courses aligned with the goals of the minor.

Co-Major of Film Studies and Media Production

This co-major includes core courses in both theory and practice in the areas of Film Studies and Media Production along with electives and a capstone. See Film Studies and Media Production Co-Major.

Digital Media Arts Undergraduate Courses

DIMA 111 Intro to Mass Media (4 credits)
This course will introduce the student to mass media, including news media, social media and entertainment media. The course examines the mass media as cultural industries. Students will consider how the mass media shape and are shaped by society, the history of particular media, current research and media trends. Students will be expected to obtain an understanding of how print, broadcast, social, film and other media work, as well as a sense of their influence. Students are also expected to learn to be critical media consumers, asking themselves why they watch or read or listen to what they do. Students are strongly encouraged to take this course before taking upper-level Journalism or Digital Media Arts courses. The course is cross listed as JOUR 111 and STCM 111.

DIMA 199 LD Digital Media Arts Elective (1 to 4 credits)

DIMA 232 Visual Media Theory & Practice (4 credits)
Introduction to the history, theory and principles of communicating visually through art, illustration, photography, design, typography, film, video and other visual forms. Cross-listed as JOUR 232.

DIMA 240 Digital Imagery and Sound (4 credits)
This class provides a foundation for producing digital photographs, videos and sound recordings that will enable the student to create a wide range of media texts, including journalistic multimedia stories, documentary films, dramatic or comedic productions, and audio productions. The class covers the basics of digital information, basic equipment operation, basic composition for still and moving images, high quality sound recording and basic digital editing, including digital storage and workflow. Students learn how to create digital media with an eye on technique and aesthetic quality.

DIMA 243 Individual Study (1 TO 4 credits)

DIMA 246 Game Design (4 credits)
This course will introduce students to fundamental theories of game design and the practice of creating video games. Students will learn digital tools for video game creation, such as familiarity with an introductory-level game creation engine. Students will engage in ethical questions in design and how video games can contribute to the common good.

Course content will explore the expressive possibilities of games as cultural productions.

DIMA 256 Graphic Design (4 credits)
This course has been developed to provide students with an elementary understanding of graphic design elements and principles. Applied projects in illustration, typography, and publication design will be completed via software applications.

DIMA 259 Creative Coding (4 credits)
This course examines the application of new and emerging technologies in creative and interactive media production and development. Modern audiovisual, music, and interactive projects benefit from the expressive use of coding, visual programming environments, microcontrollers, sensors, data visualization, data sonification, automated fabrication, and open-source platforms. As technologies advance, these tools have become more common, less expensive, and easier to use. Students will put several of these recent technologies into practice through several assignments including a final project publicly exhibited or performed at the end of the class.

DIMA 262 Audio Production (4 credits)
An introduction to audio production. Students will produce projects digitally that are designed to acquaint them with genres, styles and production techniques. Production planning, scripting, the use of sound effects, field production, multitrack recording, mixing and editing are covered.

DIMA 298 Topics (4 credits)

DIMA 299 LD Digital Media Arts Elective (1 to 4 credits)

DIMA 312 Motion Graphics & DV Effects (4 credits)
This course is an introduction to principles of motion graphics and digital visual effects in digital media arts, as utilized in professional and creative media industries. Students will use industry-standard design tools for motion design, video animation and compositing. Course covers fundamentals of motion design, keyframing, matting and masking, audio integration, effects, 3D space and compositing of elements suitable to design for interactive and linear media. This course explores core processes in conceptualizing and executing motion graphics and composite sequences. Students will work with footage, still images, and audio assets to create content in web media, commercial and broadcast video, program or game titling, and other visual media content suitable to their professional goals.

DIMA 342 Media, Culture and Society (4 credits)
Media, Culture and Society examines the role media play in social and cultural formations. This course looks beyond the media as transmitters of information to their broadest social and cultural effects. Students study media as agents of enlightened social modernism, as political and economic institutions, as purveyors of popular culture, and as aspects of cultural and sub-cultural rituals. History, political economy, critical studies, cultural anthropology, semiotics and sociology are among the areas from which approaches for studying the media are considered in the course. Prerequisite: Junior standing or permission of instructor

DIMA 346 Game Production (4 credits)
Students will apply game design concepts through a production and practice-focused course. Students will work as individuals and as teams to produce games from the perspective of designers. The course will also explore ethical issues of game design and work through projects to imagine how games can contribute to the common good. Competence in an introductory-level game engine and basic programming skills are required. Prerequisites: DIMA 246 and CISC 131 or permission from the instructor.

DIMA 358 Web Design (4 credits)
This course teaches students HTML and Web-page production. The goal is to help students develop strategies for writing, editing, designing and publishing a Website that meets professional standards.

DIMA 360 Videography: TV Prod in Field (4 credits)
This course will examine the aesthetic and technical components associated with producing video projects outside of the television studio. Students will examine current theory and practice of field production and will engage in the conceptualization, execution and analysis of field- produced video. Prerequisite: DIMA 240 or permission of instructor

DIMA 399 UD Digital Media Arts Elective (1 to 4 credits)

DIMA 456 Media Design Studio (4 credits)
Graphic Design Studio is an advanced graphic design course. Students study the history of graphic design and typography, the elements of fine typography, techniques in interactive media / web design, and create projects suitable for their portfolio. Prerequisite: DIMA 256 or DIMA 258

DIMA 460 Advanced Video Production (4 credits)
This course will examine advanced aesthetic and technical components associated with producing and directing video projects individually and as a part of production teams. Students will examine

current theory and practice of emerging media production and will engage in the conceptualization, execution and analysis of advanced video production. Prerequisite: DIMA 360 or permission of instructor. Prerequisite: DIMA 360

DIMA 476 Experiential Learning (1 TO 4 credits)

DIMA 480 Digital Media for Common Good (4 credits)
This class represents the culmination of learning in the program and provides a capstone involving the planning and creation of a large-scale digital media project within the student's area of emphasis and a professional demo reel or portfolio, including components dealing with the ethical responsibilities of media producers and how the student's work reflects those responsibilities. It is required of all majors. Prerequisite: Senior Standing

DIMA 495 Individual Study (2 TO 4 credits)

Economics

Program Overview

College of Arts and Sciences, Department of Economics

O'Shaughnessy Education Center (OEC) Fourth Floor, (651) 962-5675

Hartmann (chair), Aliakbari, Bedsworth, Kim, Kreitzer, Langan, L., Langan, T., Papagapitos, Rho, Saavedra, Schipper, Walrath, Wilson, Wisniewski, Wu

Department Website:
https://cas.stthomas.edu/departments/areas-of-study/economics/index.html

The economics program develops a logical, consistent and rigorous method of thinking about the world and its problems. The economic way of thinking can be applied to a wide variety of topics including inflation, unemployment, financial markets, international trade, poverty, income inequality, currency depreciation, monopoly power, bank failures, sports, budget deficits and health-care costs.

The Department of Economics offers two majors and a minor in economics. All three programs are designed to provide excellent career-entry skills and those skills providing preparation for possible career shifts.

Whether a major or minor in economics is pursued, students are strongly encouraged to complement their studies with work in other fields. In recent years, for example, graduates have done complementary coursework in such fields as mathematics, foreign languages, business, environmental studies, computer science, international studies and English.

The choice of major and of a complementary field depends upon the path the student wishes to pursue. For example, students pursuing a liberal arts major, wishing to double major, or who are interested in continuing studies in professions other than economics would likely find the Bachelor of Arts (B.A.) best suited to their needs. Students wishing to engage the discipline at a deeper level would find the Bachelor of Science (B.S.) a better alternative.

Students graduating with a major in economics will be able to integrate the tools and concepts of the discipline in the analysis of an economic issue. The background provided by this major should equip the student with sound preparation for career advancement.

The core for each degree consists of five economics courses and two allied requirements. The B.A. requires three additional electives of the student's choosing. The B.S. has four possible paths. Each path requires three specified electives, two additional electives of the student's choosing, and additional allied requirements suitable to the different paths.

Students wishing to pursue graduate study in economics should consider the path in Mathematical Economics. Students interested in international affairs should consider the path in International Economics. Students seeking an economics degree supplemented with additional technical skills and an introduction to the business field or who are looking towards an eventual MBA degree should consider the Business Economics path. Finally, students wishing to pursue careers in the government sector or graduate study in public policy should consider the path in Public Policy Economics.

Majors must complete a minimum of twenty credits in economics at St. Thomas. Minors must complete a minimum of twelve credits in economics at St. Thomas.

Economics Honor Society

Omicron Delta Epsilon, the international fraternity in economics, was organized at St. Thomas in 1967. Candidates must have completed at least sixteen credits in economics and have an average of 3.40 or better in both economics and their overall work.

Economics Honors Program

Candidates for honors in economics must complete an honors thesis under the supervision of an economics faculty member. A committee composed of the faculty supervisor and two other faculty members chosen by the student will read each thesis. Each member of the committee will determine if the thesis is suitable for the honors requirement, with a majority rule determining honors designation. Candidates must achieve a grade-point average of 3.75 or higher in the major and 3.5 or higher overall. To be eligible, students must complete a minimum of 32 non-research credits in Economics.

Teacher Education

Elementary Education with a Specialty in Social Studies (5-8)

Co-major in Social Studies (5-12) and a Co-major in Secondary Education

See Education

Major in Economics (B.A.)

B.A. in Economics -

- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- ECON 315 Introduction to Econometrics (4 credits)
- ECON 351 Macroeconomic Theory (4 credits)
- ECON 352 Microeconomic Theory (4 credits)

Plus:

- Twelve credits in courses numbered 300 and above.

Note: Students are strongly encouraged to take ECON 315, 351 and 352 by the end of the junior year.

Allied requirements

Four credits from the following:

- MATH 109 Calculus with Review II (4 credits)
- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Note: While all of these options will provide students with the necessary preparation for the major, students interested in data analysis-intensive careers or an advanced degree in Economics are advised to complete additional math courses beyond what is needed for the major. For these students, the MATH 109 or MATH 113 options provide a more direct path to additional mathematics courses.

Plus a C- or higher in one of the following:

- DASC 120 (or DASC 111 and 112) Introduction to Computational Statistics (4 credits)
- STAT 303 Statistics for the Applied Sciences (4 credits)
- STAT 313 Probability (4 credits) and STAT 314 Mathematical Statistics (4 credits)

Major in Economics (B.S.)

- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- ECON 315 Introduction to Econometrics (4 credits)
- ECON 351 Macroeconomic Theory (4 credits)
- ECON 352 Microeconomic Theory (4 credits)

Note: Students are strongly encouraged to take ECON 315, 351 and 352 by the end of the junior year.

Plus:

- A set of courses in one of the four paths below: **Business, International, Public Policy**, or **Mathematical.**

Allied Requirements

Four credits from the following:

- MATH 109 Calculus with Review II (4 credits)
- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Note: While all of these options will provide students with the necessary preparation for the major, students interested in data analysis-intensive careers or an advanced degree in Economics are advised to complete additional math courses beyond what is needed for the major. For these students, the MATH 109 or MATH 113 options provide a more direct path to additional mathematics courses.

Plus a C- or higher in one of the following:

- DASC 120 (or DASC 111 and 112) Introduction to Computational Statistics (4 credits)
- STAT 303 Statistics for the Applied Sciences (4 credits)
- STAT 313 Probability (4 credits) and STAT 314 Mathematical Statistics (4 credits)

Major Path: Business Economics

Business Economics - A path which emphasizes additional tools for analyzing business situations as well as incorporating a basic foundation in the field of business.

- ECON 311 Forecasting (4 credits)
- ECON 332 Industrial Organization (4 credits)
- ECON 401 Managerial Decision Making (4 credits)

Plus:

- Eight credits in elective economics courses numbered 300 or above

Plus:

- ACCT 100 Principles of Accounting I (4 credits)
- ACCT 200 Principles of Accounting II (2 credits)
- FINC 310 Core Financial Management (2 credits)

Plus:

- Four additional credits at the 200 level or higher within the following Business Administration areas: ACCT, BETH, BLAW, ENTR, FINC, MGMT, MKTG, OPMT, and REAL. These four credits will be chosen in consultation with the student's economics advisor.

Major Path: International Economics

International Economics - A path which prepares students for careers in which an understanding of the complexities of cultural differences and international economic relationships is crucial.

Twelve credits from the following:

- ECON 345 Economics of Development and Growth (4 credits)
- ECON 346 Country and Area Studies in Economics (4 credits)
- ECON 341 Open Economy Macroeconomics (4 credits)
- ECON 342 International Trade (4 credits)

Plus:

- Eight credits in elective economics courses numbered 300 or above (ECON 346 can only be included one time in fulfillment of the path requirement, and not as one of the additional electives)

Plus:

- A minor in a foreign language or significant study abroad experience approved by the department chair

Major Path: Mathematical Economics

Mathematical Economics - A path which prepares students for the core competencies necessary for graduate study in economics.

- ECON 355 Game Theory (4 credits)
- ECON 418 Mathematical Economics (4 credits)

Plus four credits from the following:

- ECON 301 History of Economic Thought (4 credits)
- ECON 337 Economics of the Public Sector (4 credits)
- ECON 339 Labor Economics (4 credits)

Plus:

- Eight credits in elective economics courses numbered 300 or above

Plus:

- MATH 114 Calculus II (4 credits)
- MATH 200 Multi-Variable Calculus (4 credits)
- MATH 240 Linear Algebra (4 credits)

Note: STAT 333 Predictive Modeling may be substituted for ECON 311

Students applying to graduate school are advised to complete MATH 240 prior to submitting their application.

Major Path: Public Policy Economics

Public Policy Economics - A path which prepares students for careers in the government or non-profit sectors, or for graduate study in public policy.

- ECON 337 Economics of the Public Sector (4 credits)

Plus eight credits from the following:

- ECON 324 Health Economics (4 credits)
- ECON 333 Regional and Urban Economics (4 credits)
- ECON 370 Environmental and Natural Resource Economics (4 credits)

Plus:

- Eight credits in elective economics courses numbered 300 or above

Plus:

- POLS 104 American Government in Comparative Perspective (4 credits)
- POLS 205 Citizen Participation and Public Policy (4 credits)

Plus:

- Four credits in elective political science courses numbered 300 through 319

Minor in Economics

- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)

Plus four credits from the following:

- ECON 351 Macroeconomic Theory (4 credits)
- ECON 352 Microeconomic Theory (4 credits)

Plus:

- Twelve credits in elective economics courses numbered 300 and above.

Economics Undergraduate Courses

ECON 110 Explore Econ with Data Viz (2 credits) The purpose of this course is to explore economic topics by using and creating data visualizations. In this course, students will learn fundamentals of data visualization, including how to make clear and informative tables and graphs and when different types of visualizations are most appropriate. These skills are valued in a variety of settings, including in business, international organizations, government agencies, or nonprofits, and can help students use big data to promote the common good. This course is appropriate for students new to economics, but also for students experienced in economics but who wish to gain a deeper understanding of data visualizations. Among the anticipated data visualization course offerings will focus on economics and social problems, sports, international trade, and managerial economics.

ECON 120 Data Mgmt for Econ Analysis (2 credits) In this course, students will explore how data can be used to examine a range of topics in economic research (e.g., health care, education, poverty, immigration, finance, international trade). In doing so, students will acquire skills in data management (e.g., acquisition, preparation, transformation) that support effective economic analysis. Students will also gain economic insights from working with real-world data, which could apply to a wide range of disciplines and organizational settings that utilize economic-based decision making (e.g., government, business, non-profit, policy research).

ECON 130 Quantitative Data Literacy (2 credits) How are quantitative claims misunderstood and misrepresented? Every day, we are exposed to quantitative claims from a variety of sources, including advertising, politics, and the media. However, these claims vary in their degree of validity, accuracy, and even honesty. The ability to critically evaluate quantitative data is an essential skill for people in a variety of roles—as students, professionals, and members of society. Therefore, the purpose of this seminar is to encourage and equip students—from all fields and disciplines—to be both good consumers and producers of quantitative data analysis by learning how to better detect, understand, refute, and avoid generating invalid, inaccurate, or dishonest quantitative claims. Prerequisites: DASC 112, DASC 120, STAT 314, or STAT 303

ECON 211 Current Economic Issues (4 credits) Poverty, health care, tax reform, international trade, crime, income inequality, inflation, and business mergers are some of the contemporary topics that raise interesting questions for public policy and economic analysis. This course will focus on a series of these macroeconomic and microeconomic topics. The goal is to develop economic concepts and analytical tools within a context of direct application to economic issues. Consideration of equity or fairness will be included in discussions of public policy. Student preferences will be considered in selecting many of the issues. Not open to students who have completed ECON 251 or 252.

ECON 243 Individual Study (2 or 4 credits)

ECON 251 Prin of Macroeconomics (4 credits)
An introduction to macroeconomics: national income analysis, unemployment, price stability, and growth; monetary and fiscal policies; international trade and finance; application of economic theory to current problems. Students who enroll in this course are expected to be able to use high-school algebra.

ECON 252 Prin of Microeconomics (4 credits)
An introduction to microeconomics: theory of household (consumer) behavior, theory of the firm, market structures, market failures, economic efficiency, factor markets, and income distribution. Students who enroll in this course are expected to be able to use high-school algebra.

ECON 269 Research (2 or 4 credits)

ECON 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ECON 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ECON 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ECON 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ECON 301 Hist of Economic Thought (4 credits)
A survey of the content and method of economics and an analysis of the theories of the great economists from the ancient Greeks to the present; mercantilism, physiocracy, the classical school and its critics, particularly Marx; the marginalist school; Alfred Marshall and Keynes, recent developments in economic thought. Prerequisites: ECON 251 and 252

ECON 311 Forecasting (4 credits)
An introduction to techniques used in forecasting with emphasis on analyzing economic and business data. The emphasis is on timeseries data, although cross-sectional analysis is also covered. Techniques presented include variants of moving averages, variants of exponential smoothing, regression and ARIMA processes. Prerequisites: ECON 251 and 252 and a grade of C- or higher in DASC 120, 201, MATH 303, or STAT 314.

ECON 315 Econometrics/Causal Inference (4 credits)
An introduction to the application of statistical models and methods to economic problems; simple and multiple linear regression models; generalized least-squares; model building and related topics. Emphasis is on use of econometric software to analyze data and to test hypotheses. Prerequisites: Eight credits of ECON at the 300- or 400-level, and MATH 109, 111, or 113, and a grade of C- or higher in one of the following: DASC 120, DASC 112, STAT 303, or STAT 314.

ECON 321 Law and Economics (4 credits)
The relationship between legal and economic aspects of selected issues: property rights, liability laws, product-safety legislation, discrimination, crime control, and related topics. Prerequisites: ECON 251and 252 or permission of instructor

ECON 324 Health Economics (4 credits)
This course provides an application of economic principles to the health care system and health policy topics with the focus on the critical economic issues in producing, delivering and financing health care. The course focuses on the U.S. health care sector but will also feature discussion of other developed and developing countries. Prerequisite: ECON 252

ECON 326 Industry Studies (4 credits)
This course provides an analysis of a particular industry or sector of the U.S. economy. Among the topics included in the analysis will be: identification and description of the industry in question, past and present performance of the industry, the importance of the industry within the national and global economy, the level of competition present in the industry, and the role of government in this industry. Among the anticipated course offerings are Agricultural Economics, Economics of the Arts, and Transportation Economics. Prerequisites: ECON 251 and 252

ECON 327 Sports Economics (4 credits)
The application of industrial organization, public finance, labor economics, and economic history to the sports entertainment industry with a view toward better understanding the many economic issues in sports, such as Major League Baseball's antitrust exemption, the deontological and consequentialist bases for the public subsidation of sports stadiums, and the underpayment of salaries to professional athletes in North America. Prerequisite: ECON 252.

ECON 331 Economic Inequality (4 credits)
Economic Inequality focuses on two types of inequality often studied by economists: income and wealth inequality. The course will illustrate how inequality in the U.S. has evolved over time, and how it compares to other countries. It puts particular emphasis on using data and modeling to explain the origins of inequality and explore the impacts of policies aimed to address it. The course highlights how inequality relates to demographics such as race, gender, and education. Finally, it explores hard questions about whether inequality is unavoidable, whether it matters, and what can be done about it. Prerequisites: ECON 251 and ECON 252

ECON 332 Industrial Organization (4 credits)
Relationship between market structure, behavior and performance of business enterprises; government intervention and regulation; antitrust and other public-policy issues. Prerequisites: ECON 251 and 252

ECON 333 Regional & Urban Economics (4 credits)
Principles underlying the location of economic activity; land-use patterns; transfer cost; location and structure of urban areas; growth of cities and regions; urban and regional problems and policies. Prerequisite: ECON 252

ECON 335 Money,Fin Market,Economy (4 credits)
The nature, evolution, and functions of money; the role of depository financial institutions; structure of financial markets; principles of central banking; monetary theory and monetary policy; introduction to international banking and finance. Prerequisites: ECON 251 and 252

ECON 337 Econ of the Public Sector (4 credits)
This course examines the role of government in a modern economy. It develops a set of concepts that will allow students to evaluate policy alternatives. The following are among the particular topics likely to be addressed: externalities and environmental protection, education, the redistribution of income, health care, social insurance, taxation and tax reform, cost-benefit analysis, fiscal federalism, and state and local government finance. In each case, the focus is on whether intervention by government is appropriate, what the most effective form of any such intervention is, and how alternative policy interventions affect the private decisions made by citizens and business firms. Prerequisite: ECON 252

ECON 339 Labor Economics (4 credits)
Labor supply and demand; determinants of the wage structure; education and training decisions; the role of labor unions; mobility and migration, discrimination; public policies in labor markets. Prerequisite: ECON 252

ECON 341 International Monetary Systems (4 credits)
This course presents the framework necessary to understand international financial flows and open-economy macroeconomics. Upon completion of the course, students are expected to have a solid understanding of the workings of foreign exchange markets, balance of payments, exchange rate determination and regimes, optimum currency areas and policy coordination in an open economy. Prerequisites: ECON 251 and 252.

ECON 342 International Trade (4 credits)
This course examines the economics of International trade and trade policy. Topics include: theories of why countries trade and their implications for income distribution and gains from trade; implications of national trade policies; strategic trade policy; regional agreements (including multilateral trade agreements, free trade areas, customs unions, common markets and economic unions); international factor movements; trade issues related to developing countries, the environment of economic growth. Prerequisites: ECON 251 and 252

ECON 345 Economic Development/Growth (4 credits)
Nature and measures of economic growth and development; theories of growth; developed and less-developed nations; economic planning; selection and financing of projects for economic growth and human development; environment, resources, and limits to growth. Prerequisites: ECON 251 and 252

ECON 346 Country & Area Studies (0 to 4 credits)
An analysis of the economic system(s) of a particular country or region of the world. Among the topics included in the analysis will be: functioning of key sectors of the system; the role of government in the economy; the resource base; the income distribution; trade and financial relations with other countries; contemporary economic issues and policies; past and present economic performance. Course offerings are anticipated for Japan, Russia, European Union, Latin America, China and Australia. Students may take this course more than once provided the specific country/region is not duplicated. Prerequisites: ECON 251 and 252

ECON 351 Macroeconomic Theory (4 credits)
Theories of money, interest, income and expenditure, employment, and inflation; monetary and fiscal policies; introduction to the theory of growth. Prerequisites: ECON 251 and 252

ECON 352 Microeconomic Theory (4 credits)
Analysis of consumer behavior and demand theory;

theory of production and costs; analysis of the firm and industry under various market structures; factor pricing; general equilibrium. Selected additional topics such as market failure, economics of information, welfare economics, income distribution. Prerequisites: ECON 251, 252 and MATH 109 or 111 or 113 or equivalent.

ECON 355 Game Theory (4 credits)
Game theory seeks to explain how rational people make decisions when outcomes are mutually interdependent. This course introduces the methods of game theory from a historical perspective with primary emphasis on applications to economics. Applications to the other social sciences, business and biology are also considered. Topics covered include: normal and extensive forms of games, strict and weak dominance, sub-game perfections, pure and mixed strategies, Nash equilibrium, bargaining, oligopoly, New Keynesian and Classical Economics, trade policy, environmental economics and conflict resolution. Prerequisites: ECON 251 and 252, plus completion of the core curriculum mathematics requirement.

ECON 370 Envr & Nat Resource Econ (4 credits)
This course employs economic principles to analyze the problems of environmental pollution and natural-resource depletion. Economic systems, such as the private-market mechanism, are evaluated with respect to their effectiveness in the management of natural resources and the environment. Domestic and international environmental policies are examined and critiqued. Prerequisite: ECON 252

ECON 389 Research (2 or 4 credits)

ECON 393 Individual Study (2 or 4 credits)

ECON 395 Topics (2 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ECON 396 Topics (2 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ECON 397 Topics (2 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ECON 398 Topics (2 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ECON 401 Managerial Decision Making (4 credits)
Microeconomic theory applied to business decision making. Emphasis on quantitative techniques applied to business decision making under uncertainty, demand and cost estimation, linear production models, pricing decisions, capital budgeting, inventory problems, and group decision making. Quantitative tools include linear regression, statistical decision analysis and linear programming. Prerequisites: ECON 352 and a grade of C- or higher in one of the following: DASC 120, DASC 112, MATH 303, or STAT 314; or permission of the instructor.

ECON 418 Mathematical Economics (4 credits)
Introduction to a mathematical treatment of models of economic behavior; economic content includes consumer theory, theory of the firm and selected topics in macroeconomics. Prerequisites: ECON 352, and MATH 200 or MATH 114 with permission of instructor

ECON 476 Experiential Learning (1 to 4 credits)

ECON 478 Experiential Learning (0 credits)

ECON 483 Seminar (2 credits)

ECON 484 Seminar (2 credits)

ECON 487 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ECON 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ECON 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ECON 491 Research (2 or 4 credits)

ECON 495 Individual Study (2 or 4 credits)

English

Program Overview

College of Arts and Sciences, Department of English

John Roach Center for the Liberal Arts (JRC) 333, (651) 962-5600

Muse (Chair), Batt, Bouwman, Brorby, Callaway, Chowdhury, Craft-Fairchild, Davis, Gardiner, Ghimire, Herrera, James, Larson, Lawrence, Li, MacKenzie, Pane, Renee, Scheurer, Tankersley, Wilkinson, Zebuhr

English Department Web Site: https://cas.stthomas.edu/departments/areas-of-study/english

In the English program at St. Thomas, students find joy in studying literature and writing while honing their skills as critical and creative thinkers. They work with top-notch faculty who are master teachers and engaged scholars. Mentoring students is the keystone of our department.

Our graduates have excellent job placement rates in the fields of editing, publishing, marketing, business, and communication. Their success reflects broader trends in the labor market. At St. Thomas, English majors have opportunities to gain practical experience through tutoring, participating in internships, engaging in collaborative research with faculty, and editing our literary magazine, the *Summit Avenue Review*. Our students have high rates of acceptance into law school and other graduate programs.

We offer undergraduate specializations in Creative Writing, Literature & Writing, Professional Writing, and English with a Secondary Education Emphasis (5-12), as well as minors in English, Creative Writing, Professional Writing, and Narrative Medicine. Students can also apply for admission to our accelerated BA/MA Program, which enables them to receive both degrees in five years. A major, co-major, or minor in English signals to employers that graduates have advanced communication skills and can solve problems creatively. These are exactly the skills that are most prized by employers in the modern workplace (National Association of Colleges and Employers, Job Outlook Survey, 2023).

The Department of English offers four concentrations.

1. The Major in English with a Literature and Writing Emphasis provides students with broad exposure to literature in historical contexts, within and across national traditions and theoretical frameworks, and in relation to other intellectual and artistic disciplines, along with writing for scholarly and professional purposes in both traditional and digital forms.
2. The Major in English with a Creative Writing Emphasis gives students a foundation of study in literary history and genre along with a sequence of writing courses focused on poetry, fiction, creative nonfiction, and other creative writing genres in both traditional and digital forms.
3. The Major in English with a Professional Writing Emphasis gives students a foundation of study in rhetorical concepts and the ethics, methods, and genres of professional writing. They gain instruction and practice in writing in a wide range of genres and media, and for purposes and audiences within organizational settings such as nonprofits, for-profits, government, and grassroots organizations.
4. The Major in English with a Secondary Education Emphasis (5-12) prepares students for teaching middle and secondary school through coursework in literature, linguistics, writing, and writing pedagogy. This major also requires additional coursework from the Department of Teacher Education and the Department of Communication Studies. Successful completion of these requirements will lead to eligibility for a 5-12 Communication Arts and Literature license in the state of Minnesota.

In addition to its four major concentrations, the department also offers 16-credit minors in (1) English, (2) Creative Writing and (3) Narrative Medicine.

The four major concentration areas consist of 44 credits each, including the core curriculum English course. The department offers courses for non-majors to fulfill various core areas, including Integrations in the Humanities; Global Perspectives; Diversity, Inclusion, and Social Justice; and Signature Work.

English majors and minors are encouraged to study abroad. Specific courses taken abroad may substitute for St. Thomas requirements. For program options, see the chair of the department, a study abroad advisor in the Office of Study Abroad, or International & Off-Campus Programs in the front section of this catalog.

English Honor Society

Sigma Tau Delta, the national English honor society, brings together students and faculty with a love of literature, language, and writing; it sponsors a

variety of scholarships, holds regional and national conventions, and provides a forum for both creative and critical writing. Students who have a grade point average of at least 3.0 in English courses, rank at least in the highest 35 percent of their class in general scholarship, and have completed at least three semesters of college are eligible to apply for membership.

Majors in English

- ENGL 121: Critical Thinking: Literature and Writing (4 credits)
  or ENGL 190 Advanced Critical Thinking: Literature and Writing (4 credits)*

* Open to students with qualifying standardized test scores or high school GPA.

- ENGL 280: Introduction to English Studies (4 credits)
- ENGL 405, 481 or ENGL 482: Capstone Seminar (4 credits)
- Select an Emphasis in:
  - Literature and Writing
  - Creative Writing
  - Professional Writing
  - Secondary Education Emphasis (5-12)

All English majors should complete 44 credits in English and maintain a GPA of 2.0 in their English coursework. A minimum of 16 credits in English at or above ENGL 211 must be taken at St. Thomas.

Major in English: Creative Writing Emphasis

44 credits

All English with Creative Writing emphasis majors should complete 44 credits in English and maintain a GPA of 2.0 in English. A minimum of 16 credits in English at or above ENGL 201 must be taken at St. Thomas.

Eight credits of required coursework:

- ENGL 121: Critical Thinking: Literature and Writing (4 credits) or ENGL 190: Advanced Critical Thinking: Literature and Writing (4 credits)
- ENGL 280: Introduction to English Studies (4 credits)

Sixteen credits from the following writing courses:

- ENGL 255 Introduction to Creative Writing (4 credits)
- ENGL 321 Writing Poetry (4 credits)*
- ENGL 322 Writing Fiction (4 credits)*
- ENGL 323 Writing Creative Nonfiction (4 credits)*
- ENGL 326 Topics in Creative Writing (4 credits)*
- ENGL 405 Advanced Poetry, Fiction, or Creative Nonfiction Writing (4 credits)**
- ENGL 421 Literary Magazine Practicum, Part I (2 credits)**
- ENGL 422 Literary Magazine Practicum, Part II (2 credits)

*Prerequisite: ENGL 255
**Prerequisite: ENGL 321, 322, 323

Note: The creative writing sequence normally includes:

- first – ENGL 255
- then – ENGL 321 and/or ENGL 322 and/or 323 and/or ENGL 326
- then – ENGL 405

Plus
Four credits from Historical Perspectives

- ENGL 211 British Authors I (4 credits)
- ENGL 212 British Authors II (4 credits)
- ENGL 214 American Authors I (4 credits)
- ENGL 215 American Authors II (4 credits)
- ENGL 217 Multicultural Literature (4 credits)
- ENGL 218 Women in Literature: Critical History (4 credits)
- ENGL 220 The Classical Tradition (4 credits)
- ENGL 221 The Modern Tradition (4 credits)
- ENGL 222 Catholic Literary Tradition (4 credits)

Four credits from Genre Studies

- ENGL 324: Genre Studies (4 credits)
- ENGL 325: Special Topics in Genre, Region, or Theme [some sections or topics only] (4 credits)
- ENGL 327: Major Literary Genre (4 credits)
- ENGL 390: Major Literary Figures in Context (4 credits) [some sections and topics only]
- ENGL 395: Issues in Literature, Language, and Culture (4 credits) [some sections and topics only]

Four credits from the following Literature Courses

- ENGL 201 or above (includes ENGL 202, 203, 204, 211, 212, 214, 215, 217, 218, 220, 221, 222, 230, 231, 232, 297, 324, 325, 327,

334, 337, 341, 360, 361, 362, 364, 365, 366, 367, 370, 371, 372, 373, 390, and 395)

- Eight Elective ENGL Courses
- Any ENGL class not taken above

Course-level requirements

- At least 12 credits numbered ENGL 201-299 (note: 4 of these credits must be from ENGL 280)
- At least 16 credits numbered ENGL 300-399
- At least 4 credits numbered ENGL 400-499

Major in English: Literature and Writing Emphasis

44 credits

Twelve credits of required coursework:

- ENGL 121: Critical Thinking: Literature and Writing (4 credits) or ENGL 190 Advanced Critical Thinking: Literature and Writing (4 credits)
- ENGL 257: The Literary Imagination (4 credits) or ENGL 280: Introduction to English Studies (4 credits)
- ENGL 481 or ENGL 482: Capstone Seminar (4 credits)

Approaches and Methods Requirements:

Four credits of Historical Perspectives

- ENGL 211: British Authors I (4 credits)
- ENGL 212: British Authors II (4 credits)
- ENGL 214: American Authors I (4 credits)
- ENGL 215: American Authors II (4 credits)
- ENGL 217: Multicultural Literature (4 credits)
- ENGL 218: Literature by Women: Critical History (4 credits)
- ENGL 220: The Classical Tradition (4 credits)
- ENGL 221: The Modern Tradition (4 credits)
- ENGL 222: Catholic Literary Tradition (4 credits)

Four credits of Contexts and Convergences

- ENGL 325: Special Studies in Genre, Region, or Theme (4 credits)
- ENGL 334: Literature from a Christian Perspective (4 credits)
- ENGL 337: The Literature of Human Diversity (4 credits)
- ENGL 341: Literature by Women: Critical Questions (4 credits)
- ENGL 360: Chaucer and the Medieval Period (4 credits)
- ENGL 361: Shakespeare and the Early Modern Period (4 credits)
- ENGL 362: Milton and Seventeenth-Century British Literature (4 credits)
- ENGL 364: Eighteenth-Century British Literature (4 credits)
- ENGL 365: Romantic Literature (4 credits)
- ENGL 366: Victorian Literature (4 credits)
- ENGL 367: Twentieth-Century British Literature (4 credits)
- ENGL 370: Colonial and Early American Literature (4 credits)
- ENGL 371: Nineteenth-Century American Literature (4 credits)
- ENGL 372: Modern American Literature (4 credits)
- ENGL 373: Contemporary American Literature (4 credits)
- ENGL 390: Major Literary Figures in Context (4 credits)
- ENGL 395: Issues in Literature, Language, and Culture (4 credits)

Four credits in Genre Study

- ENGL 255: Introduction to Imaginative Writing (4 credits)
- ENGL 321: Writing Poetry (4 credits)*
- ENGL 322: Writing Fiction (4 credits)*
- ENGL 323: Writing Creative Nonfiction (4 credits)*
- ENGL 324: Genre Studies (4 credits)
- ENGL 325: Special Studies in Genre, Region, or Theme [some sections or topics only] (4 credits)
- ENGL 326: Topics in Creative Writing (4 credits)*
- ENGL 327: Major Literary Genres (4 credits)
- ENGL 390: Major Literary Figures in Context [some sections and topics only] (4 credits
- ENGL 395: Issues in Literature, Language, and Culture [some sections and topics only] (4 credits)

*Prerequisite: ENGL 255

Four credits in Theory and Practice

- ENGL 300: Theory and Practice of Writing (4 credits)

- ENGL 304: Analytical and Persuasive Writing (4 credits)
- ENGL 305: Linguistics (4 credits)
- ENGL 311: Theory and Practice of Literary Criticism (4 credits)
- ENGL 314: Professional Editing (4 credits)
- ENGL 315: Topics in Professional Writing (4 credits)

Area literature requirements:

Four credits in Early American Literature

- ENGL 214 American Authors I (4 credits)
- ENGL 370 Colonial and Early American Literature (4 credits)
- ENGL 371 Nineteenth-Century American Literature (4 credits)
- ENGL 390 Major Literary Figures in Context [some sections and topics only] (4 credits)
- ENGL 395 Issues in Literature, Language, and Culture [some sections and topics only] (4 credits)

Four credits in Early British Literature

- ENGL 211: British Authors I (4 credits)
- ENGL 360: Chaucer and the Medieval Period (4 credits)
- ENGL 361: Shakespeare and the Early Modern Period (4 credits)
- ENGL 362: Milton and Seventeenth-Century British Literature (4 credits)
- ENGL 364: Eighteenth-Century British Literature (4 credits)
- ENGL 365: Romantic Literature (4 credits)
- ENGL 390: Major Literary Figures in Context [some section and topics only] (4 credits)
- ENGL 395: Issues in Literature, Language, and Culture [some sections and topics only] (4 credits)

Four credits in Diversity Literature

- ENGL 217 Multicultural Literature (4 credits)
- ENGL 218 Literature by Women: Critical History (4 credits)
- ENGL 337 The Literature of Human Diversity (4 credits)
- ENGL 341 Literature by Women: Critical Questions (4 credits)
- ENGL 390 Major Literary Figures in Context [some sections and topics only] (4 credits)
- ENGL 395 Issues in Literature, Language, and Culture [some sections and topics only] (4 credits)

Students should take 16 credits in literature, chosen from among the following: 201, 202, 203, 204, 211, 212, 214, 215, 217, 218, 220, 221, 222, 230, 231, 255, 297, 298, 324, 325, 327, 334, 341, 337, 341, 360, 361, 362, 364, 365, 366, 367, 370, 371, 372, 373, 390, 395.

Major in English with Professional Writing Emphasis

44 credits

Twenty credits of required coursework

- ENGL 121 Critical Thinking: Literature and Writing (4 credits) or ENGL 190 Advanced Critical Thinking: Literature and Writing (4 credits)*
- ENGL 256 Introduction to Professional Writing (4 credits)
- ENGL 280 Introduction to English Studies (4 credits)
- ENGL 350 Tech Writing: Practice & Research (4 credits)
- ENGL 482 Capstone Seminar: Pre-Professional Emphasis (4 credits)

Eight credits from the following Professional Writing courses

- ENGL 314 Professional Editing (4 credits)
- ENGL 315 Topics in Professional Writing (4 credits) (Credit may be earned more than once for different emphases.)

Four credits in Diversity Literature

- ENGL 217 Multicultural Literature (4 credits)
- ENGL 218 Literature by Women: Critical History (4 credits)
- ENGL 337 The Literature of Human Diversity (4 credits)
- ENGL 341 Literature by Women: Critical Questions (4 credits)
- ENGL 390 Major Literary Figures in Context [some sections and topics only] (4 credits)
- ENGL 395 Issues in Literature and Culture [some sections and topics only] (4 credits)

Four credits in Creative Writing

- ENGL 255 Introduction to Creative Writing (4 credits)
- ENGL 321 Writing Poetry (4 credits)*
- ENGL 322 Writing Fiction (4 credits)*
- ENGL 323 Writing Creative Nonfiction (4 credits)*

- ENGL 326 Topics in Creative Writing (4 credits)*

*Prerequisite: ENGL 255

Four Elective Credits from any of the Following or an Appropriate Course of the Student's Choice Approved by the Department Chair

- ENGL 201 or above (4 credits)
- CISC 120: Introduction to Programming & Problem Solving: Sciences (4 credits)
- CISC 130: Introduction to Programming & Problem Solving (4 credits)
- COMM 212: Communication Criticism (4 credits)
- COMM 320: Organizational Communication (4 credits)
- COMM 370: Intercultural Communication (4 credits)
- DIMA 232: Visual Media Theory & Practice (4 credits)
- ECON 110: Exploring Economics with Data Visualization (2 credits)
- ECON 120: Data Management for Economic Analysis (2 credits)
- ENTR 340: Social Entrepreneurship (4 credits)
- JPST 250: Introduction to Justice and Peace Studies (4 credits)
- MKTG 200: Introduction to Marketing (2 credits)
- MKTG 201: Application in Marketing (2 credits)
- SOCI 350: Social Inequality (4 credits)
- SOWK 430: Leadership, Advocacy & Fundraising (4 credits)

Additional Requirements

- Four credits in additional English coursework

Course-Level Requirements

- At least 12 credits numbered ENGL 211-299 (note: 8 of these credits must be from ENGL 280 and ENGL 256)
- At least 16 credits numbered ENGL 300-399
- At least 4 credits numbered ENGL 400-499

All English with Professional Writing emphasis majors should complete 44 credits in English and maintain a GPA of 2.0 in English. A minimum of 16 credits in English at or above ENGL 211 must be taken at St. Thomas.

Major in English: Teacher Education Emphasis (5-12)

- ENGL 121: Critical Thinking: Literature and Writing (4 credits)
  or ENGL 190: Advanced Critical Thinking: Literature and Writing (4 credits)
- ENGL 211: British Authors I (4 credits)
  or ENGL 212: British Authors II (4 credits)
- ENGL 214: American Authors I (4 credits)
  or ENGL 215: American Authors II (4 credits)
- ENGL 217: Multicultural Literature (4 credits)
  or ENGL 218: Literature by Women: Critical History (4 credits
- ENGL 220: The Classical Tradition (4 credits)
  or ENGL 221: The Modern Tradition(4 credits)
- ENGL 280: Introduction to English Studies (4 credits)
- ENGL 300: Theory and Practice of Writing (4 credits)
- ENGL 305: Linguistics: English Language (4 credits)
- ENGL 327: Major Literary Genres (4 credits)
- ENGL 361: Shakespeare and the Early Modern Period (4 credits)

Four additional credits:

EITHER in English at the 300 or 400 level, or COMM 326: Communication and Pop Culture or COMM 328: Communication of Race, Class, and Gender.

Students seeking licensure in Communication Arts and Literature (5-12) must also complete the following courses in Communication Studies: COMM 212, COMM 326, COMM 366, and the EDUC courses listed under Teacher Education for Communication Arts and Literature (5-12)*. Students who also take COMM 100 will obtain a minor in Communication Studies. See Education.

Combined Bachelor of Arts and Master of Arts in English

The English Department offers a combined Bachelor of Arts/Master of Arts degree program for exceptional current and incoming English majors. Students in the program complete graduate-level coursework during the spring semester of their senior year and complete their B.A. and M.A. in just five years. This program is available for both the Literature and Writing and Creative Writing

concentrations in the English major. For more information, contact the English Department Chair.

Minors in English

Minor in English

Our most flexible minor option, the Minor in English, allows students to explore their curiosity and build their knowledge through their choice of any four English courses numbered ENGL 201 or above. (Note: some courses have prerequisites.)

The minor in English consists of twenty credits:

- ENGL 121 or 190
- Sixteen credits numbered ENGL 201-490

A minimum of eight credits in English at or above ENGL 201 must be taken at the University of St. Thomas

Minor in Narrative Medicine

16 credits

Narrative Medicine humanizes healthcare by training professionals to listen to the stories of human beings: stories of the patient, the healthcare professional, and the cultures and systems in which they live. It is designed to improve the quality of care for patients and to deepen healthcare professionals' empathy and understanding. This minor complements students' science curriculum with a set of four courses in literature, creative writing, and professional writing or communication. The courses teach practices of narrative medicine: close reading of and attentive listening to trauma and illness narratives and the stories of those marginalized by institutions and social policies; reflective and analytical writing in healthcare contexts; creativity and expressive writing; and communicating across cultures with empathy and compassion.

- ENGL 230 Narrative Medicine (4 credits)
- 12 credits in literature, creative writing, professional writing, and/or communication studies

Literature:

- ENGL 217 Multicultural Literature
- ENGL 218 Literature by women: Critical Histories
- ENGL 337 Literature of Human Diversity
- ENGL 341 Literature by Women: Critical Questions

Creative writing:

- ENGL 255 Introduction to Creative Writing

Professional writing:

- ENGL 317 Writing for Health and Human Sciences

Communication Studies:

- COMM 220 Interpersonal Communication
- COMM 242 Health Communication
- COMM 328 Communication of Race, Class and Gender
- COMM 370 Intercultural Communication

Other courses may be substituted with approval of the chair of English / Communication Studies.

*This minor is only available for non-English majors.

Minor in Creative Writing

The minor in Creative Writing allows students to cultivate writing skills in multiple genres. Along with rigorous coursework in creative writing and literature, we offer opportunities to study the full range of English studies, including professional writing, editing, and publishing.

In addition to studying a variety of literary forms, students take a three-course sequence focusing on the development of their own creative work. Students may choose from courses in poetry, fiction, and creative nonfiction, as well as special topics courses such as writing for children and young adults, creative writing and new media, and a practicum course in design and publication of a literary magazine.

16 credits

At least 12 credits from the following writing courses:

- ENGL 255: Introduction to Imaginative Writing: Writing Poetry, Fiction, and Creative Nonfiction (4 credits, fall/spring)
- ENGL 321: Writing Poetry (4 credits)
- ENGL 322: Writing Fiction (4 credits)
- ENGL 323: Writing Creative Nonfiction (4 credits)
- ENGL 326: Topics in Creative Writing (4 credits)
- ENGL 405: Advanced Poetry, Fiction, or Creative Nonfiction Writing (4 credits)
- ENGL 421: Literary Magazine Practicum, Part I (2 credits)

- ENGL 422: Literary Magazine Practicum, Part II (2 credits)

plus 4 credits

- any English course at or above the 200 level (this may be another creative writing class)

Creative Writing Majors are not eligible for a minor in Creative Writing.

Minor in Professional Writing

Professional Writing is clear, usable writing that helps others get work done in the world, and it's everywhere! With the professional writing minor, students develop the foundational skills needed to craft writing that audiences can easily understand and use, no matter what discipline or career field they're interested in. They have many opportunities to apply their skills writing a diverse array of documents for diverse audiences. This might include genres like one-page explainers, reports, proposals, promotional materials, social and digital content, and more. They will also identify how research, like usability testing or content auditing, can make writing and reading experiences better for users.

In addition to the required gateway course, ENGL 256: Introduction to Professional Writing, students choose two courses that cover specialized topics in professional writing and one elective course to expand the skills in their writing toolbox. Some courses may partner with an organization in the community, giving students experience navigating a real-world writing situation.

The Professional Writing Minor (20 credits)

- 4 credits in ENGL 121 or 190
- 4 credits in ENGL 256 Introduction to Professional Writing
- 8 credits from the following courses
    - ENGL 314: Professional Editing (4 credits)
    - ENGL 315: Topics in Professional Writing (4 credits) (Credit may be earned more than once for different emphases)
    - ENGL 317: Writing in the Health and Human Sciences (4 credits)
    - ENGL 318: Business Writing (4 credits)
    - ENGL 350: Technical Writing: Practice & Research (4 credits)
- Plus 4 credits from any of the following:
    - ENGL 201 or above (4 credits)
    - CISC 130: Introduction to Programming & Problem Solving in the Sciences (4 credits)
    - CISC 131: Introduction to Programming & Problem Solving (4 credits)
    - COMM 212: Communication Criticism (4 credits)
    - COMM 320: Organizational Communication (4 credits)
    - COMM 370: Intercultural Communication (4 credits)
    - DIMA 232: Visual Media Theory & Practice (4 credits)
    - ECON 110: Exploring Economics with Data Visualization (2 credits)
    - ECON 120: Data Management for Economic Analysis (2 credits)
    - ENTR 340: Social Entrepreneurship (4 credits)
    - JPST 250: Introduction to Justice and Peace Studies (4 credits)
    - SOCI 350: Social Inequality (4 credits)

English Undergraduate Courses

ENGL 110 Intensive Writing (4 credits)
The course provides students with intensive practice in writing, enabling them to adapt to the demands of differing rhetorical contexts. Emphasis on understanding writing processes and learning to respond thoughtfully to writing at various stages. Critical reading will be practiced as an integral part of the writing process. Prerequisite: participation in the Academic Development Program

ENGL 121 Critical Thinking: Lit/Writing (4 credits)
Students will read and write about literary texts critically and closely. The course emphasizes recursive reading and writing processes that encourage students to discover, explain, question and clarify ideas. To this end, students will study a variety of genres as well as terms and concepts helpful to close analysis of those genres. They will practice various forms of writing for specific audiences and purposes. Students will reflect on and develop critical awareness of their own strengths and weaknesses as readers and writers. The writing load for this course is a minimum of 12 pages of formal revised writing.

ENGL 190 Adv Crit Thinking: Lit&Writing (4 credits)
English 190 is a core course in literature and writing for specially qualified students who show greater aptitude and preparation than typical first-year students or those whose pre-matriculation credits cover some, but not all, of the content of ENGL 121. The learning goals are the same as those for ENGL

121; however, writing, critical thinking, and textual analysis are taught at a higher level and with increased complexity in this course.

ENGL 201 Perspectives on Genre & Craft (4 credits)
This course examines the conventions of, and development within, a literary genre during a specific period or across literary history. It may also explore the particular choices made by writers working in several genres and the effects of those choices on us as readers. The course will examine both the conventions and innovations practiced by writers working within one or more genres or periods, and may include study of the authors' reflections on their own work and the work of their fellow writers. The writing load for this course is a minimum of 15 pages of formal revised writing.

ENGL 202 Interdisciplinary Perspectives (4 credits)
This course examines a body of literary texts in the framework of a discipline other than literary or English studies per se--e.g., the physical or social sciences, religion/theology, history, the other arts. The writing load for this course is a minimum of 15 pages of formal revised writing.

ENGL 203 Thematic/Intertextual Perspect (0 OR 4 credits)
With its focus on thematic and intertextual perspectives, the readings in this course might be ordered any number of ways: according to theme, an idea that develops across genres or literary periods, or by their incorporation of specific oral or textual precedents (e.g. mythology, the Bible, classical writings, legends, or folklore). The writing load for this course is a minimum of 15 pages of formal revised writing.

ENGL 204 Perspect on Language/Cult/Lit (4 credits)
This course examines artifacts of language and literature in their function as social and cultural phenomena. The course will explore angles of analysis appropriate to the study of one or more of the following: everyday language, public rhetoric, or the various forms of mass and popular culture (film, music, blogging/texting). The course may also examine essential but critically contested concepts such as literacy, culture, or literature. The writing load for this course is a minimum of 15 pages of formal revised writing.

ENGL 211 British Authors I (4 credits)
How have heroic ideals changed from Beowulf to the 18th century? How did marriage evolve from an arrangement between tribes and families to love between two people? Such questions will be explored in a chronological framework through extensive readings in the British literary tradition in the period from approximately 900-1780. Threaded throughout the literature are themes such as war and conflict, the history of love, humor and satire, social reform, religious reform and the rights of the individual. This course fulfills the Historical Perspectives requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 212 British Authors II (4 credits)
How has the category of "English literature" expanded as a result of global changes over the nineteenth and twentieth centuries? How have authors responded to fundamental upheavals in the individual, religion, the British Empire, the role of women, and the value of poetry and art? Such questions will be explored in a chronological framework through extensive readings in the British literary tradition from approximately 1789 to the present. Threaded throughout the literature are themes such as revolution and reform, authorship, war, nationality and race, and the relationships between literature and other arts. This course fulfills the Historical Perspectives requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 214 American Authors I (4 credits)
Where does the popular perception of America as the "New World" come from? How could slavery flourish in a land idealizing freedom? Why were immigrants so feared and reviled? Why did expansionism push out some and make millionaires of others? Such questions will be explored in a chronological framework through extensive readings from the beginnings of the American literary tradition to the turn of the twentieth century. Threaded throughout the literature are themes such as religious identity, political reform, race, slavery, war, gender, and industrialization. This course fulfills the Historical Perspectives requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 215 American Authors II (4 credits)
How did the modern warfare of World War I change those who fought and those who stayed at home? Why did so many of the best American artists flee to Paris? How did the traditionalism and stability of the 1950s lead to the radicalism and rebellion of the 60s? How has technology, from the typewriter to the internet, reshaped literature? Such questions will be explored in a chronological framework though extensive readings in American literature from the beginning of the twentieth century to the present. Threaded throughout the literature are themes such as progress and innovation, war, the "lost generation," the New Woman, race, and conformity and individuality. This course fulfills the Historical Perspectives requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 217 Multicultural Literature (4 credits)
What does it mean to be labeled an African American dramatist? A Latino/a poet? A transgender novelist? An Asian American essayist? A Native American environmental writer? How do the varied experiences and backgrounds of authors writing from diverse subject positions inform, mark, and/or transform their writing? How do the works of these writers fit into, conflict with, actively resist, or even redefine the American Literary canon as it has been traditionally understood? These questions and more will be explored in a chronological framework through extensive reading of literature from: a) American communities of color; b) postcolonial peoples; c) immigrant and/or diasporic peoples; or d) LGBTQ communities. This course will focus on the literary and cultural texts of one or more of these groups with an emphasis on the cultural, political, and historical contexts that surround them. This course fulfills the Historical Perspectives requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 218 Lit by Women:Critical Hist (4 credits)
From Sappho to Austen to Woolf to Morrison – women have been rendering the world into exquisite words for centuries. But how has the writing of women served as a critique of patriarchy? What impact has women's writing had on important cultural and political movements such as abolition, suffrage, and environmentalism? In what ways has the writing of women been more radical than polite, more aggressive than demure, more confrontational than deferential? How have women consistently defied the limiting expectations of them through the creation of some of the most experimental, risky, and defiant works of literature in existence? These questions and more will be explored in this course, which focuses on the history of literature by women. While it will concentrate mainly on British and American women writers, the course will also address the work of non-western writers. Ultimately, this course will examine gender and its role in both the composition and reading of literary texts. This course fulfills the Historical Perspectives requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 220 The Classical Tradition (4 credits)
What might it mean to speak of "the classical tradition?" What does that include and exclude? And how does it matter to us today? From the ancient Greek gods in their serenity to the howls of the damned in Dante's vision of the afterlife, whether mythological or theological, the works to be studied engage us in the most fundamental questions about what it means to be human. Such questions will be explored in a chronological framework through extensive readings of representative texts of Western literature in translation from ancient Greece to the Renaissance, including some interactions of the European traditions with ancient or medieval Asian, Mesopotamian, or Middle Eastern literatures. Authors may include Homer, Aeschylus, Sappho, Virgil, Dante, Rumi, Marie de France, and Christine de Pizan. This course fulfills the Historical Perspectives requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 221 The Modern Tradition (4 credits)
What might it mean to speak of "the modern tradition"? What does that include and exclude? And how does it matter to us today? How does the modern tradition help us understand about concepts such as authorship, originality, literacy, and literary excellence? Such questions will be explored in a chronological framework through extensive readings of representative texts of Western literature in translation from the seventeenth century through the present, including some interactions of the European traditions with modern African, Latin American, or Asian literatures. Authors may include Racine, Goethe, Flaubert, Dostoevsky, Rilke, Solzhenitsyn, Duras, Lispector, and Achebe. This course fulfills the Historical Perspectives requirement in the English major. Prerequisites: Prerequisites: ENGL 121 or 190.

ENGL 222 Catholic Literary Tradition (4 credits)
What makes a text a work of Catholic literature? How do Catholic writers struggle with the existential questions of meaning, purpose, or suffering in a unique fashion? How do the themes they engage—such as forgiveness, redemption, or the power of grace in the world—place them within the Catholic tradition? Is there a sacramental imagination or incarnational theology at the root of a work of Catholic literature? Such questions will be explored in a chronological framework through extensive readings of representative texts of Catholic literature in both English and translation from the medieval era through the present. This course fulfills the Historical Perspectives requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 230 Narrative Medicine (4 credits)
Increasingly, education for nurses, physicians, and other healthcare professionals includes the practices of reading literature, writing reflectively, and engaging in role-play to learn how to care for patients (and for themselves). This is sometimes called narrative medicine. By focusing on stories (of the patient, the healthcare professional, and the cultures and systems in which both live) and therefore humanizing the often-impersonal world of

the healthcare system, it improves the quality of care for patients and reduces burnout among healthcare professionals. In this course we will engage in practices of narrative medicine, reading and writing about literature as a means of understanding ourselves and others. The texts we'll read illuminate questions about pain and illness, empathy and the training of healthcare professionals, the health implications of racial and economic injustice, and the need for reformation of the healthcare system. Prerequisites: ENGL 121 or 190, or transfer equivalent

ENGL 231 Law and Literature (4 credits)
This course is focused on intersections and tensions between literature and the law. By analyzing literary and cinematic texts, students will explore the experiences of individuals living within imperfect systems of the law, especially the often-ambiguous relationship between innocence and guilt, right and wrong, justice and injustice. Reading and writing assignments will sharpen students' understanding of rhetoric and audience and will raise questions related to racial, gender, and economic justice particular to the practice of law within the United States and beyond. Texts may include Thomas Jefferson's Declaration of Independence, Henry David Thoreau's Civil Disobedience, Susan Glaspell's A Jury of Her Peers, Harriet Jacobs's Incidents in the Life of a Slave Girl, or Suzan-Lori Parks' Sally & Tom. The goal is to help students understand the ethical dimensions of law and prepare them to engage compassionately in professional practice. Prerequisites: ENGL 121 or 190, or transfer equivalent

ENGL 232 Sports and Social Justice (4 credits)
This course is focused on the multiplicities of narrative that are sport, with a special emphasis on American authors and U.S. sports journalism. Sports by definition are stories that literally play out in front of us: stories that involve conflict – conflict within the self, conflict in relationships, conflict against the elements, and, if we believe it possible, conflict with the supernatural. Through sports literature, students will thoughtfully investigate human interactions: the best we have to offer and sometimes the worst. Sports literature, whether that be fiction, non-fiction, drama, or poetry, asks us to consider what is just and what is unjust -- and how we discern which is which. Analytical and creative non-fiction writing assignments put students in thoughtful conversation with the ways that race, ethnicity, gender identity, sexual orientation, religion, class, disability, or other underrepresented or marginalized positions affect our engagement with sports and our world. Prerequisites: ENGL 121 or 190, or transfer equivalent.

ENGL 243 Individual Study (2 OR 4 credits)

ENGL 251 Writing in the Academy (4 credits)
This course focuses on principles of effective academic writing. Attention will be paid to strategies for development, patterns of organization, and rhetorical concerns such as voice, audience, purpose and style. Students will consider conventions of academic discourse, both as they are shared and as they vary across disciplines. Prerequisites: ENGL 121 or 190.

ENGL 255 Intro to Creative Writing (4 credits)
This course introduces students to the craft of creative writing, focusing on three broad genres: poetry, fiction, and creative nonfiction. Students learn how various forms (e.g., free verse, the sonnet, narrative) have developed and evolved historically and within various contexts (cultural, political, social)—and by extension, what it means to write in these forms today. They receive instruction in setting, character, voice, point of view, literal and figurative imagery, rhythm and sound patterns, and literary structures; and practice writing in all three genres. Assignments include close readings of literary texts that model craft techniques, weekly writing exercises that encourage exploration and development of craft, and workshop discussions to develop students' analytic and critical skills. For English majors, it fulfills the Genre Study requirement. Prerequisite: ENGL 121 or 190.

ENGL 256 Intro to Professional Writing (4 credits)
This course introduces students to principles and skills necessary for writing in professional settings. It includes study of rhetoric, ethics, and information design in workplace writing; examination of the roles of professional writers; close readings of texts and documents that model professional techniques; and practice composing in a variety of professional genres. The course will include instruction in ethical communication, rhetorical context, document design, communication technologies, precision, concision, and tone. This course fulfills the Theory and Practice requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 257 The Literary Imagination (4 credits)
Poets and neuroscientists agree that the human mind is essentially literary; it depends on narrative imagining, on story. In this course we ask questions like what it means to have a literary imagination, and how a literary imagination uses language to create worlds, generate beauty, expose injustice, and envision new possibilities for individual and collective change. We also identify the kinds of conversations the discipline of literary studies has historically had about literature, such as about its definition, why it is organized into genres, how those

genres work, how we read and write about literature, and why we care about it. Prerequisites: ENGL 121 or 190, or transfer equivalent

ENGL 269 Research (2 OR 4 credits)

ENGL 280 Intro to English Studies (4 credits)
This gateway course into the English major and the minor is an introduction to (a) literary tools, techniques, and terminology for reading and writing in English studies; (b) the history of English Studies as a discipline and the intellectual concepts and critical debates that have shaped the field; and (c) the practices of English Studies, from close reading and analysis of literary and critical texts to interpretation and scholarly research. Prerequisites: ENGL 121 or 190.

ENGL 294 Writing Video Games (4 credits)
As video games have become increasingly complex, there's a stronger need than ever for video game writers and narrative designers. But what is a narrative designer? In this course, students will study how professionals write video games and then attempt to do so themselves. Using a variety of simple-to-learn programs, students will collaborate in small development teams in addition to writing their own meaningful video games. Examples such as GONE HOME or UNDERTALE will be analyzed in class. Prerequisites: ENGL 121 or 190

ENGL 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online. Prerequisite: ENGL 121 or 190.

ENGL 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online,. Prerequisite: ENGL 121 or 190.

ENGL 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online. Prerequisite: ENGL 121 or 190.

ENGL 300 Theory& Practice of Writing (4 credits)
This course introduces students to current writing, rhetorical, and pedagogical theory, and helps them develop a vocabulary for talking about writing and strengthen their abilities to write and to assist others in developing their academic literacy. Students will practice writing in a variety of forms such as academic writing, professional writing, experimental writing, and writing with particular attention to social justice. Required for secondary licensure in communication arts and literature students. This course fulfills the Theory and Practice requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 304 Analytical/Persuasive Writing (4 credits)
This course examines rhetorical strategies used in published writing, focusing in particular on the roles of analysis and persuasion in the writing process. Students will strengthen their own writing through various projects and possible partnerships with community organizations with an eye toward the writing they will be doing upon graduation. This course fulfills the Theory and Practice requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 305 Linguistics: English Lang (4 credits)
ENGL 305 is an introduction to the systematic study of the structure and use of the English language, with an emphasis on connections between academic linguistics and relevant social and educational questions. Students will study the English sound system through phonetics and phonology, word formation processes through morphology, and structures and meanings of clauses through syntax and semantics. Throughout the process of learning the linguistic tools to describe the English language, students consider variations of structures and uses in different varieties of English and critically engage with issues related to linguistic difference. With the linguistic toolkit introduced in the class, students will examine instances of language use in various social contexts, addressing the intersections of language and aspects of diversity including race, ethnicity, gender, political perspective, and citizenship. This course fulfills the Theory and Practice requirement in for the English with Literature and Writing major and is a required course for English with Secondary Education majors. Prerequisites: ENGL 121 or 190.

ENGL 311 Theory & Prac of Lit Criticism (4 credits)
This course engages students in the study, reading, and writing of literary criticism. Emphasis may be placed on historical periods of criticism, schools of thought, modes of writing, or the application of theories, such as Marxist, feminist, postcolonial, psychoanalytic, or eco-critical to literary works. This course fulfills the Theory and Practice requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 314 Professional Editing (4 credits)
This course focuses on current theories, practices, and conventions of professional editing in the field of English studies. This includes discussion of broad questions relating to authorship, textuality, and the role of the editor, as well as hands-on practice

introducing, annotating, and copyediting literary texts. Students will learn techniques for ensuring consistent, accurate copy, including the use of style sheets and guides. They will also learn how to track and manage editorial projects. The course will include guest lecturers from the community as well as practice managing real-world editing assignments. This course fulfills the Theory and Practice requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 315 Topics in Pro. Writing (4 credits)
This course provides intensive study and practice in a particular area of professional writing. All sections concentrate on learning professional terminology and conventions and on writing for specific audiences and purposes. The focus of genre and study will vary for each section offered; credit may be earned more-than once under this number for different emphases. This course fulfills the Theory and Practice requirement in the English major. Prerequisite: ENGL 121 or 190.

ENGL 317 Writing for Health/Human Sci (4 credits)
This course focuses on the rhetorical principles and writing practices necessary for producing effective documents and materials within human health and medical contexts. Students will gain experience producing such genres as patient information materials, personal statements, reviews, and reports. Readings will include scientific, academic, and popular texts as well as digital sources. The curriculum is informed by collaborative work with faculty members in health and science fields as well as current research in rhetoric and professional writing. Although this course is most relevant for students in the College for Health, the School of Nursing, and students pursuing a narrative medicine minor or postgraduate careers in health and medicine, no specific medical knowledge is required to take this course. Prerequisites: ENGL 121 or 190, or transfer equivalent and 80 completed credits

ENGL 318 Business Writing (4 credits)
In ENGL 318, students will develop writing practices to help them successfully communicate in business and professional contexts. Students will learn about genres of writing commonly used in professional environments while refining the rhetorical skills necessary to navigate new or organization-specific communication situations they might encounter. The course curriculum is informed by current research in rhetoric and professional writing and is guided by the needs and practices of business, industry, as well as society at large. The course will task students with applying writing practices to diverse communication scenarios, which may include the following: writing correspondence to connect with internal and external audiences; summarizing information concisely; creating messaging and content for digital audiences; engaging in revision and project management processes; and generating cohesive materials to be used in a job search. Prerequisites: ENGL 121 or ENGL 190

ENGL 321 Writing Poetry (4 credits)
This intermediate course explores traditional and innovative patterns of poetry writing. Emphasis on experimentation with a variety of techniques and development of individual voice. This course will include critique sessions, readings to broaden possibilities of form and subject, and individual instruction. Open to students with some previous experience in writing poetry. This course fulfills the Genre Study requirement in the English major. Prerequisite: ENGL 255 or permission of instructor.

ENGL 322 Writing Fiction (4 credits)
This intermediate course explores traditional and innovative patterns of fiction writing. Emphasis on experimentation with a variety of techniques and development of individual voice. This course will include critique sessions, readings to broaden possibilities of form and subject, and individual instruction. This course fulfills the Genre Study requirement in the English major. Prerequisite: ENGL 255 or permission of instructor.

ENGL 323 Writing Creative Nonfiction (4 credits)
This intermediate course explores traditional and innovative patterns of creative nonfiction writing. Emphasis on experimentation with a variety of techniques and development of individual voice. This course will include critique sessions, readings to broaden possibilities of form and subject, and individual instruction. This course fulfills the Genre Study requirement in the English major. Prerequisites: ENGL 255 or permission of instructor.

ENGL 324 Genre Studies (4 credits)
This course will study literature in terms of form, with explicit attention given to the concept and practice of genre—whether one or more, traditional or emerging, from various canonical or non-canonical traditions, print or emerging digital literacies, etc. Credit may be earned more than once under this number for different emphases. This course fulfills the Genre Study requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 325 Spec Study:Genre,Reg,Theme (4 credits)
This course will offer an intensive focus on a body of literature defined by its association with a special genre, locale, or theme. Such specialized topics as the epic poem, contemporary autobiography, Minnesota literature, or Genesis in literature might

be studied. Students will also consider relevant critical approaches and issues. Credit may be earned more than once under this number for different emphases. Some sections of this course fulfill the Genre Study requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 326 Topics in Creative Writing (4 credits)
This intermediate course explores traditional and innovative topics and forms of imaginative writing. Emphasis on experimentation with a variety of techniques and development of literary voices. The focus of genre and writing for each section offered will vary. Some examples of possible topics include Postmodern Poetry Forms, Writing Magical Realism, Contemporary Autobiography, and Submersion Journalism. This course will include peer review, readings to broaden possibilities of form and subject, and individual instruction. This course fulfills the Genre Study requirement in the English major Prerequisites: ENGL 255 or permission of the instructor.

ENGL 327 Major Literary Genres (4 credits)
Study of major literary genres (poetry, drama, fiction, essays). Consideration of the varying definitions, boundaries, and formal properties of these genres, as well as the historical and cultural contexts in which they developed and in which they continue to function. Readings may include some examples of emergent, experimental, or mixed literary genres as well. Prerequisites: ENGL 121 or ENGL 190.

ENGL 334 Lit from Christian Perspective (4 credits)
This course provides an in-depth exploration of how literature engages Christian thought, experience, and practice and how a reader engages works of imaginative literature from an intellectually serious Christian perspective. The course will also provide an introduction to theories in the interdisciplinary field of religion and literature. Religious themes studied will come from a variety of literary forms, including those of myth, history, parable, short story, essay, children's literature, poem, and novel. The literature chosen may reflect a variety of cultural backgrounds so that, among other things, we may consider how meaning may be affected by changes in worldview. Specific topics vary; accordingly, credit may be earned more than once for this course number. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 337 The Lit. of Human Diversity (4 credits)
This course provides an in-depth exploration of literatures that focus intensively on topics related to race, ethnicity, nation, class, gender, and/or sexual orientation. It examines questions related to how these literatures fit in "the canon" and how they speak to or inform each other, which critical approaches are relevant for studying these literatures, how issues of power and privilege are connected to our understanding of these literatures, and what provocations and concerns emerge from the study of these literatures. Specific topics vary; accordingly, credit may be earned more than once for this course number. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 341 Lit by Women:Crit Questions (4 credits)
This course will offer an in-depth exploration of a select body of women's writing, organized by period, genre, or theme. As a Women's Studies course, it will examine diverse situations of women, nationally or globally, and discuss strategies of social change. Examples might include women, sport, and the body in literature; women writers and celebrity in the Victorian era; female independence and female friendship; or women writing about exile. Specific topics vary; accordingly, credit may be earned more than once for this course number. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 350 Tech Writing: Practice & Rsrch (4 credits)
This course will familiarize students with theories and practices of technical writers and explore opportunities for students in technical writing careers and graduate studies. Assigned projects will help students learn how technical writers are responsible for both creating content and also managing it across various digital systems. Topics will include user experience, content management, content operations, information design, single-source authoring, and other areas that become relevant as the field of technical writing expands. By articulating concepts integral to the field and by enacting them in diverse rhetorical situations and for diverse audiences, students will be better positioned to apply for technical writing positions or to graduate programs in technical and professional communication. Prerequisites: ENGL 256, ENGL 314, or ENGL 315 or instructor permission

ENGL 360 Chaucer & Medieval Period (4 credits)
This course provides an in-depth exploration of a select group of texts or authors of the British Middle Ages, a time of international literary culture, transformation of the English language, courtly love, and the Crusades. Alongside the work of Chaucer, the selected texts or authors will be studied in terms of a particular historical, cultural, or other context, or in terms of a convergence with authors or texts from other literary traditions or intellectual disciplines. Examples might include the role of the knight,

religious controversy and the Inquisition, love and marriage, cross-Channel influences such as Marie de France and Dante, medieval women writers, and literatures of revolt. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 361 Shakespeare & Early Modern (4 credits)
This course provides an in-depth exploration of a select group of texts or authors from British literature of the Renaissance or early modern era, a time of religious schism, early British imperialism, the rebirth of the classical world, and the birth of the professional theatre in England. Alongside the work of Shakespeare, the selected texts or authors will be studied in terms of a particular historical, cultural, or other context, or in terms of a convergence with authors or texts from other literary traditions or intellectual disciplines. Examples might include Shakespeare and the rise of the Renaissance theatre; Elizabethan writers and the Islamic world; Shakespeare and the idea of the human in the drama, sonnet, and personal essay; your brain on Shakespeare: cognitive literary studies. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 362 Milton & 17th Cent Brit Lit (4 credits)
This course provides an in-depth exploration of a select group of texts or authors from British literature of the seventeenth century, a time of English civil war and the upheaval of national identity, political satire, metaphysical poetry, and scientific inquiry. Alongside the work of John Milton, the selected texts or authors will be studied in terms of a particular historical, cultural, or other context, or in terms of a convergence with authors or texts from other literary traditions or intellectual disciplines. Examples might include Revolution to Restoration in British Literature, women and the stage in seventeenth-century Britain, Paradise Lost and its cultural history. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 364 18th Century British Lit (4 credits)
This course provides an in-depth exploration of a select group of texts or authors from British literature of the eighteenth century, a time of exploration that launched industrialization, capitalism, the slave trade, imperialism, and the police force and prisons, as well as the vibrant new genres of the novel, biography, and the first comprehensive dictionary. Selected texts or authors (such as Behn, Defoe, Fielding, Pope, Haywood, and Austen) will be studied in terms of a particular historical, cultural, or other context, or in terms of a convergence with authors or texts from other literary traditions or intellectual disciplines. Examples might include bawdy dramas vs. elegant novels of manners, "secret histories" of disguise and mistaken identity, criminal biographies and moral philosophy, and how to choose a marriage partner. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 365 Romantic Literature (4 credits)
This course provides an in-depth exploration of a select group of texts or authors from British literature of the Romantic period, 1789-1837, a time of scientific and industrial revolutions, national independence and reform movements, passions and interiority, suffering genius-artists, the first science fiction, Regency "romances," and Byronic heroes. Selected texts or authors (such as Wollstonecraft, Blake, Wordsworth, Scott, Byron, Austen, the Shelleys, and the Brontë sisters) will be studied in terms of a particular historical, cultural, or other context, or in terms of a convergence with authors or texts from other literary traditions or intellectual disciplines. Examples might include Transatlantic Romanticism; what is a poet?; Romantic science and the birth of science fiction; the Byron-Shelley Circle and writing communities. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 366 Victorian Literature (4 credits)
This course provides an in-depth exploration of a select group of texts or authors from British literature and culture of the Victorian age, 1837-1901, a time of expansion of the British Empire, religious doubt, Darwinism, the periodical press, and the New Woman. Selected texts or authors (such as Dickens, Christina Rossetti, Wilde, and George Eliot) will be studied in terms of a particular historical, cultural, or other context, or in terms of a convergence with authors or texts from other literary traditions or intellectual disciplines. Examples might include Victorian novels and the popular press, Victorian detectives, the Aesthetic Movement in literature and art. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisite: ENGL 121 or 190.

ENGL 367 20th Century British Lit (4 credits)
This course provides an in-depth exploration of a select group of texts or authors from British literature of the twentieth and early twenty-first century, an era of world wars, new technologies, changing literacies, women's suffrage, modernism and the avant-garde, globalization and post-colonizing, and postmodernism. Selected texts or

authors (such as Yeats, Woolf, Derek Walcott, J. M. Coetzee, and Zadie Smith) will be studied in terms of a particular historical, cultural, or other context, or in terms of a convergence with authors or texts from other literary traditions or intellectual disciplines. Examples might include postcolonial British literature and film, modernism across the arts, writing war across the twentieth century, literature in the age of mechanical reproduction, the twentieth-century manifesto. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 370 Colonial/Early Amer Lit (4 credits)
This course provides an in-depth exploration of a select group of texts or authors from American Literature from the period of European discovery and colonization through the first decades following American independence. Selected texts or authors (such as Native American oral tales, John Winthrop, Anne Bradstreet, Mary Rowlandson, and Jonathan Edwards) will be studied in terms of a particular historical, cultural, or other context, or in terms of a convergence with authors or texts from other literary traditions or intellectual disciplines. Examples might include native voices in early American literature; poetry, journals, and the religious experience in colonial New England; representations of and responses to the slave trade in Colonial America; captivity narratives as literature and ideology; the myth of the wilderness. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 371 19th Century American Lit (4 credits)
This course provides an in-depth exploration of a select group of texts or authors from 19th-Century American Literature, a time of national expansion, civil war and restoration. Selected texts and authors (such as Emerson, Hawthorne, Zitkala-Ša, Melville, Douglass, Dickinson, James) will be studied in terms of a particular historical, cultural, or other context, or in terms of a convergence with authors or texts from other literary traditions or intellectual disciplines. Examples might include American literature in the age of Darwin, literary representations of the Civil War, transatlantic Romanticism; the national and the regional in late 19th-century American women's writing; the concept of freedom in American literature. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 372 Modern American Literature (4 credits)
This course provides an in-depth exploration of a select group of texts or authors from American Literature of the first half of the twentieth century. Selected texts or authors (such as Fitzgerald, Hemingway, Ellison, Wharton, Faulkner, Cather, Elizabeth Bishop and Zora Neale Hurston) will be studied in terms of a particular historical, cultural, or other context, or in terms of a convergence with authors or texts from other literary traditions or intellectual disciplines. Examples might include literary representations of and responses to the world wars, literature and the rise of cinema, literature and the agrarian movement, the proletarian tradition in literature, atom-smashing and literary modernism, American literature and American psychoanalysis. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 373 Contemporary American Lit (4 credits)
This course provides an in-depth exploration of a select group of texts or authors from American Literature from the late twentieth century to the present. Selected texts or authors (such as Baldwin, Morrison, Erdrich, and David Foster Wallace to the most contemporary) will be studied in terms of a particular historical, cultural, or other context, or in terms of a convergence with authors or texts from other literary traditions or intellectual disciplines. Examples might include literature and civil rights, American literature and new media, immigration narratives, American regionalisms, changing American identities. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 389 Research (2 OR 4 credits)

ENGL 390 Major Lit Figures in Context (4 credits)
This course provides an in-depth exploration of a significant body of work by a major writer, for example, Jane Austen, Charles Dickens, James Baldwin, Toni Morrison, or Virginia Woolf. The author's work will be studied in terms of a particular historical, cultural, or other context, or in terms of a convergence with authors or texts from other literary traditions or intellectual disciplines. Specific topics vary; accordingly, credit may be earned more than once for this course number. This course fulfills the Contexts and Convergences requirement in the English major. Prerequisite: ENGL 121 or 190.

ENGL 393 Individual Study (2 OR 4 credits)

ENG 395 Issues in Lit. Lang. & Culture (4 credits)
Any written text emerges out of a significant context; that is, the historical and cultural moment that gives rise to the text. This course offers an intensive focus on texts, both popular and traditional, and their significant "extra literary" context: for example, religious movements; political and social hierarchical structures; cultural, political and national identities; moral and political implications of

language use. The course emphasizes, appropriate critical approaches, dependent on course topic, such as critical race theory, Marxism, post-colonial theory, third-wave feminism, etc. Course content varies; some sections will fulfill the Human Diversity requirement. Credit may be earned more than once under this number for different emphases. Some sections of this course fulfill the Contexts and Convergences requirement in the English major; other sections fulfill the Theory and Practice requirement in the English major. Prerequisites: ENGL 121 or 190.

ENGL 405 Advanced Creative Writing (4 credits)
This advanced course will focus on the student's development of a substantial body of work in a chosen genre: poetry, fiction, or creative nonfiction. Students will review their previous writing, do further exploration of a chosen genre, and produce significant new work in that genre. Reading will include theoretical and creative texts. This course fulfills the Genre Study requirement in the English major. Prerequisite: ENGL 321 or 322 or 323 or permission of instructor based on examination of a portfolio, and 80 completed credits.

ENGL 421 Literary Magazine Practicum I (2 credits)
Activities during the fall semester of the sequence include readings from The Little Magazine: A History and Bibliography and The Little Magazine in America: A Modern Documentary History; examining the design and content of fifteen professional literary magazines; learning InDesign CS3 desktop publishing program; creating preliminary Summit Avenue Review page designs; working collaboratively with other literary magazine editors to develop selection procedures and principles; and writing a comparison essay on two professional literary magazines. Prerequisite: Previous or concurrent enrollment in ENGL 321 or 322 or 323 or instructor permission.

ENGL 422 Literary Magazine Practicum II (2 credits)
The spring semester component of the sequence includes readings from The Art of Literary Editing; active involvement with other editors in the selection process; learning and applying principles of literary copyediting; using desktop publishing to produce the new edition of Summit Avenue Review, from the creation of style sheets and master pages to final proofreading; writing a reflection essay on the editing process as you experienced it; examining the design and content of five professional literary magazine web sites; learning the Dreamweaver web design program; and managing the Summit Avenue Review web site. Prerequisites: ENGL 421

ENGL 450 Advanced Literary Studies (4 credits)
This advanced course will focus on a closely defined group of literary and critical texts. Students will be asked to synthesize as they read and write, using extensive critical analysis to integrate their experience of literary texts with relevant critical insights and ongoing scholarship. Students will also be expected to take part in and lead discussion, and to write a substantial critical essay. Prerequisites: 5 courses beyond the ENGL core 121 and 201-204, including ENGL 280. Open to limited undergraduate student enrollment by permission of instructor and the graduate program director.

ENGL 476 Experiential Learning (1 TO 4 credits)

ENGL 478 Experiential Learning (0 credits)

ENGL 481 Capstone Seminar: Lit Stu Emph (4 credits)
As a capstone seminar, ENGL 481 is designed to synthesize the intellectual experiences of the English major within the whole of the undergraduate curriculum, and to serve as a transition between undergraduate liberal arts education and the next steps in students' lives in graduate school or other career paths in the humanities. Students in this course will synthesize their disciplinary skills by exploring a particular literary problem or issue in depth; they will focus on, and write about, their own postgraduate vocational plans and aspirations within the field of English or related postgraduate endeavors. Prerequisite: Completion of five English courses at or beyond ENGL 211, including ENGL 280; or, for non-majors, permission of the instructor and department chair.

ENGL 482 Capstone Sem: Pre-Prof Emph (4 credits)
As a capstone seminar, English 482 is designed to synthesize the intellectual and the professional elements of the English major—to bridge the gap between academia and the public sphere and help students use the knowledge and skills acquired within the English major to enter the conversation of the next stage of their lives. Through discussion, reading, writing, and individualized research, the seminar engages students in a focused exploration of their career aspirations. Each student will conduct research and write a substantial essay, apply their findings for different rhetorical situations, and produce reflective writing on their intellectual development and vocational goals. Prerequisites: Completion of five English courses at or beyond ENGL 211, including ENGL 280; or, for non-majors, permission of the instructor and department chair.

ENGL 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ENGL 495 Individual Study (2 OR 4 credits)

Environmental Science

Program Overview

College of Arts and Sciences, Interdisciplinary Program

Owens Science Hall (OWS) 352, (651) 962-5166

Caplow (Chair), Clotts, Hickson, Lamb, McDermott, Small, Theissen, Vislova

Department Web Site: https://cas.stthomas.edu/departments/areas-of-study/earth-environment-society/index.html

Environmental science is an interdisciplinary science program focused on solving environmental problems that lie at the interface between biology, chemistry, and geology. Students participate in one of three concentrations (biology, chemistry, or geology) leading to the Bachelor of Science degree, each of which contains substantial coursework from each of these disciplines. This program provides excellent preparation for students wishing to pursue graduate degrees in conservation biology, environmental science, earth system science, or other environmentally-focused programs of study in the sciences. It also provides solid preparation for students planning other types of environmental careers, such as environmental consulting, law, policy, or research.

Students entering this program should contact the program director or a committee member. Each student will be assigned an adviser appropriate to the concentration that they choose for their course of study.

Major in Environmental Science (B.S.)

All students must complete these core requirements for the Environmental Science majors. Students will also choose only one track from Biology, Chemistry or Geosciences. A track within environmental sciences cannot be combined with another track for a double major in environmental sciences

Environmental Science core requirements:

- ESCI 310 Environmental Problem Solving (4 credits)
- ESCI 430 Senior Research Seminar (4 credits)
- BIOL 209 Biology of Sustainability (4 credits)
- GEOL 115 Environmental Geology OR *ESCI 132 Intro to Environmental Science (4 credits each)
- GEOL 252 Geomorphology OR GEOL 310 Environmental Geochemistry (4 credits each)
- CHEM 111 and 112 General Chemistry I and II (8 credits total) OR CHEM 115 Accelerated General Chemistry (4 credits)
- PHYS 211 Classical Physics I (4 credits) OR *PHYS 109 General Physics I (an acceptable PHYS choice for Biology and Geosciences track majors only) (4 credits)
- MATH 113 Calculus I (4 credits) OR MATH 108 and 109 Calculus with Review I and II (8 credits total)

Students must also complete the courses from their chosen track as listed below.

Biology Track

All Biology track students must complete the following four (4) courses:

- BIOL 207 Genetics, Evolution, and Ecology (4 credits)
- BIOL 208 Biological Communications & Energetics (4 credits)
- ENGR 123 Energy and the Environment (4 credits)
- DASC 120 Intro to Computational Statistics (4 credits)

Plus 12 credits from the following (at least 4 credits must be 400-level)

- BIOL 211 Introduction to Field Research (4 credits)
- BIOL 328 Environmental Toxicology and Health (4 credits)
- BIOL 333 Ecology (4 credits)
- BIOL 335 Conservation Biology (4 credits)
- BIOL 361 Medical Geology (4 credits)
- BIOL 435 Aquatic Biology (4 credits)
- BIOL 480 Urban Ecosystem Ecology (4 credits)
- BIOL 486 Seminar (4 credits)
- BIOL 491 Individual Research (2 or 4 credits)

Plus 8 elective credits from the following, including at least 4 credits of courses with ECON/ENVR/GEOG/HIST/PHIL/POLS/PSYCH prefix. Additionally, if ESCI 132 is taken as Environmental Science core requirement, 4 credits of GEOL is

required as an elective. (all courses are 4 credits each)

- CHEM 201 Organic Chemistry I (4 credits)
- ECON 370 Environmental and Natural Resource Economics (4 credits)
- ENVR 212 Society and Sustainability (4 credits)
- ENVR 222 MN Ecosystem Management (4 credits)
- ENVR 351 Environmental Policy (4 credits)
- or POLS 309 Environmental Policy
- GEOG 331 Conservation Geography (4 credits)
- GEOG 321 Geographic Info Systems (4 credits)
- GEOL 211 Earth Materials (4 credits)
- GEOL 220 Oceanography (4 credits)
- GEOL 252 Geomorphology (4 credits)
- GEOL 260 Regional Geology and Geological Field Methods (4 credits)
- GEOL 310 Environmental Geochemistry (4 credits)
- GEOL 410 Hydrogeology (4 credits)
- GEOL 491 Individual Research (4 credits)
- HIST 228 Environmental History (4 credits)
- MATH 114 Calculus II
- PHIL 258 Environmental Ethics (4 credits)
- PHYS 212 Classical Physics II (4 credits)
- or PHYS 110 General Physics II (4 credits)
- PSYC 334 Psychology of Sustainability (4 credits)
- DASC 210 Biostatistics (4 credits)

To help students meet specific academic goals, other classes may be taken for this requirement with prior approval from the ESCI director.

Chemistry Track

All Chemistry track students must complete the following five (5) courses:

- CHEM 201 Organic Chemistry I (4 credits)
- CHEM 202 Organic Chemistry II (4 credits)
- CHEM 300 Quantitative Analysis (4 credits)
- MATH 114 Calculus II (4 credits)
- PHYS 212 Classical Physics II (4 credits)

Plus one of the following courses:

- CHEM 320 Instrumental Analysis (4 credits)
- CHEM 331 Chemical Thermodynamics and Reaction Dynamics (4 credits)
- CHEM 332 Quantum Chemistry and Molecular Spectroscopy (4 credits)
- CHEM 440 Biochemistry I (4 credits)
- CHEM 491 Research (4-credit option only)

Plus 12 elective credits from the following, including at least 4 credits of courses with ECON/ENVR/GEOG/HIST/PHIL/POLS/PSYCH prefix. Additionally, if ESCI 132 is taken as Environmental Science core requirement, 4 credits of GEOL is required as an elective. (all courses are 4 credits each)

- BIOL 207 Genetics, Evolution and Ecology (4 credits)
- BIOL 208 Biological Communication & Energetics (4 credits)
- BIOL 211 Introduction to Field Research (4 credits)
- ECON 370 Environmental and Natural Resource Economics (4 credits)
- ENGR 123 Energy and the Environment (4 credits)
- ENVR 212 Society and Sustainability (4 credits)
- ENVR 222 MN Ecosystem Management (4 credits)
- ENVR 351 Environmental Policy (4 credits)
- or POLS 309 Environmental Policy (4 credits)
- GEOG 321 Geographic Info Systems (4 credits)
- GEOG 331 Conservation Geography (4 credits)
- GEOL 211 Earth Materials (4 credits)
- GEOL 220 Oceanography (4 credits)
- GEOL 252 Geomorphology (4 credits)
- GEOL 260 Regional Geology and Geological Field Methods (4 credits)
- GEOL 310 Environmental Geochemistry (4 credits)
- GEOL 410 Hydrogeology (4 credits)
- GEOL 491 Individual Research (2 or 4 credits)
- HIST 228 Environmental History (4 credits)
- PHIL 258 Environmental Ethics (4 credits)
- PSYC 334 Psychology of Sustainability (4 credits)
- DASC 210 Biostatistics (4 credits)

To help students meet specific academic goals, other classes may be taken for this requirement with prior approval from the ESCI director.

Geosciences Track

All students in the Geosciences track must complete the following four (4) courses:

- BIOL 207 Genetics, Evolution and Ecology (4 credits)

- BIOL 333 Ecology or BIOL 335 Conservation Biology (4 credits)
- ENGR 123 Energy and the Environment (4 credits)
- DASC 120 Intro to Computational Statistics (4 credits)

Plus 12 credits from the following (all courses are 4-credits):

- GEOL 162 Earth's Record of Climate (4 credits)
- GEOL 211 Earth Materials (4 credits)
- GEOL 220 Oceanography (4 credits)
- GEOL 252 Earth Surface Processes and Geomorphology (4 credits)
- GEOL 260 Regional Geology and Field Methods (4 credits)
- GEOL 461/BIOL 361 Medical Geology (4 credits)
- GEOL 410 Hydrogeology (4 credits)
- GEOL 462 Advanced Earth's Record of Climate (4 credits)
- GEOL 491 Research (4 credits)

Plus 8 elective credits from the following, including at least 4 credits of courses with ECON/ENVR/GEOG/HIST/PHIL/POLS/PSYCH prefix. (all courses are 4 credits each)

- BIOL 208 Biological Communication & Energetics (4 credits)
- BIOL 211 Introduction to Field Research (4 credits)
- CHEM 201 Organic Chemistry I (4 credits)
- ECON 370 Environmental and Natural Resource Economics (4 credits)
- ENVR 212 Society and Sustainability (4 credits)
- ENVR 222 MN Ecosystem Management (4 credits)
- ENVR 351 Environmental Policy (4 credits)
- or POLS 309 Environmental Policy
- GEOG 321 Geographic Info Systems (4 credits)
- GEOG 331 Conservation Geography (4 credits)
- HIST 228 Environmental History (4 credits)
- MATH 114 Calculus II (4 credits)
- PHIL 258 Environmental Ethics (4 credits)
- PHYS 212 Classical Physics II (4 credits)
- PHYS 110 General Physics II (4 credits)
- PSYC 334 Psychology of Sustainability (4 credits)
- DASC 210 Biostatistics (4 credits)

Minor in Environmental Science

Complete 12 credits from the list, including courses from at least two categories. No more than one 100-level course may be taken from a single category.

Biology

- BIOL 102 Conservation Biology (4 credits)
- BIOL 207 Genetics, Ecology, and Evolution (4 credits)
- BIOL 209 Biology of Sustainability (4 credits)
- BIOL 328 Environmental Toxicology and Health (4 credits)

Chemistry

- CHEM 101 Environmental Chemistry (4 credits)
- CHEM 109 General Chem for ENGR (4 credits)
- CHEM 111 General Chemistry I (4 credits)
- CHEM 115 Accelerated General Chemistry (4 credits)

Geology/Environmental Science

- ESCI 132 Intro to Environmental Science (4 credits)
- GEOL 111 Intro to Physical Geology (4 credits)
- GEOL 115 Environmental Geology (4 credits)
- GEOL 162 The Earth's Record of Climate (4 credits)
- GEOL 163 Applied Geology (4 credits)
- GEOL 220 Oceanography (4 credits)
- GEOL 260 Regional Geol & Field Methods (4 credits)

Upper-level Environmental Science course. All students will complete this course. (4 credits)

- ESCI 310 Environmental Problem Solving (4 credits)

Capstone Course. Select one course from this list. (4 credits)

- ESCI 430 Senior Research Seminar (4 credits)
- ESCI 491 Independent Research (4 credits)
- ENGR 468 Environmental Engineering (4 credits)

Environmental Science Undergraduate Courses

ESCI 132 Intro to Environmental Science (0-4 credits)
Environmental science is an interdisciplinary science program focused on solving environmental problems that lie at the interface between biology, chemistry, and geology. Using case studies, community partners and/or real research projects, students will learn skills used by environmental scientists to address local and regional environmental issues. We will explore the natural processes involved in the problems as well as consider scientific contributions to solutions. Students interested in Sustainability, Conservation, Advancing the Common Good and/or pairing science with business, engineering, law or other fields are encouraged to take this class.

ESCI 243 Individual Study (2 OR 4 credits)

ESCI 269 Research (2 OR 4 credits)

ESCI 310 Environmental Problem Solving (0 or 4 credits)
This course explores methods of solving environmental problems. These problems are by nature, interdisciplinary and are rarely addressed in a substantive fashion in traditional science textbooks. In this course, students and faculty work together to develop a working model of a critical earth system or biogeochemical cycle (i.e. the carbon or nitrogen cycle), and learn how to make calculations of human-induced changes to that system. Students from all concentrations of the environmental science major will work together on this interdisciplinary research project using modeling and systems analysis software to more fully understand specific environments and the quantitative methods of assessing challenges to those environments. This course should be taken by all ESCI students during their junior year. Four laboratory hours per week. Prerequisite: BIOL 209 or permission of instructor.

ESCI 389 Research (2 OR 4 credits)

ESCI 393 Individual Study (2 OR 4 credits)

ESCI 430 Senior Research Seminar (0 or 4 credits)
This course is designed to fulfill the senior capstone experience in Environmental Science. It brings together students from all the environmental science concentrations (biology, chemistry, and geology) to complete interdisciplinary research projects where students can integrate the knowledge gained in their distinct, yet complementary disciplinary tracks. The course will be a mix of research and seminar format designed to give students significant opportunities to practice the methods of scholarship and modes of communication used by environmental scientists. This course should be completed in the final Spring semester prior to graduation. Four laboratory hours per week. Prerequisite: ESCI 310 or permission of instructor.

ESCI 476 Experiential Learning (0 TO 4 credits)

ESCI 491 Research (2 OR 4 credits)

ESCI 495 Individual Study (2 OR 4 credits)

Environmental Studies

Program Overview

College of Arts and Sciences, The Department of Earth, Environment, and Society
John Roach Center for the Liberal Arts (JRC) 432, (651) 962-5566
Lorah, Kelley (Co-chair), McKay

Program website:
https://cas.stthomas.edu/departments/areas-of-study/earth-environment-society/index.html

The mission of Geography and Environmental Studies program is to provide both the highest quality liberal arts education and applied, career-oriented preparation. Our students learn to integrate knowledge and gain the depth of expertise to prepare them competitively for professional life and/or graduate school. We value the application of theory and research to real-world problems that affect the common good.

The Department of Earth, Environment, and Society offers multiple courses of study including a major and minor in geography, a major in environmental studies with various concentrations, a geographic information systems (GIS) minor (for non-geography majors) and a concentration area in GIS for majors, as well as a minor in sustainability.

With foundations in both the natural and social sciences, our courses prepare students for a wide range of careers in government, the private sector, and education. Geography and environmental studies graduates collect and analyze demographic data, model landscapes with GIS, perform location analysis for retail and service stores, are urban planners and land use managers, teach, and hold a wide variety of other jobs in the public and private sectors. Graduates also pursue advanced degrees in geography, environmental studies, business, urban and regional planning, community development, GIS, and natural resource management.

The GIS major and minor pair well with other majors in the physical and social sciences, and complement studies in education, marketing, real estate, and entrepreneurship. Our emphasis on GIS laboratory work, internships, collaborative faculty-student research, and service learning give our students a solid foundation in geographic principles and techniques, as well as an appreciation for the diversity of people and places.

The Environmental Studies major and Sustainability minor provide students with a broad interdisciplinary background as well as a basis for career specialization and practical application and problem solving. The program is based upon an investigation both of the Earth's environment and the wide variety of human interactions with that environment.

Major in Environmental Studies

The Environmental Studies degree provides students with a broad interdisciplinary background as well as a basis for career specialization and practical application and problem solving. The program is based upon an investigation both of the Earth's environment and the wide variety of human interactions with that environment.

The major has three basic objectives:

1. to transmit an understanding of environmental problems and their complexities,
2. to motivate productive responses to those problems, both vocational and avocational, based on that understanding, and
3. to foster the development of critical, inquiring minds.

All students majoring in Environmental Studies are required to take 40 credits in core courses. The core courses are designed to provide the student with a foundation in the physical, social and ethical dimensions of environmental issues. In addition to the core courses, students are required to earn either a second major or a minor, or take another 24 credits in concentration-area courses. The requirement of a double major, a related minor, or six concentration area courses is meant to deepen the student's understanding of the origin and complexity of environmental issues while focusing attention on one particular area of study (e.g., engineering, math, journalism, justice & peace, geology, English, sociology, etc.). The department Chair can assist students in constructing successful concentration area proposals. Students are encouraged, but not required, to take additional courses in writing and computer applications, and should consult the Chair of the department for recommendations.

Major Courses

40 credits

- ENVR 151 Environmental Problems and Sustainable Solutions (4 credits)
- ENVR 212 Society and Sustainability (4 credits)
- ENVR 401 Field Seminar (WID-designated WAC course) (4 credits)

Plus courses in each of the following competency areas:

Environment in Context (8 credits)

- ECON 370 Environmental and Natural Resource Economics
- ENGL 202 - 204 Topics: Literature and the Environment
- ENGL 304 Analytical and Persuasive Writing w/ SUST
- ENVR 351/POLS 309 Environmental Policy
- HIST 228 Environmental History
- JOUR 372 Environmental Journalism
- JPST 355 Public Policy
- PHIL 258 Environmental Ethics
- PSYC 342 Psychology of Work w/SUST
- SOWK 391 Social Policy for Change
- THEO 224: Bridges: Theology and the Environment

Ecological Literacy (8 credits)

- BIOL 102 Conservation Biology or BIOL 209 Biology of Sustainability
- CHEM 101 Environmental Chemistry
- ENGR 123 Energy and the Environment
- ESCI 132 Introduction to Environmental Science
- ESCI 310 Environmental Problem Solving
- GEOL 115 Environmental Geology or GEOL 162 Earth's Record of Climate

Social Science Methods (8 credits)

- ENVR/GEOG 331 Conservation Geography (4 credits)
- GEOG 223 Remote Sensing (4 credits)
- GEOG 321 GIS with Sustainable Communities Partnership (4 credits)
- GEOG 350 Geography of Global Health (4 credits)
- PSYC 334 Psychology for Sustainability (4 credits)

Environment in Practice (4 credits)

- ENVR 298 Understanding Landscapes (4 credits)
- ENVR/GEOG 222 Minnesota Ecosystem Management (4 credits)
- GEOL 260 Geology in the Field (4 credits)

Plus:

Complete 2nd major or a minor in a discipline of choice.

Notes:

- Students cannot both major in Environmental Studies and minor in Sustainability.
- Not every SUST-designated course fulfills ENVR major requirements. Those that do are stipulated above.

Minor in Sustainability

Available only to non-Environmental Studies majors

See Sustainability

Environmental Studies Undergraduate Courses

ENVR 151 Environmental Challenges (4 credits)
A study of the interaction of humans and the environment over time and space; a broad introduction that integrates a variety of social-science perspectives into an understanding of the environment and the relations between humans and nature. Specific topics include ecology, population, economic development, resources and sustainable development.

ENVR 212 Society and Sustainability (4 credits)
An emphasis on the ways in which people have created, and attempted to solve, environmental problems in different cultural and historical contexts. Examines the roles of the entire spectrum of actors and human communities, including individuals, families, groups and formal organizations, neighborhoods, cities and nations. Students examine how individual dynamics (such as altruism and economic self-interest) and collective dynamics (such as competition, cohesion, social definitional processes and global interdependence) direct humans in their interactions with the environment.

ENVR 222 MN Conserv Policy and Practice (4 credits)
This course will explore a range of current Minnesota environmental issues in the context of evolving public policy discourse and advocacy. A primary case study for this class will be the Mississippi River, one of the great rivers of the world, which flows just steps from campus. Through lectures, guest lectures, field trips, and readings, we will meet and hear the perspectives of policy advocates, policy makers, and ecologists about specific environmental issues they are engaged with in their roles. In addition to the issues themselves, we will investigate the matrix of actors, elected officials, federal, state, regional and local agencies, non-governmental organizations, and individuals who influence and determine the actions and decisions that impact our environment. This course will include weekend field trips including exploring the Mississippi by kayak. Prerequisites: One of any EES course (ENVR, ESCI, GEOG, GEOL) or BIO 102, or BIO 207 or BIO 209 or permission of instructor.

ENVR 243 Individual Study (2 OR 4 credits)

ENVR 269 Research (2 OR 4 credits)

ENVR 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ENVR 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ENVR 330 ENVR Research Methods (4 credits)
This course introduces students to the empirical nature of environmental studies, grounding them in how knowledge is acquired in the various social sciences that contribute to this interdisciplinary field of study. The course provides students with opportunities to learn ethical research protocols, practices, and methods. A combination of lectures, reading, practical exercises, and projects will be used to explore how these methods can best be incorporated into interdisciplinary research designs. This course also provides students with the experience of developing their own research project, prepares students to be savvy consumers of information, and enhances decision-making competencies concerning environmental issues. Prerequisite: ENVR 151 or permission of the instructor.

ENVR 351 Environmental Pol Formation (4 credits)
An examination of environmental policy outcomes generated by institutions and organizations, including legislation, court decisions and

administrative decisions. Additional focus on decision-making processes commonly used to assess environment-related legislation, including those rooted in economics and policy analysis. Prerequisite: ENVR 212

ENVR 389 Research (2 OR 4 credits)

ENVR 393 Individual Study (2 OR 4 credits)

ENVR 401 Field Seminar (4 credits)
A capstone course that combines field experience with classroom seminar. Student teams will conduct collaborative broadly interdisciplinary analyses of selected environmental problems. Field-based projects are chosen by the students in consultation with course instructor. Classroom seminars are used for exchange of information between teams and for discussion of readings pertinent to individual research projects or, more broadly, to the interdisciplinary character of environmental problem-solving. Each team produces a major paper that examines the selected problems through humanities, natural-science and social-science lenses. This class is cross-listed with, and is equivalent to, GEOG 402. Prerequisite: ENVR151, ENVR212, plus 20 credits from the 28 required competency credits in the major need to be completed before taking ENVR 401.

ENVR 476 Experiential Learning (1 TO 4 credits)

ENVR 491 Research (2 OR 4 credits)

ENVR 495 Individual Study (2 OR 4 credits)

Family Studies

Program Overview

College of Arts and Sciences, Interdisciplinary Program

Director: Dr. Audra Nuru (Comm & FAST)

Advisory Committee: Buri, Jessee, Lemmons, Lundquist, Nuru, Zimmerman

Associated Faculty: Balke, Niskanen, Sorenson

Department Web Site:
https://cas.stthomas.edu/departments/areas-of-study/family-studies/index.html

Family studies is an interdisciplinary field of study in which the family is the primary unit of analysis. The purpose of this major and minor is to enable students to critically examine the family using a variety of theories and methods. Family studies scholars can develop understanding of business and communication dynamics, health and social concerns, and psychological and theological matters affecting families and their members. A major and minor in family studies are flexible and multidisciplinary, providing for both broad exposure and disciplinary integration. Both the major and minor provide preparation for advanced study in family studies and the allied fields, as well as professional work in organizations focusing on families.

Major in Family Studies

A student may take no more than three courses from a single discipline toward the major in Family Studies. The major in family studies does not provide a license for a student to do therapy or counseling; it does provide a foundation for employment in the human services field and/or for graduate studies in multiple areas where a license can be earned, if so desired. Students will select elective courses in careful consultation with the director of family studies and/or his or her advisor, choosing those that best support the student's future professional, graduate and/or personal goals and aspirations. The elective selections might also include strong recommendations for a double major in another discipline and/or courses in research methods taken in a constituent department - the latter especially recommended for students wishing to pursue graduate work in Family Social Science or Psychology, Social Work, or other related fields.

All students must take:

- FAST 200 Foundations of Family Studies (4 credits)
- FAST 400 Family Studies Capstone Seminar (4 credits)

All students must take 4 credits (1 course) in research methods, chosen in consultation with the student's adviser from the following list:

- JPST 275 Qualitative Methods: Research for Social Justice (4 credits)
- PSYC 212: Research Methods in Psychology (4 credits) [Prereq MATH 101: Finite Mathematics (or MATH 108-109, 111, or 113) and DASC 120: Intro to Computational Statistics]
- SOCI 210: Research Methods in Sociology (4 credits) [Prereq: SOCI 100: Introduction to Sociology]
- SOWK 380: Social Work Research (4 credits) [Prereq: SOWK 281 Intro to Social Work and junior status -or- permission from the program director]

All students must take 8 credits (2 courses) of the following:

- COMM 374: Family and Couple Communication (4 credits)
- PSYC 288: Psychology of Marriage and the Family (4 credits)
- SOCI 321: Global Marriages and Families (4 credits)

All students are required to take 20 credits (5 courses) of elective courses, chosen in consultation with the student's adviser from the following list:

- COMM 220: Interpersonal Communication (4 credits)
- COMM 374: Family and Couple Communication (4 credits)
- COMM 378: Communication & Underrepresented Families (4 credits)
- EDUC 329: Diverse Learners and Families (4 credits)
- ENTR 349: Family Business Management (4 credits)
- FAST 243, 393, or 495: Individual Study (2 or 4 credits)
- FAST 378: Communication & Underrepresented Families
- FAST 476 or 478: Experiential Learning/Internship (2 or 4 credits)
- HIST 211: History of Women & Families in the Americas
- HLTH 462: Human Sexuality Education (4 credits)
- PHIL 234: Love, Sex, and Friendship (4 credits)
- PSYC 200: Psychology of Infancy and Childhood (4 credits)
- PSYC 202: Lifespan Development (4 credits)
- PSYC 203: Psychology of Adolescence (4 credits)
- PSYC 204: Psychology of Adulthood and Aging (4 credits)
- PSYC 288: Psychology of Marriage and the Family (4 credits)
- SOCI 298: Youth Culture & Education in Puerto Rico (4 credits)
- SOCI 304: Adolescence in Society (4 credits)
- SOCI 321: Global Marriages and Families (4 credits)
- SOCI 354: Sex in Society (4 credits)
- SOWK 181: Introduction to Social Work
- SOWK 240: Human Behavior and the Social Environment (4 credits)
- SOWK 291: Anatomy of Violence (4 credits)
- SOWK 292: Loss, Grief, Resiliency, and Transformation (2 credits)
- SOWK 297: Dying in America (4 credits)
- SOWK 401: Practice with Individuals and Families (available only to social work majors) (4 credits)
- THEO 226: Spirituality: Christian Marriage (4 credits)

NOTE: Students may take no more than three courses from a single discipline (excluding the course taken to fulfill the methods requirement) toward the major in Family Studies.

Minor in Family Studies

A student may take no more than two courses from a single discipline toward the minor in Family Studies. Students interested in a minor in family studies should meet with the director.

All students must take:

- FAST 200 Foundations of Family Studies (4 credits)

All students must take 4 credits (1 course) from the following:

- COMM 374: Family and Couple Communication (4 credits)
- PSYC 288 Psychology of Marriage and the Family (4 credits)
- SOCI 321 Global Marriages and Families (4 credits)

All students are required to take 12 credits (3 courses) of elective courses, chosen in consultation with the student's adviser from the following list:

- COMM 220: Interpersonal Communication (4 credits)
- COMM 374: Family and Couple Communication (4 credits)
- COMM 378: Communication & Underrepresented Families (4 credits)
- EDUC 329: Diversity & Cultural Competency (4 credits)
- ENTR 349: Family Business Management (4 credits)
- FAST 243, 393, or 495: Individual Study (2 or 4 credits)
- FAST 476 or 478: Experiential Learning/Internship (2 or 4 credits)
- HIST 211: History of Women & Families in the Americas
- HLTH 462: Human Sexuality Education (4 credits)

- PHIL 234: Love, Sex, and Friendship (4 credits)
- PSYC 200: Psychology of Infancy and Childhood (4 credits)
- PSYC 202: Lifespan Development (4 credits)
- PSYC 203: Psychology of Adolescence (4 credits)
- PSYC 204: Psychology of Adulthood and Aging (4 credits)
- PSYC 288: Psychology of Marriage and the Family (4 credits)
- SOCI 298: Youth Culture & Education in Puerto Rico (4 credits)
- SOCI 304: Adolescence in Society (4 credits)
- SOCI 321: Global Marriages and Families (4 credits)
- SOCI 354: Sex in Society (4 credits)
- SOWK 181: Introduction to Social Work
- SOWK 240: Human Behavior and the Social Environment (4 credits)
- SOWK 291: Anatomy of Violence (4 credits)
- SOWK 401: Practice with Individuals and Families (available only to social work majors) (4 credits)
- THEO 226: Spirituality: Christian Marriage (4 credits)

NOTE: Minors may take no more than two courses from a single discipline toward the minor in Family Studies

Family Studies Undergraduate Courses

FAST 200 Foundations of Family Studies (4 credits)
As a foundation of the Family Studies major and minor, this course provides an interdisciplinary exploration of the discipline and profession of Family Studies. Students will be introduced to primary family theories and the practical nature of theorizing for understanding, explaining and strengthening all families; read original and translated/applied research on family topics; explore substantive topics of the field; examine the current state of Family Studies and its multidisciplinary roots; become familiar with family studies' occupations and professional organizations; review ethical principles of working with and studying families; and examine a range of contemporary issues for families in the 21st century.

FAST 243 Individual Study (2 OR 4 credits)

FAST 269 Research (2 OR 4 credits)

FAST 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

FAST 377 Family Transition—Crisis & Res (4 credits)
Families inevitably experience periods of transition. From serious illness, to infidelity, to natural disasters, and through identity shifts, we often turn to communication as a source of strength to help navigate relational struggle and strength during times of challenge. This course examines critical events which can lead to family crises as well as how crises can act as a catalyst for growth and change. Further, this course explores theoretical considerations for how families construct resilience following disruption, loss, trauma, and/or disaster. Prerequisites: At least 80 credits completed. **Note: This course is a cross-listed course. It counts towards elective credit for Communication majors and minors, as well as Family Studies majors and minors.

FAST 378 Comm & Underrep Families (4 credits)
Given that demographic changes, immigration patterns, transnational adoption, new U.S. Supreme Court rulings impacting LGBTQ+ families, and the addition of a multiracial option on the 2010 Census have all contributed to changes in the ways that individuals and families identify, are formed, and are (re)negotiated, it is of critical importance to examine scholarship highlighting these diverse (and often underrepresented) family forms. Families in the United States today are faced with opportunities and challenges that have never been experienced by families before. The first 21 years of this century have produced large social, civil, and technological changes that impact not only the communication among family members, but has also impacted larger societal discourses about what constitutes "family." Although family communication scholars have long called for the inclusion of more diverse samples in family research, to date this research remains very limited in the understanding of family functioning, relationships, and processes in families of color, LGBTQ families, transnational and neo-ethnic families, discourse dependent families, and other family forms. To this end, this course examines the communicative experiences of contemporary and underrepresented families.

FAST 389 Research (2 OR 4 credits)

FAST 393 Individual Study (2 OR 4 credits)

FAST 400 Family Studies Capstone Sem. (4 credits)
This advanced capstone course for the Family Studies major is a multidisciplinary seminar taken after a student has completed at least four courses

in the Family Studies major. The course incorporates a variety of methods, theories, and pedagogies drawn from the family studies paradigm. A substantial portion of the course will be devoted to student experience in the community and professions, including reflections and analyses that incorporate family studies scholarship. Prerequisite: FAST 200, plus two of COMM 374, PSYC 288, SOCI 321, plus six other courses from the list of approved courses for the Major.

FAST 450 Intro to Marriage/Family Psych (4 credits) This course is an overview of marriage and family counseling, including application of family psychology theory to family problems and intervention strategies. This course offers an opportunity for students to study an overview of the major marriage and family therapy theories as well as be exposed to many of the fundamental constructs in the family therapy field. Different themes will be compared using the lenses of the role of family history, use of insight, whether the whole system or parts of the family are areas of focus, family problem resolution, as well as strategies useful to each therapeutic approach. An integral part of the course is an understanding of, both, family systems theory and the family in the context of a diverse, pluralistic society. Prerequisites: Majoring in Family Studies and permission from instructor.

FAST 476 Experiential Learning (1 TO 4 credits)

FAST 490 Special Topics (4 credits)

FAST 491 Research (2 OR 4 credits)

FAST 495 Individual Study (2 OR 4 credits)

Film Studies

Program Overview

College of Arts and Sciences, Department of Music, Film, and Creative Enterprise (MFCE)

Brady Education Center (BEC) 112, (651) 962-5875

Anderson (E-Media); Chaudhury (ENGL); Craft-Fairchild (ENGL); Custer (ENGL); Domingo (MCL); Feng (E-Media); Finckle (MF&CE); Gregg (E-Media); Harrison (ENGL); Hepner (CLAS); Johnson (Director; MF&CE); Kachian (MF&CE); Kroll (MCL); Lawrence (ENGL); Hoolihan (MF&CE); Itkin (MF&CE); Osmundson (MCL); Schultz (MF&CE); Snapko (MF&CE); Solachau-Chamutouski (MF&CE & MCL); Winter (MF&CE)

Film Studies Department Page: https://www.stthomas.edu/academics/undergraduate/film-studies-major-and-minor/index.html

The Film Studies major is an interdisciplinary program that provides students with a solid foundation in film history and theory, plus training in skills related to film production. By completing this major, students will be able to understand the historical development of film language (camera work, acting, and editing) including film's pre-history and relationship to photography and theatre; identify and analyze films from the major film traditions, movements, genres (narrative, documentary, and experimental-surreal), studios and directors; understand developments in world cinema, including expression, imagery and representations of nationhood, ethnicity, race, sex, gender, sexuality, social class, cultural values, religious values, political movements, etc; articulate and apply major film theories and critical approaches; understand the political and economic context of film, including the impact of distribution and circulation on the production and reception of film; and develop skills relevant to film production, such as writing, directing, acting, design, composition and the acquisition and editing of images and sound.

Major in Film Studies

Students will complete 40 credits for the Film Studies major:

Required:

- DIMA 240 Digital Imagery and Sound (4 credits)
- FILM 200 Introduction to Film Studies (4 credits)
- FILM 300 World Cinema (4 credits)
- FILM 310 Filmmaking (4 credits)
- FILM 350 Contemporary Issues in Film (4 credits)

Plus a total of 20 credits chosen from the following lists. Please note: at least five courses taken for the Film Studies major must have the FILM prefix. At least five courses taken for the Film Studies major must be numbered 300 or higher.

Film Production and Practice courses:

- DIMA 262 Audio Production (4 credits)
- DIMA 360 Videography (4 credits)
- DIMA 460 Advanced Videography (4 credits)
- DIMA 480 Capstone: Digital Media for the Common Good (4 credits)

- FILM 305 Screenwriting (4 credits)
- MUSC 140 Music Media (2 credits)
- MUSC 205 Advanced Studio Recording (2 credits)
- MUSC 221 Synthesis for Music Production (2 credits)
- MUSC 305 Mixing and Post Production (2 credits)
- MUSC 330 Composition/Production for Film/TV/Games (4 credits)
- MUSP 111 Digital Music for Film (1 credit)*
- MUSP 166 Music Composition for Film (1 credit)*
- THTR 214 Beginning Acting (4 credits)
- THTR 218 Acting for the Camera (4 credits)

* May be taken for credit more than once.

Film History and Analysis courses:

- CLAS 225 The Classical Hero, Epic, and Film (4 credits)
- COMM 332 Documentary in American Culture (4 credits)
- DIMA/JOUR 232 Visual Communication in Theory and Practice (4 credits)
- ENGL 395 Issues in Literature, Language, and Culture (Film) (4 credits)
- FILM 225 Women and Gender in FIlm (4 credits)
- FILM 250 Italian Cinema (4 credits)
- FILM 295 Topics (2 credits)
- FILM 296 Topics (2 credits)
- FILM 297 Topics (4 credits)
- FILM 298 Topics (4 credits)
- FILM 320 Memory and Trauma in Film (4 credits)
- FILM 335 Film Theory and Criticism (4 credits)
- FREN 490 French Cinema (4 credits)
- LNGS 370 Holocaust in Literature, Film and Visual Culture (4 credits)
- MUSC 170 Music of Film (4 credits)
- SPAN 415 Hispanic Cinema Studies (4 credits)

Students may also take individual or experiential learning toward the 20 elective credits:

- FILM 393: Individual Study (2 or 4 credits)
- FILM 495: Individual Study (2 or 4 credits)
- FILM 476: Experiential Learning (0-4 credits)

Minor in Film Studies

Students will complete 20 credits for the FILM minor:

- FILM 200 Introduction to Film Studies (4 credits)
- FILM 300 World Cinema (4 credits)

Plus four credits in film theory/history/criticism/analysis:

- CLAS 225 The Classical Hero, Epic, and Film (4 credits)
- COMM 332 Documentary in American Culture (4 credits)
- DIMA/JOUR 232 Visual Communication in Theory and Practice (4 credits)
- ENGL 395 Issues in Literature, Language, and Culture (Film) (4 credits)
- FILM 225 Women and Gender in Film (4 credits)
- FILM 250 Italian Cinema (4 credits)
- FILM 295 Topics (2 credits)
- FILM 296 Topics (2 credits)
- FILM 297 Topics (4 credits)
- FILM 298 Topics (4 credits)
- FILM 320 Memory and Trauma in Film (4 credits)
- FILM 335 Film Theory and Criticism (4 credits)
- FILM 350 Contemporary Issues in Film (4 credits)
- FREN 490 French Cinema (4 credits)
- LNGS 370 Holocaust in Literature, Film and Visual Culture (4 credits)
- MUSC 170 Music of Film (4 credits)
- SPAN 415 Hispanic Cinema Studies (4 credits)

Plus four credits in production/practice

- DIMA 240 Digital Imagery and Sound (4 credits)
- DIMA 262 Audio Production (4 credits)
- DIMA 360 Videography (4 credits)
- DIMA 460 Advanced Videography (4 credits)
- DIMA 480 Capstone: Digital Media for the Common Good (4 credits)
- FILM 305 Screenwriting (4 credits)
- FILM 310 Filmmaking (4 credits)
- MUSC 140 Music Media (2 credits)
- MUSC 205 Advanced Studio Recording (2 credits)
- MUSC 221 Synthesis for Music Production (2 credits)
- MUSC 305 Mixing and Post Production (2 credits)
- MUSC 330 Composition/Production for Film/TV/Games (4 credits)
- MUSP 111 Digital Music for Film (1 credit)*

- MUSP 166 Music COmposition for FIlm (1 credit)*
- THTR 214 Beginning Acting (4 credits)
- THTR 218 Acting for the Camera (4 credits)

* May be taken for credit more than once.

Plus four additional credits from:

- those listed above, internship, experiential learning, or independent study as approved by FILM studies director. At least two courses must be numbered 300 or higher.

Film Studies Undergraduate Courses

FILM 200 Introduction to Film Studies (0 or 4 credits)
FILM 200 introduces students to film analysis, providing the basic tools to understand, appreciate, and analyze the technical and aesthetic dimensions of film and to understand how these elements come together to create meaning. The course will focus on specific filmmaking techniques, provide a brief overview of film history, and introduce students to the concepts of genre, ideology and style. In addition to attending class sessions, students will be required to dedicate approximately two hours per week to viewing films in lab or outside of class.

FILM 225 Women and Gender in Film (4 credits)
Women and Gender in Film explores the diverse roles women have taken in film from an intersectional perspective that includes analysis of gender along with considerations of race, class, migrant status, disability status, religious/spiritual identity, or other dimensions of diversity. Through readings, lectures and film analysis students will be able to consider how gender constructions have influenced the roles women and non-gender conforming individuals could take in film as an industry and in film as an art, focusing primarily in film production in the United States. Through a social justice lens, this course will lead students to become aware of how gender constructions are circulated, recast, and reinforced through film, which can also be a space for resistance, change and imagination of a more egalitarian future.

FILM 230 Race in Contemporary US Film (4 credits)
In this course, we will consider the complex constructions of "race" in US film, paying special attention to the following questions: How has the category of "race" been historically constructed and represented? Whose interests have these constructions served? Why are these dominant representations often so far removed from the "real" way in which people live their lives? How are these representations connected to the ways in which we continue to think about race? How do underrepresented filmmakers resist dominant representations of race in the present, creating complex and liberating ways to rethink race? Special attention will be given to the language of filmmaking, examining how this language evolves differentially across mainstream Hollywood cinema and in films created by minority filmmakers.

FILM 243 Individual Study (2 OR 4 credits)

FILM 250 Introduction to Italian Cinema (4 credits)
Following World War II, Italian directors like Roberto Rossellini and Vittorio De Sica introduced the world to neorealism, an aesthetic movement that changed the art of cinema forever. But what is neorealism, and what are the complex historical factors that allowed this movement to thrive? What economic factors contributed to directors like Federico Fellini and Michelangelo Antonioni breaking away from neorealism in the 1960s in favor of postmodern existentialism and the hermetic environment of Cinecittà? What do spaghetti westerns or mainstream comedies reveal about Italian culture? And how have modern auteurs like Lina Wertmüller, Ferzan Özpetek, and Alice Rohrwacher carried these disparate threads forward into the present and future? In Introduction to Italian Cinema, you will answer these questions. Students will learn not only how to closely read and analyze films as complicated texts but also how to write critically rich papers that explore the complex historical backdrop that impacted not only directors, but films and audiences as well. Students will learn to analyze the elements of film imagery. To do so, you will watch films and discuss them. You will read film theory and history. You will immerse yourself in "la dolce vita."

FILM 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

FILM 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

FILM 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

FILM 298 Topics (4 credits)
The subject matter of these courses will vary from

year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

FILM 300 World Cinema (4 credits)
In this course, students will view, discuss, and read and write about feature-length films from Africa, Asia, the Americas, Europe, and possibly India and/or the Middle East. Following critical viewing of films both in and outside of class, students will engage in critical reflection, discussion, and analytical writing as a way of practicing the art of film analysis. This course asks students to think critically about the ways in which cinema engages the world as a form of entertainment, as art, as historical document, and as an instrument of social change. The course fulfills the Human Diversity requirement of the core curriculum at UST by addressing issues of race, ethnicity, gender, and geopolitical status. It scrutinizes the ways in which institutionalized and structural power and privilege are reflected in the subject matter, creation, and audience reception of film.

FILM 305 Screenwriting (4 credits)
The purpose of this course is to learn how to write effective narrative screenplays, with an emphasis on the creation of short scripts. In order to explore and identify basic dramatic principles of story, character, and structure, we will analyze numerous short scripts and films made from them. We will look at how the dramatic principles of short scripts have been expanded and turned into feature screenplays by exploring the work of various successful contemporary writers and filmmakers. Once we establish the basics of effective screenplays, students will apply these concepts to the development of their own original short scripts. By the end of the semester, students will have written several complete short scripts that are ready to be shot on their own, produced as part of a St. Thomas filmmaking course, or that could be developed further into feature length screenplays. This course counts as a production/practice course for students pursuing the Film Studies major or minor and as an elective course for English majors and minors. Finally, this course also satisfies a WAC Writing in the Discipline requirement. Please note that this course does not count towards the core literature and writing requirement.

FILM 310 Filmmaking (4 credits)
This course is designed to introduce students to the filmmaking process, from script to screen. We will concentrate our attention on two main elements - understanding the technical concerns of narrative filmmaking (the apparatuses, learning camera functions and techniques, and using editing software), AND developing students' artistic voice through storytelling and film analysis. The course aims to strengthen students' ability to conceive and flesh out ideas that will lead to compelling, authentic, personally meaningful short films and give them the critical foundation of film study and production tools to execute their ideas. Students will begin to develop their own artistic vision and style through filmmaking.

FILM 320 Memory and Trauma in Film (4 credits)
This course is concerned with cultural representations of memory and trauma in film. Whose memories are sought, believed and commemorated through the cultural sphere of the feature-length film? What problems do traumatic events present for those attempting to commemorate or represent them in film? Is trauma a useful cross-cultural concept? We will begin with an overview of the concept of trauma in psychoanalysis, film studies, and popular culture. Next, students will be introduced to theories of memory, including the study of memory in national and transnational contexts. Students will also be introduced to concepts of testimony and witnessing, and their relation to memory. We will study the cultural representation of trauma and memory in feature-length films with a particular focus on the Holocaust and the Stolen Generations, with some attention to other sites of conflict. Texts for study will include readings that contextualize trauma, memory, and representation and feature-length documentary and narrative films. Prerequisites: Sophomore standing, or permission of instructor.

FILM 335 Film Theory and Criticism (4 credits)
This course trains students in the use of a wide range of film theory and criticism as tools for interpreting film and media as texts, as narrative, as works of art, as historical artifacts, as political expression, as semiotic systems, as mediums of identity and social change, and more. Building on knowledge and skills learned in FILM 200 Introduction to Film, students will learn a range of compelling critical methods for the analysis of film and media, including many of the following: auteur theory; psychoanalysis; feminism, gender and masculinity studies; Marxism;
cultural studies; queer theory; audience reception and star studies; postcolonialism; genre analysis; and race and ethnicity, among others. Film Theory and Criticism will help situate you as informed, critically engaged viewers of global film and media texts and practices. Each area of film criticism will be accompanied by a screening of a film or films that elucidate main points of the area of film theory that is the focus for that week. Through the combination of canonical theoretical approaches and more

contemporary angles developed since the 1970s, this course will provide you with skills necessary to interpret films as collaborative art works, as technical artifacts, as sociocultural and ideological productions, and as products of a gl obalized media world. Prerequisite: Film 200 or instructor permission.

FILM 350 Contemporary Issues in Film (0 or 4 credits)
Contemporary Issues in Film surveys a topic of particular relevance for students near the culmination of their coursework in Film Studies. The course focuses on issues of diversity, creative expression, and unique perspectives in Film Studies and how these unique voices contribute to our understanding of The Common Good. Students will expand their knowledge of Film Studies and they will incorporate disciplinary tools from Film Studies and at least one other academic. discipline, which they will apply to the study of creative production in film. Students will apply knowledge from coursework in multiple disciplines, they will expand their analytical abilities by learning about new films and writing about them, and they will create a portfolio of work that is representative of their learning. Contemporary Issues that will serve as the focus of each course offering may include American Independent Cinema; Masters of Style: Great Directors; and Diverse Perspectives in Film. Prerequisites: FILM 200 or permission of instructor.

FILM 393 Individual Study (2 OR 4 credits)

FILM 476 Experiential Learning (1 TO 4 credits)

FILM 495 Individual Study (2 OR 4 credits)

Film Studies and Media Production

Co-Major

The new co-major includes core courses in both theory and practice in the areas of Film Studies and Media Production along with electives and a capstone.

(56 credits)

REQUIRED CORE – FILM STUDIES (24 credits)

- FILM 200: Introduction to Film Studies (4 credits)
- FILM 300: World Cinema (4 credits)
- FILM 305: Screenwriting (4 credits)
- FILM 310: Filmmaking (4 credits; pre-requisite: DIMA 240)
- FILM 335: Film Theory and Criticism (4 credits)
- FILM 350: Contemporary Issues in Film (4 credits)

PLUS ELECTIVES IN FILM STUDIES (4 credits)

- CLAS 225: The Classical Hero, Epic, and Film (4 credits)
- COMM 332: Documentary in American Culture (4 credits)
- ENGL 395: Issues in Literature, Language, and Culture (4 credits)
- FILM 225: Women and Gender in Film (4 credits)
- FILM 230: Race and Representation in Contemporary U.S. Film (4 credits)
- FILM 250: Introduction to Italian Cinema (4 credits)
- FILM 295: Topics (2 credits)
- FILM 296: Topics (2 credits)
- FILM 297: Topics (4 credits)
- FILM 298: Topics (4 credits)
  FILM 320: Memory and Trauma in Film (4 credits)
- FREN 490: French Cinema (4 credits)
  LNGS 370: Holocaust in Literature, Film, and Visual Culture (4 credits)
- MUSC 140: Music Media (2 credits)
- MUSC 170: Music of Film (4 credits)
- MUSC 205: Advanced Studio Recording (2 credits)
- SPAN 415: Hispanic Cinema Studies (4 credits)
- THTR 214: Beginning Acting (4 credits)
- THTR 218: Acting for the Camera (4 credits)

REQUIRED CORE - MEDIA PRODUCTION (24 credits)

- DIMA 111: Introduction to Mass Media (4 credits)
- DIMA 232: Visual Media in Theory and Practice (4 credits)
- DIMA 240: Digital Imagery and Sound (4 credits)
- DIMA 262: Audio Production (4 credits)
- DIMA 360: Videography (4 credits)
- DIMA 460: Advanced Videography (4 credits)

PLUS CAPSTONE (4 credits)

- DIMA 480: Capstone: Digital Media for the Common Good (4 credits)

—crosslisted with—

- FILM 480: Capstone: Filmmaking for the Common Good (4 credits)

French

Program Overview

The primary goal of the French program is to provide students with the opportunity to:

1. Develop a solid command of the French language
2. Learn about the history, literature and culture of France and the French-speaking world
3. Become familiar with the role of French in today's global context
4. Prepare for a variety of potential careers in which their French skills will be an asset, including careers in the medical field, business, public relations, journalism, diplomacy, international NGOs, tourism and hospitality,
5. Acquire an intellectual background that characterizes those educated in a liberal arts setting

Please note that FREN 212, the pre-requisite for FREN 300, is offered in fall semesters only and FREN 300 in spring semesters only

Major in French

- A minimum of 28 credits at the 300-level or above is required for a French major.
- At least twelve of these credits must be completed at the University of St. Thomas.

The major normally consists of courses in the following areas:

- Eight credits in advanced language study at the 300-level or beyond (grammar, composition or oral-intensive)
- Eight credits in literature
- Eight credits in civilization or culture
- Four additional credits in French to be selected in consultation with the French faculty

Courses in a second foreign language are highly recommended.

The department strongly encourages all students planning a major in French to spend some time (a summer, a January term, a semester or an academic year) in a French-speaking country and to participate in a French course on campus upon their return.

For administrative purposes, students will complete assessment measures at the beginning of their major (in their 300 class) and during their final semester.

Minor in French

- A minimum of sixteen credits at the 300-level or above is required for a French minor.
- At least eight of these credits must be completed at St. Thomas.

A typical minor consists of courses in the following areas:

- Eight credits in French language study at the FREN 300-level or beyond (phonetics, grammar, composition or conversation)
- Four credits in French literature, civilization or culture.
- Four additional elective credits in FREN to be selected in consultation with the French faculty.

French Undergraduate Courses

FREN 111 Elementary French I (4 credits)
Practice in understanding, speaking, reading and writing simple French for beginners. Intended for students with no previous experience with French or fewer than two years of high school French. Registration by departmental permission. FREN 111 cannot be taken if credit for a more advanced FREN course has already been received.

FREN 112 Elementary French II (4 credits)
Continuation of FREN 111. Prerequisite: FREN 111 or equivalent completed with a C- or better

FREN 211 Intermediate French I (4 credits)
Introduction to cultural and literary materials along with rapid review of basic skills in reading, speaking, writing and understanding oral French. Prerequisite: FREN 112 or equivalent completed with a C- or better

FREN 212 Intermediate French II (4 credits)
Continuation of FREN 211 with emphasis on oral and written use of complex sentence structure. Prerequisite: FREN 211 or equivalent completed with a C- or better

FREN 243 Individual Study (2 OR 4 credits)

FREN 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

FREN 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

FREN 300 Adv Oral & Written French I (4 credits)
A course required for all potential majors or co-majors as a preliminary to the upper-division courses they may take, as well as for any student wishing to investigate fine points of grammar and inherently intricate areas of pronunciation and intonation. Oral and written skills will be assessed. Prerequisite: FREN 212 or equivalent completed with a C- or better

FREN 301 French Poetry (4 credits)
Individualized and group exercise in oral expression and comprehension focusing on the study of the elements of French versification from the 16th century to the present. Prerequisite: FREN 300 or equivalent

FREN 302 Questions de langage (4 credits)
Intensive practice in both oral and written French using selected materials to acquire a high level of oral comprehension and communication as well as competence in writing French. Prerequisite: FREN 300 or its equivalent

FREN 309 Intro to French Lit I (4 credits)
Excerpts of French literature from the Middle Ages to the Age of Reason will be studied. Emphasis will be placed on reading skills and the tools for literary analysis. Recommended as a prerequisite for upper-level literature courses. Prerequisite: FREN 300 or equivalent

FREN 310 Intro to French Lit II (4 credits)
Excerpts of post-revolutionary French literature. Emphasis will be placed on reading skills and the tools for literary analysis. Recommended as a prerequisite for upper-level literature courses. Prerequisite: FREN 300 or equivalent

FREN 311 French Civilization I (4 credits)
An introduction to the most significant historical, cultural, social, religious and economic realities of France from the prehistoric period through the middle of the 17th century. Prerequisite: FREN 300 or equivalent

FREN 312 French Civilization II (4 credits)
An introduction to the most significant historical, cultural, social, religious and economic realities of France from the 18th century to the present. Prerequisite: FREN 300 or equivalent

FREN 370 French Phonetic (4 credits)
A course designed to improve pronunciation and intonation by means of phonetic transcription and technological aids. Prerequisite: FREN 300 or equivalent

FREN 371 Individualized Fren Conv (4 credits)
Individualized French conversation practice in comprehension and speaking involving group and individualized activities. Prerequisite: FREN 300 or permission of instructor

FREN 393 Individual Study (2 OR 4 credits)

FREN 401 French Theater (4 credits)
Intensive study of the trends in French theater with analysis and interpretation of selected works from the seventeenth century to the present. Prerequisite: FREN 300 or equivalent

FREN 402 The French Novel (4 credits)
In depth study of selected works of fiction primarily from the 19th and 20th centuries. Prerequisite: FREN 300 or equivalent

FREN 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

FREN 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

FREN 495 Individual Study (2 OR 4 credits)

LNGS 325 Language Matters (2 credits)
This course examines the importance of languages and cultural knowledge in a globalized world. Drawing on examples from students' experiences and incorporating scholarly sources and information from different disciplines, students will learn about the intersection of languages and cultures from around the world. Topics will include issues of identity, power, social justice, dignity, diversity, global citizenship, and vocation. Prerequisite: Students must have at least 80 credits in order to register for this course.

Geography

Program Overview

College of Arts and Sciences, The Department of Earth, Environment, and Society

Owens Science Hall (OWS) 153

Caplow (Chair), Kelley, Lorah, McKay

Program Website:
https://cas.stthomas.edu/departments/areas-of-study/earth-environment-society/index.html

The mission of Geography and Environmental Studies program is to provide both the highest quality liberal arts education and applied, career-oriented preparation. Our students learn to integrate knowledge and gain the depth of expertise to prepare them competitively for professional life and/or graduate school. We value the application of theory and research to real-world problems that affect the common good.

The Department of Earth, Environment, and Society offers multiple courses of study including a major and minor in geography, a major in environmental studies with various concentrations, a geographic information systems (GIS) minor (for non-geography majors) and a concentration area in GIS for majors, as well as a minor in sustainability.

With foundations in both the natural and social sciences, our courses prepare students for a wide range of careers in government, the private sector, and education. Geography and environmental studies graduates collect and analyze demographic data, model landscapes with GIS, perform location analysis for retail and service stores, are urban planners and land use managers, teach, and hold a wide variety of other jobs in the public and private sectors. Graduates also pursue advanced degrees in geography, environmental studies, business, urban and regional planning, community development, GIS, and natural resource management.

The GIS major and minor pair well with other majors in the physical and social sciences, and complement studies in education, marketing, real estate, and entrepreneurship. Our emphasis on GIS laboratory work, internships, collaborative faculty-student research, and service learning give our students a solid foundation in geographic principles and techniques, as well as an appreciation for the diversity of people and places.

The Environmental Studies major and Sustainability minor provide students with a broad interdisciplinary background as well as a basis for career specialization and practical application and problem solving. The program is based upon an investigation both of the Earth's environment and the wide variety of human interactions with that environment.

Teacher Licensure

Elementary Education with a Specialty in Social Studies (5-8).
Co-major in Social Studies (5-12) and a Co-major in Secondary Education

See Education

Majors in Geography

Major in Geography (B.A.)

- GEOG 111 Human Geography (4 credits)
- GEOG 113 Globalization & World Regions (4 credits)
- GEOL 111 Introductory Physical Geology (4 credits) or GEOL 114 The Science of Natural Disaster (4 credits) or GEOL 115 Environmental Geology (4 credits)
- GEOG 321 Geographic Information Systems (4 credits)
- GEOG/ENVR 401 Field Seminar (4 credits)

Plus sixteen credits from the following courses:

- GEOG 151 Environmental Problems & Sustainable Solution (4 credits)
- GEOG 230 Weather and Climate (4 credits)
- GEOG 322 Geographical Analysis (4 credits)
- GEOG 330 Geography for Business and Planning (4 credits)
- GEOG 350 Geography of Global Health (4 credits)
- GEOG 331 Conservation Geography (4 credits)
- GEOG 421 Applied Geographic Information Systems (4 credits)
- GEOG 298 Special Topics in Geography [focus changes with each offering] (4 credits)
- GEOG 478 Experiential Learning (4 credits) or GEOG 491 Research (4 credits)

Note: At least twelve of the credits used to fulfill the major must be at the 298-level or above.

Major (B.A.) in Geographic Information Systems (GIS)

- GEOG 111 Human Geography (4 credits)
- GEOG 113 Globalization & World Regions (4 credits)

- GEOL 111 Introductory Physical Geology (4 credits) or GEOL 114 The Science of Natural Disasters (4 credits) or GEOL 115 Environmental Geology (4 credits)
- GEOG 321 Geographic Information Systems (4 credits)
- GEOG/ENVR 401 Field Seminar (4 credits)

Plus sixteen credits from the following courses:

- GEOG 223 Remote Sensing (4 credits)
- GEOG 330 Geography for Business and Planning (4 credits)
- GEOG 350 Geography of Global Health (4 credits)
- GEOG 331 Conservation Geography (4 credits)
- GEOG 421 Applied Geographic Information Systems (4 credits)
- GEOG 478 Experiential Learning (4 credits) or GEOG 491 Research (4 credits)

Plus:

- DASC 120 (or DASC 112) Introduction to Computational Statistics (4 credits)

Minors in Geography

Minor in Geography

- Twenty credits (5 courses) in Geography
    - no more than eight credits of which may be at the GEOG 100-level
    - and at least four credits of which must be numbered GEOG 300 or above.

Selection of the specific courses to fulfill the requirements should be done in consultation with a member of the department faculty.

Minor in Geographic Information Systems (GIS)

This minor is only available to non-geography majors.

- GEOG 321 Geographic Information Systems (4 credits)

Plus sixteen credits from the following courses:

- GEOG 223 Remote Sensing (4 credits)
- GEOG 330 Geography for Business and Planning (4 credits)
- GEOG 350 Geography of Global Health (4 credits)
- GEOG 331 Conservation Geography (4 credits)
- GEOG 421 Applied Geographic Information Systems (4 credits)
- GEOG 478 Experiential Learning (4 credits) or GEOG 491 Research (4 credits)

Cert. in Geographic Information Systems (GIS)

This Certificate is a three-course, 12-credit certificate as follows:

- GEOG 321 Geographic Information Systems (4 credits)

Any two of the following courses:

- GEOG 223 Remote Sensing (4 credits)
- GEOG 331 Conservation Geography (4 credits)
- GEOG 350 Geography of Global Health (4 credits)
- GEOG 393 (with a GIS component) Individual Study (4 credits)
- GEOG 421 Applied GIS (4 credits)
- GEOG 478 Experiential Learning (with a GIS component) (4 credits)
- GEOG 491 Research (with a GIS component) (4 credits)

This Certificate is only available to non-Geography majors or minors.

Geography Undergraduate Courses

GEOG 111 Human Geography (4 credits)
This course explores the effects of social, economic, environmental, political, and demographic change from a geographic perspective. It introduces students to a broad range of topics, including the effects of population growth, human impact on the environment, economic development, and globalization. Offered every semester.

GEOG 113 Globalization & World Regions (4 credits)
A country-by-country study of the world. The goal of this course is to emphasize whatever best explains the character of each country. This may be population, economics, resources, or any aspect of nature or humanity that gives an insightful understanding of each country. Offered every semester.

GEOG 151 Environmental Challenges (4 credits)
A study of the interaction of humans and the environment over time and space; a broad

introduction that integrates a variety of social-science perspectives into an understanding of the environment and the relations between humans and nature. Specific topics include ecology, population, economic development, resources and sustainable development.

GEOG 223 Remote Sensing (4 credits)
The principles and techniques of remotely sensed data are presented including photographic and digital sensing. The applicability of these techniques to land use analysis and environmental studies will be emphasized. Students will become familiar with aerial photography and digital imagery interpretation through inquiry-based learning and GIS.

GEOG 230 Weather & Climate (4 credits)
The causes and consequences of weather and climate, from global-scale processes of climate dynamics, the greenhouse effect and El Nino to regional and local-scale processes of fronts, thunderstorms, hurricanes and tornadoes. Students are introduced to weather map analysis and simple forecasting and observational techniques.

GEOG 231 Global Migrations (4 credits)
A broad study of the history of human migrations from the earliest to modern times, and an examination of migration issues, such as why people migrate, where they come from and where they go. Part of the course will focus on the experiences of local immigrant groups: Somali, Hmong, Latino, and others.

GEOG 241 Geography of Minnesota (4 credits)
Minnesota is a land rich with diversity. In this course, students will explore the state's people, landscapes, natural resources, rural issues, economic opportunities, and many other aspects of Minnesota. The course will examine regional and topical issues to develop an understanding of what makes Minnesota unique. This will be accomplished through class discussions, hands-on activities, and readings.

GEOG 242 Latin America (4 credits)
A country-by-country tour of Latin America, this course addresses the physical geography and resources, as well as key features of history, ethnicity, government, economy, and modern issues of each country. Such issues may include land tenure, social conditions, environmental problems, indigenous movements, or any topic that is important to understand a particular country.

GEOG 243 Individual Study (2 OR 4 credits)

GEOG 244 Africa (4 credits)
A broad tour of Africa, including geography, history, and political economy. The course addresses both the broad physical and human geography of Africa, and includes specific topics such as indigenous governance, colonialism, independence leaders, Cold War politics, modern governance, ethnic conflicts, and health and environmental problems.

GEOG 269 Research (2 OR 4 credits)

GEOG 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GEOG 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GEOG 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy

GEOG 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GEOG 321 Geographic Info Systems (4 credits)
This course is an introduction to Geographic Information Systems (GIS). Topics include spatial data acquisition, editing, file geodatabase design, spatial query and display, spatial analysis, map design, and online applications. Offers valuable preparation for careers in geology, geography, environmental science, biology, engineering, government, business, real estate, health care, urban planning, marketing, and other related fields.

GEOG 322 Geographical Analysis (4 credits)
This project-based course uses Geographic Information Systems (GIS) to explore, model and better understand the American Landscape. If focuses on collecting, organizing, analyzing and presenting spatial data. Statistical methods are applied in a real-world context - providing insight into issues ranging from urban sprawl to rural economic development. Offered alternate years.

GEOG 330 Geography/Business/Planning (4 credits)
Geographic techniques for business and planning applications include demographic analysis of customer characteristics, consumer's geographic

behavior, trade areas, patterns of retailing, store location problems, site appraisals, optimal routing, and marketing.

GEOG 331 Conservation Geography (4 credits)
This course uses basic Geographic Information Systems (GIS) to study a wide range of conservation issues. GIS is ideal platform for exploring the relationships between the economic, political and environmental processes shaping our landscapes. Typical class projects include locating the best lands in Minnesota for carbon sequestration projects and helping the Minnesota Nature Conservancy target valuable forest habitat for conservation purchases.

GEOG 340 Geography of U.S. & Canada (4 credits)
What does the notion of "America" mean? How is this different from other global regions? This course examines the historical creation and expansion of North America from European, African and Asian influences. It then explores the contemporary geography of the continent: different cultural regions, economic characteristics, political variations, and places both special and commonplace that help define the North American experience.

GEOG 350 Geography of Global Health (4 credits)
This class introduces students to the concepts, theories and research techniques used by medical geographers. We study the underlying environmental, cultural and demographic processes that shape the distribution and spread of disease in an effort to achieve a deeper understanding of the factors influencing human health. Much of the semester is spent using Geographic Information Systems (GIS) to help community partners analyze and address health care challenges in the Twin Cities.

GEOG 389 Research (2 OR 4 credits)

GEOG 393 Individual Study (0 TO 4 credits)

GEOG 402 Field Seminar (4 credits)
A capstone course that combines field experience with classroom seminar. Student teams will conduct collaborative broadly interdisciplinary analyses of selected environmental problems. Field-based projects are chosen by the students in consultation with course instructor. Classroom seminars are used for exchange of information between teams and for discussion of readings pertinent to individual research projects or, more broadly, to the interdisciplinary character of environmental problem-solving. Each team produces a major paper that examines the selected problems through humanities, natural-science and social-science lenses. This class is cross-listed with, and is equivalent to, ENVR 401. Prerequisite: four geography courses or permission of the instructor

GEOG 421 Applied Geographic Info Sys (4 credits)
This project-based course is designed around individual student interests to utilize advanced ArcGIS functions and analysis. Principles of geographic information systems will be implemented in a wide variety of applications. Prerequisite: 300 level GEOG course or consent of the instructor.

GEOG 430 Urban Geography (4 credits)
This course will focus on themes in the development of contemporary cities with special attention to patterns and trends within the Twin Cities metropolitan area e.g. ethnicity, housing, transportation, historical evolution, and urban growth. Prerequisite: GEOG 111 or 113 or consent of instructor

GEOG 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GEOG 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GEOG 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GEOG 491 Research (2 OR 4 credits)

GEOG 495 Individual Study (1 TO 4 credits)

Geology

Program Overview

College of Arts and Sciences, The Department of Earth, Environment, and Society

Owens Science Hall (OWS) 153, (651) 962-5243

Caplow (Chair), Clotts, Hickson, Lamb, McDermott, Theissen, Vislova

Department Web Site:
https://cas.stthomas.edu/departments/areas-of-study/earth-environment-society/index.html

Geology is the field of study that tackles a wide range of issues facing society today: preparing for

natural disasters, finding and extracting natural resources in responsible and sustainable ways, understanding and preparing for global environmental change, preventing, assessing and mitigating environmental pollution, and public health issues, to name a few. Many of us grew up thinking geologists simply study rocks. Although it is true rocks provide some of the fundamental clues to understanding these issues, geologists also study soil, sediments, lakes, groundwater, and the interior of the earth. Spatial analysis using ArcGIS, numerical computer modeling, and geochemical analysis using sophisticated instrumentation are common methods used by different geoscientists.

In the Geology program, we strive to develop the whole student by emphasizing critical thinking and analytical, quantitative, public speaking and writing skills. Students have the opportunity to work collaboratively with geology faculty on research projects, in addition to learning the key field, lab and research skills of a professional geologist. These skills are transferable to many different fields and help prepare students for a range of career paths. The geology curriculum has been designed to provide students with a solid core, but with sufficient flexibility to allow students with particular interests to pursue a more customized Geology program. At the heart of this program are a number of hands-on learning opportunities, a fundamental and basic component of a St. Thomas geoscience degree. Program faculty emphasize the fact that geology must be learned by practicing skills and as a result offer analytical experiences in all courses that extend from a short afternoon trip to a multi-week field course on field methods and regional geology. Majors will visit many of the geologically significant localities throughout the upper Midwest as part of their program as well as use analytical instrumentation.

For information about Teacher Licensure in one of the following concentrations, please see the education section.

- Elementary Education with a Co-major in Science and Mathematics for Elementary Education
- Elementary Education with a Specialty in Science (5-8)
- Co-major in Science (5-8) – Earth and Space Science (9-12) and a Co-major in Secondary Education

Majors in Geology

Major in Geology (B.A.)

The Bachelor of Arts in Geology is designed for students that want a rigorous foundation in the geosciences that prepares them for a career as a professional geologist, but also lays the groundwork for careers in Earth and space science teaching, public policy, natural resource management, environmental law, or others that do not require graduate degrees. Some graduate programs might consider this degree sufficient for entry, but some may require more allied courses in mathematics, chemistry, and/or physics. If you are considering careers in environmental geology that will lead to a Professional Geologist state certification, pay particular attention to the elective and allied courses marked with an asterisk (*).

Four credits from the following:

- GEOL 110 Geology of the National Parks (4 credits)
- GEOL 111 Introductory Physical Geology (4 credits)
- GEOL 114 The Science of Natural Disasters (4 credits)
- GEOL 115 Environmental Geology (4 credits)
- GEOL 162 The Earth's Record of Climate (4 credits)

Plus:

- GEOL 211 Earth Materials (4 credits)
- GEOL 260 Geology in the Field (4 credits)*
- GEOL 310 Environmental Geochemistry (4 credits)
- GEOL 340 Fundamentals of the Lithosphere I (Petrology) (4 credits)
- GEOL 360 Fundamentals of the Lithosphere II (Structural Geology) (4 credits)
- GEOL 410 Hydrogeology
- GEOL 420 Sedimentology and Stratigraphy (4 credits)

Plus ten credits from the following:

- GEOL 130 Earth History (4 credits)
- GEOL 161 Medical Geology (4 credits)
- GEOL 162 The Earth's Record of Climate (if not chosen above) (4 credits)
- GEOL 210 Soils and the Environment (2 credits)
- GEOL 220 Oceanography (4 credits)
- GEOL 230 Digital Field Science (2 credits)
- GEOL 231 Applied Environmental Policy (2 credits)
- GEOL 252 Earth Surface Processes and Geomorphology (4 credits)*

- GEOL 430 Advanced Earth History (4 credits)
- GEOL 460 Advanced Field Methods (4 credits)
- GEOL 461 Medical Geology (unless receiving credit for 161) (4 credits)
- GEOL 462 The Earth's Record of Climate (unless receiving credit for 162) (4 credits)
- GEOL 491 Research (4 credits)
- BIOL 471 Evolution (4 credits)
- One course may come from this list:
    - ESCI 310 Environmental Problem Solving
    - GEOG 223 Remote Sensing
    - GEOG 321 Geographic Information Systems*

Quantitative Analysis (4 credits)

- CISC 130 Programming and Problem Solving
- DASC 120 Introduction to Computational Statistics*
- MATH 113 Calculus I (or MATH 108 + 109 or MATH 111 + 112)

Allied Courses (8 credits), with no two courses from the same program:

- BIOL 102 Conservation Biology
- BIOL 209 Biology of Sustainability
- CHEM 101 Environmental Chemistry*
- CHEM 111 General Chemistry I (MATH 113 placement required)
- CISC 130 Programming and Problem Solving (if not taken for Quantitative Analysis)
- ECON 370 Environmental and Natural Resource Economics (4 credits)
- ENGR 123 Energy and the Environment
- ENVR 212 Society and Sustainability, ENVR 301 Environmental Ethics, OR ENVR 351 Environmental Policy (all classes 4 credits)
- ESCI 310 Environmental Problem Solving (if not taken as an elective above)
- ESCI 430 Senior Research Seminar
- GEOG 223 Remote Sensing (if not taken as an elective above)
- GEOG 321 Geographic Information Systems (if not taken as an elective above)
- PHYS 101 Physics for Liberal Arts
- PHYS 104 Astronomy
- PHYS 109 Physics for Life Sciences I (MATH 111 placement required)
- PHYS 211 Classical Physics I (MATH 113 placement required)
- DASC 240 Statistics II*

*Strongly recommended for students wishing to pursue professional geologist (PG) state certification.

Major in Geology (B.S.)

Four credits from the following:

- GEOL 111 Introductory Physical Geology (4 credits)
- GEOL 114 The Science of Natural Disasters (4 credits)
- GEOL 115 Environmental Geology (4 credits)
- GEOL 162 The Earth's Record of Climate (4 credits)

Plus:

- GEOL 211 Earth Materials (4 credits) or GEOL 310 Environmental Geochemistry (4 credits)
- GEOL 260 Regional Geology and Geological Field Methods (4 credits)
- GEOL 310 Environmental Geochemistry (4 credits)
- GEOL 340 Fundamentals of the Lithosphere I (Petrology) (4 credits)
- GEOL 360 Fundamentals of the Lithosphere II (Structural Geology) (4 credits)
- GEOL 410 Hydrogeology (4 credits)
- GEOL 420 Sedimentology and Stratigraphy (4 credits)

Plus fourteen credits from the following:

- GEOL 130 Earth History (4 credits)
- GEOL 161 Medical Geology (4 credits)
- GEOL 162 The Earth's Record of Climate (if not chosen above)(4 credits)
- GEOL 210 Soils and the Environment (2 credits)
- GEOL 220 Oceanography (4 credits)
- GEOL 230 Digital Field Science (2 credits)
- GEOL 231 Applied Environmental Policy (2 credits)
- GEOL 252 Earth Surface Processes and Geomorphology (4 credits)
- GEOL 460 Advanced Field Methods (4 credits)
- GEOL 461 Medical Geology (unless receiving credit for 161) (4 credits)
- GEOL 462 The Earth's Record of Climate (unless receiving credit for 162) (4 credits)
- GEOL 491 Research (4 credits)

- ESCI 310 Environmental Problem Solving or GEOG 223 Remote Sensing or GEOG 321 Geographic Information Systems (if not taken as allied), or GEOG 421 Applied Geographic Information Systems or ESCI 430 Senior Research Seminar

Note: geology courses offered at Macalester College may fulfill one of these courses with permission of chair

Allied requirements

- MATH 113 Calculus I (4 credits) or MATH 109 Calculus with Review II (4 credits)
- CHEM 111 General Chemistry I (4 credits)
- CHEM 112 General Chemistry II (4 credits)
- PHYS 211 Introduction to Classical Physics I (4 credits)
- STAT 303 Statistics for the Applied Sciences (4 credits) or DASC 120 Introduction to Computational Statistics (4 credits)
- GEOG 321 Geographic Information Systems (if not taken to satisfy GEOL elective above) or GEOG 223 Remote Sensing
- MATH 303 Statistics for the Applied Sciences (4 credits) or DASC 120 Statistics I (4 credits)

For students wishing to pursue careers in paleontology, geobiology, or geomicrobiology:

- BIOL 207 Genetics, Ecology, and Evolution (4 credits) and 208 Biological Communication and Energetics (4 credits)
- Biology may be substituted for one of the CHEM/PHYS sequences with permission of chair

Depending on a student's interest and career goals, substitutions may be made for other advanced courses in Biology, Chemistry, or Physics for certain listed courses, in consultation with the geology department chair.

Minor in Geology

Four credits from the following:

- GEOL 110 Geology of the National Parks (4 credits)
- GEOL 111 Introductory Physical Geology (4 credits)
- GEOL 114 Natural Disasters (4 credits)
- GEOL 115 Environmental Geology (4 credits)
- GEOL 163 Applied Geology (4 credits)

And one of the following elective options:

Sixteen credits from additional GEOL courses not from the list above, at least 12 credits of which are numbered 200 or above.

or

Twelve additional credits in GEOL courses not from the list above at least 8 credits of which are numbered 200 or above, and four credits from the following list.

- ESCI 310 Environmental Problem Solving (4 credits)
- BIOL 209, Biology of Sustainability (4 credits)
- BIOL 333 General Ecology (4 credits)
- BIOL 435 Aquatic Biology (4 credits)
- CHEM 111 General Chemistry (4 credits)
- GEOG 223 Remote Sensing (4 credits)
- GEOG 321 Geographic Information Systems (4 credits)
- GEOG 421 Applied Geographic Information Systems (4 credits)
- ENGR 160 Surveying (2 credits)
- ENGR 463 Soil Mechanics and Foundations (4 credits)
- ENGR 467 Environmental Engineering, Hydrology, and Hydraulics (4 credits)
- PHYS 211, Classical Physics 1 (4 credits)

Geology Undergraduate Courses

GEOL 102 Origins & Methods (0 or 4 credits)
A study of the basic concepts of geology that were first developed by James Hutton in the late 18th century and their application today. This is an introductory science course specifically designed to reduce the mystique that often is associated with the scientific method. Following Hutton's example, the study will focus on the materials which make up the earth and on the geologic processes that operate on these materials. Offered in January term. NOTE: Students who receive credit for GEOL 102 may not receive credit for GEOL 110, 111, 114, or 115.

GEOL 111 Intro Physical Geology (0 or 4 credits)
A study of the Earth's properties; the formation and classification of minerals, rocks, ore deposits, and fuels; and the nature and origin of the Earth's surface and interior. Emphasis will be placed upon a changing Earth, and the geologic processes operating at the surface and in the interior. Lecture and two laboratory hours per week. NOTE: Students who receive credit for GEOL 111 may not receive credit for GEOL 102, 110, 114, or 115.

GEOL 114 Science of Natural Disaster (0 or 4 credits)
This introductory geology course focuses on how and why natural disasters occur, as well as on their effects and how scientists study them. The course will examine internal and external earth processes and in particular how these processes impact humans. Course emphases will be upon the principles underlying natural disasters such as earthquakes, volcanic eruptions, landslides, floods, coastal processes, and extinctions. We will use case studies of recent and historic events to understand these natural processes. NOTE: Students who receive credit for GEOL 114 may not receive credit for GEOL 102, 110, 111, or 115.

GEOL 115 Environmental Geology (0 or 4 credits)
This course emphasizes the interactions between humans and their environment, focusing on those processes and issues that are fundamentally geological in nature. Early in the course, students will be introduced to basic geoscience concepts and principals, the scientific method, plate tectonics, and earth materials (rocks and minerals). The remainder of the course will focus on specific topics at the interface between humans and their environment, including volcanic and earthquake hazards, human impacts on the hydrological cycle, surface and groundwater contamination, climate and the carbon cycle, nuclear waste storage, soil erosion, non-renewable resources, and slope stability. NOTE: Students who receive credit for GEOL 115 may not receive credit for GEOL 102, 110, 111, or 114.

GEOL 130 Earth History (0 or 4 credits)
The course introduces fundamental geologic concepts while examining the major tectonic, chemical and biological events that shaped the Earth through time. It will include a study of fossils, sedimentary structures, depositional environments, radiometric dating techniques, and other tools geoscientists use to interpret the past. Throughout the course global events will be studied but focus will be on the North American continent.

GEOL 161 Medical Geology (0 or 4 credits)
This course explores the effects of geologic materials and processes on human health. Topics include exposure to or deficiency of trace metals and minerals, inhalation of ambient and anthropogenic mineral dusts and volcanic emissions; transportation, modification and concentration of organic compounds; and exposure to radionuclide's, microbes and pathogens in various geologic settings. The knowledge and skills covered in this course will provide an understanding of the geological and biological processes controlling various public health concerns and thus provides a preparation to contribute to important societal questions. Prerequisites:GEOL 111, 112, 114, 115 or CHEM 100, 101, 111, 115 or permission of instructor. NOTE: Students who take GEOL 161 may not receive credit for GEOL 461

GEOL 162 The Earth's Record of Climate (0 or 4 credits)
Climate change is among the most pressing challenges in our world today. In this course we will explore the Earth's climate system and the climatic changes that have occurred during the history of our planet. We will use a number of geological "fingerprints" to examine past climate and modern data to examine climate change in recent decades. You will gain hands-on experience collecting, analyzing, and interpreting climate data in several laboratory projects and in course exercises designed with an emphasis on scientific inquiry and problem solving. NOTE: Students who receive credit for GEOL 162 may not receive credit for GEOL 462

GEOL 163 Applied Geology (0 or 4 credits)
This course examines geologic systems that occur at or near the Earth’s surface with a focus on processes that interact directly with human infrastructure. Effective and safe civil engineering requires an understanding of the materials upon which infrastructure is built and this course aims to provide an introduction to materials at the Earth’s surface and their response to construction and human alteration. Topics to be covered include an introduction to geologic materials (rocks, minerals, and soils), basic principles of hydrology including groundwater flow, river flow (open-channel flow), and water quality and treatment, slope stability and erosion, and surveying. The course includes weekly lab meetings to allow students to explore the topics in greater depth and apply their knowledge to real-world problems. This course is required for ENGR Civil Engineering majors, can serve as an introductory geology course for Geology and Environmental Science majors, and will satisfy the lab-science requirement for non-majors.

GEOL 210 Soil, Science and Society (2 credits)
Soil is vital to sustain life on Earth, yet many of us take it for granted. So much so that most people are unaware that humans have become the most important agent in modifying the Earth’s surface in all of geological history because our activities have accelerated soil erosion. In this course, you will develop skills to describe soil forming processes, analyze soils using a range of techniques, and be able to describe ways that humans impact soils and how we can manage the challenge of soil erosion. Topics will include soil classification and description; soil forming factors; physical, chemical, and biological processes in soils; and soil conservation

practices including regenerative farming, and indigenous knowledge to protect soil health. Prerequisites: One of: GEOL 111, 114, 115, BIOL 207, 208, 209, ESCI 132, ENVR 151, or permission of instructor

GEOL 211 Environmental Earth Materials (0 or 2 credits)
Geologists and environmental scientists address major issues facing society: groundwater contamination and cleanup, mitigating the affects of climate change, extracting natural resources sustainably, improving soil quality to grow food for a growing population. These issues require fundamental knowledge of earth's key materials. You will study the properties of the main rocks and minerals present in the upper Midwest that are key to solving these problems. Prerequisites: One of GEOL 102, 111, 114, 115, 161, 162, 163, ESCI 132, or permission of the instructor

GEOL 220 Oceanography (0 or 4 credits)
The Earth's surface is dominated by vast oceans known for the beauty of their wildlife and waters. The oceans are also increasingly recognized for their critical importance to the functioning of the Earth's climate system and for their endangered natural resources. For example, the ocean- atmospheric climate phenomenon known as El Nino Southern Oscillation has gained household name recognition for its global impact on the weather, economy, and public health. In this course we will explore the physical, chemical, and biological processes that characterize the oceans. Students will develop research and analytical skills by making observations and interpretations of oceanographic processes using data, demonstrations, and field experiences. Prerequisites: One of GEOL 102, 110, 111, 113, 114, 115, 161, 162, or 163 or permission of instructor.

GEOL 230 Digital Field Science (2 credits)
In this course students will develop skills in collecting field data using digital techniques in the natural sciences, including geology, environmental science, ecology, and other field-based disciplines. The over-arching goal of this course is to give you the skills you need to take data that you have acquired in the field or from remote sensing data—such as imagery from satellites, drones, airplanes, etc.—and display these data as a meaningful, quality maps and figures that help answer a scientific question. You will learn how to collect field data using handheld devices and surveying equipment, depict these data using cartographic best practices, and integrate geospatial technology into a wide range of applications. Prerequisites: Any one of the following: GEOL 111, 114, 115, BIOL 102, 207, 208, or 209, ESCI 132, 310, ENVR 151

GEOL 231 Applied Environmental Policy (2 credits)
Many natural science and civil engineering graduates have careers related to environmental policy or risk mitigation due to the complex Federal, State and Local rules and regulations that determine how humans interact with the natural world by ensuring short- and long-term protection of human health and the environment. This course will introduce students to the main policy framework(s) by developing a key knowledge base of the rules and regulations that drive environmental compliance. Students will develop a high level understanding of the numerous environmental risks and how these risks are mitigated through due diligence actions, and will introduce students to the different professional certifications and skills needed in these fields. Prerequisites: One of: GEOL 111, 115, 130, 162, or 163, -or- ESCI 132 or 310, -or- EES Chair approval.

GEOL 243 Individual Study (2 OR 4 credits)

GEOL 252 Earth Surface Proc/Geomorph (0 or 4 credits)
This course emphasizes the physical processes that are responsible for shaping the Earth's surface. The qualitative description of landforms is pursued, in light of student's newly-gained analytical and quantitative understanding of processes. The labs focus on techniques used by geomorphologists to characterize landforms, soils, and the processes that shape them, including: air photo interpretation, analysis of digital topographic data, experimental simulation of landforms evolution, and field techniques in geomorphology. Prerequisite: one of GEOL 102, 110, 111, 113, 114, 115, 161, 162, or 163 or permission of instructor

GEOL 260 Regional Geol & Field Meth (0 or 4 credits)
The field is geology's laboratory. this course is an introduction to the major concepts of geology, as well as the methods of field geology. Students will learn how to collect, synthesize, and analyze geological data in the field. Techniques will be taught in the context of the regional geology of an area so students will gain a critical appreciation of a geological terrain outside of their usual experience. Students will spend 2-3 weeks in the field examining geological structures, modern-day faults, modern processes that shape the earth's surface, and examining the ancient record of past climate and environments preserved in the rock record. Student teams will learn basic techniques and instruments of geological mapping and rock description, how to recognize geological structures like faults and folds, ways to interpret the evolution of the earth from sedimentary, igneous, and metamorphic rocks, and

to link surface processes with the rock record. Offered in January-term. Prerequisite: One of Geology 111, 114, 115, 130, 161, 162, 163, ESCI 132 or permission of instructor

GEOL 269 Research (2 OR 4 credits)

GEOL 296 Topics (0 or 2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GEOL 298 Topics (0 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GEOL 310 Environmental Geochemistry (0 to 4 credits)
Environmental geochemistry is a growing and dynamic field in geology which explores past and present environments for their chemical characteristics and environmental quality. In this course we will explore the applications of chemistry to solve geological and environmental problems, with an emphasis on freshwater environments. Students will get hands-on field and laboratory experience investigating Minnesota rock formations and lake sediments using several different geochemical methods. Prerequisites: one of GEOL 102, 110, 111, 113, 114, 115, 161, 162, or 163 or permission of instructor

GEOL 340 Fund of Lithosphere I (Pet) (0 or 4 credits)
This is the first course in a year-long sequence that covers the fundamentals of petrology and structural geology in a global tectonic framework. The course begins with a discussion of plate tectonics and then examines each of the major plate settings and their boundaries. This will include the formation of igneous, sedimentary and metamorphic rocks. Labs will include hand specimen identification and the use of the petrographic microscope. The course will also examine the conditions of rock deformation and the typical structural features of each tectonic setting. Labs will cover structural geology techniques including recognition and analysis of features in the field and in hand samples. In the fall semester the focus will be on the petrology of the mantle and lithosphere as well as divergent margins. In the spring semester, the focus will be on convergent margins. There will be several field trips as part of this course, ranging from 1-4 days, in the early fall and late spring. Prerequisites: one of GEOL 102, 110, 111, 113, 114, 115, 161, 162, or 163 or permission of instructor

GEOL 360 Fund of Lithosphere II (0 or 4 credits)
Continuation of GEOL 340. Prerequisite: GEOL 260 and 340

GEOL 389 Research (0 OR 4 credits)

GEOL 393 Individual Study (2 OR 4 credits)

GEOL 410 Hydrogeology (0 or 4 credits)
This course focuses on groundwater and how geology influences its recharge, movement, storage, and withdrawal. The course will cover basic concepts of surface- and subsurface water flow, aquifer properties, well testing, heterogeneity in aquifers, groundwater chemistry and contamination, the role of groundwater in geological processes, and regional groundwater systems. Examples, labs, and projects will focus on groundwater in Minnesota and its immediate surroundings. Prerequisites: one of GEOL 102, 110, 111, 113, 114, 115, 161, 162, or 163 or permission of instructor plus 80 completed credits.

GEOL 420 Sedimentology/Stratigraphy (0 or 4 credits)
Sedimentology is the study of sediment, particularly focusing on how it is transported, and deposited. Stratigraphy emphasizes the analysis of sedimentary strata, the layers of sedimentary (and some volcanic) rocks that cover about three-quarters of the earth's surface. Sedimentary rocks illuminate many of the details of the earth's history: effects of sea level change, global climate, tectonic processes, and geochemical cycles are all recorded in the sedimentary strata of the earth. This course will cover basics of fluid flow and sediment transport, sedimentary structures and textures, and - forming the bridge between modern landforms and ancient rocks - depositional sedimentary environments. Prerequisite: One of GEOL 110, 111, 113, 114, 115, 161; GEOL 211 recommended

GEOL 430 Advanced Earth History (4 credits)
This course serves as a senior capstone experience in the geology major. Using the tools and concepts from previous coursework--including geochronology, plate tectonics, and other earth processes--students will examine in-depth some aspect of earth history. The specific subject matter and focus of this course will vary from year to year, and will be chosen based on input from the students in consultation with the instructor. Some examples of topics include: Precambrian tectonics of the Great Lakes region; Global Mesozoic tectonics; Sedimentary basins and basin analysis; or the Phanerozoic amalgamation of Asia. Prerequisite: C- or better in GEOL 260, 320, and 340

GEOL 460 Advanced Field Geology (0 to 4 credits)
In this course, students will use skills developed in the introductory field methods course, Geology 260, to tackle more complex geologic problems. We will spend 3 weeks in the field mapping in an area that is more structurally complicated and learning additional techniques not introduced in the first course. Students will have the option of starting a research project and collecting data to be analyzed and written up in the following semester. Students not choosing this option will complete a field project during the course. Prerequisites: GEOL 260 and permission of the instructor

GEOL 461 Medical Geology (0 or 4 credits)
This course explores the effects of geologic materials and processes on human health. Topics include exposure to or deficiency of trace metals and minerals, inhalation of ambient and anthropogenic mineral dusts and volcanic emissions; transportation, modification and concentration of organic compounds; and exposure to radionuclide's, microbes and pathogens in various geologic settings. The knowledge and skills covered in this course will provide an understanding of the geological and biological processes controlling various health concerns and thus provides a preparation to contribute to important societal questions. Prerequisites: GEOL 310 or ESCI 310 or permission of the instructor NOTE: Students who receive credit for GEOL 161 may not receive credit for GEOL 461

GEOL 462 The Earth's Record of Climate (0 or 4 credits)
Climate change is among the most pressing challenges in our world today. In this course we will explore the Earth's climate system and the climatic changes that have occurred during the history of our planet. We will use a number of geological "fingerprints" to examine past climate and modern data to examine climate change in recent decades. You will gain hands-on experience collecting, analyzing, and interpreting climate data in several laboratory projects and in course exercises designed with an emphasis on scientific inquiry and problem solving. Prerequisite:One of GEOL 211, 220, 252 or 260, or permission of the instructor NOTE: Students who receive credit for GEOL 162 may not receive credit for GEOL 462

GEOL 476 Experiential Learning (1 TO 4 credits)

GEOL 489 Topics (0 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GEOL 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GEOL 491 Individual Study (1 TO 4 credits)

GEOL 495 Individual Study (2 OR 4 credits)

German

Program Overview

The program strives to offer a diversified curriculum capable of accommodating a variety of student interests and professional goals connected with German studies. The aims of the program are:

- To give students a solid command of the German language(s) and Germanic cultures for use in professional, academic, and personal life.
- To acquaint students with the history, literature, and cultures of the German-speaking countries and to familiarizes students with the role these countries and their cultures play in the world today.
- To prepare students for study abroad and a variety of careers in a global world through diverse course offerings.
- To educate students in the tradition of a liberal arts setting.

German degrees and tracks offered

- Major in German (BA)
- Minor in German
- International Engineering Program (IEP), dual degree program with German (BA) and Engineering (BSCE, BSCPE, BSEE, BSME)

German Honor Society

The University of St. Thomas is chartered as the Tau Omicron chapter of Delta Phi Alpha

The German National Honor Society, Delta Phi Alpha (Deutsche Ehrenverbindung), seeks to recognize excellence in the study of German and to provide an incentive for higher scholarship. The society aims to promote the study of the German language, literature, and civilization, and endeavors to emphasize those aspects of German life and culture which are of universal value, and which contribute to humankind's eternal search for peace

and truth. Delta Phi Alpha was founded in 1929 at Wofford College in Spartanburg, South Carolina, where the Alpha Chapter still resides. Currently chapters are active on over 270 college and university campuses in the United States.

Qualifications for student membership are:

A minimum of two years of college level German, or the equivalent.

A minimum GPA of B+ (3.3) in German courses.

A minimum cumulative GPA of B- (2.7).

An indication of continued interest in the study of German language and literature.

Major in German

- Completion of GERM 212 or its equivalent
- GERM 300 Introduction to German Studies (4 credits)

Plus:

- Twenty-four additional credits numbered above GERM 300
- At least six of these 24 credits must be literature courses.
- At least twelve of these 24 credits must be completed at the University of St. Thomas.
- No more than twelve credits may be in the area of advanced language skills development.
- Elective courses for the major in German should be selected in consultation with a member of the German faculty.

Plus Allied Requirement:

Four credits in a neighboring field with a German cultural component. Examples of approved allied courses are listed below. Students should consult with the German program director prior to enrolling in the class, or to request approval for a course not listed below.

- Department of Modern and Classical Languages:
    - German Program: Courses offered with an intercultural focus, but not counting toward the German Major course load such as
        - GERM 330
        - GERM 475
    - Courses offered in the Department of Modern and Classical Languages with an intercultural competence focus, such as LNGS 325
- Theology Department:
    - THEO 222: History: Reformation
    - THEO 224: Bridges: Theology & Politics
    - THEO 227: Contexts: Nazism & Apartheid
- History Department:
    - HIST 226 Modern Europe since 1914
    - HIST 227 Global History of Genocide 1900-
    - HIST 335 Nazi Germany and the Holocaust
    - HIST 337 History of the First World War
- Interdisciplinary Courses:
    - IDSC 287: German Cultural Heritage

For administrative purposes, students will complete assessment measures at the beginning of their major (in their 300 class) and during their final semester.

Recommended:

- Courses in a second foreign language.
- The department strongly urges all students planning to major in German to spend some time, (a summer, a J-Term, one semester, or a year) studying in a German-speaking country and to enroll in a German course at St. Thomas upon their return. See a member of the German faculty for information on study-abroad opportunities and scholarships for University of St. Thomas' students in Germany or Austria.
- Interdisciplinary courses offered at the University of St. Thomas with a German Studies component
- Department of Theology
    - THEO 222: HISTORY: Reformation
    - THEO 224/433: Theology & Politics
    - THEO 227: Contexts: Naziism & Apartheid
- Department of History
    - HIST 226 Modern Europe since 1914
    - HIST 227 Global History of Genocide 1900-
    - HIST 335 Nazi Germany and the Holocaust
    - HIST 337 History of the First World War
- Interdisciplinary Courses
    - IDSC 287: German Cultural Heritage

- Department of Philosophy
    - PHIL 304: Modern Philosophy
    - PHIL 306: Contemporary Philosophy

German: Int'l Engineering Program (IEP)

(https://www.stthomas.edu/catalog/current/engr/)

The German Major for the International Engineering Program (IEP) is designed for students pursuing an international career or with a global company. It provides engineers with language and culture skills through an international experience and diverse course offerings including those focused on intercultural/global competence and German for the Professions. Students in this dual program will acquire skills to prepare them for a wide variety of opportunities in industry or academia.

Upon completing, students receive a B.A. in German and a Bachelor of Science in Mechanical (BSME), Electrical (BSEE), Computer (BSCPE), or Civil Engineering (BSCE).

This dual degree requires approximately five years to complete. Plans of study for the International Engineering Program are available online, through the German program director, or in the School of Engineering Main Office.

For more information see: https://www.stthomas.edu/academics/undergraduate/german-engineering-dual-degree/index.html

Students must

- study abroad for at least one semester at a partner university in a German-speaking country
- complete a three-month local internship
- complete a six-month global internship
- fulfill the appropriate Engineering and German major requirements, as well as the respective Engineering and German allied requirements (see below).
- attend the Meet the Engineer Reverse Career Fair in their 1st, 2nd and 3rd year

German: International Engineering Program – Course work

- Completion of GERM 212 or its equivalent
- GERM 300 Introduction to German Studies (4 credits)

Plus:

- Twenty-four additional credits numbered above GERM 300 plus GERM 330 and GERM 475
- At least six of these 28 credits must be literature courses
- At least three credits must be from a Technical German course
- At least three credits must be from a German for the Professions course
- GERM 330: Intercultural Competence: Preparation Study/Work Abroad (2 credits)
- GERM 475 or 476: Experiential Learning: Study/Work Abroad (2 credits)
- ENGR 305.03: Domestic Internship, three months (0 credit)
- ENGR 305.A03: International Internship, six months (0 credit)
- At least 12 of these 28 credits must be completed at the University of St. Thomas
- No more than 12 credits may be in the area of advanced language skills development
- Elective courses for the major in German should be selected in consultation with a member of the German faculty

For administrative purposes, students will complete assessment measures at the beginning of their major (in their 300 class) and during their final semester.

Recommended:

Interdisciplinary courses offered at the University of St. Thomas with a German Studies component, e.g.:

- Department of Theology
    - THEO 222: HISTORY: Reformation
    - THEO 224: Theology & Politics
    - THEO 227: Contexts: Nazism & Apartheid
- Department of History
    - HIST 226 Modern Europe since 1914
    - HIST 227 Global History of Genocide 1900-
    - HIST 335 Nazi Germany and the Holocaust
    - HIST 337 History of the First World War
- Interdisciplinary Courses
    - IDSC 287: German Cultural Heritage
- Department of Philosophy
    - PHIL 304: Modern Philosophy
    - PHIL 306: Contemporary Philosophy

Minor in German

- Completion of GERM 212 or its equivalent
- GERM 300 Introduction to German Studies (4 credits)

Plus:

- Twelve additional credits numbered above GERM 300
- At least three of these credits must be a literature course.
- Elective courses for the minor in German should be selected in consultation with a member of the German faculty.

German Undergraduate Courses

GERM 111 Elementary German I (4 credits)
Introduction to fundamentals of language structure and vocabulary. Practice in speaking, reading, writing and understanding. Students must be placed into GERM 111.

GERM 112 Elementary German II (4 credits)
Continuation of GERM 111. Prerequisite: GERM 111 or equivalent completed with a C- or better

GERM 211 Intermediate German I (4 credits)
Review of fundamentals. Study of cultural texts with practice in speaking, reading, writing and understanding. Prerequisite: GERM 112 or equivalent completed with a C- or better

GERM 212 Intermediate German II (4 credits)
Continuation of GERM 211. Prerequisite: GERM 211 or equivalent completed with a C- or better

GERM 243 Individual Study (2 OR 4 credits)

GERM 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GERM 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GERM 300 Intro to German Studies (4 credits)
Intended as an introduction to more advanced work in German, this course, which is required of all majors and minors, will offer an overview of the evolution of German culture and civilization (society, politics, the arts) within an historical context. The course will also contain a review of advanced grammar and offer students an opportunity to improve their reading, writing, and speaking skills. Oral and written skills will be assessed. Prerequisite: GERM 212 or equivalent completed with a C- or better

GERM 301 German in the Community (2 credits)
The course offers an innovative and immersive approach to language and culture acquisition through service learning and community engagement. Designed to foster linguistic proficiency, intercultural competence, and a sense of civic responsibility, this course empowers students to apply their German language skills in real-world settings while making a meaningful impact on the local community. The course may be taken twice for a total of 4 credits. Prerequisites: GERM 212 or equivalent, and instructor permission

GERM 311 Conversation/Composition (4 credits)
Advanced practice in speaking and writing German in formal and informal situations. Instruction in the social patterns that govern language usage in various situations and discussion of contrasting linguistic and social practices among the German-speaking nations and among the regions within those nations. Prerequisite: GERM 300

GERM 312 Germ Lit: Amidst Hist Upheaval (4 credits)
The course invites students to immerse themselves in the vibrant world of contemporary German literature within the context of significant historical events. It explores how literature contributes to the understanding of critical periods in German history e.g., National Socialism, the Holocaust, and the Fall of the Wall; it investigates German literature's response to these events and their impact on the culture and society of Germany. Through captivating narratives and engaging storytelling, students will develop advanced language skills, critical thinking abilities, and a deeper appreciation for the literary and cultural traditions of the 20th Century Germany still impacting us today. Prerequisites: GERM 300 or equivalent

GERM 315 Influential Ideas (4 credits)
A study of the initiation and development of influential ideas on the part of German-speaking thinkers such as Hildegard von Bingen, Luther, Angeles Silesius, Novalis, Buchner, Marx, Nietzsche and Freud. Works selected have had a profound impact not only in German-speaking areas, but also on a worldwide scale. In addition, students will read selections from the writings and speeches of influential German political figures, past and present. Prerequisite: GERM 300

GERM 320 Contemp Germany/Curr Events (4 credits)
Examinations of the development of the Federal Republic of Germany since 1949, and examination,

evaluation and discussions of events as they develop during the course of the semester. Course materials include German pamphlets, newspapers, magazines, speeches by leading figures, and materials from the Internet. Attention is given to domestic developments in the Federal Republic of Germany as well as to international events as they concern Germany. Prerequisite: GERM 300

GERM 330 IC: Prep Study/Work Abroad (2 credits)
This course is designed for students planning to study abroad during the next semester/academic year, but any student interested in intercultural communication or in using German for professional purposes is welcome. The course prepares learners for studying and working in German-speaking countries (including advanced language study at a university and/or internships) as well as working at German-speaking companies operating in the USA. It will advance students intercultural communication: they will learn about cultural differences and discuss practical issues of coping with the experience of (living in) a foreign culture/country. Culturally relevant class content is supplemented with grammar and vocabulary review. Prerequisites: GERM 212 or equivalent

GERM 341 Highlights of German Lit I (4 credits)
A survey of German literature from 1770 to 1890. The course will focus on important works by Goethe and Schiller, German Romanticism, and the literature of the later-19th century. Prerequisite: GERM 300

GERM 342 Highlights of German Lit II (4 credits)
Continuation of GERM 341 with emphasis on literary developments in the 20th century. The course will focus on the period preceding World War I, on literary developments during the Weimar Republic, and on the attempts by postwar German authors to deal with the legacy of the World War II. The course also will discuss more recent literature. Prerequisite: GERM 300

GERM 345 Austria: the Golden Age (4 credits)
The course will examine historical and cultural developments in Austria from 1815 to 1918 with special emphasis on the literature and culture of turn- of-the-century Vienna. Students will read works by important Austrian writers such as Stifter, Nestoy, Schnitzler, Hofmannsthal, Freud and Stefan Zweig; listen to music by composers such as Schubert, Mahler and Lehar; and discuss relevant topics such as the Habsburg Empire, Biedermeier culture, art nouveau and operetta. Prerequisite: GERM 300

GERM 350 Genre Studies in German Lit. (4 credits)
This course will focus on genres of literature in German. The particular genres to be studied will vary with each offering. They will include German Drama, the German Novel of the 20th century, German Novellas, German Film, and German Poetry. May be taken twice with different topic. Prerequisite: GERM 300

GERM 393 Individual Study (2 OR 4 credits)

GERM 401 German Poetry (4 credits)
A critical study of selections from important German poets. Prerequisite: GERM 300

GERM 410 The German Opera (4 credits)
Operas of the German masters from Mozart to Weill are studied. The primary emphasis is given to the German texts of the operas, but students are given the opportunity to listen to German language recordings of the operas and to investigate the unity of poetry and music. Attention is given to the literary trends of the times. Prerequisite: GERM 300

GERM 440 Intro to Business German (4 credits)
An introduction to the vocabulary of business and economics in German. A survey of German business structure, economic principles, business-government-union interrelationships and international trade status. Readings, discussions and tests are primarily in the German language. Prerequisite: GERM 300

GERM 441 Prof Communication/Tech German (4 credits)
This course is designed for students interested in the STEM fields and/or working in a German professional setting both locally and globally such as through research, internships, or future job placement. However, any student interested in German professional communication in STEM is welcome to join the course. Through this course you will advance your German technical language (listening, reading, speaking, writing), cultural skills, and learn to communicate effectively and appropriately in technical contexts. With exercises in listening and reading comprehension geared toward the STEM and business fields, vocabulary related to specialist communication is expanded, practiced, and consolidated through presentations, role plays, as well as debates and discussions. Prerequisite: GERM 300 or equivalent such as B1+ (CEFR).

GERM 475 Experiential Learning (Abroad) (2 credits)
This interdisciplinary, intercultural, and interactive course is designed for students studying and working abroad in a German-speaking country. It accompanies you on your journey of acquiring intercultural competency, discovering real-world business and STEM concepts, and provides an opportunity to integrate academic learning with

valuable work experience in the field. During your studies and internship(s), you will gain first-hand, practical knowledge augmenting what you have learned in the classroom. These opportunities will empower you to develop creative, effective solutions to challenges relevant to global companies. Prerequisite: Germ 300 and Germ 330/488.

GERM 476 Experiential Learning (1 TO 4 credits)

GERM 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GERM 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GERM 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

GERM 495 Individual Study (2 OR 4 credits)

LNGS 325 Language Matters (2 credits)
This course examines the importance of languages and cultural knowledge in a globalized world. Drawing on examples from students' experiences and incorporating scholarly sources and information from different disciplines, students will learn about the intersection of languages and cultures from around the world. Topics will include issues of identity, power, social justice, dignity, diversity, global citizenship, and vocation. Prerequisite: Students must have at least 80 credits in order to register for this course.

Greek

Program Overview

Greek courses apply not only to the core language requirement but also to majors and minors in Classics (both Culture and Language tracks). For degree options, please see the Classics section of the catalog.

Greek Undergraduate Courses

GREK 111 Elementary Classical Greek I (4 credits)
A beginning course, with emphasis on reading classical Greek prose in passages of increasing complexity. Introduction to essential forms, syntax and vocabulary. Practice in reading Greek aloud and composing simple sentences. Exploration of the social and cultural context of the Greek language.

GREK 112 Elementary Classical Greek II (4 credits)
Continuation of GREK 111. Prerequisite: GREK 111 or equivalent completed with a C- or better

GREK 211 Intermediate Classical Greek I (4 credits)
Selected readings in Greek prose; review of grammar. Prerequisite: GREK 112 or equivalent completed with a C- or better

GREK 212 Intermediate Clas. Greek II (4 credits)
Readings in classical Greek prose, particularly Plato. Prerequisite: GREK 211 or equivalent completed with a C- or better

GREK 243 Individual Study (2 OR 4 credits)

GREK 269 Research (2 OR 4 credits)

GREK 393 Individual Study (2 OR 4 credits)

History

Program Overview

College of Arts and Sciences, Department of History

John Roach Center for the Liberal Arts (JRC) 413, (651) 962-5730

Ahmadi, Cavert, McCutchen, Mills, Nagy, Schrunk, Williard, Zhang, Zimmerman (Chair)

Department Web Site:
https://cas.stthomas.edu/departments/areas-of-study/history/index.html

The Department of History offers a wide variety of courses dealing with the principal periods and topics of American, European, and World history, as well as selected non-European/non-U.S. fields such as East Asia, Latin America, the Atlantic World, and the Middle East.

Courses in the Department of History teach students to investigate how the past produced the ever-changing present, rather than merely presenting a fixed chronicle of prior events. Students practice analyzing evidence from the past in context and using it to explain the sources of our world's possibilities and challenges. As a result, students learn that historical power relations, social conflicts, and intercultural exchanges created the diversity of the contemporary world. By promoting critical thinking, intellectual resourcefulness, interdisciplinary engagement, and intercultural awareness, historical study prepares students to be

active and informed citizens of their communities in the world.

Courses at the 100 level introduce students to historical reasoning. The Department's 100-level courses satisfy the Core Curriculum requirement in Historical Analysis.

The criteria for these courses are as follows:

1. Each course is comprehensive rather than narrow in its subject matter. It engages a wide variety of themes, and surveys how they change over time within a broad regional and chronological sweep, in order to understand people and societies separated from us by space and time.
2. Each course introduces basic methods of historical inquiry and analysis, including how to evaluate and interpret primary sources, and helps students to develop their skills in analytical writing.
3. By investigating the development of structures of power, privilege, and identity—such as race and ethnicity, gender, nationality, religion, and class—each course illuminates the historical origins of contemporary society and culture. The course thus lays a foundation for the 200-level core-flagged course in Diversity, Inclusion, and Social Justice.
4. Each course uses interdisciplinary tools to raise awareness of the historical importance of human diversity and intercultural exchange.
5. Each course increases students' knowledge of the history of the modern world and its origins by placing the history of specific regions into global historical context.

The History Department also offers a history major and a minor. Students may pursue the history major by itself or paired with another major or minor to prepare for careers in education, business, law, communications, government, and library, museum, or archival work. The history major also prepares students for graduate work in History or in other history-related academic disciplines. Interested students may also select individual history courses as electives that complement and enhance another major. History pairs especially well with majors or minors in Political Science, International Studies, Education, Justice and Society Studies, Art History, English, Modern and Classical Languages, American Culture and Difference, Journalism, Latin American and Caribbean Studies, Museum Studies, Family Studies, Women, Gender and Sexuality Studies and Legal Skills. Students who pursue liberal arts majors like History are also eligible for the Liberal Arts in Business program.

The history major consists of a combination of 100-, 200-, and 300-level courses and a 400-level capstone seminar. Because the 100-level courses are survey courses, they provide our majors and minors with a broad base of knowledge in a relatively long period of history and in a large geographic area. Students also learn basic critical thinking skills and close reading of primary source materials and secondary texts.

Likewise, the 200-level courses are survey courses, but they are somewhat more narrowly defined and require more in-depth reading and writing assignments than the 100-level courses. Basic critical thinking skills and close reading of primary source materials and secondary texts are reinforced at this level, and students begin to acquire more skills in historical research, evaluating historical evidence, and crafting arguments in support of or against particular interpretations of historical events.

The 300-level history courses focus on a specific historical period or event or particular methodological approaches to doing history. In terms of skill development, these courses ask students not only to employ evidence in support of historical interpretations but also to think critically about the relationship between varying types of evidence, to engage in prevalent debates within fields of historical scholarship, and to evaluate historical questions themselves for their utility and manageability.

In the 400-level capstone seminar, students employ the knowledge they have acquired throughout their course of studies and the skills necessary to the discipline of History to research, write, and present a significant research project of their own. The 400-level capstone seminar is required for the history major but is optional for the history minor.

History Honor Society

A campus chapter of Phi Alpha Theta, the national honor society in history, was established at St. Thomas in 1950. Candidates must have completed at least four courses in history and maintained a GPA of at least 3.1 in their history courses and a GPA of 3.0 overall to qualify.

Teacher Licensure

Co-major in Social Studies (5-12) and a Co-major in Secondary Education

See Education

Major in History

Forty-four credits (11 courses) complete the major, no more than eight credits (2 courses) of which may be at the 100-level and at least sixteen credits (4 courses) of which must be numbered HIST 300 or above.

Select 8 credits from two of the following areas:

Four credits (1 course) of World History:

- HIST 111 Origins of the Modern World to 1550 (4 credits)
- HIST 112 The History of the Modern World since 1550 (4 credits)
- HIST 115 The World Since 1900 (4 credits)

Four credits (1 course) of Regional History:

- HIST 113 Early America in Global Perspective (4 credits)
- HIST 114 The Modern U.S. in Global Perspective (4 credits)
- HIST 117 Latin America in Global Perspective (4 credits)
- HIST 118 The Middle East and North Africa in Global Perspective (4 credits)
- HIST 119 East Asian Civilizations in Global Perspective (4 credits)

No more than two 100-level History courses may be applied to the major.

Select at least four credits from the following courses that have a methodological focus:

- HIST 207 Slavery in the Americas (4 credits)
- HIST 211 Women and Families in the Americas (4 credits)
- HIST 216 African-American History (4 credits)
- HIST 228 Environmental History (4 credits)
- HIST 231 Empires and Nations of the Middle East (4 credits)
- HIST 263 United States Military History (4 credits)
- HIST 266 Topics in Minnesota History (4 credits)

Select at least four credits from each of the following areas:

Ancient and Medieval World:

- HIST 203 Ancient Egypt and the Near East (4 credits)
- HIST 205 The Ancient Greek World (4 credits)
- HIST 208 History of the Roman World (4 credits)
- HIST 209 Historical Archaeology (4 credits)
- HIST 310 The Making of Europe: Middle Ages to 1000 (4 credits)
- HIST 311 The Dawn of a New Era: Europe from 1000 to 1450 (4 credits)

Europe since 1450:

- HIST 222 Early Modern Europe, 1450-1750 (4 credits)
- HIST 223 Survey of Irish History: Celtic Ireland to 1972 (4 credits)
- HIST 225 The Making of Modern Europe, 1750 to 1914 (4 credits)
- HIST 226 Modern Europe since 1914 (4 credits)
- HIST 227 Global History of Genocide 1900- (4 credits)
- HIST 291 Topics in European History (4 credits)
- HIST 322 Tudor and Stuart Britain, 1485-1714 (4 credits)
- HIST 333 East-Central Europe: From Monarchy to the European Union (4 credits)
- HIST 335 Nazi Germany and the Holocaust (4 credits)
- HIST 336 History of the Soviet Union (4 credits)
- HIST 337 History of the First World War (4 credits)
- HIST 394 Topics in European History (4 credit)

American History:

- HIST 224 Native American History (4 credits)
- HIST 262 American Colonial History (4 credits)
- HIST 264 History of Medicine and Health Care (4 credits)
- HIST 292 Topics in U.S. History (4 credits)
- HIST 340 The Long Emancipation (4 credits)
- HIST 353 Colonial and Revolutionary America (4 credits)
- HIST 355 The Civil War Era (4 credits)
- HIST 358 Twentieth-Century United States (4 credits)
- HIST 365 U.S. Constitutional History (4 credits)
- HIST 396 Topics in History of the Americas (4 credits)

History of Africa, Asia, Latin America, or the Middle East:

- HIST 240 Foundations of Chinese Civilization (4 credits)
- HIST 241 The History of Modern China (4 credits)
- HIST 244 Modern East Asia (4 credits)
- HIST 293 Topics in History of Africa, Asia, Latin America or the Middle East (4 credits)
- HIST 303 History of Modern Brazil (4 credits)
- HIST 309 History of Urban Latin America (4 credits)
- HIST 349 History of the Ottoman Empire (1300-1922) (4 credits)
- HIST 375 Non-State Actors in the Islamic World (4 credits)
- HIST 395: Topics in History of Africa, Asia, Latin America, or the Middle East (4 credits)

Plus:

- HIST 466 Capstone Seminar in History (4 credits)

Transfer students: At least twenty-four (24) of the total credits needed for the history major must be taken at the University of St. Thomas or in a St. Thomas approved study abroad program. 200- and 300-level transfer courses require the approval of the department chair in order to be counted toward the major. The capstone seminar must be taken at St. Thomas.

Minor in History

- Twenty credits (5 courses) in history
    - no more than eight credits of which may be at the HIST 100-level
    - and at least four credits of which must be numbered HIST 300 or above.
    - Selection of the specific courses to fulfill the requirements should be done in consultation with a member of the department faculty.

Transfer students: At least twelve credits (3 courses) of the total needed for the history minor must be taken at the University of St. Thomas or in a St. Thomas approved study abroad program. 200- and 300-level transfer courses require the approval of the department chair in order to be counted toward the minor.

Certificate in the Study of War and Society

College of Arts and Sciences, Interdisciplinary Program

Scholars across disciplines have devised unique methods to study the causes of war and the consequences of violence on societies. This curriculum invites undergraduates from diverse backgrounds to rigorously study issues surrounding human conflict and global security. Students who earn this certificate may apply it toward graduate studies, government careers, teaching, non-profit work, and many other professions. The curriculum is grounded in the social sciences and humanities, inviting interdisciplinary learning to fully appreciate the consequences of conflict on subjects like technology, medicine, ethics, culture, activism, and public policy.

Students must take a total of three courses (12 credits) from the following to earn the certificate. No more than two courses (8 credits) are allowed from one academic discipline.

- HIST 263: U.S. Military History
- HIST 355: Civil War Era*
- HIST 263: U.S. Military History
- HIST 335: Nazi Germany and the Holocaust*
- HIST 337 First World War
- HIST 353: American Revolution*
- HIST 375 Non-state Actors in the Islamic World*
- POLS 328: International Security**
- POLS 320: American Foreign Policy**

*Prerequisite of one 100-level history course

**Prerequisite of POLS 225 World Politics

ROTC cadets may count up to four (4) credits of Aerospace Studies coursework, drawn from the following:

- AERO 421: National Security & Leadership Responsibility I
- AERO 422: National Security & Leadership Responsibility II

Military veterans and reservists may also receive four (4) credits of academic credit toward this certificate for prior military education. This will be done in consultation with the Director of the Veterans Resource Center.

History Undergraduate Courses

HIST 111 Origins: Mod World to 1550 (4 credits)
Introduces students to historical reasoning. Students learn to analyze evidence from the past in context in order to explain how the past produced the ever-changing present. This course examines the development of and interconnections between religious, legal, economic, social, and political institutions around the world. It considers the rise and fall of various civilizations, the peaceful and destructive interactions between and within different societies, and the lasting impacts of the pre-modern world.

HIST 112 Hist Mod World Since 1550 (4 credits)
Introduces students to historical reasoning. Students learn to analyze evidence from the past in context in order to explain how the past produced the ever-changing present. This course surveys the foundation and expansion of global networks from the sixteenth-century exploration to the contemporary world, and it examines the resulting breakthrough in communication and cultural exchanges between Europe and Africa, Asia, Latin America and the Middle East. Key aspects of the modern world are explored, such as state power and citizenship, economic systems and human labor, ideas about belonging and community, and the relationships and activities that constitute daily life.

HIST 113 Early Am/Global Perspective (4 credits)
Introduces students to historical reasoning. Students learn to analyze evidence from the past in context in order to explain how the past produced the ever-changing present. This course surveys the social, political, cultural, and economic history of North America in global context, from the European-American encounter through the aftermath of the U.S. Civil War. It examines relations among Native Americans, Africans, Europeans, and their descendants. Major themes include: empires and colonization, race and slavery, the American Revolution, nation building, territorial expansion, the origins of American capitalism and democracy, sectionalism, and the Civil War.

HIST 114 Mod Us/Global Perspective (4 credits)
Introduces students to historical reasoning. Students learn to analyze evidence from the past in context in order to explain how the past produced the ever-changing present. The course introduces students to social, political, cultural, and economic developments from the American Civil War to the present day. It not only traces how ideas and lived experiences within each of those categories of historical analysis changed over time, but also shows how developments in each realm of American life shaped the others. It pays special attention to how American politics, institutions, and cultural norms emerged from—and produced—a changing role for the United States in its global context. It also interrogates how efforts to define American identity have both provided the terrain for inclusion and been used to justify the exclusion of various people, including racial, ethnic, and immigrant groups, people of different genders and sexual identities, and people of diverse religious and political beliefs.

HIST 115 The World Since 1900 (4 credits)
Introduces students to historical reasoning. Students learn to analyze evidence from the past in context in order to explain how the past produced the ever-changing present. This course examines the origin, development, reception, alteration, and rejection of various ideologies—including, but not limited to, nationalism, imperialism, communism, liberalism, fascism and Nazism—and the political, social, economic, and cultural changes that they produced. Through a close examination of the twentieth century, students gain appreciation for the intricate nature of power and dependency that characterizes the modern world.

HIST 117 Latin Am/Global Perspective (4 credits)
Introduces students to historical reasoning. Students learn to analyze evidence from the past in context in order to explain how the past produced the ever-changing present. This course surveys the social, political, and economic history of Latin America in global context from the Independence movements to the present. Major topics include: democracy and dictatorship, economic development and dependence, slavery and race relations, political revolution, urban and rural societies, migration, militarism, the Church and the struggle for social justice.

HIST 118 Middle East and North Africa (4 credits)
Introduces students to historical reasoning. Students learn to analyze historical evidence in context in order to explain how the past produced the ever-changing present. This course introduces students to the history and cultures of the Middle East and North Africa, focusing on the region's interaction with global powers. With special attention placed on global developments and local responses, the course will highlight the origins and expansion of Islamic empires, modern interactions with the West through imperialism and oil concessions, responses to this interaction from nationalist, secularist, and Islamist movements, and the issues these responses generate in the present day, including questions of ethnic conflict and religious pluralism.

HIST 119 East Asian Civilizations (4 credits)
Introduces students to historical reasoning. Students learn to analyze evidence from the past in context in order to explain how the past produced the ever-changing present. This course will look at the history of East Asia in regional and global contexts. Students will build a foundation by learning about the formative era of Chinese history in the first millennium BCE, focusing on the creation of Confucianism and the imperial system. They will follow East Asia's emergence as a distinct historical region comprising China, Korea, and Japan, and the ties these countries maintained among themselves and with the rest of Asia. As they enter the early modern era, students will focus on connections between East Asia and the world, such as the silver economy. The class will conclude by looking at East Asia in the nineteenth and twentieth centuries, with a special emphasis on global historical themes of colonialism and industrialization. Through this class, students will learn to analyze changes and continuities over long periods of time. They will also learn to frame historical events in their local specificity as well as in their common humanity.

HIST 203 Ancient Egypt and Near East (4 credits)
A historical, comparative survey of the origins and diversity of human societies in northeastern Africa (Egypt, Nubia) and western Asia (Anatolia, Levant, Mesopotamia, Arabia, Persia), from the earliest organized political and religious communities to the Arab conquest (8000 B.C. to A.D. 750). Historical processes of special emphasis will include: transition to agriculture; urbanization; state and empire building; emergence of major religious traditions; migrations and cultural crosscurrents. Topics will be explored taking into account the latest textual and archaeological evidence. The course should provide historical understanding of the current ethnic, linguistic, and religious diversity in the region.

HIST 205 The Ancient Greek World (4 credits)
This course is a study of ancient Greek social structures, political processes, culture, beliefs, and moral values, from the Mycenaean society in the Bronze Age to the Hellenistic world of Alexander's legacy. The objective is to learn about major social, political, economic, and cultural change over time in the Greek world, with regard to the wider context of the surrounding cultures. We examine textual and material evidence in order to learn about the nature, value, and explication of primary sources and about historical, archaeological and anthropological methods of inquiry and analysis. Overall, we seek to understand the historic roots of modern issues and the relevance of past experiences, while keeping abreast of recent research and current scholarly debate.

HIST 207 Slavery in the Americas (4 credits)
By examining slave societies in Brazil, Cuba, and the United States, this course considers the commonalities and differences in African slavery across the Americas during the eighteenth and nineteenth centuries. We trace the history of slavery and society through such topics as the Atlantic Trade, plantation v. urban labor, family life, religion and culture, gender, resistance and rebellion, and post-emancipation race relations. Throughout the course, we consider how geographic location and social norms created parallel but distinct systems of slavery. Moreover, we will focus on the sources and methods employed for analyzing those groups that typically lack a historical voice. Focusing on the historiography of slavery, students will gain experience in effectively using evidence to develop an argument, thinking comparatively as a way to analyze information, and learning how to assess or evaluate arguments made by scholars. By the end of the course, students will recognize both the historical conditions of slavery in the Americas and the scholarly treatment of the subject.

HIST 208 History of the Roman World (4 credits)
From Britain to Africa and from Spain to Iran, the Roman Empire seemingly united diverse peoples and cultures. All roads led to Rome, the City - Urbs, a cosmopolitan and overcrowded metropolis. In this course we study written records and material remains from the beginnings of Rome in the eight century BCE to the late Empire in the fourth century of our era. We follow political, social, economic, and cultural changes over time, examining a variety of evidence and voices and keeping abreast of current problematic areas and scholarly debate. The Roman material is supplemented with comparative evidence from non-Roman societies within and bordering the Empire, as we account for the relevance of past experiences to our current issues.

HIST 209 Historical Archeology (4 credits)
The course deals with archaeological methods, theories and interpretations in discovering, reconstructing, and understanding past societies worldwide. As we address specific thematic units and case studies, we learn how archaeological evidence and interdisciplinary research reveal human responses and adaptations to their environments and climate change. Archaeology generally deals with material remains and is the primary discipline that systematically studies societies and time periods that lack written documents. Historical archaeology combines the methods of archaeology with analysis of written and oral sources. This holistic approach builds our knowledge of the human past, enables critical reappraisal of the interconnection between cultural

and environmental change and accounts for the relevance of past experiences to our current issues.

HIST 211 Women/Families in the Americas (4 credits)
This course examines how seemingly impersonal forces are historically associated with personal changes for women and the family across the Americas. We will analyze how women and the family intersected with the economy, politics, and society. A comparative approach allows for consideration of national circumstances and social norms regarding race, ethnicity, and class. Examining the history or women and the family throughout the Americas also highlights similarities and differences within the reciprocal relationship between private lives and public policy. Topics include working women and the family economy, slavery, political rights and protective legislature, social movements, youth culture and immigration. Understanding the history of women and the family helps explain current contentions over women's roles and modern family structure.

HIST 216 African-American History (4 credits)
An introductory social history survey of African-American experience in global perspective. This course will cover developments from the beginnings of the trans-Atlantic slave trade through the present. Topics include: West African cultures; origins of the international slave trade; African American life in the colonies and during the Revolution; development of slavery in global comparative perspective; resistance to slavery; and the role of African Americans in the Civil War and Reconstruction eras; Jim Crow culture and its challengers; migration; changes during the depression and WWII; black nationalism and independent Africa; the freedom movements of the North and South; and the post civil rights era.

HIST 222 Early Modern Europe: 1450-1750 (4 credits)
Political, religious, and cultural development of the early modern Europe: Late Renaissance; Religious Reformations; Age of Discovery and the rise of the Atlantic Economy; State building in Early Modern Europe; the New Science.

HIST 223 Irish Hist Survey: Celtic-1972 (4 credits)
As a survey of Irish History, the course covers early Irish history and society, the Viking and Norman invasions, and special attention is given to the early modern period and the origins of Ulster during the Tudor-Stuart Period in English History. In the 18th century the origins of Irish nationalism and the Rising of 1798 is highlighted. In the 19th century the course covers Catholic Emancipation, the Great Famine and emigration and the movement for Home Rule. Twentieth century Ireland includes the creation of the Irish Free State and the history of contemporary Ireland to the present.

HIST 224 Native American History (4 credits)
This course examines the historical experiences of North America's Indigenous peoples with respect to their cultures. It focuses upon Native Americans as active agents in producing their history both before and after European contact, not just victims of white oppression and/or abstract social forces. Topics include: Native cultural diversity on the eve of European contact; the dynamics of early Indian-European encounters; the political, spiritual, and gendered dimensions of Native accommodation and resistance; the construction and reconstruction of Indian identities in the era of the American Revolution; forced Indian Removal; the nineteenth-century struggles for the Great Plains; and the systematic placement of Native children in boarding schools and foster care during the twentieth century.
Prerequisites: One 100-level History course

HIST 225 Making of Mod Europe 1750-1914 (4 credits)
This course is a close examination of the cultural, social, economic, and political development of Europe from the Age of Enlightenment to the outbreak of WWI. The course will investigate Europe's transformation from pre-modern to modern and the continent's rise to hegemony throughout a very long nineteenth century. Topics include, but are not limited to, Enlightenment and enlightened absolutism, French Revolution, liberalism, Napoleonic Wars, nationalism and the rise of the nation-state, 1848 revolutions, origins of Communism, Crimean War, Colonialism, and the unification of Italy and Germany.

HIST 226 Modern Europe since 1914 (4 credits)
This course is a close examination of twentieth century European history or, as some historians refer to it, the "short twentieth century" of the "dark continent." It follows the cultural, social, economic, and political development of Europe through wars and reconstruction. Topics include, but are not limited to, imperial and national rivalry, WW I and its aftermath, Russian Revolution, Fascism and Nazism, WW II and its aftermath, Cold War and the division of Europe, 1989, and the emergence of the European Union.

HIST 227 Global History Genocide 1900- (4 credits)
The course surveys some of the most heinous mass murders that took place during the twentieth century: 1) The Herero and Nama in German South Africa 2) Armenian Genocide 3) Stalin's Genocides 4) The Holocaust 5) Mass Killing in Cambodia 6) Rwandan Genocide 7) Ethnic Cleansing in

Yugoslavia. The class will critically examine the concepts and terms associated with mass murder. Through careful reading of primary and secondary literature students will investigate why, under what circumstances and by whom these acts were carried out. Students will also seek to understand the responsibilities and responses of local, national, and international communities regarding mass killing. Finally, the course will depict the different ways that we remember these events and commemorate their victims. Prerequisite: One 100-level History course or permission of instructor.

HIST 228 Environmental History (4 credits)
Humans are part of nature, and yet they have always changed and manipulated it. This course examines the entangled story of human/nature interactions, from the early history of our species up into the twenty-first century. Doing this draws on a range of methods, tools, and skills, including archaeology and anthropology, physical sciences like geology and biology, and the close reading of texts and objects as developed in humanistic disciplines like English, philosophy, and history. Key topics may include the co-evolution of people and other species; the ways that world religions have understood nature; the global mingling of people, plants, animals, and microbes after 1492; responses to pollution and toxicity in the modern world; and the development and politicization of climate science in the 20th-21st centuries.

HIST 231 Empires & Nations Middle East (4 credits)
Since Napoleon's invasion of Egypt in 1798, Europeans and Middle Easterners have been writing modern histories of the Islamic world. The colonizer and the colonized, however, asked fundamentally different historical questions. In this course students will learn about the methods of studying Middle Eastern history, or the techniques of analyzing primary sources to piece together an argument about the past, as well as the ways in which the privilege and historical context of researchers inflect their scholarship. By focusing on the methodologies that scholars engage in order to study the Middle East, like Marxist analysis, gender theory, microhistory, or postcolonialism, students learn about trends within the discipline of History, as well.

HIST 240 Found. of Chinese Civilization (4 credits)
This course introduces students to the formation and evolution of fundamental elements of Chinese civilization to about 1800. Topics include: major Chinese thought, Confucianism, Taoism and Legalism with special emphasis on how Confucianism became a prevailing influence on Chinese government, family and society; the development of the Chinese imperial government including the Civil Service Examination; the flourishing of Buddhism in a Confucian China; Chinese written characters, calligraphy and poetry; the cosmopolitan T'ang dynasty; the T'ang-Sung commercial transformation; the Mongol rule in China; and the state and society before encountering Western expansion.

HIST 241 History of Modern China (4 credits)
This course studies the impact of Imperialism on Chinese state and society and China's subsequent transformation from about 1800 to the 1980s. Topics include: early Chinese and Western contacts; the Canton System; the Opium War and unequal treaties; China's reforms and domestic tensions - the Taiping Rebellion, the Boxer Uprising and the 1911 Revolution; the May Fourth cultural iconoclasm; Chiang Kai-shek and the Nationalist government; the Sino-Japanese War; the nature of Mao Zedong's Communism; the Great Proletarian Cultural Revolution; Deng Xiaoping, revisionism and the democratic crackdown.

HIST 243 Individual Study (2 OR 4 credits)

HIST 244 Modern East Asia (4 credits)
In this course, we will read about and discuss the development of "modern" societies in China, Korea, and Japan from early modern times to the present. We will focus on problems such as empire, historical memory, and the formation of modern nation-states. Readings include memoirs and other personal writings as historical texts, as a way to understand the times.

HIST 262 American Colonial History (4 credits)
An examination of several aspects of colonial history including the European background to colonization, and the political, economic and social development of British North American colonies to the end of the Seven Years War.

HIST 263 United States Military History (4 credits)
This course provides and overview of the military history of the United States from its revolutionary origins to its contemporary challenges. It examines the composition and employment of the United States military as a product of the larger political and cultural aims of American society while also paying attention to the reciprocal effect that wars have on the societies that engage in them. Special attention will be devoted to the human experience of warfare as an ethical, social, and intellectual problem.

HIST 264 Hist of Medicine & Health Care (4 credits)
This course explores how people have thought about bodies, illness, and medical treatment over the last several centuries, both in the American

context and in other parts of the world. Although the geographic and temporal coverage of this course might vary depending on the instructor's expertise, we will investigate the history of several different medical epistemologies before narrowing in on the gradually developed hegemony that allopathic or Western medicine came to hold within the United States and Europe. In the American context, we will inquire about indigenous concepts of health and healing, pandemics and disease during the colonial era, the proliferation of medical disciplines during the nineteenth century, and the professionalization and privatization of health care in the twentieth and twenty first centuries that give rise to the disparities in access and outcomes that we see today. Prerequisite: One 100-level history course.

HIST 266 Topics in Minnesota History (4 credits)
This course enables students to become historians of the community around them. Students will learn the techniques of local history by studying how Minnesotans participated in and responded to major moments of historical change. Specific course topics will vary, but they will be designed to foster in-depth research in local archives and to support collaboration with community resources such as the Minnesota History Center. Students will be encouraged to make their research findings accessible to the broader Twin Cities community through opportunities such as local conference presentations, collaborative exhibits, and building digital projects such as podcasts and websites.

HIST 269 Research (2 OR 4 credits)

HIST 291 Topics: European History (4 credits)
The subject matter of this course will vary from year to year and will focus on a specific historical period or event and/or particular methodological approach(es) to doing history. It will not duplicate existing courses in European history. Students will be asked not only to employ evidence in support of historical interpretations but also to think critically about the relationship between varying types of evidence, to engage in prevalent debates within fields of historical scholarship, and to evaluate historical questions themselves for their utility and manageability.

HIST 292 Topics: U.S. History (4 credits)
The subject matter of this course will vary from year to year and will focus on a specific historical period or event and/or particular methodological approach(es) to doing history. It will not duplicate existing courses in U.S. history. Students will be asked not only to employ evidence in support of historical interpretations but also to think critically about the relationship between varying types of evidence, to engage in prevalent debates within fields of historical scholarship, and to evaluate historical questions themselves for their utility and manageability.

HIST 293 Topics: Africa, Asia, LA, ME (4 credits)
The subject matter of this course will vary from year to year and will focus on a specific historical period or event and/or particular methodological approach(es) to doing history. It will not duplicate existing courses in the history of Africa, Asia, Latin America or the Middle East. Students will be asked not only to employ evidence in support of historical interpretations but also to think critically about the relationship between varying types of evidence, to engage in prevalent debates within fields of historical scholarship, and to evaluate historical questions themselves for their utility and manageability.

HIST 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

HIST 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

HIST 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule

HIST 303 The History of Modern Brazil (4 credits)
This course surveys the history of modern Brazil from 1800-2000. Two centuries after independence, Brazil continues to straddle the first and third worlds. It has one the world's largest economies and diverse populations and yet is also characterized by one of the worst distributions of wealth, political corruption and social marginalization. The course is divided by political regime and topics include the enduring importance of Brazil's agricultural economies, slavery and abolition, transition from Empire to Republic, industrialization and urbanization, paternalism and patriarchy, immigration, ethnicity and race relations, religion, geographic diversity, regionalism and inequality. Primary and secondary research assignments are focused on the construction of national identity in order to formulate a historically sensitive appreciation of the complexity of Brazilian society. Exploring the major themes of Brazilian history, the course helps students understand current economic, political and

social contradictions. Prerequisite: one 100-level history course.

HIST 309 History of Urban Latin America (4 credits)
This course examines the causes and consequences of urban development in Latin America, where two of the ten largest cities in the world are located. Beginning with the colonial city that served as a political and religious center, the course explores the evolution of the Latin American city through nation-state formation, twentieth-century modernization projects, and up to contemporary megacities. The course considers the history of urbanization in Latin America as both an official project and a lived experience. Major themes such as market development, class conflict, labor and workers' movements, migrations, gendered spaces, public health and social control, built environments, and urban culture are considered in a comparative framework. Prerequisites: One 100-level history course

HIST 310 Europe: Middle Ages to 1000 (4 credits)
Origins of the middles ages: the late Roman Empire; Germanic migrations and settlements; the Frankish Dynasties of the Merovingians and Carolingians; Anglo-Saxon England; development of the early Medieval Papacy and Western Church. Recovery of Byzantine Empire; Islamic World under Umayyad and Abbasid Caliphates. Prerequisite: One 100-level history course

HIST 311 Europe from 1000 to 1450 (4 credits)
Rebirth of Europe in the high and late Middle Ages: the Feudal Revolution; the world of knights and chivalry; the emergence of Western Monarchies; the Crusades; the Renaissance of the 12th Century; the rise of Medieval Christendom in the 13th century: papacy; mendicant orders; universities; heresy; Inquisition. Political and economic crises of the 14th century. Ecclesiastical crises of the later middle ages. Recovery and renaissance in the 15th century. Prerequisite: One 100-level history course

HIST 322 Tudor and Stuart Britain (4 credits)
England from the accession of the Tudor dynasty down to the Glorious Revolution. Modernization of English society and government. The English Reformation. Anglicanism. The Elizabethan period. Puritanism. Crown and Parliament in Tudor and Early Stuart times. Civil War, Revolution and Restoration. The Revolution of 1688. Prerequisite: One 100-level history course

HIST 333 East-Centr Eur Monarchy to EU (4 credits)
This course is an examination of the history of East-Central Europe from 1848 to 2010. The subject of our study is one of the most fascinating places one can learn about. The "other Europe," as some people refer to it, is a multiethnic and multicultural region with a turbulent history. The geographical focus of our course will be Poland, Czech Republic, Slovakia, Hungary, and the former Yugoslavia. The course allows students to gain knowledge of the region's history and culture. It promises to be a captivating ride, for the "land between" often served as a laboratory for the various ideological and political movements of the nineteenth and twentieth century (liberalism, nationalism, fascism, socialism/communism, capitalism etc.). Prerequisite: One 100-level history course

HIST 335 Nazi Germany and the Holocaust (4 credits)
This course examines the origins of modern anti-Semitism, the rise of the Nazi Party and the subsequent radicalization of its racial policy from persecution to genocide. The course conceptualizes the Holocaust in the European/global framework-beyond Germans and Jews. It investigates the relationship between the various segments of the continent's population and complexities of such concepts as collaboration and resistance. Finally, it examines the legacy, influence, and contemporary understanding of the Holocaust. Prerequisite: One 100-level HIST course

HIST 336 History of the Soviet Union (4 credits)
This course examines the history of the Soviet Union from its outset to its collapse. During the semester students engage with topics related to the "Soviet experiment" that transformed the world's largest country in every aspect. Topics include, but certainly not limited to: origins of the Soviet ideology; the Bolshevik Revolution and the subsequent Civil War; Leninism; the Stalinist Revolution and the Great Purge; the Great Patriotic War; de-Stalinization, the Soviet Union and the Cold War in its global perspective; everyday history of the Soviet Union; collapse of the system; and the emergence of post-Soviet Russia. Prerequisite: One 100-level history course.

HIST 337 History of the First World War (4 credits)
This course examines one of the most monumental and influential events of the twentieth century: The First World War (1914-1918). It seeks to move beyond the trenches to investigate various issues that relate to the war that was supposed to end all wars, including the complex origins of the war, the experiences of front-soldiers and those of the home front, the difficulty of the peace treaties that followed, the impacts of the conflict on the (geo-) political, social and intellectual landscape and its legacy and its commemoration. Prerequisites: One 100-level history course

HIST 340 The Long Emancipation (4 credits)
The African American freedom struggle occupies a critical place in the history of the United States. From roughly 1800, as the United States consolidated the meanings and limits of the American Revolution, to 1900, when emancipation's promise dwindled during the nadir of American race relations, emancipation took on many valences. In this course, we will approach the relationship between slavery, freedom, and citizenship as a dynamic interplay between large-scale changes and lived experiences. To do so, we will explore questions about emancipation's causes, course, and outcomes from multiple perspectives. Rather than celebrating or denigrating emancipation, this course will instead interrogate it to pose questions about its social, legal, and human consequences. In addition to its content-specific goals, this course also engages the process of reading, writing, and thinking about history. We will discuss how to identify historical questions in published works and how to pose our own, the nature of historical argumentation, and ways to discover and interpret various types of historical evidence. We will pay particular attention to the relationship between enslaved persons and the archive, both by studying how historians have worked with available sources and by choosing sources of our own to interpret. Prerequisite: One 100-level History course or instructor permission

HIST 349 History of Ottoman Empire (4 credits)
This course is a survey of the history of the Ottomans from its origins as a small medieval principality in Asia Minor to a major global power in the sixteenth century, and to its eventual disintegration by the end of World War I. The course will concentrate on the main political, social and cultural institutions of the Ottoman society, and how these changed over time. It will also introduce students to some of the major themes and recent trends in Ottoman historiography, including debates on the origins and decline of the Ottomans, the issue of Ottomans' legacy for the successor states, as well as the growing research on the formerly underrepresented groups such as women, minorities, etc. Prerequisite: One 100-level history course

HIST 353 Colonial Revolutionary America (4 credits)
This course is an intensive study of North American history from the pre-contact era through the Revolutionary War, exploring the social, cultural, and political developments that shaped the coming of the American Revolution. Emphasis will be placed on the ways in which Native peoples, individuals of African descent, women, and non-elites contributed to the development of Colonial and Revolutionary society. The semester begins with an exploration of the French, British, Spanish, and Dutch colonization of the continent, devoting particular attention to first encounters between Europeans and Native peoples. It moves forward chronologically to examine the growing maturation of colonial society and the resulting breakdown of Anglo-American relations, focusing on the ideological underpinnings of the American Revolution. After an exploration of the conflict, the semester concludes by investigating the postwar struggle to draft and ratify the U.S. Constitution.

HIST 355 Civil War Era (4 credits)
The American Civil War was a pivotal event, followed by incomplete efforts at changing the shape of the nation through Reconstruction. The causes of the war, its conduct on both sides, and the consequences of this "War of Rebellion," including Reconstruction, form the three parts of this course. Prerequisite: One 100-level history course

HIST 358 20th Century U.S. (4 credits)
An intensive study of 20th-century United States domestic history, with emphasis on social change and social thought. Topics include: reform movements, industrialization, urbanization, the economy, the homefront, consumer culture, suburbanization, liberation movements, and deindustrialization. Prerequisite: one 100-level history course.

HIST 365 U.S. Constitutional History (4 credits)
The origins and evolution of the American constitutional system from the colonial period to the present. Students explore the constitutional system created by Americans, and the way in which this system and its corresponding institutions have articulated Americans' constantly changing perception of the proper relationship between the people and their government. Prerequisite: One 100-level history course

HIST 375 Non-State Actors Islamic World (4 credits)
As the Ottoman and Qajar empires showed signs of collapse in the late nineteenth century, Middle Eastern and North African intellectuals eagerly adopted western systems of finance, education, and governance. In fact, some burgeoning nation-states even copied, word-for-word, European constitutions. By the mid-twentieth century, however, despots ruled the Middle East and North Africa. The two questions that animate this course are: (1) Why do we see autocracies, and destructive non-state actors, dominating the Islamic world? (2) What role do non-state actors play in producing volatility or maintaining stability? Students address these complex questions for an understanding of the region's conflicts and the role of the international community in resolving (or

exacerbating) humanitarian crises. Prerequisites: One 100-level history course.

HIST 389 Research (2 OR 4 credits)

HIST 393 Individual Study (2 OR 4 credits)

HIST 394 Topics in European History (0 TO 4 credits)
The subject matter of this course will vary from year to year and will focus on a specific historical period or event and/or particular methodological approach(es) to doing history. It will not duplicate existing courses in European history. Students will be asked not only to employ evidence in support of historical interpretations but also to think critically about the relationship between varying types of evidence, to engage in prevalent debates within fields of historical scholarship, and to evaluate historical questions themselves for their utility and manageability. Prerequisite: one 100-level history course

HIST 395 Topics:Africa/Asia/Lat/MidEast (0 TO 4 credits)
The subject matter of this course will vary from year to year and will focus on a specific historical period or event and/or particular methodological approach(es) to doing history. It will not duplicate existing courses in the history of the Africa, Asia, Latin America, or the Middle East. Students will be asked not only to employ evidence in support of historical interpretations but also to think critically about the relationship between varying types of evidence,to engage in prevalent debates within fields of historical scholarship, and to evaluate historical questions themselves for their utility and manageability. Prerequisite: one 100-level history course

HIST 396 Topics History of the Americas (0 TO 4 credits)
The subject matter of this course will vary from year to year and will focus on a specific historical period or event and/or particular methodological approach(es) to doing history. It will not duplicate existing courses in the history of the Americas. Students will be asked not only to employ evidence in support of historical interpretations but also to think critically about the relationship between varying types of evidence, to engage in prevalent debates within fields of historical scholarship, and to evaluate historical questions themselves for their utility and manageability. Prerequisite: one 100-level history course.

HIST 398 History Internships (4 credits)
Students in this course will be placed in apprenticeships in private businesses, public agencies or nonprofit historical agencies and museums. The apprenticeship will require 10 hours per week and a weekly seminar session. Prerequisite: one history course or consent of the instructor.

HIST 400 History Signature Work (2 credits)
This course is intended to give History majors and those in related fields an opportunity to reflect on their academic career and plan for future career paths. Focusing on Historical fields, methods, and applied skills, students will synthesize the integrative experience of their HIST Major and liberal arts education. History faculty will discuss the opportunities and challenges in their respective fields as well as how these subfields address issues in the contemporary social, political, and economic landscapes students face upon graduation. With support from Career Services, students will also critically analyze Historical methods and their application to future paths as professionals and global citizens. Finally, class workshops will provide students with guidance and time to develop an interdisciplinary portfolio of work and accompanying integrative essay reflecting on the strengths of their History degree and liberal arts training at UST, which may provide the foundation for career and graduate school preparations. Prerequisites: Completion of at least two 300-level HIST courses and 80 completed credits, or permission of the instructor

HIST 466 Capstone Seminar in History (4 credits)
History seminars involve students (primarily, though not exclusively, majors and minors) with the methodological and historiographical dimensions of research in the seminar's topic. Students in the seminar will complete and present to other members of the class a significant research project. This course fulfills the Writing in the Disciplines requirement. Prerequisites: at least two 300-level History courses completed before registration for this seminar.

HIST 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

HIST 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

HIST 491 Research (2 OR 4 credits)

HIST 495 Individual Study (2 OR 4 credits)

HIST 498 Individual Study (4 credits)

Holocaust and Genocide Studies

Program Overview

The Minor in Holocaust and Genocide Studies invites students to explore the historical, theological, political, and cultural roots of antisemitism, racism, and other forms of extreme hatred that lead to genocide and the mass annihilation of peoples. Through an interdisciplinary approach that considers generational effects of such traumas, students will engage with photographic, artistic, musical, literary, theatrical, and cinematic artifacts to bear witness to the Shoah, the Native American Genocide, and the Rwandan Genocide, among other genocides. This program not only seeks to remember these atrocities but also aims to empower students with the knowledge and strategies to intervene and resist emerging patterns of destruction.

Minor in Holocaust & Genocide Studies

The minor consists of 16 credits, as follows:

4 Credits: Integrative Courses

Students must take one of the following 4-credit integrative courses:

- HIST 227: Global History of Genocide and Ethnic Cleansing in the Twentieth Century (4 cr.)
- THEO 300: Signature Work: Nazism and Apartheid (4 cr.)

12 Additional Credits

Students may choose any combination of 12 additional credits from the following list:

- ARTH 297: Topics: Art & Trauma: Histories and Healing (NOTE: only this topic under ARTH 297 counts toward this minor)
- FILM 320: Memory and Trauma in Film
- HIST 224: Native American History
- HIST 227: Global History of Genocide and Ethnic Cleansing in the Twentieth Century (NOTE: students who take THEO 300 as the integrative course may take HIST 227 toward the 12 additional credits required for the minor)
- HIST 335: Nazi Germany and the Holocaust
- LNGS 370: The Holocaust in Literature, Film and Visual Culture
- POLS 354: Politics of Post-Soviet States
- POLS 424/IDSC 481: Senior Seminar - International Relations
- THEO 223: Belief: Evil & Suffering (NOTE: only this topic under THEO 223 counts toward this minor)
- THEO 227: Contexts: Nazism and Apartheid –or–
  THEO 300: Signature Work – Nazism and Apartheid
  (NOTE:students who take HIST 227 as the integrative course may take THEO 227 or THEO 300 toward the 12 additional credits required for the minor. Students cannot take both THEO 227 and THEO 300.)

Please make note of pre-requisites for all classes.

Instrumental Music Education K-12

Co-Major - See Education

International Studies

Program Overview

College of Arts and Sciences, Interdisciplinary Program

John Roach Center for the Liberal Arts (JRC) 407, 651-962-5726
Mazumdar (POLS), director

This major seeks to give the student an understanding of the contemporary international system. It combines study in economics, history and political science with a concentration in one of these fields, along with the study of world geography and a foreign language beyond the College's general education requirement. The program takes an explicitly interdisciplinary approach, which is intended to instill in students the core knowledge shared by international studies scholars and professionals.

Students graduating with a major in international studies will be capable of critical thought and writing in the professional style of the discipline. Majors will also develop skills such as research fundamentals, analysis, and collection and interpretation of empirical data. These skills enable graduates to relate their international interests to a broad range

of careers including government, international business, international law, nonprofit organizations and teaching. Graduates will also be well-prepared to undertake graduate studies in related disciplines such as international relations, public policy, law and business.

ACTC courses

A student with particular academic and/or career interests should consult with the director about courses offered by the Associated Colleges of the Twin Cities that would be appropriate to the major.

Opportunities for study abroad

Students majoring in international studies should seriously consider one or more of the opportunities to study abroad offered by the Office of Study Abroad.

Opportunities for internships

Students majoring in international studies should discuss with the director opportunities to relate academic and career interests through internship experiences in the Twin Cities or Washington, D.C.

Major in International Studies

- ECON 251 Principles of Macroeconomics (4 credits)
- GEOG 113 Globalization & World Regions (4 credits)
- HIST 112 The Modern World Since 1550 (4 credits)
  or HIST 115 The World Since 1900 (4 credits)
- IDSC 481 Seminar in International Studies (4 credits)
  or POLS 424 Senior Seminar in International Studies/Politics (4 credits)
- POLS 104 Government and Politics (4 credits)

Plus:

Twenty-eight credits from a list of courses in economics, history and political science. A student must choose at least 16 credits from one discipline (the area of concentration). The remaining 12 credits must include courses from each of the other two disciplines or the courses from other disciplines listed below.

- COMM 370 Intercultural Communication (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- ECON 341 Economics of International Finance (4 credits)
- ECON 342 International Trade (4 credits)
- ECON 345 Economics of Development and Growth (4 credits)
- ECON 346 Country and Area Studies in Economics (4 credits)
- HIST 207 Slavery in the Americas (4 credits)
- HIST 225 The Making of Modern Europe, 1750 to 1914 (4 credits)
- HIST 226 Modern Europe since 1914 (4 credits)
- HIST 227 Global History of Genocide (4 credits)
- HIST 228 Environmental History (4 credits)
- HIST 231 Empires and Nations of the Middle East (4 credits)
- HIST 240 Foundations of Chinese Civilization (4 credits)
- HIST 241 History of Modern China (4 credits)
- HIST 244 Modern East Asia (4 credits)
- HIST 303 History of Modern Brazil (4 credits)
- HIST 309 History of Urban Latin America (4 credits)
- HIST 333 East-Central Europe : From Monarchy to the European Union (4 credits)
- HIST 349 History of the Ottoman Empire (4 credits)
- HIST 375 Non-State Actors in the Islamic World (4 credits)
- HIST 394 Topics in European History (4 credits)
- HIST 395 Topics in History of Africa, Asia, Latin America, or the Middle East (4 credits)
- POLS 225 World Politics (4 credits)
- POLS 320 American Foreign Policy (4 credits)
- POLS 321 Comparative Foreign Policy (4 credits)
- POLS 326 International Law and Organizations (4 credits)
- POLS 328 International Security (4 credits)
- POLS 350 Comparative Politics of the New Europe (4 credits)
- POLS 352 Politics of the Developing World (4 credits)
- POLS 354 Politics of Post-Soviet States (4 credits)
- POLS 358 Comparative Politics of Asia (4 credits)
- POLS 424 Seminar in International Relations(4 credits)

- POLS 454 Seminar in Comparative Politics (4 credits)
- GEOG - The Geography & Environmental Studies program from time to time offers courses on the geography of selected regions of the world. With the approval of the director of international studies, these courses may be elected to fulfill non-concentration requirements.
- JPST - The Justice and Peace Studies program has courses that may count toward the major. Ask the program director if a course qualifies.
- WGSS - The Women, Gender, and Sexualities Studies program occasionally offers courses that may count toward the major. Ask the program director if a course qualifies.

Allied requirements:

Foreign Language: Students may choose one from the following:

- Languages with a major offered at St. Thomas: For languages in which St. Thomas offers a major (Classics, French, German, Spanish): successful completion of a 300-level course plus one additional course at a higher level or equivalent.
- Languages without a major at St. Thomas but classified as critical languages: For languages in which St. Thomas does not offer a major (American Sign Language, Arabic, Chinese, Italian, Japanese) but that are designated as critical languages by the U.S. Department of State: successful completion of a 212-level course or equivalent.
- Languages neither offered as a major at St. Thomas nor classified as critical languages: For languages in which St. Thomas neither offers a major nor that are included on the U.S. Department of State's list of critical languages: successful completion of sixteen credits of study in that language or equivalent.

Irish Studies

Program Overview

Through this interdisciplinary minor, students will immerse themselves in the global perspective of Irish Studies. One of the youngest political countries (est. 1949), the Republic of Ireland remains critically involved with global perspectives from the U.K. to the U.N and well beyond. A goal of the program is to move students beyond a simplified understanding of global events through a study of the Republic of Ireland and Northern Ireland's historic, political, economic, and literary traditions.

The Irish Studies minor offers courses from various disciplines that coincide with the mission of the Center for Irish Studies (Lárionad an Léinn Éireannaigh Irish Studies) and our many study-abroad programs. Students in the Irish Studies minor will avail themselves of four (4) four-credit courses that must include IRST 200: Introduction to Irish Studies. Eight credits must be at the 200-level or above.

Minor in Irish Studies

- IRST 200: Introduction to Irish Studies (required course)

plus, 12 credits from the following
(from at least two different disciplines):

- ECON 346/POLS 398: Economics, Politics, and Brexit in Northern Ireland (when offered as study abroad)
- HIST 223: Survey of Irish History – Celtic Ireland to 1972
- HIST 226: Modern Europe since 1914
- HIST 322: Tudor and Stuart Britain
- POLS 104: Government and Politics
- POLS 350: Comparative Politics of the New Europe
- POLS 328: International Security
- MUSC 117: Historical Survey of Western Culture
- MUSC 130: Introduction to World Music
- MUSC 230: The Music of the U.S.

Irish Studies Undergraduate Courses

IRST 200 Introduction to Irish Studies (4 credits)
This interdisciplinary course offers a broad introduction to the study of Irish literature, history and culture. This course focuses on the history, society, politics, culture, and economics of Ireland and the Irish Diaspora, from the early Christian period to the present.

IRST 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

IRST 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses.

Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

IRST 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

Italian

Program Overview

The Italian program offers elementary and intermediate-level core classes on a yearly basis (111 and 211 in the fall, 112 in the spring).Students interested in pursuing higher-level courses can do so through our St. Thomas study abroad programs or other approved programs in consultation with the department.

The primary goal of the Italian program at St. Thomas is to provide students with the opportunity to:

1. Learn basic and intermediate levels of Italian through speaking, listening, writing and reading activities
2. Develop cultural knowledge and intercultural skills
3. Explore the study of the Italian language and culture as an integral part of a liberal arts education
4. Prepare for study abroad opportunities

Italian Undergraduate Courses

ITAL 111 Elementary Italian I (4 credits)
Pronunciation, essentials of grammatical structures, aural-oral practice, writing, reading of simple Italian prose, introduction to the cultures of the Italian-speaking world.

ITAL 112 Elementary Italian II (3 TO 4 credits)
Continuation of ITAL 111. Emphasis on grammatical structures , aural-oral practice, writing, reading. Continuation of Italian culture. Prerequisite: ITAL 111 or its equivalent completed with a C- or better.

ITAL 211 Intermediate Italian I (4 credits)
Designed to increase listening, speaking, reading, and writing skills in Italian. Reinforcement and expansion of grammatical structures of Elementary Italian I and II. Continued exposure to Italian culture. Prerequisite: ITAL 112 or its equivalent completed with a C- or better.

ITAL 212 Intermediate Italian II (4 credits)
Continuation of ITAL 211. Focus on intermediate grammatical structures. Emphasis on Italian culture, conversation, writing, and expansion of vocabulary based on thematic discussions and cultural readings. Prerequisite: ITAL 211 or its equivalent completed with a C- or better.

ITAL 243 Individual Study (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ITAL 269 Research (2 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ITAL 297 Topics (2 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ITAL 389 Research (2 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online, View Searchable Class Schedule

ITAL 393 Individual Study (2 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ITAL 485 Seminar (2 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ITAL 489 Topics (2 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ITAL 495 Individual Study (2 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ITAL 497 Research (2 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses.

Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

Japanese

Program Overview

The Japanese program offers elementary and intermediate-level core classes on a yearly basis (111 and 211 in the fall, 112 in the spring). Students interested in pursuing higher-level courses can do so through study abroad and/or the ACTC consortium in consultation with the department.

The primary goal of the Japanese program at St. Thomas is to provide students with the opportunity to:

1. Learn basic and intermediate levels of Japanese through speaking, listening, reading and writing activities (the three writing systems of hiragana, katakana and kanji are covered)
2. Develop cultural knowledge and intercultural skills
3. Explore the study of the Japanese language and culture as an integral part of a liberal arts education
4. Prepare for study abroad opportunities

Japanese Undergraduate Courses

JAPN 111 Elementary Japanese I (4 credits)
Mastering 46 hiragana alphabets. Introduction to basic sentence structures, particles, polite forms of verbs, and simple kanjis (Chinese characters). Students are encouraged to converse in given situations utilizing whatever has been learned in the class.

JAPN 112 Elementary Japanese II (4 credits)
Continuation of JAPN 111. Mastering 46 katakana alphabets. Further study of kanjis. Conjugation of adjectives, plain forms, te-forms. Noun modification. Action-in-progress as well as resultant-state forms of verbs. Main and subordinate clause construction. Daily free speaking in Japanese at simple level. Prerequisite: JAPN 111 or equivalent completed with a C- or better

JAPN 211 Intermediate Japanese I (4 credits)
Continuation of JAPN 112. Some of the volitional forms, hypothetical forms, and desiderative forms are introduced. Continued study of kanjis. Daily free speaking. Introduction to the use of Japanese word processor. Prerequisite: JAPN 112 or equivalent completed with a C- or better

JAPN 212 Intermediate Japanese II (4 credits)
Continuation of JAPN 211. Potential forms, transitive- intransitive verbs, respectful-humble forms, giving-receiving verbs, and some more hypothetical forms are introduced. Practice in situational and functional Japanese. Daily free conversation and further study of kanjis are continued. Prerequisite: JAPN 211 or equivalent completed with a C- or better

JAPN 243 Individual Study (2 OR 4 credits)

JAPN 311 Advanced Japanese (4 credits)
In-depth study of sentence patterns. Additional kanji characters will be presented to increase reading skills. Prerequisite: 212 or equivalent

JAPN 312 Advanced Japanese II (4 credits)

JAPN 393 Individual Study (2 OR 4 credits)

JAPN 495 Individual Study (2 OR 4 credits)

Journalism

Program Overview

College of Arts and Sciences, Department of Emerging Media

Major in Journalism

The eMedia Journalism degree program emphasizes responsible storytelling in a wide range of media while providing students with practical experience throughout their college careers. The program teaches students the skills and techniques needed to tell accurate and compelling stories. The coursework includes multiple multimedia reporting courses, technical training, and ethical instruction. The in-class curriculum is supported by practical experience in student media. Ultimately, the overall training prepares students for careers as reporters, TV producers, photographers, videographers, web content producers, social media content creators and more.

All Journalism majors must take 11 courses totaling 44 credits.

Required courses

- DIMA/JOUR 111 Intro to Mass Media (4 credits)
- JOUR 200 Principles of Journalism (4 credits)

- DIMA 240 Digital Imagery and Sound (4 credits)
- JOUR 252 Editing (4 credits)
- JOUR 251 Multimedia Reporting (4 credits)
- JOUR 336 Media Law (4 credits)
- JOUR 451 Advanced Multimedia Reporting (4 credits)
- JOUR 480 Journalism and Media Ethics (4 credits)

Electives:

Choose three (3) additional approved courses from the Journalism, Digital Media Arts, Strategic Communication, or Communication curriculum with at least one (1) at the 300-level or above. These electives can include individual study, experiential learning, study abroad or topics courses.

- COMM 326 Communication in Pop Culture
- COMM 328 Comm of Race, Class & Gender
- COMM 332 Documentary - American Culture
- COMM 340 Television Criticism
- COMM 366 Persuasion & Social Influence
- JOUR 151 Internship: The Crest
- JOUR 254 Photojournalism
- JOUR 262 Literary Journalism
- JOUR 270 Media Literacy
- JOUR 297 Topics
- JOUR 298 Topics
- JOUR 330 Media History
- JOUR 350 Magazine Writing
- JOUR 355 Sports Broadcasting
- JOUR 372 Environmental Journalism
- JOUR 476 Experiential Learning (1 – 4 credits)
- JOUR 495 Individual Study 2 OR 4 credits
- DIMA 256 Graphic Design
- DIMA 342 Media, Culture and Society
- DIMA 358 Web Design
- DIMA 360 Videography: TV Prod in Field
- DIMA 456 Media Design Studio
- STCM 234 Principles of Strategic Comm.
- STCM 346 Digital Content and Strategy
- STCM 344 Writing for Strategic Comm.

Minor in Journalism

All eMedia minors must take five courses totaling 20 credits, as follows:

- DIMA/JOUR 111 Introduction to Mass Media (4 credits)
- DIMA 240 Digital Imagery and Sound (4 credits)
- JOUR 200 Principles of Journalism (4 credits)
- JOUR 251 Multimedia Reporting (4 credits)
- One (1) elective from Journalism program courses.

Journalism Undergraduate Courses

JOUR 111 Intro to Mass Media (4 credits)
This course will introduce the student to mass media, including news media, social media and entertainment media. The course examines the mass media as cultural industries. Students will consider how the mass media shape and are shaped by society, the history of particular media, current research and media trends. Students will be expected to obtain an understanding of how print, broadcast, social, film and other media work, as well as a sense of their influence. Students are also expected to learn to be critical media consumers, asking themselves why they watch or read or listen to what they do. Students are strongly encouraged to take this course before taking upper-level Journalism or Digital Media Arts courses. The course is cross listed as DIMA 111 and STCM 111.

JOUR 151 Internship: TommieMedia (1 credit)
This course covers the entry-level responsibilities and duties of working in a multimedia newsroom, including but not limited to reporting, opinion writing, video journalism, graphic design, web design, audio podcasting, advertising, public relations, and management. Students will earn internship credit for their work in TommieMedia, the department-advised and student-run news organization. There is no prerequisite. Non-majors are welcome.

JOUR 232 Visual Media Theory & Practice (4 credits)
Introduction to the history, theory and principles of communicating visually through art, illustration, photography, design, typography, film, video and other visual forms. Cross-listed as DIMA 232.

JOUR 251 Multimedia Reporting (4 credits)
This course concentrates on news reporting, teaching skills in news judgment, observation, interviewing, information gathering, organization and writing. Students learn to report news for a variety of media platforms, preparing text , audio and video versions of stories for the web, television, print and radio. Prerequisites: JOUR 200 Principles of Journalism

JOUR 252 Editing (4 credits)
Preparation of copy for publication; evaluation of news; headline and title writing; news display, including typography; picture editing; and editing magazines and web publications.

JOUR 254 Photojournalism (4 credits)
An entry-level course on still photography as used in the mass media. Imparts mechanical skills to practice photography, creates an awareness of the aesthetics involved and introduces principles of communicating via photojournalism. Students supply own camera. Lecture and laboratory.

JOUR 262 Literary Journalism (4 credits)
A look at journalistic writing style as a literary prose form, with emphasis upon late 19th- and 20th-century American writing, and upon the tradition of literary journalism. Newspaper and magazine articles from both centuries and book-length works from the past 50 years will be read and discussed. Students will have the option of writing a research essay or a literary journalistic article for the final project. Prerequisite: junior or senior standing and JOUR 111.

JOUR 270 Media Literacy (4 credits)
This course empowers and supports students' engagement with traditional and emerging forms of media. Students will not only understand how media contents shape people's beliefs about different social groups, and how media exposure and usage influence identity development and cultural norms, but also become mindful in their own creation of media content. Students will be able to use media wisely and critically for individual purposes and in broader civic participation. Students will work collaboratively and collectively to build their knowledge structures in media literacy, and to understand how media contents are created, used, interpreted, and re-used by themselves and others. As a result of this course, students will have a firm grasp on not only the relationships of literacy and media, but also concrete experiences in responsible creation and use of media texts including social media posts, wiki entries, short videos, photo essays, etc.

JOUR 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

JOUR 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

JOUR 330 Media History (4 credits)
Early forms of communication, including art and symbols of ancient humans, civilizations without writing, the idea of an alphabet, medieval libraries, European background of the American news media system, development of American journalism, photography, film and telegraphy, and the mass media as a cultural institution

JOUR 336 Media Law (4 credits)
This course focuses on legal standards that protect and constrain communications in America, particularly, but not exclusively, in the context of mass media. Students consider First Amendment philosophy, examine historic free-expression cases that have affected the collection and dissemination of information, and explore how recent legal and technological developments influence both the character and the content of communication in all facets of American society today. Prerequisites: DIMA 111 or JOUR 111 or permission of instructor

JOUR 350 Magazine Writing (4 credits)
Explores the nature of writing for magazines as a staff writer or free-lance writer. Students will write service articles, profiles, human interest pieces and in-depth issue articles common to both commercial and trade magazines.

JOUR 355 Sports Broadcasting (4 credits)
This course introduces students to sports broadcasting. Students will develop a historical, ethical, theoretical, and practical foundation that is essential to a career in sports broadcasting. Practical skill development will include both performance and production for the current and emerging media industries. Transmedia skill development will be included as appropriate.

JOUR 372 Environmental Journalism (4 credits)
This course focuses on mediated information about the environment, the environmental movement and its issues. Students will examine what makes (and what has made) the environmental journalism of today, beginning with early journalistic influences such as found in ancient texts to more current writing about agriculture, nature, science, outdoor adventures, and journalism from points of view.

JOUR 451 Advanced Multimedia (4 credits)
This course concentrates on refining skills in interviewing, storytelling, use of documents, choice of media format, and creation of multi-part news stories. Students report news for a variety of media platforms, preparing text, audio and video versions of stories for the web, television, print and radio. Prerequisite: JOUR 251.

JOUR 476 Experiential Learning (1 TO 4 credits)

JOUR 480 Journalism and Media Ethics (4 credits)
This capstone seminar for graduating seniors explores ethical issues that confront professionals in journalism and other fields of mass media, and their

audiences. Students explore theoretical perspectives on ethics, work from case studies to understand professional ethical standards, discuss current ethical issues, work in teams to perfect oral and written ethical analysis skills and write an individual thesis paper. Prerequisites: graduating seniors only and permission of department chair.

JOUR 495 Individual Study (1 to 4 credits)

Justice and Peace Studies (JPST)

Program Overview

College of Arts and Sciences, Interdisciplinary Program

O'Shaughnessy Education Center (OEC) 468, (651) 962-5420

Finnegan (JPST), Okoi (JPST) and Klein (JPST)(Program Director).

Department Web Site: https://cas.stthomas.edu/departments/areas-of-study/justice-society-studies/index.html

Justice and peace studies is an interdisciplinary department designed to prepare students to be responsible critics of contemporary societies and effective agents for positive social transformation. The program offers a general major or minor, peace engineering minor, and three optional tracks for major concentrations:

The Conflict Transformation concentration prepares students to analyze the dynamics and identify transformative opportunities in conflicts at multiple levels, from interpersonal to international, while developing practical skills in mediation and conflict resolution through partnerships with local practitioners and organizations that exemplify best practices in the field.

The Public Policy Analysis and Advocacy concentration develops social analysis skills for public policy formation, evidence-based research and argumentation, as well as communication and networking skills for effective advocacy around issues such as environmental sustainability and climate change, foreign policy and peacebuilding, and economic justice and social welfare.

The Leadership for Social Justice concentration helps students anticipate and begin preparing for the full arc of a career in which successful community organizing requires them to institutionalize the changes they seek, through social entrepreneurship and nonprofit management.

Core courses for the major and minor, and the pattern of the program in general, make use of the four stages of the Circle of Praxis:

1. Experience (actual and vicarious) of poverty, injustice, social conflict, or marginalization.
2. Descriptive analysis: Empirical study of the economic, political, social, and cultural realities of society, and the historical events that produce them.
3. Normative analysis: Moral judgment on existing societies; study of alternative possibilities; and analysis of the moral values at stake.
4. Action possibilities: Strategies and skills for transforming society from its present condition to a better condition.

The justice and peace studies program is strongly interdisciplinary and interfaith. It promotes understanding and appreciation of widely diverse ideologies, cultures, and world views. Special attention is given to the rich tradition of Roman Catholic social thought in the context of pluralistic world societies.

Students graduating with a major in justice and peace studies will understand how the circle of praxis works, as well as the role of each of its components. They will also know how to use skills associated with each component. They will know the principles of active nonviolence, how it operates to promote social change, and historical examples of its use. Students will also learn the techniques and appropriate uses of other methods of social change, with special focus on community organizing, social entrepreneurship, nonprofit management and public policy advocacy. They will be able to engage in respectful dialogue with people whose values and positions differ widely from their own. They will understand and be able to use conflict resolution skills in personal life and small groups, and they will understand how these techniques are used in inter-group and international conflicts. They will have developed the personal skills and confidence to work effectively in organizations committed to justice and peace.

While all core courses utilize all four steps of the Circle of Praxis, JPST 250 concentrates on experience and descriptive analysis, while THEO

227 concentrates on normative analysis. Others core courses focus on action possibilities. All students who major in justice and peace studies take each of the signature courses from the three concentration areas: JPST 375 Conflict Analysis and Transformation, JPST 355 Public Policy Analysis and Advocacy, and JPST 365 Leadership for Social Justice.

Internship Requirements

The internships themselves involve at least 7-10 hours a week of justice and peace work. Students doing internships for credit by enrolling for JPST 475-478 Experiential Learning are usually required to do a total of 100 hours of work for 2 credit hours, or 200 hours of work for 4 credit hours.

Students doing a concentration in Conflict Transformation, Public Policy Analysis and Advocacy, or Leadership for Social Justice must choose an internship that allows them to develop skills in their area. In general, acceptable placements include work with a nonprofit or governmental group doing direct service; education for peace and justice; political action for peace and justice; and leadership positions in UST's Students for Justice and Peace (SJP). There is no objection to using an appropriate internship from another major (such as social work) to fulfill this requirement.

Alternatively, the internship and seminar requirement may sometimes be fulfilled by participating in appropriate off-campus academic programs which have reflective internship components, such as the programs of Augsburg's Center for Global Education. Students may also get credit for doing further research on, and analysis of, their internship experience by enrolling in JPST 475-478 Experiential Learning.

Significant experience requirement

Appropriate experience of poverty, injustice, social conflict, or marginalization. May be done for credit through 475-478 Experiential Learning.

It may also be done on a non-credit basis (e.g., in the context of another course or through volunteer activities). Possibilities include VISION Trips and off-campus study through programs that expose students to poverty and oppression.

Examples of appropriate off-campus study programs include those run by: Augsburg's Center for Global Education (in Cuernevaca Mexico, conflict resolution in Northern Ireland); American University's Washington Semester (e.g., on homelessness); and UMAIE. VISION Trips during January term, spring break or summer sessions (to Guatemala, Appalachia, the border of Mexico, a Native American reservation, etc.), and VIA programs located in the Twin Cities (e.g., working at a shelter, tutoring immigrant students, etc.).

Internship and seminar in the area of justice and peace studies. The internship may, but need not, carry credit:

JPST 473 Vocational Seminar (0 credit)

Students are required to take this seminar during senior year. At the core of this mini course is a reflective process designed to lead students to: a deeper understanding of the practical means of working for social change; an evaluation of their internship experience (both in terms of gaining a deeper understanding of their own vocation and a better understanding of the type of institutions they are working with); and applying these insights to future course work and career planning. Five 2-hour seminars through the course of the semester provide opportunities for those engaged in individual placements to get peer support for their discernment process.

Major in Justice and Peace Studies

(generalist track)

Complete the following:

- JPST 250 Introduction to Justice and Peace Studies (4 credits)
- JPST 275 Qualitative Methods: Research for Social Justice (4 credits)
- JPST 280 Active Nonviolence (4 credits)
- JPST 355 Public Policy (4 credits)
- JPST 365 Leadership for Social Justice (4 credits)
- JPST 375 Conflict Analysis and Transformation (4 credits)
- JPST 473 Vocational Seminar (0 credits, Senior year)
- JPST 489 Topics (4 credits)
- THEO 227 Theologies of Justice and Peace (4 credits) – Based on student career interests, other THEO 225 or THEO 227 classes may substitute for this course, with permission of the program director.

Significant Experience and Essay - engaging student directly with situation of poverty, injustice, social conflict, or marginalization (0 credits – see section below for more information)

Internship during junior or senior year (0-4 credits – see section below for more information)

Plus four additional credits in descriptive analysis

Appropriate courses include:

- AMCD 200 Introduction to American Culture and Difference
- BIOL 102 Conservation Biology
- COMM 326 Communication in Pop Culture
- COMM 328 Communication of Race, Class, and Gender
- DIMA 345 Media, Culture and Society
- COMM 370 Intercultural Communication
- ECON 211 Current Economic Issues
- ECON 337 Economics of the Public Sector
- ECON 339 Labor Economics
- ECON 345 Economics of Development and Growth
- ENVR 151 Environmental Challenges and Sustainable Solutions
- ENVR 212 Social Dynamics and the Environment
- GEOG 111 Human Geography
- GEOG 113 World Geography
- GEOL 113 The Earth's Record of Climate
- GEOL 115 Environmental Geology
- HIST 116 African American History in Global Perspective
- HIST 210 Modern Latin America, 1800 to the Present
- HIST 371 History of U.S. Foreign Policy
- IDSC 399 Study Away Courses
- POLS 225 World Politics
- POLS 301 Political Identity and Participation
- POLS 302 Women and Politics
- POLS 314 Constitutional Rights and Liberties
- POLS 326 International Law and Organizations
- POLS 350 Comparative Politics of the New Europe
- POLS 352 Third World Politics and Government
- PSYC 121 Social Psychology
- PSYC 151 Cross-Cultural Psychology
- SOCI 110 Social Problems
- SOCI 200 Introduction to Criminal and Juvenile Justice
- SOCI 251 Race and Ethnicity
- SOCI 301 General Anthropology
- SOCI 350 Social Inequality: Privilege & Power
- SOCI 353 Global Perspectives on Gender
- SOCI 365 Social Psychology
- SOWK 340 Human Behavior and the Social Environment

Plus four additional credits in normative analysis:

- BETH 301 Business Ethics (4 credits)
- BLAW 303 International Business Law (4 credits)
- BLAW 351 Environmental Law (4 credits)
- BLAW 352 Gender Issues and the Law (4 credits)
- CATH 340 Church and Culture: Social Dimensions of Catholicism (4 credits)
- COMM 366 Persuasion and Social Influence(4 credits)
- ENGL 217 Multicultural Literature (4 credits)
- ENGL 218 Literature by Women: Critical History (4 credits)
- ENGL 337 The Literature of Human Diversity (4 credits)
- ENGL 341 Literature by Women: Critical Questions (4 credits)
- ENVR 301 Environmental Ethics (4 credits)
- IDSC 466 City Arts: Reading Seminar (HECUA) (4 credits)
- IDSC 471 MUST Seminar: Research on Urban Issues (HECUA) (4 credits)
- PHIL 350 Advanced Ethical Theory (4 credits)
- PHIL 353 Machiavelli, Hobbes, and Nietzsche (4 credits)
- PHIL 357 Political Philosophy (4 credits)
- POLS 275 American Political Thought (4 credits)
- SOWK 291 The Anatomy of Violence (4 credits)
- THEO 221: Bible: Prophetic Literature
- THEO 224: Bridges: Theo & Consumerism
- THEO 224: Bridges: Theo & Environment
- THEO 224: Bridges: Theo & Discourse
- THEO 225: Faith & Ethics: Social Thought
- THEO 225: Faith & Ethics: Morality & War
- THEO 225: Faith & Ethics: Immigration
- THEO 227: Contexts: Liberation Theology
- THEO 227: Contexts: Church in Latin Am
- THEO 227: Contexts: Culture & Bible
- THEO 227: Contexts: Justice & Bible
- THEO 227: Contexts: Justice & Peace
- THEO 229: Professions: Faith & Mgmt
- THEO 229: Professions: Faith & Social Wk
- THEO 229: Professions: Faith & ENGL

Note: Additional 300- and 400-level Theology courses may also qualify, with approval of the JPST director.

- WGSS 205 Foundations in Women, Gender, and Sexuality Studies (4 credits)

Plus:

Additional courses to be selected with the approval of the program director, to bring the total number of credits to 44 (40 for a double major). These courses may deal with any part of the Circle of Praxis. Students seeking further opportunities to learn the theories behind, or honing of, skills for action might consider:

- ENTR 360 Creativity and Change (4 credits)
- ENVR 351 Environmental Policy Formation (4 credits)
- JPST 385 Globalization and Social Movements (4 credits)
- SOWK 391 Social Policy for Social Change (4 credits)

Students majoring only in Justice and Peace Studies are strongly encouraged to take a "methods" course from a department that uses approaches relevant to the way they are choosing to complete the JPST major. The purpose of this recommendation is to strengthen abilities in data interpretation, manipulation and generation.

Possibilities include:

- GEOG 221 Computer Skills in Geography (4 credits)
- POLS 205 Citizen Participation and Public Policy (4 credits)
- SOCI 210 Research Methods in Sociology (4 credits)
- SOCI 220 Sociological Analysis (4 credits)

Concentrations within a JSPT Major

Concentration in Leadership for Social Justice

Complete the following:

- JPST 250 Introduction to Justice and Peace Studies (4 credits)
- JPST 275 Qualitative Methods: Research for Social Justice (4 credits)
- JPST 280 Active Nonviolence (4 credits)
- JPST 355 Public Policy (4 credits)
- JPST 365 Leadership for Social Justice (4 credits)
- JPST 375 Conflict Analysis and Transformation (4 credits)
- JPST 473 Vocational Seminar (0 credits, Senior year)
- JPST 489 Topics (4 credits)
- THEO 227 Theologies of Justice and Peace (4 credits) – Based on student career interests, other THEO 225 or THEO 227 classes may substitute for this course, with permission of the program director.

Significant experience engaging student directly with situation of poverty, injustice, social conflict, or marginalization (0 credits – see section below for more information)

Internship during junior or senior year (0-4 credits – see section below or contact director for more information)

Plus:

- SOCI 110 Social Problems
- ENTR 200 Foundations of Entrepreneurship
- ENTR 490 Social Entrepreneurship
- SOCI 365 Social Psychology
- COMM111 Communication & Citizenship

One additional cultural awareness course from the following list:

- COMM 326 Communication in Pop Culture
- COMM 328 Communication of Race, Class, and Gender
- COMM 370 Intercultural Communication
- PSYC 151 Cross-Cultural Psychology
- SOCI 251 Race and Ethnicity
- SOCI 301 General Anthropology
- SOCI 350 Social Inequality: Privilege & Power

Two applied communication courses from the following list:

- COMM 220 Interpersonal Communication
- COMM 274 Small Group Communication
- COMM 320 Organizational Communication
- COMM 338 Political Communication
- COMM 366 Persuasion & Social Influence
- JPST 370 Conflict Mediation
- JPST 478 Experiential Learning [internship taken for credit]

Concentration in Conflict Transformation

Complete the following:

- JPST 250 Introduction to Justice and Peace Studies (4 credits)

- JPST 275 Qualitative Methods: Research for Social Justice (4 credits)
- JPST 280 Active Nonviolence (4 credits)
- JPST 355 Public Policy (4 credits)
- JPST 365 Leadership for Social Justice (4 credits)
- JPST 375 Conflict Analysis and Transformation (4 credits)
- JPST 473 Vocational Seminar (0 credits, Senior year)
- JPST 489 Topics (4 credits)
- THEO 227 Theologies of Justice and Peace (4 credits) – Based on student career interests, other THEO 225 or THEO 227 classes may substitute for this course, with permission of the program director.

Significant experience engaging student directly with situation of poverty, injustice, social conflict, or marginalization (0 credits – see section below for more information)

- SOCI 110 Social Problems
- COMM 111 Communication and Citizenship
- SOCI 365 Social Psychology
- JPST 370 Conflict Mediation
- JPST 478 Experiential Learning [internship taken for 4 credit hours]

Plus one of the following:

- IDSC 291 The Anatomy of Violence
- SOCI 350 Social Inequality: Privilege & Power

Plus one of the following:

- COMM 328 Communication of Race, Class, and Gender
- COMM 370 Intercultural Communication
- PSYC 151 Cross-Cultural Psychology
- SOCI 251 Race and Ethnicity
- SOCI 301 General Anthropology

Concentration in Public Policy Analysis and Advocacy

Complete the following:

- JPST 250 Introduction to Justice and Peace Studies (4 credits)
- JPST 275 Qualitative Methods: Research for Social Justice (4 credits)
- JPST 280 Active Nonviolence (4 credits)
- JPST 355 Public Policy (4 credits)
- JPST 365 Leadership for Social Justice (4 credits)
- JPST 375 Conflict Analysis and Transformation (4 credits)
- JPST 473 Vocational Seminar (0 credits, Senior year)
- JPST 489 Topics (4 credits)
- THEO 227 Theologies of Justice and Peace (4 credits) – Based on student career interests, other THEO 225 or THEO 227 classes may substitute for this course, with permission of the program director.

Significant experience engaging student directly with situation of poverty, injustice, violence, and/or marginalization (0 credits – see section below for more information).

Internship during junior or senior year (0-4 credits – see section below for more information)

Recommendations:

- As students fulfill their social analysis requirement in the core curriculum, they should anticipate which of the disciplines below they will focus upon, in order to meet prerequisites for classes in this concentration.
- As students fulfill their lab science requirements in the core curriculum, they are encouraged to take one of the following courses:
    - BIOL 102 Conservation Biology
    - CHEM 101 Environmental Chemistry
    - GEOL 113 Earth's Record
- As students fulfill their third math and science requirement in the core curriculum, they are encouraged to take the following course:
    - DASC 120–Intro to Computational Statistics

Plus at least 3 courses in one discipline from the following clusters, plus 1 course each in 2 other disciplines (5 total):

Economics:

- ECON 211 Current Economic Issues (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- ECON 326 Industry Studies (4 credits)
- ECON 333 Regional and Urban Economics (4 credits)
- ECON 370 Environmental and Natural Resource Economics (4 credits)

Environmental studies:

- ENVR 151 Environmental Challenges and Sustainable Solutions (4 credits)
- ENVR 212 Social Dynamics and the Environment (4 credits)
- ENVR 301 Environmental Ethics (4 credits)
- ENVR 351 Environmental Policy Formation (4 credits)

Geography:

- GEOG 298 Geography for Social Analysis (4 credits)
- GEOG 321 Geographic Information Systems (4 credits)
- And one of the following:
    - GEOG 322 Geographical Analysis (4 credits)
    - GEOG 331 Conservation Geography (4 credits)
    - GEOG 421 Applied GIS (4 credits)

Public policy in the U.S.:

- POLS 104 American Government in Comparative Perspective (4 credits)
- POLS 205 Citizen Participation and Public Policy (4 credits)
- POLS 303 Urban and Metro Politics (4 credits)

Foreign policy and international relations:

- POLS 225 World Politics (4 credits)
- POLS 320 American Foreign Policy (4 credits)
- POLS 321 Comparative Foreign Policy (4 credits)

Sociology and Social Work:

- SOCI 110 Social Problems (4 credits)
- SOCI 251 Race and Ethnicity (4 credits)
- SOCI 350 Social Inequality: Privilege and Power (4 credits)
- SOWK 281 Introduction to Social Work (4 credits)
- SOWK 391 Social Policy for Social Change (4 credits)

Two applied communication courses:

- COMM 111 Communication & Citizenship (4 credits)
- COMM 320 Organizational Communication (4 credits)
- COMM 338 Political Communication (4 credits)
- COMM 366 Persuasion and Social Influence(4 credits)
- JOUR 372 Environmental Communication (4 credits)
- JPST 370 Conflict Mediation (4 credits)
- JPST 478 Experiential Learning [internship taken for 4 hours credit]

Minors in JPST

Minor in Justice and Peace Studies

The 16-credit minor in Justice and Peace Studies is designed to prepare students to be responsible critics of contemporary societies and effective agents for positive social transformation.

Complete the following (8 credits):

- JPST 250 Introduction to Justice and Peace Studies (4 credits)
- JPST 280 Active Nonviolence (4 credits)

Plus one of the following:

- JPST 355 Public Policy (4 credits)
- JPST 365 Leadership for Social Justice (4 credits)
- JPST 375 Conflict Analysis and Transformation (4 credits)

Plus (4 credits):

- JPST 275 Qualitative Methods: Research for Social Justice (4 credits)
- JPST 295-298 Topics (2 or 4 credits) such as Art of Social Justice, Engineering Peace, Social Change for Climate Justice&
- An additional JPST 300-level course
- THEO 227: Contexts: Justice & Peace (4 credits) or an additional THEO course related to Justice and Peace with approval of JPST program director
- Another course related to Justice and Peace with approval of JPST program director

And:

- JPST 473 Vocational Seminar (0-credits) a reflective process for seniors over five evening meetings designed to integrate fields of study, promote understanding of the practical means of working for social change, develop a deeper understanding of vocation and apply insights to future work for justice and peace

Minor in Peace Engineering

The peace engineering minor may be combined with any undergraduate engineering degree (i.e. mechanical, computer, electrical, civil) by adding a Peace Engineering Minor through the Department of Justice and Peace Studies.

Complete the following:

- JPST 250 Introduction to Justice and Peace Studies (4 credits)
- THEO 421 Theology of Justice and Peace (4 credits)
- ENGR 480 & ENGR 481 Senior Design - with a peace engineering designated project (8 credits)
- JPST 473 Vocational Seminar (0-credits, in conjunction with ENGR 480 & ENGR 481 Senior Design).
- Significant Experience – see below for description.

Plus One of the following:

- JPST 355 Public Policy Analysis & Advocacy (4 credits)
- JPST 365 Leadership for Social Justice (4 credits)
- JPST 375 Conflict Analysis & Transformation (4 credits)

JPST Undergraduate Courses

JPST 225 Making Art Social Justice (2 credits)
Students will explore the intersections of art and social justice with a focus on visual arts and social movements in the Twin Cities. Topics of study will include public art, protest art, expression and censorship, social movement theory, aesthetic theory, and the Twin Cities as a unique space for social practice art. Readings, videos, and art exploration will be accompanied by making art as an approach to learning, but students will not be graded on the quality of art, only the meaning they make. In other words, no art experience necessary! The class will collaborate with a local artist or arts collective who uses art to address social justice and conclude with an art installation, exhibition, or virtual display of student artwork

JPST 243 Individual Study (2 OR 4 credits)

JPST 250 Intro to Justice & Peace (4 credits)
Major aspects of world and local conflict, theories of social science relating to conflict and violence, and various proposals for solutions. Among the aspects of conflict studied are cultural differences, scarcity of resources, economic and social structures, international trade, the arms race, corruption, oppression and war. Proposed solutions assessed include development, structural changes, world governance, multinational agencies, military power, civilian-based defense, active nonviolence for social change, conflict resolution, disarmament, cultural exchange, religious revival and prayer. These topics are considered in the light of theory, history, and literature. Students apply these concepts by investigating one country or geographic area in depth through a semester long research project. Usually offered every semester.

JPST 269 Research (2 OR 4 credits)

JPST 275 Qualitative Methods (4 credits)
This course introduces students to qualitative research theories, methods, and techniques focused on representing voices of women, people of color, people in poverty and others that are marginalized or excluded from dominant culture. Specifically, students will gain familiarity with the qualitative social science methods of interviews, ethnography, documentary research, and focus groups. Throughout the course, students will be guided through the process of designing and conducting their own unique research projects meanwhile learning from ongoing research with their instructors and partner organizations. In addition to training in data collection techniques, analysis, and varied epistemologies, the course thoroughly explores the ethics of research with marginalized communities and the ways in which research can and does relate to social change. Together, participants in this course will co-create a teaching/learning community wherein we all critically analyze and respectfully value each person's individual and particular contributions as well as our diverse understandings of social reality and how we position ourselves in the multiple worlds in which we live and work.

JPST 280 Active Nonviolence (4 credits)
Active nonviolence as a means for societal defense and social transformation analyzed through case studies of actual nonviolent movements, examining their political philosophy and how this philosophy is reflected in their methods and strategies. Examples of possible case studies include: Mahatma Gandhi's movement for a free India, Danish resistance to Nazi occupation, the struggle for interracial justice in the United State, an integrated Canada-to-Cuba peace-and-freedom walk, the campaign to close the U.S. Army School of the Americas (WHINSEC), fair trade movements, and the Honeywell Project. The course emphasizes the theory and active practice of nonviolence as well as oral histories of successful nonviolent movements. Usually offered every semester.

JPST 295 Topics 2 (credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses.

Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

JPST 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

JPST 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

JPST 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

JPST 355 Public Policy (4 credits)
In this class students will investigate how and why particular policies are developed, proposed, adopted, and implemented; will explore how social values shape and impact public policies; and will learn how to frame issues in ways that allow for more effective advocacy. The class will examine the relative power of diverse corporate and non-profit sectors in influencing policy debates and outcomes, including the role of think tanks. Students will analyze the limitations and strengths of diverse approaches to advocacy ranging from third-party appeals and solidarity efforts to elite decision makers, as well as the prospects for a politics of agency rooted in citizen-centered politics in which people mobilize to meet the needs of their communities. The course will integrate basic theory, interaction with public policy analysts and advocates, personal experience in persuasive advocacy, and case studies focused on issues such as climate change, economic inequality, land-food-hunger, and approaches to health care. Assignments will introduce students to various tools for persuasive advocacy and allow them to develop skill sets for using them.

JPST 365 Leadership for Social Justice (4 credits)
Leadership for Social Justice examines the arc of leadership through the process of creating, sustaining, then institutionalizing positive social change. The course examines models and case studies of authoritative, positional, influential and situational leadership in diverse settings such as community organizing, social movements, social entrepreneurship and nonprofit management. The course also explores approaches to ethical leadership and provides opportunities for students to develop the skills and vision needed to become ethical leaders for social justice. Students will analyze the role of leadership in the tensions between preserving order and promoting transformation. They will develop a critical approach to the dynamics of power in order to effect systemic change. Prerequisites: 80 completed credits

JPST 370 Conflict Mediation (4 credits)
This course will focus on mediation and the third-party role of the mediator. Much class time will be spent learning the process of mediation and the skills needed to be a mediator whether in a formal sense or informally as a life skill. Experiential in nature, the course will elicit and build upon students' own experiences of conflict and will use various experiential learning tools to develop practical mediation skills. Students will also survey various streams in the practice of mediation as they have developed historically, along with its theoretical basis. Special attention will be given to arenas/situations in which mediation is and is not appropriate or indicated, to cultural implications of mediation and to some of the ethical dilemmas mediators face. For Justice and Peace Studies major doing a concentration in Conflict Transformation, the course will complement JPST 375 Conflict Analysis and Transformation, but there are no prerequisites and the course is open to students in other majors.

JPST 375 Conflict Analysis & Transform (4 credits)
This course is an introduction to the issues surrounding social conflict. It centers on equipping students with the theory and skills of conflict analysis and processes of engaging in conflict on the global, local and interpersonal levels. It contrasts a traditional conflict resolution model with conflict transformation, a paradigm that appreciates how conflict and violence are connected to underlying issues of justice. The course introduces students to a wide range of conflict transformation processes such as negotiation, mediation, dialogue, facilitation, restorative justice and conflict advocacy. It provides students with the opportunities to participate in these processes and explore potential vocational paths in the field of conflict transformation. As a component of the practice of the skills taught in this course, students organize and lead the annual World Cafe, a university-wide interdisciplinary dialogue. Throughout, the course engages students in a process of rigorous reflection of the ethics involved in engaging conflict. Prerequisite: Sophomore standing

JPST 385 Globalization & Social Mvmts (4 credits)
Our class will analyze social movements through the events that shape their struggles for justice in the context of an increasingly interconnected,

globalized world. Historical survey and key theoretical concepts will provide context for examining the methods used to advance social change and strengthen civil society. The course will give major attention to exploring the U.S. Civil Rights Movement through primary documents, video and classroom analysis, applying the lessons of this and other historical movements to contemporary movements. We will explore local manifestations of global movements through immersion, service-learning projects, guest speakers, student research and final presentations.

JPST 389 Research (2 OR 4 credits)

JPST 393 Individual Study (2 OR 4 credits)

JPST 473 Vocational Internship Seminar (0 credits)
Students are required to take this seminar during the semester they are doing an internship of 7-10 hrs/wk. The seminar meets three times (at the beginning, middle, and end of the semester), to provide opportunities for those engaged in individual placements to get peer support for their discernment process. At its core is a reflective process designed to lead students to: a deeper understanding of the practical means of working for social change; an evaluation of their internship experience (both in terms of gaining a deeper understanding of their own vocation and a better understanding of the type of institutions they are working with); and applying these insights to future course work and career planning.

JPST 476 Experiential Learning (1 TO 4 credits)

JPST 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

JPST 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online, View Searchable Class Schedule

JPST 495 Individual Study (2 OR 4 credits)

Latin

Program Overview

Latin courses apply not only to the core language requirement but also to majors and minors in Classics (both Culture and Language tracks). For degree options, please see the Classics section of the catalog.

Latin Undergraduate Courses

LATN 111 Elementary Latin I (4 credits)
A beginning course, with emphasis on reading Latin prose in passages of increasing complexity. Introduction to essential forms, syntax and vocabulary. Practice in reading Latin aloud and composing simple sentences. Exploration of the social and cultural context of the Latin language. Students must be placed into LATN 111.

LATN 112 Elementary Latin II (4 credits)
Continuation of LATN 111. More graded readings, further mastery of forms, syntax and vocabulary. Prerequisite: LATN 111 or equivalent completed with a C- or better

LATN 211 Intermediate Latin I (4 credits)
Readings of narrative prose. Review and further study of grammar. Prerequisite: LATN 112 or equivalent completed with a C- or better

LATN 212 Intermediate Latin II (4 credits)
This course focuses on solidifying the basic skills of language mastery through reading, writing, speaking and listening. Reading selections will be taken from various authors, both prose and poetry; stories will be drawn from the early history of Rome. Prerequisite: LATN 211 or equivalent completed with a C- or better

LATN 243 Individual Study (2 TO 4 credits)

LATN 255 Latin: Old/New Testament (4 credits)
Readings from St. Jerome's Latin translation of the Old and New Testament. Prerequisite: LATN 211 or equivalent

LATN 269 Research (2 OR 4 credits)

LATN 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

LATN 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

LATN 305 Introduction to Medieval Latin (4 credits)
This course will focus on developing mastery of Latin through the four essential skills of reading, writing, speaking, and listening. We will read, discuss and write about (Latine!) selections drawn from various Medieval Latin authors, both Christian and secular,

and further develop our literary exploration of various genres of writing. Readings will include texts drawn from the early Christian biographies and the history of the development of Christianity in Rome, as well as texts from the later medieval period. Prerequisite: LATN 212 or instructor permission.

LATN 311 Latin Composition (4 credits)
A thorough review of Latin grammar. Practice in the writing of continuous Latin prose. Prerequisite: LATN 212 or 255 or equivalent

LATN 320 St. Augustine (4 credits)
Selected readings from the text of St. Augustine. Focal points will include pertinent background on the author, his times, philosophical influences, and the grammatical and syntactical features of Medieval Latin.

LATN 360 Topics Phil & Scientific Latin (4 credits)
Topics in Philosophical and Scientific Latin. Work in this course explores Latin literature in the field of "natural history," from its origins in Greek philosophy through the medieval period to the flowering of modern science, and will introduce students to “classic” texts in the history of Science, in their original language. Students will develop their Latin skills and increase their mastery of the language through the basic tools of reading, writing, speaking, and listening. Readings will include elements of post-classical Latin that may be called “medieval,” and to show the wide range of styles that “medieval” Latin attained, especially in technical or didactic writings. Prerequisite: LATN 212 or instructor permission.

LATN 393 Individual Study (2 OR 4 credits)

LATN 421 Vergil (4 credits)
Reading of extensive selections from the Aeneid in Latin and of the entire poem in English translation. Discussion of the sources, themes and techniques of the epic. Prerequisite: LATN 212 or 255 or equivalent

LATN 430 Caesar and Cicero (4 credits)
Extensive reading of the Gallic War and of the Orations of Cicero. A study of the character and career of each author. Prerequisite: LATN 212 or 255 or equivalent

LATN 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

LATN 495 Individual Study (2 OR 4 credits)

Latin American and Caribbean Studies

Program Overview

College of Arts and Sciences, Interdisciplinary Program

John Roach Center for the Liberal Arts – JRC 410, (651) 962-5724

Director: Kari Zimmerman (HIST)

Latin American and Caribbean Studies is an interdisciplinary program that prepares students to understand and critically examine the complexities and diversity of the people and institutions of Latin America; the region comprised of countries in North, Central and South America, as well as the Caribbean, whose distinct geography, political economies, and societies are unified by aspects of a common cultural heritage. The purpose of the minor is to enable students to analyze Latin America, at the national and regional level, and its relationship to major global trends. Relying on the perspectives and methodologies of several disciplines, students will acquire a deeper knowledge of Latin America and the Caribbean; its history, geopolitics, diverse populations, cultural traditions and contributions, and its crucial place in international development. The broad scope and analytical approach of Latin American and Caribbean Studies positions students with the critical framework and cultural competency necessary to be effective and socially responsible citizens of the Americas.

The minor offers two tracks that prepare students to become specialists on Latin America and its people or Latin America in Global Perspective. Students focused on either track will be proficient in analytical writing, foreign language aptitude and cross-cultural study. In addition, an integral part of the program includes an immersion experience either in Latin America and the Caribbean or locally among Latino communities. The goal of the immersion experience is to build on academic knowledge and help students gain a more nuanced understanding of lived experiences as related to contemporary issues and circumstances. In combination, these academic and experiential skills allow students to apply their knowledge of Latin America to a broad range of careers including government and diplomacy, international business and/or law, nonprofit and non-government organizations, and teaching. Students with a minor in Latin American and Caribbean Studies are also well prepared for graduate studies in related disciplines such as public policy, law, international relations, business, modern

languages and literature, art history and museum studies. This comprehensive and flexible minor provides students with the opportunity to develop their academic, cultural, and/or vocational interests in Latin America..

Minor in Latin American and Caribbean Studies

Students Will Complete 24 Credits for the LACS Minor, Including 1 Immersion Experience.

Foundation Courses:

- LACS 200 Introduction to Latin American Studies (4 credits)
  or HIST 117 Latin America in Global Perspective
- SPAN 212 Intermediate Spanish II (4 credits) or equivalent

Plus 16 Credits in 1 of 2 Tracks:

Latin American Studies Generalist

16 credits of the following with no more than 8 credits taken in any 1 Department.

- ARTH 265 Art of Mesoamerica (4 credits)
- ARTH 321 The Art and Culture of Modern Mexico (1824-1940) (4 credits)
- ARTH 323 Colonial Art of Latin America (4 credits)
- HIST 293 Topics in History of Latin America (4 credits)
- HIST 301 History of Urban Latin America (4 credits)
- HIST 303 History of Modern Brazil (4 credits)
- HIST 395: Topics in History of Latin America (4 credits)
- SPAN 316 Studies in Spanish Linguistics (4 credits)
- SPAN 332 Latin American Culture and Civilization (4 credits)
- SPAN 340 The Long Emancipation (4 credits)
- SPAN 380 Themes in Latin American Literature (4 credits)
- SPAN 405 Spanish Genre Studies (4 credits) (Upon approval by the director) SPAN 410 Women and Discourse of the Spanish-speaking World (4 credits) (Upon approval by the director)
- SPAN 411 Ethnicity and Multiculturalism of the Spanish-speaking World (4 credits)
- SPAN 415 Hispanic Cinema Studies (4 credits)
- THEO 455 The Church in Latin America (4 credits)

Latin America in Global Perspective

8 credits chosen from the Latin American Studies Generalist List [above] and 8 credits of the following courses with partial coverage of Latin America, with no more than 8 credits in any 1 department.

Note: Students in partial coverage courses must focus their final project/assignment on the region and submit a copy of it to the LACS Director.

- ECON 341 Open Economy Macroeconomics (4 credits)
- ECON 342 International Trade (4 credits)
- ECON 345 Economics of Development and Growth (4 credits)
- ENGL 337 Latina Women Authors (4 credits)
- FILM courses as appropriate and approved by director of LACS. Examples include:
  - FILM 300 World Cinema
- GEOG 113 Globalization & World Regions (4 credits)
- GEOG 350 Geography of Global Health (4 credits)
- HIST 207 Slavery in the Americas (4 credits)
- HIST 211 Women & the Family in the Americas (4 credits)
- IBUS courses completed in Latin America & approved by the director of LACS
  - IBUS 450 Transnational Business Issues in Management, Marketing, or Business Law (4 credits)
  - IBUS 460 Transnational Business Issues in Finance or Accounting (4 credits)
  - IBUS 470 Transnational Issues in International Business (4 credits)
- JPST 250 Introduction to Justice and Peace Studies (4 credits)
- JPST 385 Globalization and Social Movements (4 credits)
- MGMT 391 Elements of Global Business (2 credits)
- MGMT 430 Global Strategy and Management (4 credits)
- MUSC 130 Intro to World Music (4 Credits
- MUSC 217 Music of the Americas (4 credits)
- POLS 225 World Politics (4 credits)
- POLS 424 Seminar in International Relations (4 credits)
- POLS 454 Seminar in Comparative Politics (4 credits)

- POLS 321 Comparative Foreign Policy (4 credits)
- POLS 326 International Law and Organizations (4 credits)
- POLS 328 International Security (4 credits)
- POLS 352 Politics of the Developing World (4 credits)
- PUBH 225: Global Heath and Development (4 credits)
- SOCI courses as appropriate and approved by director of LACS. Examples include:
    - SOCI 251 Race and Ethnicity (4 credits)
    - SOCI 350 Social Inequality: Privilege & Power (4 credits)
    - SOCI 353 Global Perspectives on Gender (4 credits)
- SPAN 412 Chicano and U.S. Latino Culture(s) and Literature(s) (4 credits)
- THEO 421 Theologies of Justice and Peace (4 credits)

Immersion Experience:

- At least 4 of the 24 required credits in either track must include an immersion experience (study abroad or campus affiliated courses/internship that includes community engagement) approved by the director of the program.

LACS Undergraduate Courses

LACS 200 Intro Latin American Studies (4 credits) Introduces students to the interdisciplinary field of Latin American Studies as well as the individuals, cultures, histories, politics, economics, and geographies that distinguish the region and its nations. Students learn different disciplinary approaches to analyzing Latin America (e.g. art history, political science, literature, sociology, and history) through course content, readings, and instruction as the course is rotated among affiliated faculty each semester offered. The interdisciplinary framework provides a number of different ways to think about Latin American society and challenges us to recognize the linkages and tensions that define the region, explored through topics such as social and economic variations, democracy and dictatorship, slavery and race relations, urban and rural societies, (im)migrations, gender and sexuality, citizenship and resistance, popular culture, and the Church and social justice. Exploring the major themes and disciplinary studies of Latin America help us integrate ideas about the region and its communities.

Legal Skills

Program Overview

College of Arts and Sciences, Interdisciplinary Program

Director: Dr. Caleb Goltz (POLS), John Roach Center 406
(651) 962-5724, goltz@stthomas.edu)

The minor in Legal Skills prepares students for law school, law-related graduate study, and law-related employment. The Legal Skills minor equips students with skills necessary to succeed in the field of law by cultivating techniques and habits of mind that prepare them for future legal education and work. This skills-based minor focuses on developing and strengthening the skills of writing, reasoning, analysis, and oral communication. Several departments within the university offer courses that provide a framework for developing a set of core skills that form a solid foundation for legal education and careers.

Minor in Legal Skills

The minor in Legal Skills consists of six courses, completed from the four categories of Writing, Formal and Applied Reasoning, Analysis of Legal and Political Texts, and Oral Communication.

5. Writing (complete a and b, as well as c, d, or e)
    a. Complete the university's Writing Across the Curriculum requirements.
    b. POLS 115: Legal Research and Writing
    c. ENGL 256: Intro to Professional Writing
    d. ENGL 300: Writing Theory and Practice
    e. ENGL 304: Persuasive Writing
2. Formal and Applied Reasoning (complete one of the following courses)
    - PHIL 220: Logic
    - BLAW 401: Legal Research, Advocacy, and Dispute Resolution
    - THEO 229: Professions: Faith and Law
    - ECON 321: Law and Economics
3. Analysis of Legal and Political Texts (complete two of the following courses)
    - POLS 313: Constitutional Powers of Government

- POLS 314: The Supreme Court, Civil Rights, and Civil Liberties
- POLS 326: International Law and Organization
- POLS 370: Exploration in Political Theory
- PHIL 357: Political Philosophy
- PHIL 359: Philosophy of Law
- HIST 365: U.S.Constitutional History
- CJUS 342: Criminal Law and Procedure

4. Oral Communication (complete one of the following courses)
   - COMM 100: Public Speaking
   - COMM 366: Persuasion & Social Influence

A legal internship or experience is strongly recommended but not required. Consult with the program director.

Legal Studies

Program Overview

College of Arts and Sciences, Interdisciplinary Program

Director: Dr. Caleb Goltz (POLS), John Roach Center 406
(651) 962-5724, goltz@stthomas.edu

The minor in legal studies enables students to undertake a multidisciplinary examination of the relationship of law to culture and society. Understanding the foundations and nature of law and legal process is an integral element of a liberal arts education. Several departments within the university offer courses that examine the sociological, political, philosophical, journalistic, historical, economic and business aspects of legal behavior and legal systems.

By drawing on those courses, the legal studies minor exposes students to a variety of perspectives on the study of law and provides a broad understanding of the role of law in society.

The legal studies minor is not intended as a pre-law program, although it may prove especially attractive to students interested in careers in law, public administration or related professions. Its objective is to allow students to undertake an examination of law and legal process within a liberal arts context.

Minor in Legal Studies

20 credits

Twenty credits from the following list, or other courses selected with the approval of the program director. To ensure an interdisciplinary base of study, no more than eight credits may come from any one department.

- BLAW 300: Law for Business Leaders I (2 credits)
- BLAW 304 Real Estate Law (4 credits)
- BLAW 310 Law for Business Leaders II (2 credits)
- BLAW 311 Advanced Business Law for Accounting (2 credits)
- BLAW 313 Essentials of Intellectual Property Law (2 credits)
- BLAW 314 Employment Law (2 credits)
- BLAW 315 Law and Ethics of Data (2 credits)
- BLAW 320 Compliance in Business Organizations (4 credits)
- BLAW 321 Law for Entrepreneurs and Innovators (4 credits)
- BLAW 322 Law for International Business (4 credits)
- BLAW 323 Health Care Law and Ethics (4 credits)
- BLAW 351 Environmental Law (4 credits)
- BLAW 352 Gender Issues and the Law (4 credits)
- BLAW 401 Legal Research, Advocacy, and Dispute Resolution (4 credits)
- CJUS 342 Criminal Law and Procedure (4 credits)
- JOUR 336 Media Law (4 credits)
- ECON 321 Law and Economics (4 credits)
- ENGL 231 Law and Literature (4 credits)
- HIST 365 U.S. Constitutional History (4 credits)
- PHIL 357 Political Philosophy (4 credits)
- PHIL 359 Philosophy of Law (4 credits)
- PHIL 398 Advanced Critical Thinking (4 credits)
- POLS 312 Judicial Process and Politics (4 credits)
- POLS 313 Constitutional Powers of Government (4 credits)
- POLS 314 Constitutional Rights and Liberties (4 credits)
- POLS 326 International Law and Organizations (4 credits)
- POLS 414 Seminar in Judicial Politics (4 credits)

- THEO 229 Professions: Faith and Law (4 credits)
- THEO 300 Signature Work: Faith and Law (4 credits)

Liberal Arts in Business

Program Overview

College of Arts and Sciences, Interdisciplinary Program

John Roach Center for the Liberal Arts (JRC) 323, (651) 962-5693

MacKenzie (ENGL), director

Liberal Arts in Business Program Department Web Site: https://www.stthomas.edu/academics/undergraduate/liberal-arts-in-business-minor

The Liberal Arts in Business Program is an interdisciplinary minor which provides students the opportunity to combine the distinct learning experiences of a concentration in a liberal or non-business related field with exposure to career-related studies and significant work experience. It is designed for students majoring in the liberal arts who want preparation for their career search.

Students who minor in the Liberal Arts in Business Program elect a major field of study from any of the liberal arts disciplines – that is, from the humanities, social sciences, natural sciences and the like. Students who major in any of the Business fields or in Health and Human Performance are not eligible for the program.

The program's requirements consist of coursework and an internship. Students choose a set of six courses (detailed below) from a broad range of pre-professional and professional areas. In their senior year, students take IDSC 333 Liberal Arts in Business Program Studies, a capstone seminar that brings together the perspectives of economics, business, and the liberal arts. Students also complete an internship in a career-related field. A variety of options and opportunities are available through the Career Center; students are encouraged to be creative and to search for inventive ways of implementing a plan of practical work experience.

As part of its commitment to Liberal Arts in Business Program students, the University of St. Thomas extends to graduates of the program the opportunity to take undergraduate business courses tuition-free, on a space-available basis. There is no limit on the number of such courses the student may take. Students may take these courses either for credit or as audits, but may not use the courses toward a major or minor in business.

Application for admission is made through the Liberal Arts in Business Program director's office, currently in the Department of English. Application should normally take place during the second semester of the sophomore year, but may occur later.

Liberal Arts in Business Minor

This minor is only available for non-business majors.

Four credits from the following:

- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)

Note: Other courses from the Department of Economics may be acceptable if the necessary prerequisites have been met, and on the approval of the director of the Liberal Arts in Business.

Plus four credits from the following:

- CISC 130 Introduction to Programming and Problem-Solving Sciences (4 credits)
- CISC 200 Introduction to Computer Business and Technical Applications (4 credits)
- DASC 120 (or DASC 112) Introduction to Computational Statistics (4 credits)

Note: Other courses from the Department of CISC may be acceptable if the necessary prerequisites have been met, and on the approval of the director of the Liberal Arts in Business.

Plus a total of twelve credits in Business, chosen from among the following:

- ACCT 100 Principles of Accounting 1 (4 credits)
- ACCT 200 Principles of Accounting II (2 credits)
- BETH 300 Ethical Principles in Business (2 credits)
- BLAW 300 Law for Business Leaders (2 credits)
- BUSN 100 Business for the Common Good (2 credits)
- ENTR 100 Introduction to Entrepreneurship and Innovation (2 credits)
- FINC 310 Core Financial Management (2 credits)

- MGMT 200 Working Skillfully in Organizations (2 credits)
- MKTG 200 Introduction to Marketing (2 credits)
- OPMT 300 Operations and Supply Chain Management (2 credits)

Note: With the exception of BLAW 300, all these courses require prerequisites, generally BUSN 100. OPMT 300 requires DASC 120, MATH 101 or above, and sophomore standing. Sophomore standing is also required for MKTG 200 and MGMT 200.

Other courses from the Opus College of Business may be acceptable if the necessary prerequisites have been met, and on the approval of the Director of the Liberal Arts in Business.

Plus:

- LABM 330 Liberal Arts in Business Internship (0 credit)
- LABM 333 Liberal Arts in Business Studies (4 credits)

Note: Another course that integrates themes involving the relation between the liberal arts and the world of work may be acceptable provided the necessary prerequisites have been met, and on the approval of the director of the Liberal Arts in Business.

Liberal Arts in Business Undergraduate Courses

LABM 330 Liberal Arts Business Intern (0 credits) Participants in the Renaissance Program complete one internship in a career-related field. Students are encouraged to be creative and to search for inventive ways of implementing a plan of practical work experience. A variety of options and opportunities is available through the Career Center.

LABM 333 Liberal Arts Business Studies (4 credits) In accord with the Renaissance Program's commitment to foster the integration of theoretical and practical learning, the design of this course is to promote the investigation of some theme or problem having a particularly interdisciplinary focus. This course will rely upon concepts and models stemming from both theoretical and practical sources in an attempt to further integrate aspects of these distinct branches of higher learning. Among the types of issues or topics that could fall within the scope of this course are: the meaning and value of work; the nature and place of technology; the relationship of individual to community; views of self - as worker and theoretician; models and parameters of authority. Prerequisites: 80 completed credits.

Life Science (9-12)

Co-Major – See Education

Liberal Studies

Second major (B.A.) in Liberal Studies

Students can earn this second major by completing (in addition to the core curriculum courses):

- Proficiency in a second language and culture(s) through the 211 level
- One additional course in Quantitative Analysis or Natural Sciences
- One additional course in English
- One additional course in Philosophy or in Theology

Mathematics

Program Overview

College of Arts and Sciences, Department of Mathematics

O'Shaughnessy Science Hall (OSS) 201, (651) 962-5520

Anderson, Axtell, Barrios, Dragovic, Falconbury (Actuarial Science Director), Glover, Harding (MaRC Director), Hoft, Kang, Kroschel (associate chair), Patrias, Peterson, Rawdon, Rezac, Shemyakin, Shvartsman, Stolarksa (chair), Tang, Yang

Department Web Site: https://cas.stthomas.edu/departments/areas-of-study/mathematics/index.html

The Department of Mathematics offers major tracks that can satisfy a variety of student interests and careers. Majors in mathematics can prepare themselves for graduate study in mathematics or related areas, for the teaching of mathematics at the secondary school level, for professional school in law or health science, or for the application of mathematics and statistics in science, business, industry and government.

Students majoring in mathematics are encouraged to use elective courses to broaden their background in mathematics or in a related area of special interest. Coursework in biology, chemistry,

economics, engineering, finance, geology, physics, psychology and computer and information sciences combines well with a major in mathematics.

Students graduating with a major in mathematics will be able to demonstrate an understanding of the fundamental notions of mathematics, including rigorous proof. They will be able to model and solve real-world problems arising in business and industry. They will be able to effectively communicate, both orally and in writing, mathematical concepts to their peers and to an audience of non-majors. They will be able to learn and apply mathematics on their own through independent study, research and participation in non-class-related lectures.

A minor in mathematics is available to support majors in many other departments. A strong mathematical background is of great benefit to students majoring in engineering, actuarial science and the physical sciences.

In addition to the mathematics tracks described below, the department offers a major in actuarial science (see Actuarial Science) and has programs to prepare students for teacher licensure (see Education). An interdisciplinary major in statistics is offered jointly with the Department of Computer and Information Sciences (see Statistics, Computer and Information Science).

Students should see the chair of the Department of Mathematics for advice in selecting courses for a particular purpose. The department offers a number of courses for non-majors to fulfill the mathematics portion of the core curriculum.

Center for Applied Mathematics

Within the Department of Mathematics, the Center for Applied Mathematics (CAM) provides opportunities for students to work on significant mathematical problems of current interest to business, industry, and government. The CAM summer student research program funds a number of student projects each year.

Teacher Licensure

Elementary Education with a Co-major in Science, Technology, Engineering and Mathematics (STEM) for Elementary Education

Major in Mathematics with a Co-major in Secondary Education (5-12)

See Education

Placement

Some entry-level mathematics courses require students to have an appropriate Math Placement level. The student's ACT / SAT Math score or performance on the Math Placement Assessment determines this placement level. Students that do not have the placement level required for their desired course can take MATH 007 to refresh their skills. This is a 0-credit courses, offered every Fall and Spring semester. Successful completion of MATH 007 would allow a student to take MATH 108. MATH 100 or MATH 101 do not require math placement.

In some cases, students have earned AP credit for MATH 113 Calculus I but elect not to transfer this credit to St. Thomas. In this case, students receive automatic placement into MATH 113.

Majors in Mathematics

Major in Mathematics (B.A)

44 credits

- MATH 113 Calculus I (4 credits) or MATH 108 and MATH 109 or MATH 111 and MATH 112
- MATH 114 Calculus II (4 credits)
- MATH 200 Multi-Variable Calculus (4 credits)
- MATH 201 Bridge to Mathematical Proof (4 credits)
- MATH 230 Introduction to Applied Mathematics (4 credits)
- MATH 240 Linear Algebra (4 credits)
- MATH 301 Abstract Algebra I or MATH 317 Real Analysis (4 credits)
- Three upper-level electives (MATH or STAT courses numbered 300 or above: MATH 303 is recommended). One 300-level elective or above outside Math (e.g., ACSC, ECON, PHYS) is allowed with special permission of Math major advisor or department chair (12 credits).

Allied requirement

- CISC 131 Introduction to Programming and Problem Solving (4 credits)
  or CISC 130 Introduction to Programming and Problem Solving in the Sciences (4 credits)

Note: CISC 131 is recommended for this major.

Major in Mathematics (B.S.)

52 credits

- MATH 113 Calculus I (4 credits)
  or MATH 108 and MATH 109
  or MATH 111 and MATH 112
- MATH 114 Calculus II (4 credits)
- MATH 200 Multi-Variable Calculus (4 credits)
- MATH 201 Bridge to Mathematical Proof (4 credits)
- MATH 230 Introduction to Applied Mathematics (4 credits)
- MATH 240 Linear Algebra (4 credits)
- MATH 301 Abstract Algebra I (4 credits)
- MATH 317 Real Analysis (4 credits)
- Four upper-level electives (MATH or STAT courses numbered 300 or above: MATH 303 is recommended). Up to two 300-level or above electives outside Math (e.g., ACSC, ECON, PHYS) are allowed with special permission of Math major advisor or department chair (16 credits).

Allied requirement

- CISC 131 Introduction to Programming and Problem Solving (4 credits)
  or CISC 130 Introduction to Programming and Problem Solving in the Sciences (4 credits)

Note: CISC 131 is recommended for this major

Minor in Mathematics

- MATH 113 Calculus I (4 credits)
  (or MATH 108+109 or MATH 111+112)
- MATH 114 Calculus II (4 credits)

Plus at least four credits from the following:

- MATH 201 Bridge to Mathematical Proof (4 credits)
- MATH 230 Introduction to Applied Mathematics (4 credits)

Plus:

- A minimum of twelve additional MATH or STAT credits in courses numbered MATH/STAT 200 or above (or approved by the department chair)

A student minoring in mathematics must successfully complete a minimum of 8 credits in mathematics numbered 200 and above at St. Thomas.

Mathematics Undergraduate Courses

MATH 005 Basic Math Skills (0 credits)
The objective of this course is to provide background knowledge necessary for students to place into MATH 006, and it serves as a prerequisite for MATH 006. Topics covered include the real numbers, operations with real numbers, first degree equations and inequalities, Cartesian coordinate system and lines, linear functions, and problem solving. This course does not satisfy the core requirement in Natural Science and Mathematical and Quantitative Reasoning. This non-credit course is typically offered during the first half of the Fall and Spring semesters.

MATH 006 Basic Math Skills II (0 credits)
The objective of this course is to provide background knowledge necessary for students to place into MATH 108. This course serves as a prerequisite for MATH 108. Topics covered include polynomials, rational expressions, exponents, and radicals, quadratic equations, problem solving. This course does not satisfy the core requirement in Natural Science and Mathematical and Quantitative Reasoning. Prerequisite: Successful completion of MATH 005 or a mathematics placement score of 101 or above. This non-credit course is typically offered during J-Term and the second half of Fall and Spring semesters.

MATH 007 Topics (0 credits)

MATH 100 Mathematical Sampler (4 credits)
This survey of basic mathematical concepts includes both modern and historical perspectives. Emphasis is on the development and appreciation of mathematical ideas and their relationship to other disciplines. Topics include, among others: mathematical problem-solving, set theory, graph theory, an introduction to randomness, counting and probability, statistics and data exploration, measurement and symmetry, and recursion.

MATH 101 Finite Mathematics (4 credits)
Elementary set theory, linear equations and matrices, linear programming (optional), finite probability, applications primarily in business and the social sciences. Offered Fall, J-Term, Spring and Summer.

MATH 103 College Algebra (2 credits)
The purpose of this course is to provide knowledge of pre-calculus topics necessary for MATH 111. This course serves as a prerequisite for MATH 111 and can also serve as a prerequisite for MATH 104. This two-credit course does not satisfy a student's core curriculum requirement in mathematics. Topics

covered include solving equations, inequalities, and systems of equations; graphing functions; inverse functions, polynomials; complex numbers; rational functions; exponential functions; properties of logarithms and logarithmic functions; applications. Offered as a directed study in Fall and Spring. Note: Students who receive credit for this course may not receive credit for MATH 105, MATH 108, or MATH 109. Prerequisite: Math placement at 108 or above, or successful completion of MATH 006

MATH 104 Trigonometry (2 credits)
The purpose of this course is to provide knowledge of trigonometric topics necessary for MATH 113. This course serves as a prerequisite for MATH 113. This 2-credit course does not satisfy a student's core curriculum requirement in mathematics. Topics covered include radian/degree measure; trigonometric and inverse trigonometric functions; graphs of trig functions; applications of trigonometry; analytic trigonometry; trigonometric formulae. Offered as a directed study in Fall and Spring. Prerequisite: Math placement at 111 or above, or a C- or above in MATH 103. NOTE: Students who receive credit for this course may not receive credit for MATH 105, MATH 108, or MATH 109.

MATH 105 Precalculus (4 credits)
The real numbers; basic algebra; analytical treatment of the elementary functions emphasizing the exponential, logarithmic and trigonometric functions and their graphs. (This course is intended as preparation for 113 and does not fulfill a general graduation requirement.) Prerequisite: Placement at MATH 105 or above. NOTE: Students who receive credit for MATH 105 may not receive credit for MATH 108 or 109.

MATH 107 Math Skills for Calc w Review (2 credits)
This course is designed to help students refresh and strengthen mathematical concepts and problem-solving skills for use within the context of calculus. Within a comprehensive conceptual framework, this course refreshes students on fundamental arithmetic and algebraic skills, and introduces several precalculus concepts, such as function notation, domain and range, average rate of change, and the relationship between rate of change and slope. Gaining knowledge of these concepts will lead to increased preparedness for Calculus with Review. Emphasis will also be placed on developing growth mindsets and study skills necessary to succeed in mathematics. Successful completion of MATH 107 with a C- or above allows students to take MATH 108. Offered fall and spring semesters.

MATH 108 Calculus with Review I (4 credits)
The first course of a two-course sequence designed to integrate introductory calculus material with the algebraic and trigonometric topics necessary to support that study. Review topics include: number systems, basic algebra, functions, the Cartesian coordinate system and graphing. Calculus topics include limits, continuity, derivatives for algebraic functions, applications of derivatives and more graphing. This course is intended only for students planning to take MATH 109 and does not satisfy the mathematics requirement in the core curriculum. Offered Fall, Spring and Summer. Prerequisite: Placement at MATH 108 or above, or successful completion of MATH 006. NOTE: Students who receive credit for MATH 108 may not receive credit for MATH 105, 111, or 113.

MATH 109 Calculus with Review II (4 credits)
The second course of a two-course sequence designed to integrate introductory calculus material with the algebraic and trigonometric topics necessary to support that study. Review topics include: exponential and logarithmic functions, trigonometric functions and their inverses and associated graphs. Calculus topics include: derivatives of the transcendental functions, applications of those derivatives and an introduction to integration. Offered Fall, Spring and Summer. Prerequisite: a grade of C- or better in MATH 108 NOTE: Students who receive credit for MATH 109 may not receive credit for MATH 105, 111, or 113.

MATH 111 Calculus/Business & Soc Sci (4 credits)
An introductory course in calculus with motivation and examples drawn from business and the social sciences whenever possible. Does not include the calculus of trigonometric functions. Offered Fall and Spring. Prerequisite: a grade of C- or above in MATH 103 or MATH 105 or placement at MATH 111 or above. Four years of high school mathematics, including college algebra, are also recommended as background for this course. Students who are considering taking MATH 114 should take MATH 113 instead of MATH 111. NOTE: Students who receive credit for MATH 111 may not receive credit for MATH 108, 109, or 113.

MATH 112 Calc of Trig Function (2 credits)
This course is designed for students who have taken MATH 111 but need to have credit for MATH 113; it covers the material in MATH 113 that is not covered in MATH 111. This course serves as a prerequisite for MATH 114. This 2-credit course does not satisfy a student's core curriculum requirement in mathematics. Topics covered include trigonometric functions, inverse trig functions, trigonometric identities, solving trigonometric equations, limits of trigonometric functions, derivatives of trigonometric functions, and integrals of trigonometric functions,

and applications. Successfully completing this course is equivalent to successfully completing MATH 113. Offered Fall and Spring as a directed study. Prerequisite: A C- or above in MATH 111.

MATH 113 Calculus I (4 credits)
An introductory course in calculus: limits; derivatives and integrals of algebraic, exponential, logarithmic and trigonometric functions of one real variable; applications of the derivative in engineering and the natural sciences. Offered Fall, Spring and Summer. Prerequisite: a grade of C- or above in MATH 104 or 105 or placement at MATH 113 or above. Four years of high school mathematics, including college algebra and trigonometry, also are recommended as background for this course. NOTE: Students who receive credit for MATH 113 may not receive credit for MATH 108, 109, or 111.

MATH 114 Calculus II (4 credits)
Techniques of integration; applications of integration; infinite series; parametric/polar equations. Offered Fall, Spring and Summer. Prerequisite: a grade of C- or above in MATH 112 or in MATH 113 or MATH 109

MATH 121 Structures of Elem Math I (4 credits)
An examination of the mathematical underpinnings of the K-8 school curriculum with an emphasis on the conceptual understanding of mathematics. Topics include foundations of integer and rational arithmetic, notions of place-value and base, number sense and estimation, ratio and proportion, and mathematical problem-solving. This course is recommended as the first course in a three-course sequence in mathematics for prospective elementary teachers. Offered Fall and Spring. Prerequisites: MATH placement at or above 100 or a C- or above in MATH 005, and concurrent registration in any EDUC course (Click here for Math Placement Exam Information: https://cas.stthomas.edu/departments/areas-of-study/mathematics/placement-information/)

MATH 122 Structures of Elem. Math II (4 credits)
An examination of the mathematical underpinnings of the K-8 school curriculum with an emphasis on the conceptual understanding of mathematics. Concepts of shape and space will be covered, which will include geometry, measurement, area, volume, surface area, symmetry, the geometry of motion and change, and problem solving. This course is recommended as the second in a three-course sequence in mathematics for prospective elementary teachers. Offered Fall and Spring. Prerequisite: A C- or above in MATH 121 or permission of instructor

MATH 128 Intro to Discrete Math (4 credits)
A survey of basic discrete mathematical concepts. Topics include: Boolean algebra, logic, analysis of algorithms, mathematical induction and matrices. Focus on applications to computer science. Offered Fall and Spring.Prerequisite: A C- or better in either Math 109, Math 111, or Math 113 and a C- or better in either CISC 130 or CISC 131, or instructor permission

MATH 200 Multi-Variable Calculus (4 credits)
Vector algebra in two and three dimensions, partial derivatives, multiple integrals, line integrals, surface integrals, Green's Theorem, Stokes' Theorem, divergence theorem. Offered Fall and Spring. Prerequisite: a grade of C- or higher in MATH 109 or 113, and MATH 114

MATH 201 Bridge to Mathematical Proof (4 credits)
Introduction to mathematical proof with an emphasis on exploring mathematical ideas and developing initial cognitive skills needed for mathematical proof and written and oral communication of mathematical arguments. Topics covered include logic and truth tables, basic set theory, functions, and various types of proof and disproof, including direct, indirect, induction, and counterexamples. Prerequisites: A grade of C- or better in Math 109 or Math 113. This course can count towards the electives for all tracks in the mathematics major after discussion with the department.

MATH 210 Intro-Differ Equations & Syst (4 credits)
An introduction to ordinary differential equations (ODEs), with an emphasis on linear differential equations and linear systems, including applications. Topics covered include first-order equations, ODE models in the physical and biological sciences and engineering, numerical methods of solution, higher order linear equations, matrix tools, the role of eigenvalues and eigenvectors, and LaPlace transforms. Offered Fall and Spring. Prerequisite: a grade of C- or above in MATH 114

MATH 223 Structures of Elem. Math III (4 credits)
An advanced examination of the mathematical underpinnings of the K-8 school curriculum with an emphasis on the conceptual understanding of mathematics. Topics include counting, graph theory and other discrete topics, number theory, recursion, algebra and functions, probability and statistics. As the third course in a three-course sequence in mathematics for prospective elementary teachers, this course integrates uses of technology and problem solving in STEM applications appropriate for the K-8 classroom. Offered Fall and Spring. Prerequisites: A C- or above in MATH 121 and a C- or above in MATH 122

MATH 230 Intro Applied Math (4 credits)
Introduction to foundational topics, methods, and algorithms in applied mathematics, with emphasis on computation. This course serves as a transition from mathematics as seen in the calculus sequence to applications of mathematics as seen in industry, applied mathematics, physics, computer science, engineering, and other disciplines. Topics include Taylor series, optimization, solving systems of equations, differential equations, and combinatorics. Prerequisite: A C- or higher in Math 114 or permission of the instructor. This course can be substituted for Math 210 in the mathematics major after discussion with the department.

MATH 240 Linear Algebra (4 credits)
An introductory course in linear algebra, beginning with linear equations and matrix algebra. Subsequent topics include study of vector spaces, orthogonality, eigenvectors and inner products. The course combines theoretical and applied perspectives, including concepts of rigorous proof. Offered Fall and Spring. Prerequisite: A grade of C- or above in MATH 200, concurrent enrollment allowed.

MATH 243 Individual Study (2 OR 4 credits)

MATH 259 Elements of Geometry & Stat (4 credits)
Intended for elementary education majors who plan a licensure endorsement in mathematics for grades 5-8. Includes intermediate concepts in geometry and statistics essential for a middle school teacher of mathematics. Topics will include: axiometric systems of geometry with emphasis on Books I and VI of Euclid's Elements; an introduction to non-Euclidean geometry; geometric and inductive reasoning, with applications; introduction to geometric probability and the geometric display of data; organization and analysis of data sets; statistical support of decisions, including applications in education; prediction; the role of randomness in both formal and empirical probability. Prerequisites: MATH 100 and 121

MATH 269 Research (2 OR 4 credits)

MATH 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online. NOTE: Depending on the subject matter of topics course, the course may or may not count towards a minor in Mathematics.

MATH 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online. NOTE: Depending on the subject matter of topics course, the course may or may not count towards a minor in Mathematics.

MATH 300 Advanced Differential Equation (4 credits)
A second course in differential equations and their applications. Topics are selected from a continued study of linear differential equations and systems, Laplace transforms, series solution methods, non-linear equations and systems, partial differential equations and other topics chosen by the instructor. Prerequisite: A grade of C- or above in MATH 210 or MATH 230.

MATH 301 Abstract Algebra I (4 credits)
Properties of sets, relations and mappings; introduction to groups, rings and fields. Offered Spring. Prerequisite: A grade of C- or above in MATH 201

MATH 302 Abstract Algebra II (4 credits)
Topics in modern algebra with applications. Includes material selected from the theory of groups, rings, and fields; linear algebra; Boolean algebra and discrete structures. Offered fall of odd-numbered years. Prerequisite: A grade of C- or above MATH 301

MATH 315 Applied Math & Modeling I (4 credits)
This is a topics course in applied mathematics. Course content will be drawn from topics that coincide with expertise of department members. Recent topics include finite element methods, techniques in scientific computing, wavelets and applications, mathematical biology, and weather modeling. Offered Fall. Prerequisites: A grade of C- or above in MATH 210 or MATH 230 and a grade of C- or above in MATH 240, or permission of instructor.

MATH 316 Applied Math & Modeling II (4 credits)
This is a second topics course in applied mathematics. It does not require MATH 315 as a prerequisite. Course content will be drawn from the topics listed under MATH 315. Offered Spring. Prerequisites: A grade of C- or above in MATH 210 or MATH 230 and a grade of C- or above in MATH 240, or permission of instructor.

MATH 317 Real Analysis (4 credits)
Topology of the real numbers. Functions of one real variable. Rigorous development of continuity and uniform continuity; differentiability; uniform convergence. Sequences and series. Offered Fall. Prerequisites: A grade of C- or above in MATH 201

MATH 325 Geometry (4 credits)
Axioms for geometries; geometrical transformations and their invariants; non-Euclidean geometries; additional topics. Offered Spring of even-numbered years. Prerequisites: A grade of C- or above in MATH 114; MATH 128 or MATH 240 recommended.

MATH 385 Math Meths/Numerical Anal (4 credits)
Rigorous mathematical treatment of standard topics in numerical analysis including solutions to linear and nonlinear systems, interpolation, numerical integration and differentiation, differential equations, and iterative techniques in matrix algebra. This course provides a theoretical foundation for the numerical solution of mathematical problems. Prerequisites: A grade of C- or above in MATH 210 or MATH 230 and a grade of C- or above in MATH 240, or permission of instructor

MATH 389 Research (2 OR 4 credits)

MATH 393 Individual Study (2 OR 4 credits)

MATH 400 Dynamical Systems & Chaos (4 credits)
An introduction to discrete and continuous dynamical systems and applications with topics including: iterated mappings in one and two dimensions, phase-plane theory, nonlinear differential equations, and chaos. Additional topics will be chosen from among bifurcations, stability, attractors, Lyapunov functions, Julia sets and Mandelbrot sets. Prerequisite: A grade of C- or above in MATH 210 or MATH 230 or MATH 240, or permission of instructor

MATH 419 Complex Variables (4 credits)
Analytic functions; theorems of Cauchy; Laurent series; residue calculus; entire and meromorphic functions; conformal mapping. Prerequisite: A grade of C- or above in MATH 210 or MATH 230 and a grade of C- or above in MATH 240, or permission of instructor

MATH 420 Topology (4 credits)
Properties of Euclidean spaces; general spaces; mappings; separation properties; connectedness; compactness; metrizable spaces. Prerequisite: A grade of C- or above in MATH 240, or permission of instructor

MATH 450 Adv Math:Explor & Exposition (4 credits)
A capstone mathematics course for students seeking to teach secondary mathematics. Students make substantial oral and written presentations. Topics are included from discrete and continuous mathematics. Students use publications, e.g. The American Mathematical Monthly, Mathematics Magazine, Mathematical intelligencer and Scientific American, as well as standard texts, as sources for their work. Offered in Fall of even-numbered years. Prerequisite: one of MATH 301 or 317 (a C- or above in the completed course) with concurrent registration in the other; or permission of instructor.

MATH 476 Experiential Learning (1 TO 4 credits)

MATH 484 Seminar (2 credits)

MATH 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

MATH 495 Individual Study (2 OR 4 credits)

Mathematics 5-12

Co-Major – See Education

Modern and Classical Languages

Program Overview

College of Arts and Sciences, Department of Modern and Classical Languages

O'Shaughnessy Education Center (OEC) 320, (651) 962-5150

Kroll, J. (chair), Tight, D. (associate chair); Arabic – Hamouchi; Chinese (Mandarin) – Wang; Classics – Quartarone (coordinator); French –Lohse (coordinator), Shams; German – Wagner (coordinator); Italian - Berge; Japanese – Kilau; Spanish – Domingo, Ehrmantraut, Kramer, Kroll (coordinator), Pérez-Castillejo, Pinto, Rey-Montejo, Tar, Tight, Vigil

Department Web Site:
https://cas.stthomas.edu/departments/areas-of-study/modern-classical-languages/index.html

The Department of Modern and Classical Languages offers major and minor concentrations in Classics, French, German, and Spanish. Other language majors and minors are available through the Associated Colleges of the Twin Cities and through Individualized Majors/Minors at UST (contact department chair for details). Language classes are also available in American Sign Language, Arabic, Chinese, Greek, Italian, and Japanese and, in cooperation with the ACTC, in other languages not offered at UST.

Students graduating with a major in Classics will have acquired a working vocabulary and knowledge of the structures of Classical Greek and/or Latin adequate to read the works of Greek and/or Latin authors. They will have gained experience in reading major authors in the languages, and will perceive the relationship between the authors and their cultural context.

Students graduating with a major in French will have a solid understanding of the French language and the ability to use the language effectively in speaking, listening comprehension, reading, and writing. They will have developed the skills necessary for the study, analysis, and interpretation of a wide range of cultural texts, including literary texts.

Students graduating with a major in German will have acquired a command of the German language for use in academic and/or professional life. They will have become acquainted with the culture of the German-speaking countries and with the role these countries and their culture have historically played and continue to play in the world today.

Students graduating with a major in Spanish will have a solid understanding of the Spanish language and the ability to use the language effectively in speaking, listening, reading, and writing. Additionally, they will have developed 1) the skills necessary for the study, analysis, and interpretation of a wide range of cultural and literary texts; or 2) a foundation in Hispanic linguistics from both a theoretical and an applied perspective.

The department also offers courses for the non-major to fulfill the Language and Culture requirement of the core curriculum.

Language options

- American Sign Language
- Arabic
- Chinese
- Classics (major and minor available)
- French (major and minor available)
- German (major and minor available)
- Italian
- Japanese
- Spanish (major and minor available)
- Teacher Licensure

Teacher Licensure

Students seeking licensure for languages may pursue licensure programs in K-12 Education with a Specialty in World Languages and Cultures with a co-major in Spanish. For details on this program:

See Education

Museum Studies

College of Arts and Sciences, Department of Art History
44 N. Cleveland Ave.,(651) 962-5560
Shirey (Chair), Barnes, Eliason, Kindall, Nygaard, Stansbury-O'Donnell, Young

The interdisciplinary museum studies minor at the University of St. Thomas introduces the ways that museums work and the theories and practices of museums in both historical and contemporary contexts. The minor offers opportunities to develop interests in numerous aspects of museum careers, including exhibitions, collections management, education, administration and visitor studies

Museum Studies Minor website:
https://www.stthomas.edu/academics/undergraduate/museum-studies-minor/index.html

Minor – See Art History

Music

College of Arts and Sciences, Department of Music, Film, and Creative Enterprise

Brady Education Center (BEC) 112, (651) 962-5850

Acito, Aguilar, K. Anderson, Arons, Auerbach, Barker, Bauder, Benda, J. Broeker, Buck, Capener, Carmack, Casey, Cole, Cornett-Murtada, Elkina, Eschedor, Garner, George, Gerth, Gleason, Greco, Hawley, Howard, Itkin, S. Johnson, Jorstad, Kachian, Kaviraj, Kemperman, Larson, Leap, LeJeune, Linnihan, Mann, Melin Nelson, Mensah, Minette, Mitchell, Orzolek (Chair), Ostrander, Palmer, Rinear, Schmalenberger, Schons, B. Schultz, T. Schultz, Schulz, Schwalbach, Skaar, Summersgill, Thomsen, Thygeson, Tietz, Vasquez, Volpe, Waln, Zimmerman

Music, Film, and Creative Enterprise Department Web Site:
https://cas.stthomas.edu/departments/areas-of-study/music

The Department of Music, Film & Creative Enterprise brings together students and world-class faculty to elevate individual creativity, skills, and talent in music, visual storytelling, pedagogy, and creative entrepreneurship. Our goal is to foster a seamless connection between the artist, the art form, and the creative economy.

Our broad range of programs and opportunities prepare students for careers in an ever-evolving

world. Creative enterprises – be they traditional or novel – now represent over 7% of the world's GDP. These ventures derive their value from the human creativity, artistry, and talent incorporated in the education of artists – and in the creation, production, and distribution of art, music, films, games and other creative services.

Beyond the specific area of study, all students majoring in music take courses in six areas: performance studies, ensembles, music theory, musicology, music media, and for some conducting. There is also a keyboard studies component.

Through the study of music, students develop an aural comprehension of tonal and non-tonal music, an understanding of harmonic language and voice-leading principles, and an understanding of musical vocabulary, analytical systems, and structural and formal principles. Students develop the necessary skills to read musical scores and to write in standard musical notation for a variety of instruments and voices. Students develop the ability to understand a wide range of musical traditions and cultural practices, ranging from the western classical tradition to the music of selected non-western cultures to today's popular music. Students will be able to discuss music critically and will be prepared to engage in meaningful research in musical fields. Student performers will develop an expressive interpretation of solo repertoire through an understanding of compositional process and historical style with the necessary technical proficiency. Students will demonstrate advanced ensemble skills and contextual understanding of repertoire by artistically performing music representing a variety of genres, stylistic periods and cultures.

Transfer students must:

- Take a theory placement test. This placement test should be taken at the beginning of the first semester of studies at UST. Review sheets and information on time and place of the placement test are available from the Music Department Office (651) 962-5850.
- File an Application for Major Field with the department chair.
- Take at least one semester of music history at UST.
- Pass the performance level audition and/or present a portfolio of compositions/digital music as outlined on the Music Department website.
- Take at least four semesters of lessons at UST.
- Take at least four semesters of Student Convocation Hour - MUSC 001
- Perform their final level recital at UST.
- Take a minimum of four semesters of an appropriate ensemble.
- Complete 32 of their last 36 credits at UST.

Students intending on majoring in music must pass a performance/portfolio audition. Students majoring in music may not have a letter grade lower than C- in a required music course.

For information concerning the department's current policies and procedures, consult the Handbook for Music Majors and Minors, which is available on the Music Department website.

The department offers minors for those students who have an interest in music, but do not wish to major in the field. A Performer's Certificate is available to students who wish to document their engagement in music lessons and ensembles.

A variety of ensembles and individual lessons are available to composers, producers, instrumentalists and vocalists, regardless of major.

The department also offers a number of courses for non-majors that fulfill the Fine Arts, Writing Across the Curriculum, First-year Experience, DISJ, IH, and Global Perspectives components of the core curriculum.

The University of St. Thomas is fully accredited by the National Association of Schools of Music.

Majors in Music

Major in Music – Performance (B.M.)

- MUSC 001 Student Convocation Hour (0 credits) (6 semesters)
- MUSC 101 Piano Skills I* (1 credit)
- MUSC 102 Piano Skills II* (1 credit)
- MUSC 113 Musicianship & Theory I (4 credits)
- MUSC 117 Historical Survey of Music in Western Culture (2 credits)
- MUSC 140 Music Media (2 credits)
- MUSC 201 Piano Skills III* (1 credit)
- MUSC 202 Piano Skills IV* (1 credit)
- MUSC 212 Musicianship & Theory II (4 credits)
- MUSC 213 Musicianship & Theory III (4 credits)
- MUSC 230 Music of the United States(4 credits)
- MUSC 231 Introduction to Conducting I (1 credit)

- MUSC 233 Music of the World: Aural and Written Traditions (4 credits)
- MUSC 263 Entrepreneurial Careers in Music & Professional Practice (1 credit)
- MUSC 412 Music History and Literature of the Western European Concert Tradition, Classical to Current Era (4 credits)
- MUSN 1xx Eight semesters of Ensemble participation (0 credits)

*Students for whom piano or organ is the primary instrument will take the following courses in lieu of MUSC 101, 102, 201, and 202:

  - MUSC 192 Technical Skills for Keyboard Majors (1 credit)
  - MUSC 292 Functional Skills for Keyboard Majors I (1 credit)
  - MUSC 293 Functional Skills for Keyboard Majors II (1 credit)
  - MUSC xxx Piano Elective (1 credit) to be chosen from the following: MUSP 121, 131 (organ majors only), 135 (piano majors only), 153, MUSN 171, 172, 182, or MUSW 501.

Guidelines for choosing an ensemble:

If principal instrument is:

Piano - at least two semesters in MUSN 171: at least two semesters in MUSN 172; at least two semesters in one of: MUSN 140, 142, 143, 160, 181, 185, 186, 190: two semesters may be in 161, 182, 183.

Voice - voice majors must participate in a minimum of eight semesters in MUSN 140, 142, 143, or 160.

Woodwind, Brass or Percussion - at least eight semesters in MUSN 185 or 186.

Orchestral String - at least eight semesters in MUSN 181.

Guitar - at least six semesters in MUSN 173; at least two semesters in MUSN 174.

Other Instruments - at least eight semesters chosen from: MUSN 140, 142, 143, 160, 171, 172, 181, 185, 186, 190.

- MUSP 3xx Eight semesters of performance studies in the same performance medium (2 credits per semester)
- Aural-Skills Proficiency
- Piano Proficiency
- Level I Recital
- Level II Recital
- Level III Recital

Plus:

- EDUC 308 Pedagogy and Literature for Music Performers I (2 credits)
- EDUC 309 Pedagogy and Literature for Music Performers II (2 credits)

Allied Requirements:

- PHYS 105 Musical Acoustics (4 credit hours)

Music Education – Instrumental Music Education (K-12) (B.M.)

See Education

Music Education – Vocal Music Education (K-12) (B.M.)

See Education

Major in Music (B.A.)

- MUSC 001 Student Convocation Hour (0 credits) (6 semesters)
- MUSC 101 Piano Skills I* (1 credit)
- MUSC 102 Piano Skills II* (1 credit)
- MUSC 113 Musicianship and Theory I (4 credits)
- MUSC 140 Music Media (2 credits)

Choose one

- MUSC 201 Piano Skills III* (1 credit)
- MUSC 202 Piano Skills IV* (1 credit)
- MUSC 230 Music of the United States (4 credits)
- MUSC 233 Music of the World (4 credits)

*Students for whom piano or organ is the primary instrument will take the following courses in lieu of MUSC 101, 102, 201, and 202:

  - MUSC 192 Technical Skills for Keyboard Majors (1 credit)
  - MUSC 292 Functional Skills for Keyboard Majors I (1 credit)
  - MUSC 293 Functional Skills for Keyboard Majors II (1 credit)
  - Piano Elective (1 credit) to be chosen from the following: MUSP 121, 131 (organ majors only), 135 (piano majors only), 153, MUSN 171, 172, 182, or MUSW 501.

- MUSC 212 Musicianship and Theory II (4 credits)

- MUSC 213 Musicianship and Theory III (4 credits)
- MUSC 231 Introduction to Conducting (1 credit)
- MUSC 263 Entrepreneurial Careers in Music, & Professional Practice (1 credit)
- MUSC 412 Music History and Literature of the Western European Concert Tradition, Classical to Current Era (4 credits)
- MUSN 1xx Six semesters of Ensemble participation (0 credits)

Guidelines for choosing an ensemble:

If principal instrument or concentration is:

- Piano - two of the six semesters in MUSN 171: two semesters in MUSN 172; and two semesters in one of: MUSN 140, 142, 143, 160, 161, 181, 182, 183, 185, 186
- Voice - a minimum of six semesters in MUSN 140, 142, 143, or 160.
- Woodwind, Brass or Percussion - at least six semesters in MUSN 185 or 186
- Orchestral String - at least six semesters in MUSN 181.
- Guitar - at least four semesters in MUSN 173; at least two semesters in MUSN 174.
- Composition - consult with the chair/advisor
- MUSP 2xx Six semesters of composition studies, digital music lessons, or performance studies in the same performance medium (1 credit per semester)
- Aural-Skills Proficiency
- Piano Proficiency
- Level I Recital or Level 1 Composition Recital
- Level II Recital

Allied requirements

- PHYS 105 Musical Acoustics (4 credits)

Majors in Music Business (B.A.)

All students take the following

Music Theory & History

- MUSC 001 Student Convocation Hour (0 cr.) (6 semesters)
- MUSC 112 How Music Works (4 cr.)
- MUSC 117 Survey of Music in Western Culture (2 cr.)

Music Business

- MUSC 160 Introduction to Music Business (4 cr.)
- MUSC 263 Entrepreneurial Careers in Music, & Prof. Practice (1 cr.)
- MUSC 363 Emerging Models in Music Industry (4 cr.)
- MUSC 480 Music Business Seminar (4 cr.)
- MUSC 476 Experiential Learning (0 cr.)

Business & Entrepreneurship

- BUSN 100 Business for the Common Good (2 cr.)
- ENTR 100 Introduction to Entrepreneurship and Innovation (2 cr.)

Allied Requirements

- PHYS105 Musical Acoustics (4cr)

Management and Creative Leadership Track

Music Technology

- MUSC 140 Music Media (2 cr.)

Business and Entrepreneurship

- MGMT 200 Working Skillfully in Organizations (2 cr.)
- MKTG 200 Principles of Marketing (2 cr.)
- BUID301 Emerging Tech in Business (2 cr.)

Choose 6 cr.

- BLAW 300 Law for Business Leaders (2 cr.)
- BETH 300 Ethical Principles in Business (2 cr.)
- ENTR 250 Fundamentals of Innovation (4 cr.)
- ENTR 370 ENTR/Financial Resource Management (4 cr.)
- MKTG 488 Multicultural and Inclusive Mktg (2 cr.)
- MGMT 383 Effective Teams (2 cr.)
- MGMT 385 Inclusive Leadership (2 cr.)
- MGMT 391 Elements of Global Business (2 cr.)
- MKTG 380 Digital Marketing (4 cr.)
- ECON110 Data Visualization to Explore Economic and Social Problems (2 cr.)
- ECON120 Data Management for Economic Analysis (2 cr.)

Other courses in consultation with advisor.

Performance Study

- MUSP 1XX Four semesters of performance studies (1 cr. per semester)
- MUSN 1XX Six Semesters of Ensemble Participation (1 cr. per semester)

Choose 4 cr. from Music Context

- MUSC 115 Understanding Music and Culture (4 cr.)
- MUSC 162 Roots of Blues, Rock, Country (4 cr.)
- MUSC 170 Music of Film (4 cr.)
- MUSC 216 USA Jazz (4 cr.)
- MUSC 233 Music of the World (4 cr.)

Choose 8 cr. from Music and Creative Practice

- MUSC 101 Piano Skills I (1 cr.)
- MUSC 102 Piano Skills II (1 cr.)
- MUSC 113 Musicianship and Theory I (4 cr.)
- MUSP 1xx Performance Studies (1 cr.) *Maximum of 2 semesters
- MUSC 204 Music and the Creative Process (2 cr.)
- MUSC 205 Advanced Recording (2 cr.)
- MUSC 212 Musicianship and Theory II (4 cr.)
- MUSC 221 Synthesis for Music Production (2 cr.)
- MUSC 224 Songwriting (2 cr.)
- MUSC 260 Fundamentals of Popular Music (4 cr.)
- MUSC 305 Mixing and Post Production (2 cr.)
- MUSC 330 Music Composition and Production for Film, TV & Games (4 cr.)

Other courses in consultation with advisor.

Sound Arts and Music Production Track

Performance Study

- MUSP 210 Four semesters of performance studies in Digital Music (1 cr. per semester)
- MUSN 1XX Four Semesters of Ensemble Participation (1 cr. per semester)

Sound Arts and Music Production

- MUSC 205 Advanced Recording (2 cr.)
- MUSC 221 Synthesis for Music Production (2 cr.)
- MUSC 305 Mixing and Post Production (2 cr.)
- MUSC 330 Music Composition and Production for Film, TV & Games (4 cr.)

Choose 6 cr. from Music and Creative Practice

- MUSC 101 Piano Skills I (1 cr.)
- MUSC 102 Piano Skills II (1 cr.)
- MUSC 113 Musicianship and Theory I (4 cr.)
- MUSN 1XX Ensemble (1 cr.) *Maximum of 2 semesters
- MUSP 1xx Performance Studies (1 cr.) *Maximum of 2 semesters
- MUSC 204 Music and the Creative Process (2 cr.)
- MUSC 212 Musicianship and Theory II (4 cr.)
- MUSC 224 Songwriting (2 cr.)
- MUSC 233 Music of the World (4)
- MUSC 260 Fundamentals of Popular Music (4 cr.)

Other courses in consultation with advisor

Minors in Music

Minor in Recording Arts

18 credits

- MUSC 140 Music Media (2 credits)
- MUSC 160 Introduction to Music Business (4 credits)
- MUSC 162 Roots of Blues, Rock, and Country Music (4 credits)
- MUSC 205 Advanced Studio Recording (2 credits)
- MUSC 221 Synthesis for Music Production (2 credits)
- MUSC 224 Songwriting/Composition (2 credits)
- MUSC 305 Mixing and Post Production (2 credits)

Minor in Music Composition

- MUSC 113 Musicianship & Theory I (4 credits)
- MUSC 140 Music Media (2 credits)
- MUSC 212 Musicianship & Theory II (4 credits)
- MUSC 231 Intro to Conducting I (1 credit)
- MUSN 1xx Four semesters of Ensemble (1 credit per semester)
- MUSP 265 Four semesters of Composition Studies (50 minute lessons) (1 credit per semester)
- Level 1 Composition Recital

Plus four credits from the following, two of which need to be at the 200 level or above:

- MUSC 101 Piano Skills I (1 credit)
- MUSC 102 Piano Skills II (1 credit)

- MUSC 201 Piano Skills III (1 credit)
- MUSC 202 Piano Skills IV (1 credit)
- MUSC 213 Musicianship & Theory III (4 credits)
- MUSC 224 Songwriting (2 credits)
- MUSC 260 Fundamentals of Musicianship in Popular Music (4 credits)
- MUSC 340 Music Theory Elective: Topics (2 credits)
- MUSC 354 Advanced Conducting and Materials: Instrumental Concentration (2 credits)
- MUSC 355 Advanced Conducting and Materials: Vocal Concentration (2 credits)

At least eight credits must be taken at the 2xx-level or above

Minor in Music

Select from one of these tracks:

- Classic Track: Instrumental/Vocal Performance or Composition (Focus on Art Music, Musical Theater, and other styles)
- Contemporary Track: Pop, Electronic Music Performance (Focus on Blues, Rock, Country, R&B/Hip Hop, Jazz, Electronic Dance Music, House, Techno and other popular styles)

Performance Studies:

4 credits. Four Semesters in same medium.

- Classic Track (instruments/voice/composition): MUSP 1xx Performance Studies (1 credit per semester)
- Contemporary Track (voice, guitar, piano, drums, digital music production, etc): MUSP 1xx Performance Studies (1 credit per semester)
- Level 1 Recital

Ensemble Experiences:

(both tracks). 4 credits.

- MUSN 1xx Four semesters of appropriate Ensemble for principal instrument, voice, or electronic production (1 credit per semester)

Music Fundamentals:

(both tracks). 8 credits.

- Classic Track: MUSC 113 Music Theory and Aural Skills I (4 credits) and MUSC 114 Music Theory and Aural Skills II (4 credits)
- Contemporary Track: MUSC 112 Introduction to Music or MUSC 113 Music Theory and Aural Skills (4 credits) and MUSC 260 Fundamentals of Popular Music (4 credits)

Music History:

(both tracks). 4 credits.

- MUSC 115 Understanding Music and Culture (4 credits)
- MUSC 130 Introduction to World Music (4 credits)
- MUSC 162 Roots of Blues, Rock and Country (4 credits)
- MUSC 170 The Music of Film (4 credits)
- MUSC 216 Jazz in America (4 credits)
- MUSC 230 Music of the United States (4 credits)
- MUSC 233 Music of the World (4 credits)

Elective:

(both tracks). 2 credits. Select from the following:

- MUSC 117 Music History Survey (2 credits)
- MUSC 140 Music Media (2 credits)
- MUSC 204 Music and the Creative Process (2 credits)
- MUSC 224 Songwriting (2 credits)

At least eight credits must be taken at the 2xx-level or above

Minor in Music Industry

Required Courses

- MUSC 160 Introduction to Music Business (4 credits)
- MUSC 363 Emerging Models in Music Industry (4 credits)

Allied Requirement

- BUSN 100 Business for the Common Good (2 cr.)

Choose Four Credits in Music Context

- MUSC 130 Music of the World (4 credits)
- MUSC 162 Roots of Blues, Rock & Country Music (4 credits)
- MUSC 170 The Music of Film (4 credits)
- MUSC 216 Jazz in America (4 credits)

Choose 6 Credits in Business/Entrepreneurship

- ENTR 100 Introduction to Entrepreneurship & Innovation (2 cr.)
- ENTR 250 Fundamentals of Innovation (4 cr.)
- BLAW 300 Law for Business Leaders I (2 cr.)
- BETH 300 Ethical Principles in Business (2 cr.)
- MGMT 200 Working Skillfully in Organizations (2 cr.)
- MGMT 382 Management and Leadership (4 cr.)
- MKTG 200 Introduction to Marketing (2 cr.)
- MKTG 380 Digital Marketing (4 cr.)
- ACCT 100 Principles of Accounting I (4 cr.)
- ACCT 200 Principles of Accounting II (2 cr.)

At least eight credits must be taken at the 2xx-level or above

Minor in Music in Faith

Required Courses

- MUSC 101 Piano Skills I (1 credit)*
- MUSC 102 Piano Skills II (1 credit)*
- MUSP 108 Class Voice (1 credit)*
- MUSC 231 Intro to Conducting (1 credit)
- MUSC 113 Music Theory and Aural Skills I (4 credits)

Plus 4 credits from the following**:

- MUSC 115 Understanding Music and Culture (4 credits)
- MUSC 233 Music of the World: Aural and Written Trad. (4 credits)

Plus 4 credits from the following**:

- THEO 222 History: Reformation (4 credits)
- THEO 224 Bridges: Theology and Beauty (4 credits)
- THEO 224 Bridges: Theology and Music (4 credits)
- THEO 226 Spirituality: Christian Worship (4 credits)
- THEO 226 Spirituality: Christian Spirituality (4 credits)
- THEO 227 Contexts: Global Christianity (4 credits)
- THEO 227 Contexts: Black Religious Experience (4 credits)
- THEO 228 Comparative: World Religions (4 credits)
- THEO 228 Comparative: Judaism (4 credits)
- THEO 228 Comparative: Islam (4 credits)
- THEO 228 Comparative: Hinduism and Buddhism (4 credits)
- THEO 228 Comparative: The Qur'an and the Bible (4 credits)
- THEO 228 Comparative: Muslim Christian Dialogue (4 credits)

Plus 2 credits from the following (may be repeated):

- MUSN 143 Liturgical Choir (1 credit)
- MUSN 1xx Ensemble (1 credit)
- MUSP 131 Piano: Elective (1 credit)
- MUSP 133 Voice: Elective (1 credit)
- MUSP 135 Organ: Elective (1 credit)
- MUSP 158 Guitar: Elective (1 credit)
- MUSP 1xx Performance Studies: Elective (1 credit)

Plus 2-4 credits from the following:

- IDSC 476 Experiential Learning (2 credits)
- THEO 417 Internship in Ministry (2 credits)

At least eight credits must be taken at the 2xx-level or above

No more than 8 credits may apply to another degree.

*Proficient keyboard players and/or vocalists can audition to substitute MUSP 131, 133, and/or 135 (may be repeated).

**Other courses may be substituted with approval from the chair.

Minor in Composing for the Screen

This minor teaches students to compose and produce effective, professional quality music for common visual media projects including film, television, music video, games, advertising, and social media. Through a diverse set of courses that combine theory and practice, students will learn to competently translate dramatic and creative observations and choices into appropriate and effective musical decisions. These decisions will manifest into original compositions which students will author, produce, and mix utilizing current industry standard software such as Protools, Ableton Live, Logic, and Adobe Suite.

- MUSC 112 How Music Works (4 cr)
- MUSC 140 Music Media (2 cr)
- MUSC 330 Music Composition and Production for Film, TV and Games (4 cr)
- FILM 200 Introduction to Film Studies (4 cr)
- MUSC 170 Music of Film (4 cr)

- MUSC 221 Synthesis for Music Production (2 cr) OR
  MUSC 110-02 Digital Music Lessons (1 cr) and MUSC210-02 Digital Music Lessons (1 cr)

Music Performer's Certificate

UST Music Performer's Certificate is intended to provide recognition to the many students who participate in our program, but do not wish to major or minor. Ther requirements include:

- Minimum of 4 Semesters of Large Ensemble (1 cr. Each) – Using Guidelines for Instrument found in UST Catalog.
- Minimum of 4 Semesters of Lessons (1 cr. Each) – All on Same Instrument
- Select MUSC Course with Music Advisor (4 cr.) or PHYS 105 Musical Acoustics (4 cr.)

Music Performance Studies

Music Performance Studies are generally on an individual basis, although some group lessons are available. Consult with the Music Department office to ensure that you enroll in the correct course number. Twelve lessons are scheduled each semester.

Music Major and Minor lessons are 50 minutes in length. Major lessons are available only by audition. Please see the Degree Requirements for more information

Elective Level Performance studies (1xx) are available for all students. No audition is required for elective studies. These courses are designed for non-majors who are interested in beginning or continuing study on an instrument, voice, composition, or digital music. Students wishing to study piano, guitar, or voice having little or no previous study on the instrument, are encouraged to register for group lessons. 30-minute or 50-minute lessons are available.

The Fine Arts requirement may be fulfilled by four semesters of participation in one of the following areas of 50-minute performance studies: MUSP 110, 121, 122, 128, 131, 135, 152, 153, 159, 160, 161, 162, 165, 168, 187, 188. Other performance studies or combinations may be approved by the department chair.

Music Ensembles

Membership in music ensembles is based upon a successful audition. Students may register for the same ensemble in as many semesters as desired.

The Fine Arts requirement may be fulfilled by four semesters of participation in one of the following ensembles: MUSN 140, 142, 143, 160, 181, 185, 186. A total of four semesters in MUSN 140, 142, 143 and 160; or 185 and 186 will also fulfill the requirement. Other combinations must be approved by the department chair. Some music ensembles also fulfill certain First-Year Experience requirements.

See specific ensemble requirements for various music major emphases in the first part of the music section of this catalog, or consult the Handbook for Music Majors and Minors available from the Department of Music office.

Music Undergraduate Courses

MUSC 001 Student Convocation Hour (0 credits)
The student convocation hour is for all music majors regardless of specialization. This course meets three times per semester for each semester of enrollment and gives the community of learners performance opportunities, lectures/ discussions on topics applicable to all music concentrations; and lecture/discussions on topics specific to each music concentration.

MUSC 101 Piano Skills I (1 credit)
This course teaches the keyboard skills required for music majors whose principal instrument is not piano. It includes training in basic keyboard technique, sight reading , score reading, accompanying, transposing, playing by ear, harmonizing melodies, and making practical applications of music theory. Prerequisite: MUSC 113 (concurrent registration preferred)

MUSC 102 Piano Skills II (1 credit)
This course teaches the keyboard skills required for music majors whose principal instrument is not piano. It includes training in basic keyboard technique, sight reading, score reading, accompanying, transposing, playing by ear, harmonizing melodies, making practical applications of music theory, and the development of other skills studied in Piano Skills I. The final exam for this class will serve as the piano proficiency exam for BA in Music Business major students. Prerequisite: MUSC 101, and MUSC 114 (concurrent registration preferred)

MUSC 112 How Music Works (4 credits)
Open to all students, this class introduces those with diverse levels of musical background to the elements of music theory and listening skills. No musical training is necessary for participation – all levels of musical abilities are welcome. Two priorities will guide our activities: (1) drawing on

musical practices from multiple social and cultural contexts in both familiar and unfamiliar styles; (2) learning via direct experience. This course offers real-life practice of skills to help students develop their understanding of how music works and how it moves us, particularly regarding the interaction between music elements (e.g. rhythm, melody, harmony, and form) with emotion, meaning, and performance.

MUSC 113 Musicianship & Theory I (0 to 4 credits)
This course, designed for those intending to major or minor in music, covers basic materials and techniques of music, approached through analysis and experience. This course is the first of a three-semester sequence that integrates aural skills with the analysis of harmony, form, and contrapuntal procedures in music from the 16th through the 21st centuries. Topics include meter and rhythm, the management of dissonance, the structure of keys, the harmonic function of triads and seventh chords, and basic formal units (phrases, etc.). Assignments include the development of compositional and arranging skills. Lecture plus laboratory. Offered spring semester.

MUSC 115 Understanding Music&Culture (4 credits)
This survey course explores the classics of European and American music in their historical, cultural and social contexts. It will investigate the many ethnic, religious, political, philosophical, economic and scientific influences that have shaped these traditions. This course is designed to enable students, regardless of musical background, to increase their understanding of music. The listening skill and knowledge acquired will provide a foundation for students to become more critical and discerning listeners of music of all types. NOTE: Students who receive credit for MUSC 115 may not receive credit for MUSC 118 or 119.

MUSC 117 Survey Music in West Cultur (2 credits)
This fully online survey course explores the historical foundations of western European concert music traditions. It will explore the various ethnic, religious, political, economic, and scientific influences that have shaped our understanding of "classical" western music into stylistic periods or eras – Medieval, Renaissance, Baroque, Classical, Romantic, and Twenty/Twenty-First Century. Students will conduct listening fieldwork by attending live concert events as approved by the instructor. The listening skills and knowledge gained in this course will provide an essential foundation for students seeking a degree in music.

MUSC 130 Introduction to World Music (4 credits)
This course provides students a foundation for developing critical thinking and self-analysis, by way of exploring the diversity of musical traditions across the world. Students will develop attentive listening skills and analytical perspectives that engage with music's distinctive sounds, settings, and meanings. Students will gain awareness and appreciation of music as expressions of human experience at the individual, community, and global level.

MUSC 140 Music Media (2 credits)
This course will serve to introduce first semester freshman music majors to software, hardware, techniques and issues surrounding digital music media. Learners will engage in the retrieval, generation, and distribution of musical notation, digital recordings, and MIDI sequences.

MUSC 160 Introduction to Music Business (4 credits)
This course provides an overview of the music industry, exploring and examining aspects of technology, economics, industry structures, marketing, audiences, and artistic innovations and trends. Students will begin exploring personal career interests.

MUSC 162 Roots of Blues, Rock, Country (4 credits)
This course traces the development of American popular music from its roots through multiple genres such as minstrelsy, jazz, big band, swing, crooning, jump blues, gospel, rhythm and blues, country, western, folk/protest, and rock 'n' roll, concluding with the British Invasion. Popular music development is critically examined through four interrelated driving forces: identity (ethnicity, gender, culture, generation), centers vs. peripheries (the established vs. the innovative), technology (impact on musical performance and listening), and business/law (commercial competition and development). Multimedia presentations include extensive audio and video support. Designed for the Popular Music minor.

MUSC 170 The Music of Film (4 credits)
Film is a form of communication that can be analyzed in terms of its images, as a historical record, and as a critical statement of the audience for which it is intended. Film music is a discreet yet complementary component used in some way and to some degree by nearly every filmmaker throughout history. Through readings, class discussion, and extensive directed viewing of movies, this course will provide a framework for analyzing the images and the sounds of films throughout the 20th and 21st centuries. Students will prepare and deliver oral presentations analyzing the images and sounds of select films.

MUSC 192 Techn. Skills for Keyboard Maj (1 credit)
This course teaches the technical keyboard skills required for music majors whose principal

instrument is piano or organ. It includes study and performance of all major and minor scales, triad and seventh arpeggios, and chord progressions in every key.

MUSC 201 Piano Skills III (1 credit)
This course teaches the keyboard skills required for music majors whose principal instrument is not piano. It includes training in basic keyboard technique, sight reading, score reading, accompanying, transposing, playing by ear, harmonizing melodies, making practical applications of music theory, and the development of other skills studied in Piano Skills II. Prerequisites: MUSC 102, and MUSC 213 (concurrent registration preferred).

MUSC 202 Piano Skills IV (1 credit)
This course teaches the keyboard skills required for music majors whose principal instrument is not piano, and will culminate in the piano proficiency exam for all music students except for Music Business majors. It includes training in basic keyboard technique, sight reading , score reading, accompanying, transposing, playing by ear, harmonizing melodies, making practical applications of music theory, and the development of other skills studied in Piano Skills III. Prerequisite: MUSC 201, and MUSC 214 (concurrent registration preferred)

MUSC 204 Music and the Creative Process (4 credits)
This unique course welcomes students of all musical backgrounds and abilities to explore the creative processes of collaborative music making. In the absence of notated music, the techniques and principles of Soundpainting will be studied toward understanding music's creative structures. Students will meet in class twice a week, study learning materials for the course (reading, listening, discussion activies), toward applying ideas and skills to create together musical works of their own design. All students will learn to direct, improvise, and co-create music that reflects the expressive input of the group. Reflective study and dialogue on the creative process will facilitate critical understanding of how music expresses ideas about self, others, and community, and can generate deeply transformational change to those identities. Course assignment toward the final grade include: Three compositions; Two short written essays analyzing the creative processes of selected musicians; Low-Stakes reading summaries; Attendance and Engagement; Collaborative Community Vision.

MUSC 205 Advanced Studio Recording (2 credits)
This course is a continuation and further practice of the studio production techniques explored in MUSC 140 - Music Media. Students will become more autonomous in the studio as they learn to manage and run sessions. As students delve deeper into the many layers of various digital audio workstations they will begin to discover how this technology is at its best when it serves the music, its performers, and creators. Students will further explore digital signal processing, plug-in's, and editing. Students will also further their knowledge of microphone applications and placement by producing and recording projects of their own. Prerequisites: MUSC140 or successful music technology placement test

MUSC 212 Musicianship & Theory II (0 or 4 credits)
Continuations of MUSC 113. This course, designed for those intending to major or minor in music, covers basic materials and structures of music, approached through analysis and experience. This course is the second of a three-semester sequence that integrates aural skills with the analysis of harmony, form and contrapuntal procedures in music from the 16th through the 21st centuries. Topics include classical and popular forms and chromatic harmony. Assignments include the development of compositional and arranging skills. Lecture plus laboratory. Offered fall semester of odd years. Prerequisite: MUSC 113 or successful placement test

MUSC 213 Musicianship & Theory III (0 to 4 credits)
Continuation of MUSC 212. This course, designed for those intending to major or minor in music, covers basic materials and structures of music, approached through analysis and experience. This course is the third of a three-semester sequence that integrates aural skills with the analysis of harmony, form and contemporary procedures in music from the 16th through the 21st centuries. Topics include advanced pitch collections, harmony, rhythmic techniques, form, and timbral analysis. Assignments include the development of compositional and arranging skills. Lecture plus laboratory. Offered spring semester of even years. Prerequisite: MUSC 212 or successful Theory Placement Exam.

MUSC 214 Music Theory & Aural Skill I (0 to 4 credits)
Continuation of MUSC 213. Offered in spring semester. Prerequisite: MUSC 213 or successful placement test

MUSC 216 Jazz in America (4 credits)
The origins and history of jazz in the United States. Various phases in the development of jazz style are discussed. Blues, ragtime, Dixieland, swing, bop, cool jazz, fusion, as well as other recent developments in jazz performances are investigated. An essential part of the course is the analysis and

evaluation of recorded performances by outstanding jazz musicians. Designed for non-majors as well as an elective for music majors interested in jazz. Offered fall semester.

MUSC 221 Synthesis for Music Production (2 credits)
This course is an exploration in synthesizing sounds for musical productions. Students will use hardware and software synthesizers to learn the fundamentals and history of creating and processing synthesized musical sounds. Students will also explore how synthesis in modern music connects to cultures, ideas, and identities. Using intuitive native devices in Ableton Live, and commonly used VST's, students will learn how to analyze and synthesize sound that they will embed into produced music in multiple contexts and genres. Throughout the course, students will explore these concepts within other DAW's (Digital Audio Workstations) to create a portfolio of musical sounds that are equal parts artistry and craft. Prerequisites: MUSC140 or successful music technology placement test

MUSC 224 Songwriting/Composition (2 credits)
This course presents the basic principles related to the composition of popular vocal and instrumental forms: lyric, melody, progression, and rhythm. Applications of these elements in Rock, Pop, Jazz, Blues, Hip-Hop, Christian, and Country are explored.

MUSC 230 Music of the United States (4 credits)
This course focuses on the study of music in the United States within its historical, cultural, and sociological contexts. The course will develop skills in critical listening analysis using appropriate musical terminology, to describe both aural and written traditions of music. Repertoire to be explored include homeland traditions of cultures and population groups brought over through migration/immigration, blends of popular and concert traditions, and new and emerging styles unique to the United States. Historical, cultural, and social contexts will facilitate and understanding of how music reflects particular identities, ideas, values, and issues among population groups in the United States.

MUSC 231 Intro to Conducting I (1 credit)
This course includes basic conducting patterns and gestures, general knowledge of score types (choral, band, orchestral, etc.), score study and basic rehearsal planning. Practice in conducting small ensembles will be provided.

MUSC 233 Music of the Wrld: Aural/Writt (4 credits)
This course, designed for music majors, studies music as a ritual activity among the peoples of the non-Western world. It employs an anthropological approach that analyzes music in cultural context rather than as an object of art. The music and cultural activities of a diverse number of countries will be investigated each semester. Prerequisites: A processed music major or minor declaration

MUSC 242 Children's Artistic Cultur (4 credits)
This course explores the role of the arts in children's lives. The course provides elementary education majors with performative experiences and pedagogical models of best practices in creating music, movement, and visual art experiences for, with, and by children. Students will investigate principles, strategies, and materials for use and will have guided practice in performing, creating, planning, delivering, and assessing learning. Available to Elementary Education majors only.

MUSC 243 Individual Study (2 OR 4 credits)

MUSC 260 Fund-Musicianship in Popul Mus (4 credits)
This course is designed to give the student a working knowledge of the skills required for popular music improvisation and performance. Study will include practical application of the rhythm, melody, and harmony of all styles of popular music. Genres that will be examined include: rock, blues, jazz, hip-hop, country and pop. This course is open to all instrumentalists and singers.

MUSC 263 Entrepreneurial Careers Music (1 credit)
With special emphasis on entrepreneurship, innovation, & self-efficacy, this course will explore the skills, values and practices that are essential to creating successful and fulfilling careers in music. Through case study, class discussion, and individual/group projects, students will explore best practices for creating successful careers in the creative industries, as well as the modern media tools necessary for sustainable career growth. Assignments in this class will guide you in the processes of defining your career vision and articulating your goals; developing a portfolio to represent your work; developing skills to respond to emerging opportunities; and developing an actionable plan for activating your professional career. This course is restricted to music major and minor students.

MUSC 269 Research (2 OR 4 credits)

MUSC 292 Functl Skills Keyboard Maj I (1 credit)
This course teaches the functional keyboard skills required for music majors whose principal instrument is piano or organ. It includes practical training in sight reading, harmonization, improvisation, playing by ear, transposing, score reading, and other applications of basic musicianship. Prerequisite: MUSC 192

MUSC 293 Funct Skills Keyboard Majr II (1 credit)
This course teaches the advanced functional keyboard skills required for music majors whose principal instrument is piano or organ. It includes practical training in sight reading, harmonization, improvisation, playing by ear, transposing, score reading, and other applications of basic musicianship. Prerequisite: MUSC 292

MUSC 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

MUSC 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

MUSC 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

MUSC 302 Intro to Liturgical Musi (2 credits)
Introduction to Liturgical Music is a study of instructions and guidelines for music in divine worship, and a survey of repertoire appropriate for use in liturgical celebrations. Prerequisites: THEO 101 and MUSC 113 and MUSC 101

MUSC 305 Mixing and Post Production (2 credits)
This course will introduce students to current audio mixing and post production techniques in a variety of musical styles. Independent mixing projects and hands-on experience will support coursework with a focus on advanced concepts in preparing audio mixes for various media, as well as mastering and post prodcution techniques. This course serves as a solid foundation for future music producers, mix engineers, and content creators. Prerequisites: MUSC 205

MUSC 308 Pedagogy & Lit for Musc Perf I (2 credits)
This class will survey methods and materials for performance studies. Discussions will include principles of technique, learning theories, musicianship, and performance based upon a wide and diverse body of literature. Students should sign up for the section number that corresponds with their primary area of performance. Section 1: Voice; Section 2: Keyboard; Section 3: Guitar; Section 4: Winds/Percussion/Brass.

MUSC 309 Pedagogy & Lit for Musc Per II (2 credits)
A continuation of Pedagogy and Literature for Music Performers I, this class will survey methods and materials for performance studies. Discussions will include principles of technique, learning theories, musicianship, and performance based upon a wide and diverse body of literature. Students should sign up for the section number that corresponds with their primary area of performance. Section 1: Voice; Section 2: Keyboard;Section 3: Guitar; Section 4: Winds/Percussion/Brass. Prerequisites: EDUC 308/MUSC 308

MUSC 330 Comp/Prod for Film/TV/Games (4 credits)
This class explores practical application of compositional techniques found in contemporary commercial writing, for Film, Television, Video Games, Commercials, etc. The course will present real world situations and application of techniques used to finish projects, with strategies to deal with additions, form changes, and revisions. It is designed to improve "Creativity on demand" and working outside one's comfort zone as a composer and producer. Prerequisite: MUSC 140

MUSC 340 Theory Elective: Topics (2 credits)

MUSC 354 Adv Conducting & Materials (2 credits)
Advanced Conducting and Materials: Instrumental Concentration: Continuation of Introduction to Conducting I and II. Study of advanced conducting patterns and refined expressive gestures. Survey of orchestral and band literature and in-depth study of selected pieces. Rehearsal planning, rehearsal techniques, and classroom management. Offered fall semester of even years. Prerequisites: MUSC 231.

MUSC 355 Adv Conducting & Mat: Vocal (2 credits)
Continuation of Introduction to Conducting I and II. Study of advanced conducting patterns and refined expressive gestures. Survey of choral literature and in-depth study of selected pieces. Rehearsal planning, rehearsal techniques, and classroom management. Offered fall semester of even years. Prerequisites: MUSC 231

MUSC 363 Emerging Models in Music Indus (4 credits)
This course will explore the evolution of the music industry and the emerging trends technologies and business models that continue to transform the music industry in all of its aspects. Topics addressed in the course will include but not be limited to analysis of innovation in multiple modes of the music industry; remix culture, copyright, and licensing limitation/innovation; the impact of social media on management, agency, and artist fan engagement; growth sectors of the music economy including concert promotion, & touring; crowd funding, and

its impact on new ventures in music; and the impact of technology on communications culture, and the creative sector. Students will move regularly between theory and practice as they use evidence from the past and present to formulate new possibilities for the future architecture of the music industry. Prerequisite: MUSC 160 or ENTR 260 or permission of the instructor

MUSC 389 Research (2 OR 4 credits)

MUSC 393 Individual Study (2 OR 4 credits)

MUSC 411 History & Lit Music I (4 credits)
A survey of Western European music to 1750: the medieval, Renaissance, Baroque eras. Historical development, social context, forms, styles and issues of expression are explored. Writing assignments are designed for teaching to the "Writing in the Discipline" objectives for the Writing Across the Curriculum initiative. This is a core course for students seeking a major degree in music. Students must be at junior-level standing and have passed at least Theory II before enrolling in this course. Offered in fall semester.

MUSC 412 Hist&Lit of West European (4 credits)
A survey of Western European music from 1750 to the present: the Classical and Romantic eras and the Twentieth century. Emphasis of study is on social context and issues of meaning and expression. Continuation of MUSC 411. Writing assignments are designed for teaching to the "Writing in the Discipline" objectives for the Writing Across the Curriculum initiative. This is a core course for students seeking a major degree in music. Offered in spring semester. Prerequisites: MUSC 113 and junior standing

MUSC 420 Senior Research Paper (2 credits)
This course allows music students to demonstrate research and writing skills by utilizing standard music resources (Music Index, RILM, Grove, Baker's, etc.). The paper may contain theoretical analysis, and/or it may be connected to the student's performance area or degree focus. Prerequisite: 80 credits completed; Seeking a BM or BA in music.

MUSC 476 Experiential Learning (1 TO 4 credits)

MUSC 479 Internship (2 credits)

MUSC 480 Music Business Seminar (4 credits)
A course involving individual research that is shared among the participants. Guest speakers from various areas of music business, the electronic media industries and arts management make presentations to the seminar, which is under the direction of a faculty coordinator. A major research project is required. Prerequisite: At least Junior standing and at least 80 completed credits

MUSC 495 Individual Study (2 OR 4 credits)

MUSC 497 Individual Study (4 credits)

Music Performance Studies Undergraduate Courses

MUSP 101 Group Piano (0 TO 1 credits)
This course is designed for students who have little or no piano background. The small group setting includes work on keyboard technique, reading music, transposing, improvising, playing by ear and harmonizing melodies. Groups are limited to six students and meet for an hour each week. This course may be repeated.

MUSP 108 Class Voice (0 TO 1 credit)
Designed for non-music majors who wish to study voice and also for non-vocal music majors who wish to develop their singing in a class situation.

MUSP 110 Digital Music Lesson (0 TO 1 credit)
These lessons focus on Hard-Disk Recording and MIDI-Sequencing and are designed with the modern musician in mind. Each week students witness the demonstration of professional recording techniques in one of the UST computerized recording studios. Then they apply their new skills to original compositions in scheduled studio sessions. Some of the subjects covered: Multi-tracking, Automation, Groove Quantizing, Harmonizing, Music Notation, and Miking. Students may have their choice of MIDI-controllers: guitar, keyboard, or drum-machine pads. Prerequisite: Basic computer and music-making skills

MUSP 111 Digital Music for Film (0 or 1 credits)
These lessons focus on creation of music for film or other screen media via Hard-Disk Recording and MIDI-Sequencing and are designed with the modern musician in mind. Each week students witness the demonstration of professional recording techniques in one of the UST computerized recording studios. Then they apply their new skills to original compositions in scheduled studio sessions. Some of the subjects covered: Multi-tracking, Automation, Groove Quantizing, Harmonizing, Music Notation, and Miking. Students may have their choice of MIDI-controllers: guitar, keyboard, or drum-machine pads. Basic computer and music-making skills are required. No online Lesson Registration Form is needed

MUSP 113 Aural Skills Proficiency (0 TO 1 credit)
This course is designed to help students prepare to demonstrate aural skills proficiency.

MUSP 121 Harpsichord: Elective (0 TO 1 credit)

MUSP 122 Lute: Elective (0 TO 1 credit)

MUSP 128 Recorder: Elective (0 TO 1 credit)

MUSP 131 Piano: Elective (0 TO 1 credit)

MUSP 133 Voice: Elective (0 TO 1 credit)

MUSP 135 Organ: Elective (0 TO 1 credit)

MUSP 136 Flute: Elective (0 TO 1 credit)

MUSP 137 Oboe: Elective (0 TO 1 credit)

MUSP 138 Clarinet: Elective (0 TO 1 credit)

MUSP 139 Bassoon: Elective (0 TO 1 credit)

MUSP 141 Saxophone: Elective (0 TO 1 credit)

MUSP 144 Trumpet: Elective (0 TO 1 credit)

MUSP 145 French Horn: Elective (0 TO 1 credit)

MUSP 146 Trombone: Elective (0 TO 1 credit)

MUSP 147 Euphonium: Elective (0 TO 1 credit)

MUSP 148 Tuba: Elective (0 TO 1 credit)

MUSP 149 Percussion: Elective (0 TO 1 credit)

MUSP 152 Jazz/Pop Vocal: Elective (0 TO 1 credit)
Covers techniques for communicative lyric singing, including repertoire from different eras of the American music spectrum. Considers stage presence, microphone technique, vocal inflection and communication with an accompanist or rhythm section. Improvisation may also be explored.

MUSP 153 Jazz Piano: Elective (0 TO 1 credit)
Individual studies with a jazz pianist, developing jazz style and working on improvisation. Prerequisite: Some facility on the piano.

MUSP 154 Violin: Elective (0 TO 1 credit)

MUSP 155 Viola: Elective (0 TO 1 credit)

MUSP 156 Cello: Elective (0 TO 1 credit)

MUSP 157 Double Bass: Elective (0 TO 1 credit)

MUSP 158 Guitar: Elective (0 TO 1 credit)
Students will study all styles of music including classical, blues, rock, folk and others on acoustic, nylon and electric guitars. Topics include all forms of notation (standard, tab, chord symbols, etc.), improvisation and performance practice.

MUSP 159 Harp: Elective (0 TO 1 credit)

MUSP 160 Banjo: Elective (0 TO 1 credit)
Students will study basic and advanced plectrum and fingerstyle techniques for the 4-string and 5-string banjos. Other topics will include stylistic propriety of appropriate genres, improvisation and other issues pertinent to the banjo. Repertoire will include all American popular music styles.

MUSP 161 Harmonica: Elective (0 TO 1 credit)
Students will study basic to advanced techniques of the instrument including breathing technique, tonguing, cross-harp, chromatic, straight position, vibrato, and microphone placement. Additional topics will include: stylistic propriety of blues, rock, spiritual and folk, and improvisation.

MUSP 162 Mandolin: Elective (0 TO 1 credit)
Students will study basic to advanced plectrum techniques, tremolo, and finger placement in the context of appropriateness to bluegrass, country, folk, and classical musics. Improvisation, solo and ensemble playing, and various notation systems will be discussed.

MUSP 165 Music Composition (0 TO 1 credit)
The course aims at developing the student's own imagination and musical style, as well as providing studies for the developing of technical and notational skills. Prerequisite: MUSC 114 or permission of instructor.

MUSP 166 Composition for Film Lessons (0 to 1 credits)
The course aims at developing the student's own imagination and musical style, as pertains to composing music for film. Prerequisite: MUSC 114 or permission of instructor. No online Lesson Registration Form is needed

MUSP 168 African Drumming: Elective (0 TO 1 credit)
Study the art and techniques of both hand and stick drumming in West African traditions. Covers a wide variety of repertoire (Agbadza, Kpanlogo, Adowa, Gota, etc.), including those performed by the African Music Ensemble.

MUSP 187 Electric Guitar: Elective (0 TO 1 credit)
Students will study basic to advanced plectrum and fingerstyle techniques as they apply to the amplified guitar. Other topics will include fretboard theory, improvisation, ensemble performance practice and current technologies in amplification and MIDI applications. Repertoire will include all American popular music styles.

MUSP 188 Flamenco Guitar: Elective (0 TO 1 credit)
Students will study the techniques involved in picado, arpeggio, tremolo, and rasqueado. The

course includes intensive study of various rhythms and styles including Sevillanas, Soleareas, Alegrias, Siguiryas, Tango, Bulerias, Tiento, etc., and an introduction to basic flamenco dance and song accompaniment. Students will learn about the Gypsy and Moorish influences on the history of this artform.

MUSP 210 Digital Music Lessons (0 TO 1 credit)
This course, MUSP 210 Digital Music Lessons, is designed for those planning to pursue the BA in Music (MUSP 110 Digital Music Lessons is available for elective credit). These 50-minute lessons focus on Hard-Disk Recording and MIDI-Sequencing and are designed with the modern musician in mind. Each week students witness the demonstration of professional recording techniques in one of the UST computerized recording studios. Then they apply their new skills to original compositions in scheduled studio sessions. Some of the subjects covered: Multi-tracking, Automation, Groove Quantizing, Harmonizing, Music Notation, and Miking. Students may have their choice of MIDI-controllers: guitar, keyboard, or drum-machine pads.

MUSP 221 Harpsichord: Performance (0 TO 1 credit)

MUSP 231 Piano: Performance (0 TO 1 credit)

MUSP 233 Voice: Performance (0 TO 1 credit)

MUSP 235 Organ: Performance (0 TO 1 credit)

MUSP 236 Flute: Performance (0 TO 1 credit)

MUSP 237 Oboe: Performance (0 TO 1 credit)

MUSP 238 Clarinet: Performance (0 TO 1 credit)

MUSP 239 Bassoon: Performance (0 TO 1 credit)

MUSP 241 Saxophone: Performance (0 TO 1 credit)

MUSP 244 Trumpet: Performance (0 TO 1 credit)

MUSP 245 French Horn: Performance (0 TO 1 credit)

MUSP 246 Trombone: Performance (0 TO 1 credit)

MUSP 247 Euphonium: Performance (0 TO 1 credit)

MUSP 248 Tuba: Performance (0 TO 1 credit)

MUSP 249 Percussion: Performance (0 TO 1 credit)

MUSP 252 Jazz/Pop Vocal: Performance (0 TO 1 credit)
Covers techniques for communicative lyric singing, including repertoire from different eras of the American music spectrum. Considers stage presence, microphone technique, vocal inflection and communication with an accompanist or rhythm section. Improvisation may also be explored.

MUSP 253 Jazz Piano: Elective (0 TO 2 credits)

MUSP 254 Violin: Performance (0 TO 1 credit)

MUSP 255 Viola: Performance (0 TO 1 credit)

MUSP 256 Cello: Performance (0 TO 1 credit)

MUSP 257 Double Bass: Performance (0 TO 1 credit)

MUSP 258 Guitar: Performance (0 TO 1 credit)

MUSP 259 Harp: Performance (0 TO 1 credit)

MUSP 265 Music Composition (0 TO 1 credit)
The course aims at developing the student's own imagination and musical style, as well as providing studies for the developing of technical and notational skills. Individual guidance and group meetings. Half-hour sessions. Prerequisite: MUSC 114 and permission of instructor

MUSP 321 Harpsichord: Performance (0 TO 2 credits)

MUSP 331 Piano: Performance 0 TO 2 credits)

MUSP 333 Voice: Performance (0 TO 2 credits)

MUSP 335 Organ: Performance (0 TO 2 credits)

MUSP 336 Flute: Performance (0 TO 2 credits)

MUSP 337 Oboe: Performance (0 TO 2 credits)

MUSP 338 Clarinet: Performance (0 TO 2 credits)

MUSP 339 Bassoon: Performance (0 TO 2 credits)

MUSP 341 Saxophone: Performance (0 TO 2 credits)

MUSP 344 Trumpet: Performance (0 TO 2 credits)

MUSP 345 French Horn: Performance (0 TO 2 credits)

MUSP 346 Trombone: Performance (0 TO 2 credits)

MUSP 347 Euphonium: Performance (0 TO 2 credits)

MUSP 348 Tuba: Performance (0 TO 2 credits)

MUSP 349 Percussion: Performance (0 TO 4 credits)

MUSP 354 Violin: Performance (0 TO 2 credits)

MUSP 355 Viola: Performance (0 TO 2 credits)

MUSP 356 Cello: Performance (0 TO 2 credits)

MUSP 357 Double Bass: Performance (0 TO 2 credits)

MUSP 358 Guitar: Performance (0 TO 2 credits)

MUSP 359 Harp: Performance (0 TO 2 credits)

MUSP 365 Music Composition (0 TO 2 credits)
This course aims at developing the student's own imagination and musical style, as well as providing studies for the developing of technical and notational skills. Prerequisite: MUSC 114 or permission of instructor.

Music Ensembles Undergraduate Courses

MUSN 140 Donne Unite (0 OR 1 credit)
A vocal ensemble that explores the wide variety of secular and sacred repertoire composed for women's voices. Major performances are given each semester and may include exchange/joint concerts with other choirs. Three rehearsals a week. Membership by audition. A combination of four semesters in 140, 142, 143, and 160.

MUSN 142 Chamber Singers (0 OR 1 credit)
A mixed vocal ensemble of 30-40 members that will study and perform materials appropriate to the chamber ensemble; repertoire will include secular and sacred literature. Major performances are given each semester and may include exchange/joint concerts with other choirs. Three rehearsals per week. Membership by audition. A combination of four semesters in 140, 142, 143, and 160.

MUSN 143 Liturgical Choir (0 OR 1 credit)
Liturgical Choir is an ensemble of students of varied faith and cultural backgrounds that sings for services in the UST chapel. Local, regional and international tours are part of the choir's ministry as well as concert performances with other Music Department ensembles. Two rehearsals a week plus bi-weekly Sunday chapel liturgies. Membership by audition. A combination of four semesters in 140, 142, 143, and 160.

MUSN 151 Schola Cantorum (0 OR 1 credit)
This vocal ensemble focuses primarily on early Plainchant from the Gregorian chant tradition as well as contemporary chant repertoire. Historical and modern chant notations are studied and repertoire will be performed in the context of both liturgical service and concert. Membership by audition.

MUSN 160 Concert Choir (0 OR 1 credit)
A mixed vocal ensemble that performs a variety of secular and sacred repertoire from the Middle Ages to the 21st century. Choral literature performed includes unaccompanied works as well as works with professional chamber orchestra. Major performances are given each semester and may include exchange/joint concerts with other choirs. Tours locally, nationally and internationally. Three rehearsals a week. Membership by audition. A combination of four semesters in 140, 142, 143, and 160.

MUSN 161 String Ensembles (0 OR 1 credit)
Ensemble meets weekly and are coached by a member of the string faculty. Membership by audition.

MUSN 162 Flute Ensembles (0 OR 1 credit)
Formation of trios, quartets and other small ensembles, dependent upon personnel available. Ensembles may include piccolo, soprano flutes, alto flute and bass flute. Ensembles meet once a week and are coached by a member of the woodwind faculty. Membership by audition.

MUSN 163 Clarinet Ensembles (0 OR 1 credit)
Formation of small ensembles involving various members of the clarinet family. Ensembles meet once a week and are coached by a member of the woodwind faculty. Membership by audition.

MUSN 164 Saxophone Ensembles (0 OR 1 credit)
Formation of small ensembles involving various members of the saxophone family. Ensembles meet once a week and are coached by a member of the woodwind faculty. Membership by audition.

MUSN 165 Chamber Wind Ensembles (0 OR 1 credit)
This ensemble is comprised of small mixed chamber ensembles. This course is designed as a student/faculty collaborative ensemble, where students are mentored in ensemble via side by side performance with studio faculty. Chamber Winds is instructed and conducted by a member of the faculty. Membership is by approval of the course instructor.

MUSN 166 Brass Choir (0 OR 1 credit)
Formation of small and large ensembles using only brass and sometimes percussion instruments. The choir, directed by a member of the brass faculty, gives regularly scheduled public performances. Membership by audition.

MUSN 167 Percussion Ensembles (0 OR 1 credit)
A variety of mallet and stick instruments are used to form these ensembles. Ensembles meet once a week and are coached by a member of the percussion faculty. Membership by audition.

MUSN 169 African Music Ensemble (0 OR 1 credit)
This course provides a non-Western music performance experience. The repertoire to be studied includes traditional genres such as Adowa, Agbadza, Gota, Kpanlogo, Boboobo, and includes contemporary compositions. Three main areas in the ensemble are drumming, flutes and vocal. No

prior experience is necessary for this ensemble. An audition is required.

MUSN 170 Handbell Choir (0 OR 1 credit)
This instrumental ensemble performs with both English and Dutch handbells. Repertoire consists of arrangements for two to five octaves from a variety of musical periods and styles as well as music composed specifically for the expanding contemporary handbell literature. Performances include monthly appearances in chapel liturgical settings as well as regular campus and public performances. No previous handbell experience necessary but ability to read music is required. Membership by audition or permission of instructor.

MUSN 171 Piano Ensembles (0 OR 1 credit)
Study and performance of duets and two-piano music. One major performance per semester. Membership by audition.

MUSN 172 Accompanying Ensembles (0 OR 1 credit)
Qualified pianists have the opportunity to accompany solo vocalists and solo instrumentalists through individual instruction. Membership by audition.

MUSN 173 Guitar Ensemble (0 OR 1 credit)
Study, performance and recording of music for multiple guitars and bass from Renaissance through twentieth-century composers including American jazz and rock styles. Repertoire includes original works, transcriptions, and arrangements. Opportunities provided for students to learn improvisation, composition, and arrangement.

MUSN 174 Guitar Small Ensemble (0 OR 1 credit)
The study and performance of all styles in popular and classical music for guitar and diverse instruments, including bass and drums.

MUSN 175 Popular Music Ensemble (0 OR 1 credit)
This course provides individual coaching for small ensembles on the performance of all genres and types of American popular music.

MUSN 176 New Music Ensemble (0 TO 1 credit)
A mixed instrumental ensemble devoted to the study and performance of new music. Repertoire may include non-tonal, avant-garde, indeterminate, and experimental genres, collaborative improvisation, and original composition. The ensemble meets once per week and presents at least one major performance per semester. Membership by audition.

MUSN 177 Indonesian Gamelan Ensemble (0 OR 1 credit)
Hands-on experience in learning to play Javanese gamelan music, an Indonesian percussion ensemble, one of the great non-Western music-making traditions that is readily accessible to beginners. This course will also include insights into the role of gamelan music and dance in Indonesian culture. This ensemble is open to all students and majors. No previous musical background required.

MUSN 181 Orchestra (0 OR 1 credit)
This course is designed for experienced orchestra string musicians (primarily) as well as woodwind, brass and percussionists (on select pieces). The content of the course is based on study, rehearsal and performance of music primarily written for string and symphonic orchestra performance mediums. Literature studied and performed comes from a diversity of cultures and style periods. The Orchestra gives public performances on a regular basis throughout the school year including regional, national and international tours. Meets two times a week. Membership by audition.

MUSN 182 Instr Jazz Ensemble (0 OR 1 credit)
Study and performance of instrumental jazz in various styles with exposure to improvisation. Formal concert is presented each semester, and informal campus appearances occur on a regular basis. Membership by audition.

MUSN 183 Jazz Singers (0 OR 1 credit)
Study and performance of vocal jazz in various styles. Group is limited in size, thus allowing each member to develop independence in singing and microphone technique. Membership by audition.

MUSN 185 Symphonic Band (0 OR 1 credit)
Study and performance of original works for wind-band; transcriptions, manuscripts, and solo repertoire with band accompaniment. Two rehearsals per week; regular series of concerts, tours. Private lessons recommended. Membership by audition. Four semesters of participation or a combination with MUSN 186 fulfills the Fine Arts requirement in the core curriculum.

MUSN 186 Symphonic Wind Ensemble (0 OR 1 credit)
This course is designed for the advanced woodwind, brass and percussion student. A select group of approximately forty musicians studies and performs music primarily written for the wind ensemble genre. Literature studied and performed comes from a diversity of cultures and style periods. The Wind Ensemble gives public performances on a regular basis throughout the school year including regional, national and international tours. Meets two times a week. Membership by audition. Four semesters of participation or a combination with

MUSN 185 fulfill the Fine Arts requirement in the core curriculum.

MUSN 196 Topics Ensembles (0 OR 1 credit)
The ensemble(s) will be announced in the annual Class Schedule. Content will vary but will not duplicate existing ensembles.

Neuroscience

Program Overview

College of Arts and Sciences, Interdisciplinary Program

John Roach Center for the Liberal Arts (JRC) LL56, (651) 962-5030

Hankerson (PSYC); Heimovics (BIOL); Husak (BIOL); Illig (BIOL); Prichard (PSYC); Tong (BIOL); Vetter (BIOL); Wolfe (PSYC)

Department Web Site:
https://www.stthomas.edu/academics/undergraduate/neuroscience-major/index.html

The Neuroscience Program is an interdisciplinary, research-intensive major leading to the Bachelor of Science degree. Training in neuroscience requires a broad foundation in the natural sciences, and the major requires students to complete foundational courses in Biology, Chemistry, Mathematics and Psychology. Flexibility in course selection at the upper division level allows specialization in concert with student interest. Students who successfully complete this major will be well-prepared for graduate study in neuroscience or in related disciplines. The Program is administered in consultation with the Biology and Psychology Departments. Students choosing this major may not take a second major in either Biology or Psychology, or a minor in Biology.

Neuroscience Honor Society

Nu Rho Psi, the national Neuroscience Honor Society encourages professional interest and excellence in scholarship, particularly in neuroscience. The St. Thomas chapter was established in 2007. To qualify, students who must have a 3.2 or higher overall grade point average and a 3.5 or higher grade point average in specific neuroscience courses.

Major in Neuroscience (B.S.)

64 credits

Required Foundational Courses (16 credits)

- CHEM 111 General Chemistry I (4 credits) and CHEM 112 General Chemistry II (4 credits)
  or CHEM 115 Accelerated General Chemistry (4 credits)
- DASC 120 (or DASC 111 and 112) Introduction to Computational Statistics (4 credits
- MATH 113 Calculus 1 (4 credits)
  or MATH 108 Calculus with Review I (4 credits) and MATH 109 Calculus with review II (4 credits)
- PSYC 111 General Psychology (4 credits)

Neuroscience Core Courses (20 credits)

- NSCI 201 Introduction to Neuroscience (4 credits)
  or BIOL 208 Biological Comm & Energetics (4 credits)
  NOTE: All pre-health students should follow the BIOL 208 pathway into NSCI 202, rather than taking NSCI 201. Note: BIOL 208 has a pre-requisite of BIOL 207 or a 100-level BIOL course. BIOL 207 is highly recommended.
- NSCI 202 Principles of Neuroscience (4 credits)
- NSCI 203 Neuroscience Literacy (4 credits)
- NSCI 302 Neuroanatomy (4 credits)
- NSCI 303 Neurophysiology (4 credits)

Neuroscience Electives Courses (12 credits)

A maximum of four (4) credits of NSCI 389 can count for elective credit.

- NSCI 310 Cognitive Neuroscience (4 credits)
- NSCI 320 Human & Comparative Neurology (4 credits)
- NSCI 330 Neuropharmacology (4 credits)
- NSCI 340 Computational Neuroscience (4 credits)
- NSCI 350 Neurobio of Social Behavior (4 credits)
- NSCI 360 Neurobiology: Drug Use & Abuse (4 credits)
- NSCI 389 Research (2 to 4 credits)
- NSCI 398 Topics in Neuroscience (4 credits)
- NSCI 460 Aggression (4 credits)

Electives in Consultation (12 credits)

- 12 credits selected in consultation with the academic advisor and approved by the Neuroscience Program Director

Capstone Experience Course (4 credits)

- BIOL 462 Molecular Biology (4 credits)
- BIOL 486 Seminar in Physiology (4 credits)
- BIOL 464 Bioinformatics (4 credits)
- NSCI 420 Sleep & Circadian Rhythms (4 credits)
- NSCI 430 Neuroecology (4 credits)
- NSCI 450 Integrative Neuroscience (4 credits)
- NSCI 490 Topics in Neuroscience (4 credits)
- PSYC 415 Research Issues in Cognition (4 credits)

Minor in Neuroscience

- NSCI 201 Introduction to Neuroscience or BIOL 208* Biological Communication and Energetics
- PSYC 111 General Psychology
- NSCI 202 Principles of Neuroscience
- Two 300/400 level NSCI courses

*Starred course has a pre-requisite not included in the minor

Neuroscience Undergraduate Courses

NSCI 201 Introduction to Neuroscience (0 or 4 credits)
This course is an introduction to the field of neuroscience and explores the biological and psychological foundations of the brain and behavior. The course introduces cell biology and covers the basic principles of nervous system cells and organization, brain function, and how the nervous system contributes to our behaviors and experiences. Two laboratory hours per week.

NSCI 202 Principles of Neuroscience (0 or 4 credits)
This course is an in-depth introduction to the fundamental biological processes that are key for understanding how the brain controls behavior in humans and animals. Content will range from neuronal communication to higher order brain functions. The course will provide a detailed examination of how environmental influences impact the cellular processes in the brain and behavior. The laboratory component of the course will examine clinical connections between neuroscience foundational knowledge and human disease. Three laboratory hours per week. Prerequisites: NSCI 201 OR BIOL 208 with a C- or better. CHEM 112 OR CHEM 115 recommended. This course will replace the current NSCI 301 Principles of Neuroscience. Students cannot get credit for both NSCI 202 and the current NSCI 301.

NSCI 203 Neuroscience Literacy (0 or 4 credits)
This course emphasizes understanding the scientific method in the context of modern neuroscience research and covers research design and writing in neuroscience. Course content focuses on developing skills in reading primary neuroscience literature, designing neuroscience experiments, analyzing neuroscience data, and presenting neuroscience research. Three laboratory hours per week. Prerequisites: NSCI 202 AND DASC 120 or DASC 112 with a strong recommendation in taking the SPSS, R, or Excel sections. Note: Students cannot get credit for both NSCI 203 and PSYC 212. Note: Students cannot get credit for both NSCI 203 and PSYC 212.

NSCI 243 Individual Study (2 TO 4 credits)

NSCI 298 Topics (0 TO 4 credits)
The subject matter of this course will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online.

NSCI 301 Principles of Neuroscience (0 or 4 credits)
Human understanding of the brain and nervous system has improved dramatically over the past three decades. With the rapid expansion of knowledge has come an understanding that behavioral and cognitive disorders associated with both childhood development and with aging have a biological basis, and many have their origins in the interaction between the nervous system and environmental factors. Recent research has revealed that a healthy brain and nervous system depends on sound biologic function. Therefore, a basic understanding of the biology of the brain and nervous system, and of how the nervous system interacts with environmental factors, is necessary. This course will cover fundamental biological processes in the brain and nervous system, the role of the nervous system in human and animal behavior, and how environmental influences impact these processes at the cellular and organismal levels. Prerequisite: BIOL 208

NSCI 302 Neuroanatomy (0 or 4 credits)
This course is an in-depth study of the structure and organization of the vertebrate nervous system. The course will build upon foundational neuroscience knowledge and will provide a detailed examination of the anatomy of the nervous system. The course will examine the structures of the nervous system, how these structures support critical functions, and disorders/diseases of these structures and their clinical manifestations. Laboratory sessions will focus on gross dissections, neuroanatomical techniques, and clinical methods used to investigate nervous system morphology and connectivity. Four laboratory hours per week. Prerequisites: NSCI 202.

NSCI 303 Neurophysiology (0 or 4 credits)
This course is an in-depth study of the molecular, genetic, and cellular components of the vertebrate nervous system, and how these components interact to allow neurons to communicate. The course will build upon foundational neuroscience knowledge and will provide a detailed examination of the components of neuronal signaling, including the molecular structure of ion channels; proteins responsible for synaptic signaling; extracellular matrix structure and function; glial cell function; mRNA transfer between neurons. Laboratory topics will include training in the techniques and data analysis for modern neurophysiological techniques, including optogenetics, EEG, and multi-electrode neurophysiology. Four laboratory hours per week. Prerequisites: NSCI 202 and CHEM 112 OR CHEM 115.

NSCI 310 Cognitive Neuroscience (0 or 4 credits)
Cognitive neuroscience is the study of "how the brain enables the mind." The purpose of this course is for you to develop an advanced understanding of the biological basis of mental activity. We will examine the biological roots of various mental phenomena including perception, attention, learning, memory, language, emotion and consciousness. In particular, we will focus on the roles of plasticity and evolutionary pressure in shaping the mind, and on the treatment of cognitive neuroscience in popular media.Prerequisites: a C- in NSCI 203

NSCI 320 Human & Comparative Neurology (0 or 4 credits)
All neuroscience is a multidisciplinary enterprise that draws on findings from diverse fields, ranging from molecular genetics to comparative psychology. Comparative Neurology involves scrutinizing brain anatomy and physiology, relating brain structure to function, and linking each of these to behavior and ecology. In this course, we will explore how the human brain has emerged, discover some rules of how brains generally evolve (and develop some of our own), and determine what factors have guided the phylogenetic development of this complex structure. Throughout the course, laboratory projects and problem sets will support our classroom discussions. Prerequisites: a C- in NSCI 203

NSCI 330 Neuropharmacology (0 or 4 credits)
Neuropharmacology is the study of how drugs affect the cells of the nervous system and their ability to communicate with other target systems in the body. This course will cover different classes of neurotransmitters and neurohormones and the receptors on target cells that recognize and bind these substances, using a "clinical model" framework that ties these principles to the therapeutic use of drugs. A significant amount of time will be spent covering the transduction mechanisms involved in converting the signals into a biological response, the gaps in a therapeutic approach, and new technologies that are improving the study and application of neurochemistry in modern neuroscience. Prerequisites: a C- in NSCI 203

NSCI 340 Computational Neuroscience (0 or 4 credits)
The brain is a complex, dynamical system consisting of billions of neurons. Computational models are essential for understanding how brain functions arise through neuronal interactions. This course covers current computational approaches of studying neural codes, network dynamics, and learning. In the process, we will learn how to characterize the coding and decoding in nervous systems, how the visual and auditory systems work, how to model individual neurons and network of dynamics, how neural integrators function, and how learning occurs through synaptic plasticity, self-organization, and reinforcement learning. The goal is to understand how cognitive growth and human-level cognition emerge from interactions of neuronal networks. Prerequisites: a C- in NSCI 203

NSCI 350 Neurobio of Social Behavior (0 or 4 credits)
In this course, we will examine the neural and hormonal correlates of social behavior including vocal communication, aggressive behavior, reproductive behavior, pair bonding, parental behavior, and human sociality. We will consider how hormones influence the development and activation of behavior and, in turn, how behavior influences neural and endocrine physiology. A comparative approach will be emphasized to facilitate understanding the adaptive function of molecular and physiological mechanisms of behavior as well as the translational nature of behavioral neuroendocrinology research. In the laboratory component of the course, students will design and implement an experiment investigating the neuroendocrine regulation of social behavior in a non-human animal model. Prerequisites: a C- in NSCI 203

NSCI 370 Neuroscience of Meditation (0 or 4 credits)
How do contemplative practices, such as meditation or yoga, change the brain, mind and body? The class examines the scientific evidence for the neurobiological effects of contemplation and how these relate to changes in emotion, cognition and

behavior. In this online lecture and lab course, we will complete scientific and popular readings as well as online modules with discussion boards, videos, guided meditations, animations, and quizzes. Prerequisites: ONE of the following: PSYC 206, 315, 322, 401, 415, NSCI 301, 201, OR instructor permission

NSCI 389 Research (2 OR 4 credits)

NSCI 393 Individual Study (2 TO 4 credits)

NSCI 398 Topics in Neuroscience (0 to 4 credits)
The subject matter of this course will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online.

NSCI 420 Sleep and Circadian Rhythms (0 or 4 credits)
This capstone neuroscience course uses the physiological process of sleep as a lens to evaluate neural connectivity, neurochemical modulation, and sensory integration. This course will emphasize sleep as central to neural development, learning, and health. As part of the laboratory work, students will track their own sleep and circadian rhythms through temperature, behavioral, and hormonal assessment. Prerequisites: Two NSCI classes at the 300 level, one of which must be higher than 303

NSCI 430 Neuroecology (4 credits)
This international field course will focus on the development, structure and function of nervous systems in aquatic and terrestrial animals that populate various habitats. The course will explore a site that contains geomorphological and ecological variety, and which contains diverse terrestrial and aquatic habitats that are home to an array of vertebrate and invertebrate fauna. We will examine sensory, motor and integrative components of nervous system function and organization in the context of the unique environmental niche that each species populates, to learn about how animals orient, navigate, communicate, find food and avoid predation. Typically based at a biological research station, students engage in geological, morphological, physiological, behavioral and ecological research in both field and lab settings, and explore the ways that organisms and their environment are interrelated. Prerequisites: BIOL 209 and one 300-level BIOL or NSCI course with a grade of C- or better and 80 completed credits.

NSCI 450 Integrative Neuroscience (0 or 4 credits)
If we are to understand how behavior is guided by environmental cues, we must first understand how sensory information about the world is represented and processed in brain. In this seminar-style course, we will examine the neural organization of sensory systems, particularly the organization of cortical structures. We will first explore how various organizational strategies are used in different systems to perform specific functions, leading to the focus of our course: how information from different sensory modalities is integrated in higher-order cortical areas, and how this integration ultimately influences behavior. Prerequisite: Two NSCI classes at the 300 level, one of which must be higher than 303 and 80 completed credits

NSCI 460 Aggression (0 or 4 credits)
This capstone neuroscience course uses an interdisciplinary lens to examine the neurobiological, hormonal, developmental, societal, and evolutionary causes of human behavior at its worst (aggression) and it best (altruism). This course emphasizes translational neuroscience research and stresses skills in science communication. As part of laboratory work, students use a non-human animal model to study the neuroendocrine regulation of aggressive behavior. Prerequisites: NSCI 302, 303, or 350 and senior standing (or permission from the instructor).

NSCI 476 Experiential Learning (1 to 4 credits)

NSCI 478 Experiential Learning (0 credit)

NSCI 490 Topics (0 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy On-line

NSCI 491 Research (2 OR 4 credits)

NSCI 495 Individual Study (2 OR 4 credits)

Peace Engineering

Interdisciplinary Minor – See Engineering

Philosophy

Program Overview

College of Arts and Sciences, Department of Philosophy

John Roach Center for the Liberal Arts (JRC) 241, (651) 962-5350

Stoltz (chair), Clemenson, Distelzweig, Feeney, Frost, Giebel, Grant, Kronen, Laumakis, Lu, Menssen, Pawl, Rota, Spencer, Stuchlik, Toner, Winter

Department Web Site:
https://cas.stthomas.edu/departments/areas-of-study/philosophy/index.html

Philosophy engages questions such as:

- Is the human mind just a very complicated machine?
- Can we have free will if the mind is a machine?
- Must we have free will in order for life to be meaningful?
- What makes an act moral or immoral?
- When, if ever, can a government mandate moral acts or outlaw immoral acts?
- Is it ever permissible to start a war with a preemptive strike?
- Is the design in the world evidence that there is a God?
- Do the world's evils show that a good God cannot exist?
- What is the role of philosophy in dealing with questions about God?
- What is knowledge?
- Can we know anything with certainty?
- Are warrants for knowledge relative to particular cultures?

Philosophy considers these questions, and countless others, from the standpoint of human reason and experience. It emphasizes precise and careful argument, and sharpens your thinking skills.

The philosophy program at St. Thomas will introduce you to distinguished philosophical work over the centuries and into our own time. While attending carefully to philosophers whose works are foundational to the Catholic intellectual tradition, particularly Aristotle and Aquinas, the program is committed to broad integration of our understanding of reality. As you work to construct a philosophical worldview you will engage a variety of traditions, including non-Western, and confront questions prompted by the study of such subjects as the natural and social sciences, mathematics, medicine, business, law, theology, the fine arts, and literature.

Major in Philosophy

- PHIL 110 The Person and the Good (or PHIL 115 or PHIL 197) (4 credits)
- PHIL 220 Logic (4 credits)
- PHIL 350 Ethics (4 credits)

Plus eight credits in the history of philosophy

Four credits in classical Western philosophy

- PHIL 302 Ancient Philosophy (4 credits)
- PHIL 303 Medieval Philosophy (4 credits)
- PHIL 340 Thought of Thomas Aquinas (4 credits)
- or another course approved by the department

Four credits in an elective in the history of philosophy

- PHIL 210 Chinese Philosophy (4 credits)
- PHIL 302 Ancient Philosophy (4 credits)
- PHIL 303 Medieval Philosophy (4 credits)
- PHIL 304 Modern Philosophy (4 credits)
- PHIL 306 Contemporary Philosophy (4 credits)
- PHIL 308 Indian Philosophy (4 credits)
- PHIL 340 Thought of Thomas Aquinas (4 credits)
- PHIL 353 Machiavelli, Hobbes, and Nietzsche (4 credits)
- or another course approved by the department

Plus:

- Sixteen credits at the 300-level or above, including four credits at the 400-level (all 400-level courses require public presentation of a paper)

Plus:

- Additional coursework in Philosophy to bring the total number of credits in philosophy either to forty-four (for single majors) or thirty-six (for double or triple majors).

Philosophy majors who are single majors must complete twenty-eight of their credits in philosophy at St. Thomas's St. Paul campus; philosophy majors who are double majors must complete twenty-four of their credits in philosophy at St. Thomas's St. Paul campus.

Minors in Philosophy

Philosophy

All minors take:

- PHIL 110 (or PHIL 197) The Person and the Good (4 credits),
  or PHIL 115 Philosophy of the Human Person (4 credits)

Plus:

- Twelve additional credits in philosophy. It is recommended that minors take PHIL 220 Logic (4 credits)

Philosophy minors must complete 12 of their credits in philosophy at St. Thomas, unless they receive a waiver from the department chair; at least eight credits must be at the 2xx-level or above.

A student may have more than one philosophy minor provided there is no more than an eight-credit overlap, but may not minor in philosophy while also majoring in philosophy.

Global Philosophy

Expand your perspective with the department's experts in Buddhist, Chinese, Indian, and Tibetan philosophy. Benefit from the insights these traditions provide and be prepared to navigate a globalized world.

All minors take:

- PHIL 110 The Person and the Good (4 credits)

Plus 12 credits from the following:

- PHIL 210 Chinese Philosophy (4 credits)
- PHIL 211 Buddhist Philosophy (4 credits)
- PHIL 213 Comparative Applied Ethics East and West (4 credits)
- PHIL 220 Logic or PHIL 221 Critical Thinking & Inductive Reasoning (4 credits)
- PHIL 260 Global Philosophy of Religion (4 credits)
- PHIL 308 Indian Philosophy (4 credits)
- Another course approved by the department.

*A student may have more than one philosophy minor provided there is no more than an eight-credit overlap, but may not minor in philosophy while also majoring in philosophy.

Philosophy minors must complete twelve of their credits in philosophy at St. Thomas, unless they receive a waiver from the department chair; at least eight credits must be at the 2xx-level or above.

Philosophy, Ethics, and Society

Explore the foundations of morality and the application of moral and ethical principles to complex challenges facing the world today. The track will prepare you to work for the common good both professionally and personally.

- PHIL 110 The Person and the Good (4 credits)
- PHIL 350 Ethics (4 credits)

Plus 8 credits from the following:

- PHIL 213 Comparative Applied Ethics East and West (4 credits)
- PHIL 220 Logic or PHIL 221 Critical Thinking & Inductive Reasoning (4 credits)
- PHIL 234 Love, Sex, and Friendship (4 credits)
- PHIL 235 Politics, Law, and the Common Good (4 credits)
- PHIL 254 Biomedical Ethics (4 credits)
- PHIL 255 Technology and Ethics (4 credits)
- PHIL 256 Contemporary Social Issues (4 credits)
- PHIL 258 Environmental Ethics (4 credits)
- Another course approved by the department.

*A student may have more than one philosophy minor provided there is no more than an eight-credit overlap, but may not minor in philosophy while also majoring in philosophy.

Philosophy of Law and Politics

Develop philosophical tools and perspectives to think critically, creatively and constructively about the foundations of political, legal and policy questions. This track can enhance and complement degrees in Business, Economics, History, Sociology, Political Science, and help prepare you for careers engaging law, policy and politics.

All minors take:

- PHIL 110 The Person and the Good (4 credits)

Plus one of the following:

- PHIL 235: Politics, Law, and the Common Good (4 credits), or
- PHIL 357 Political Philosophy (4 credits), or
- PHIL 359 Philosophy of Law (4 credits)

Plus eight credits from the following:

- PHIL 220 Logic or PHIL 221 Critical Thinking & Inductive Reasoning (4 credits)
- PHIL 231 Philosophies of Social Justice (4 credits)
- PHIL 235 Politics, Law, and the Common Good (4 credits)
- PHIL 256 Contemporary Social Issues (4 credits)

- PHIL 357 Political Philosophy (4 credits)
- PHIL 359 Philosophy of Law (4 credits)
- Another course approved by the department.

*A student may have more than one philosophy minor provided there is no more than an eight-credit overlap, but may not minor in philosophy while also majoring in philosophy.

Philosophy minors must complete 12 of their credits in philosophy at St. Thomas, unless they receive a waiver from the department chair; at least eight credits must be at the 2xx-level or above.

Logic & Analytical Reasoning

Director: Dr. Jonathan Stoltz (PHIL)

The interdisciplinary minor in Logic & Analytical Reasoning explores fundamental principles and techniques of inferential reasoning, thereby providing students with the tools needed to distinguish reasoning well from reasoning poorly. Students completing the minor will learn how formal systems (and formal languages) can be harnessed for the benefit of improved reasoning, problem solving, and information processing. Courses in the minor do not merely employ logic and reasoning in order to examine other topics; rather, these courses have principles and systems of reasoning as their primary subject matter. The interdisciplinary character of the minor helps students draw connections between (i) the theorizing about inferential reasoning that regularly happens in fields like philosophy and mathematics and (ii) the applications of inferential reasoning found in the natural and social sciences.

Required Courses (8 credits)

- PHIL 220: Logic (4 credits)
- PHIL 221: Critical Thinking and Inductive Reasoning (4 credits)

or, with approval of program director, one other 4-credit course from the list below

Electives (at least 8 credits)

At least eight credits drawn from the list of courses below, with at least four credits from the starred (*) courses: CISC 131 (or CISC 130), DASC 120 (or DASC 111 and 112) and SOCI 220

- *CISC 131 (or CISC 130): Introduction to Programming and Problem Solving (4 credits)
- *SOCI 220: Sociological Analysis (4 Credits)
- *DASC 120 (or DASC 111 and 112): Introduction to Computational Statistics (4 credits)
- CISC 230: Object-Oriented Design and Programming (4 credits)
- DASC 210: Biostatistics (4 credits)
- DASC 240: Applied Regression Analysis (4 credits)
- ECON 315: Introduction to Econometrics (4 credits)
- ECON 355: Game Theory (4 credits)
- ECON 418: Mathematical Economics (4 credits)
- MATH 128: Introduction to Discrete Math (4 credits)
- MATH 201: Bridge to Mathematical Proof (4 credits)
- POLS 240: Research Methods in Political Science (4 credits)
- PSYC 212: Research Methods in Psychology (4 credits)
- SOCI 210: Research Methods in Sociology (4 credits)
- STAT 303: Statistics for the Applied Sciences (4 credits)
- STAT 313: Probability (4 credits)

Philosophy of Mind and Brain

Integrate and contextualize insights from psychology, neuroscience, and even computer science by developing and applying philosophical tools and perspectives to examine the nature of the mind and the relationship between mind and brain.

All minors take:

- PHIL 110 The Person and the Good (4 credits)

Plus one of the following:

- PHIL 265: Minds, Brains, and Computers (4 credits), or
- PHIL 330: Philosophy of Mind (4 credits)

Plus eight credits from the following:

- PHIL 220 Logic (4 credits)
- PHIL 221 Critical Thinking & Inductive Reasoning (4 credits)
- PHIL 265: Minds, Brains, and Computers (4 credits)
- PHIL 304: Modern Philosophy (4 credits)
- PHIL 330: Philosophy of Mind (4 credits)
- PHIL 385: Philosophy of Science (4 credits)
- Another course approved by the department.

*A student may have more than one philosophy minor provided there is no more than an eight-credit overlap, but may not minor in philosophy while also majoring in philosophy.

Philosophy minors must complete 12 of their credits in philosophy at St. Thomas, unless they receive a waiver from the department chair; at least eight credits must be at the 2xx-level or above.

Philosophy of Religion

Develop and apply philosophical perspectives and tools to address questions concerning the existence and nature of God, the compatibility of faith and reason, and the nature and meaning of religious belief and experience. An ideal track to complement study in Theology or Catholic Studies, for those interested in apologetics, or for anyone who wants to think philosophically about the nature of religion and its place in the world.

All minors take:

- PHIL 110 The Person and the Good (4 credits)

Plus 12 credits from the following:

- PHIL 220 Logic or PHIL 221 Critical Thinking & Inductive Reasoning (4 credits)
- PHIL 240 Faith and Doubt (4 credits)
- PHIL 250 Christian Mysteries from a Philosophical Viewpoint (4 credits)
- PHIL 260 Global Philosophy of Religion (4 credits)
- PHIL 272 Evolution and Creation (4 credits)
- PHIL 303 Medieval Philosophy (4 credits)
- PHIL 340 Thought of Aquinas (4 credits)
- PHIL 365 Natural Philosophy and Metaphysics (4 credits)
- PHIL 460 Philosophy of God (4 credits)
- Another course approved by the department.

*A student may have more than one philosophy minor provided there is no more than an eight-credit overlap, but may not minor in philosophy while also majoring in philosophy.

Philosophy minors must complete 12 of their credits in philosophy at St. Thomas, unless they receive a waiver from the department chair; at least eight credits must be at the 2xx-level or above.

Philosophy and Science

Develop philosophical tools with which to examine fundamental questions about the nature of scientific methods and findings. This track is designed for students in STEM and related fields and for those concerned to deepen and sharpen their philosophical perspective on the sciences and their place in society.

All minors take:

- PHIL 110 The Person and the Good (4 credits)

Plus:

- PHIL 385 Philosophy of Science (4 credits)

Plus eight credits from the following:

- PHIL 220 Logic (4 credits)
- PHIL 221 Critical Thinking & Inductive Reasoning (4 credits)
- PHIL 254 Biomedical Ethics (4 credits)
- PHIL 255 Technology and Ethics (4 credits)
- PHIL 265 Minds, Brains, and Computers (4 credits)
- PHIL 272 Evolution and Creation (4 credits)
- PHIL 342 History and Philosophy of Medicine (4 credits)
- PHIL 380 Epistemology (4 credits)
- Another course approved by the department

*A student may have more than one philosophy minor provided there is no more than an eight-credit overlap, but may not minor in philosophy while also majoring in philosophy.

Philosophy minors must complete twelve of their credits in philosophy at St. Thomas, unless they receive a waiver from the department chair; at least eight credits must be at the 2xx-level or above.

Philosophy Undergraduate Courses

PHIL 110 The Person and the Good (4 credits)
Using philosophical methodology, and with substantial attention to Catholic intellectual tradition, this course enquires into the foundations of ethics, including how our conception of the human person affects our understanding of the moral life. It considers also the question of the rationality of belief in God and the difference (if any) God makes to our understanding of the person and the good. In addressing these topics, the course develops and applies basic logic skills, introduced as an essential part of philosophical method and an indispensable tool of critical thinking.

PHIL 115 Philosophy of Human Person (0 TO 4 credits)

An examination of fundamental conceptions of the human person in ancient, medieval and modern philosophy. Possible topics include: the existence and immortality of the human soul, free will and determinism, the immateriality of the intellect, the relationship between mind and body, and the relevance of different conceptions of the human person for ethics and religion. Attention is given to relevant issues of human diversity. The development of logical and critical thinking receives special attention.

PHIL 197 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHIL 210 Chinese Philosophy (4 credits)
An examination of the primary texts and problems that form the basis of Confucianism, Daoism, or Chinese Buddhism. Metaphysical and ethical themes will be considered. Prerequisite: PHIL 110 or PHIL 115.

PHIL 211 Buddhist Philosophy (4 credits)
An examination of the history, primary texts, and philosophical problems that form the basis of Buddhist philosophy in India, China, Japan, and the West. Metaphysical, epistemological, and ethical themes will be considered. Prerequisites: PHIL 110 or PHIL 115

PHIL 213 Applied Ethics: East and West (4 credits)
A comparison of Eastern and Western moral theories with an emphasis on their application to contemporary moral issues. Eastern theories may include Confucian, Hindu, Buddhist, or Taoist accounts of ethics. Western theories will include significant attention to accounts important to Catholic intellectual tradition. Contemporary moral issues to be considered will vary from semester to semester, but may include …sexual morality, abortion, suicide and euthanasia, family morality, race, sex, gender, war, capital punishment, technology, media ethics, business ethics, environmental ethics, and questions about Hawaiian sovereignty. Prerequisite: PHIL 110 or PHIL 115.

PHIL 214 Introductory Ethics (4 credits)
An inquiry into the rational foundations and methods of ethics, with attention to the application of ethical principles to areas of personal conduct, institutional behavior and public policy, and diversity within and across cultures. Prerequisite: PHIL 110 or 115. NOTE: Students who receive credit for PHIL 214 may not receive credit for PHIL 215.

PHIL 218 Philosophy of Sport (4 credits)
An in-depth philosophical examination of conceptual, moral, cultural, and legal issues surrounding regulating, watching, and participating in sports. Possible topics include: the definition of sport; the nature of competition; sportsmanship; being a fan; performance-enhancing drugs; gender; race; and the relationships among athletics, moral education, the law, and social responsibility in high school, collegiate, and professional sports. The course integrates various disciplinary perspectives on the nature and practice of sport, and special attention is given to reflection on these topics from within Catholic intellectual tradition. Students cannot receive credit for both PHIL 218 and the less in-depth 2-credit version of the course, PHIL 219. Prerequisites: PHIL 110 or PHIL 115

PHIL 219 Philosophy of Sport (2 credits)
A philosophical survey of conceptual, moral, cultural, and legal issues surrounding regulating, watching, and participating in sports. Possible topics include: the definition of sport; the nature of competition; sportsmanship; being a fan; performance-enhancing drugs; gender; race; and the relationships among athletics, moral education, the law, and social responsibility in high school, collegiate, and professional sports. The course will integrate various disciplinary perspectives on the nature and practice of sport, especially perspectives from philosophical ethics, law, and sociology. Students cannot receive credit for both PHIL 219 and the more in-depth 4-credit version of the course, PHIL 218. Prerequisites: PHIL 110 or PHIL 115

PHIL 220 Logic (4 credits)
This course provides students with skills for identifying, analyzing, and evaluating the sorts of reasoning encountered in natural language. Emphasis will be placed on attaining facility with different formal systems for representing and evaluating arguments - including propositional logic, Aristotelian syllogistic, first-order predicate calculus, - as well as on acquiring the ability to apply these systems in the analysis and evaluation of arguments in ordinary and philosophical discourse. Prerequisite: PHIL 110 or PHIL 115.

PHIL 221 Critical & Inductive Reasoning (4 credits)
Drawing on insights from philosophy as well as research from cognitive science, psychology, and behavioral economics, this course aims to help students learn to reason better. Emphasis is on inductive and probabilistic reasoning rather than on deductive logic (which is the focus in PHIL 220). Possible topics covered include cognitive biases to which humans are naturally subject, intellectual

virtues that promote the attainment of truth, the nature of evidence, the assessment of the quality of an information source, inference to the best explanation, probabilistic reasoning, and decision-making under uncertainty and risk. Prerequisite: PHIL 110

PHIL 230 Disability and Human Dignity (4 credits)
This course is a comprehensive introduction to the most pressing issues and questions concerning disability. Students will encounter and critically evaluate longstanding stereotypes and biases about the disadvantages of disability. This course examines disability primarily from a philosophical perspective, yet readings from other disciplines will also be used throughout the course. Some of the central questions examined in the course include: What is disability? Is disability merely a medical condition? In what ways do societal barriers disable? How does economic class impact access to educational, medical and social resources? Does disability itself make a person worse off or is it only social stigmatization and lack of accommodation that makes the lives of those with disabilities worse? How have those with disabilities been disadvantaged in the US? What is the basis for human dignity? What conceptual frameworks allow us to uphold the dignity of those with severe disabilities? Which behaviors and assumptions threaten the equality and dignity of those with disabilities? Prerequisite: PHIL 110

PHIL 231 Philosophies of Social Justic (4 credits)
Action to achieve social justice depends, ultimately, on an understanding of what social justice is. What makes a society just? How is a just society ordered? What does social justice look like up close? If our society is not currently just, how may we justly make it so? This course considers competing (though sometimes overlapping) accounts of social justice that are of continuing relevance today, such as those found in the traditions of classical liberalism, socialism, Catholicism, and critical theory. One goal is to understand where such accounts agree, where they disagree, and why. Another goal is to appreciate how such traditions have animated and continue to animate the pursuit of justice, especially for marginalized persons in the United States. Prerequisite: PHIL 110

PHIL 234 Love, Sex, & Friendship (4 credits)
This course examines the nature of human love, particularly within marriages and families. Possible topics include: romantic love, sex, dating, and marriage; true friends and friendships of selfish pleasure or advantage; love of family, strangers, and those one doesn't like; the nature of love (is it a feeling? Is it an act of will?); reciprocity, permanence, and fidelity; love within families, especially spousal and parent/child bonds. Attention will be given to reflection on these topics from within both Catholic intellectual tradition and other traditions and perspectives. Prerequisite: PHIL 110 or PHIL 115.

PHIL 235 Politics, Law, and Common Good (4 credits)
A philosophical examination into the origin, nature, purpose, and legitimacy of government and law, especially as these relate to the good of individuals and the common good. Possible questions include: Are human beings by nature political animals? What justifies political and legal authority? What sorts of political regimes can be just and legitimate? Is there a best type of government? Are there universal human rights and, if so, where do they come from? What are the respective roles of legislator, executive, and judge? Can civil disobedience ever be justified? Can violent revolution? Should government and law take stands on questions of morality, religion, and the meaning of life or try to remain neutral in these matters? The course will consider both classical and contemporary reflection on such topics, including from authors within Catholic intellectual tradition in conversation with other traditions and perspectives. Prerequisite: PHIL 110 or PHIL 115.

PHIL 240 Faith and Doubt (4 credits)
This course examines philosophical arguments for and against the existence of God and for the claim that the Christian faith, in particular, has been revealed by God; it also considers how faith, reason, and doubt are related. Possible questions include: Are there any good arguments for God's existence? Does the evil in the world make it unlikely there is a God? Are faith and reason (including the findings of science) compatible? Could it be reasonable to believe in certain foundational Christian claims such as that Jesus is divine, that Jesus founded and gave authority to the church, and that the Bible is the word of God? Does the plurality of religions undermine the particular claims of any one of them? Can one make religious commitments in a state of doubt about the evidence? Prerequisite: PHIL 110 or PHIL 115.

PHIL 243 Individual Study (2 OR 4 credits)

PHIL 245 Philosophy of Art and Beauty (4 credits)
An enquiry into philosophical questions having to do with art, beauty, and other aesthetic qualities. Possible topics include: the nature of beauty, the nature and purpose of art, the role of beauty and art in a well-lived life, the relationship of art to insight and emotion, aesthetic qualities other than beauty, the role of art in the formation of culture and social

consciousness, the role of beauty and other aesthetic qualities in nature, and the connection of art and beauty to God. The course pays special attention to reflection on these issues within Catholic intellectual tradition in dialogue with other traditions and perspectives. Case studies of artworks and other aesthetic objects are considered throughout the course. Prerequisite: PHIL 110 or PHIL 115.

PHIL 250 Christian Mysteries (4 credits)
Philosophers of religion have engaged in extensive analysis and debate regarding the rational coherence of central Christian doctrines. While philosophical critics of the faith have argued that various Christian doctrines are impossible or contradictory, philosophical defenders of the faith have maintained, on the contrary, that such doctrines can withstand rational scrutiny, employing the resources of philosophy to show how. This course will consider some of these discussions, focusing on such doctrines as the Doctrine of Creation; the Incarnation; the Trinity; the Eucharist; the Atonement; Providence, Grace, and Free Will; and the classical divine attributes (e.g. divine simplicity, immutability, and eternity). Prerequisite: PHIL 110 or PHIL 115.

PHIL 252 AI Ethics (4 credits)
This course is a philosophical examination of the ethical challenges posed by artificial intelligence, including among other issues the introduction of bias into AI models. The course explores perspectives on AI ethics, such as consequentialist approaches that emphasize long-term impacts and virtue ethics approaches that emphasize AI's influence on human character and flourishing. Goals include analyzing these ethical frameworks as both arguments and cultural movements, drawing connections to the Catholic intellectual tradition, and applying them to real-world issues. Prerequisites: PHIL 110 or PHIL 115

PHIL 254 Biomedical Ethics (4 credits)
A philosophical investigation into ethical problems related to medicine and biotechnology, particularly those having to do with issues of special contemporary concern. Possible topics include: the right to healthcare and the just distribution of medical resources; professional-patient relationships and confidentiality; experimentation with human subjects; organ donation, genetic engineering; reproductive rights and abortion; cloning and stem cell research; euthanasia and physician assisted suicide; the ethics of triage and medical decision making; the funding of healthcare; the rights (including conscience rights) and responsibilities of medical professionals and patients; the prevention and control of epidemics. The course gives special attention to reflection on these topics from within Catholic intellectual tradition in dialogue with other traditions and perspectives. Prerequisite: PHIL 110 or PHIL 214.

PHIL 255 Technology and Ethics (4 credits)
An application of concepts and principles in philosophical ethics to issues raised by modern technology. Technologies whose ethical use may be considered include: Information Technologies, Robotics and Artificial Intelligence, Synthetic Genomics and Artificial Life, Reproductive Technologies, Biomedical and Therapeutic Technologies, Human Enhancement Technologies, Agricultural Technologies, and Environmental Technologies. Special attention will be paid to the application of moral concepts and principles from Catholic intellectual tradition in dialogue with other traditions and perspectives. Prerequisite: PHIL 110 or PHIL 115.

PHIL 256 Contemporary Social Issues (4 credits)
A philosophical examination of contemporary social issues that have public policy implications, with particular attention to the conceptions of the human person, ethics, and law relevant to our thinking about such issues. Possible issues for consideration include abortion, animal rights, the death penalty, environmental sustainability, health care, just wages, immigration, marriage, racial justice, religious liberty, sex and gender, student debt, and wealth distribution. Typically, sections of the course will focus on 3-6 issues per semester. Students may consult the instructor or department about what issues will be considered prior to registration. Attention will be given to philosophical reflection on the issues from within the Catholic intellectual tradition in conversation with other traditions and perspectives. Prerequisite: PHIL 110 or PHIL 115.

PHIL 258 Environmental Ethics (4 credits)
A consideration of the ethical dimensions of human interaction with the environment, including inquiry into the scope and justification of our obligations concerning the environment. Possible topics include: the question of who all (or what all) count as the proper objects of moral consideration, animal welfare, species preservation, conservation, climate change, environmental racism, population pressure, sustainability, and what it means to say that human beings are charged with the care of Creation. Special attention will be given to reflection on these topics from within Catholic intellectual tradition, in dialogue with other traditions and perspectives. Prerequisite: PHIL 110 or PHIL 115.

PHIL 260 Global Philosophy of Religion (4 credits)
An investigation into Western and non-Western

philosophical arguments concerning the nature and justifying bases of religious belief, with special attention to philosophical implications of religious pluralism. Possible questions include: Are there good arguments for the existence of God, of a higher power, of something Ultimate? If so, what is its nature and relationship to the world? What is the purpose of religious devotion or practice? What is the nature of religious experience? Is there such a thing as religious knowledge? Is religiosity compatible with reason? What is evil, and how does it fit into a religious viewpoint? This course considers philosophical reflection on such questions from within the Christian tradition as well as some other religious traditions, such as Judaism, Islam, Hinduism, and Buddhism. It seeks to foster dialogue among religious philosophies. Prerequisite: PHIL 110 or PHIL 115.

PHIL 265 Minds, Brains, and Computers (4 credits)
A philosophical examination of the mind from both classical and contemporary perspectives. Topics that may be covered include: the relation between the mind and the body/brain, theories of the soul and how it relates to mind and brain, theories of personal identity over time, free will, mental causation, functionalist theories of intelligence, computer/artificial intelligence, and the nature of consciousness. The course considers reflection on these topics from within both Catholic intellectual tradition and other traditions and perspectives, and engages contemporary philosophical work informed by brain and computer science. Prerequisite: PHIL 110 or PHIL 115.

PHIL 269 Research (2 OR 4 credits)

PHIL 272 Evolution and Creation (4 credits)
A philosophical examination of the relation between the doctrine of creation and theories in the evolutionary sciences. The course aims to help integrate insights from science, religion, and philosophy in a constructive and responsible manner. It also introduces students to broader issues in philosophy of science, philosophy of nature, and philosophy of religion as they apply to evolution and creation. Prerequisite: PHIL 110 or PHIL 115.

PHIL 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHIL 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHIL 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHIL 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHIL 300 Philosophical Discussions (2 credits)
A 2-credit discussion-based course taking up a variety of philosophical questions over the semester designed to connect and integrate different branches of human knowledge within and beyond the discipline of philosophy. The course satisfies the core curriculum Signature Work requirement in line with the university's mission. Assignments include producing an e-portfolio in which students will reflect on three pieces of work, including one from outside the student's major. Students are encouraged to connect themes from their e-portfolio to topics discussed in the course. Students of all majors welcome. Prerequisites: PHIL 110 or 115, one additional philosophy course and 80 credits completed.

PHIL 301 Signature Work in Philosophy (4 credits)
PHIL 301 is a signature work course in philosophy, open to all students. Topics vary from section to section, but all sections focus on issues relevant to our university's mission. Various sections will, therefore, focus on questions concerning such things as the nature and dignity of human beings, what makes for a meaningful human life, the compatibility of faith and reason, what makes for a just society, or the application of ethical principles, to a variety of settings and professions, for the sake of the common good. The course provides students the opportunity to reflect on and integrate knowledge acquired throughout their academic career, and to approach problems through multiple disciplinary lenses. Prerequisites: PHIL 110 and at least 80 credits completed by the start of the course.

PHIL 302 Ancient Philosophy (4 credits)
A survey of the roots of philosophical inquiry in the classical period. The pre-Socratics, Plato, and Aristotle. Prerequisite: PHIL 110 or PHIL 115.

PHIL 303 Medieval Philosophy (4 credits)
An investigation of major philosophical problems in their medieval context. Possible topics include: faith and reason, free will, the role of authority, and the

existence of God. Prerequisite: PHIL 110 or PHIL 115.

PHIL 304 Modern Philosophy (4 credits)
An examination of major philosophers of the early modern period from Rene Descartes to Immanuel Kant, with emphasis on methodology and claims to knowledge. Prerequisite: PHIL 110 or PHIL 115, and one other PHIL course.

PHIL 306 Contemporary Philosophy (4 credits)
An investigation of major philosophical problems from the late nineteenth century to the present, with a focus on prominent philosophers, including thinkers from both the analytic and continental traditions. Prerequisite: PHIL 220

PHIL 308 Indian Philosophy (4 credits)
An examination of foundational philosophical problems discussed in classical Indian schools of thought. Metaphysical, epistemological, and ethical themes will be considered. Though the primary aim of this course is to study Indian philosophy in its own terms, a secondary aim is to examine some ways in which Western thinkers have viewed Indian philosophy through lenses that have distorted its nature and value. Prerequisite: PHIL 110 or PHIL 115, and one other PHIL course.

PHIL 320 Aristotelian Logic (4 credits)
A study of Aristotle's Organon, covering such topics as the categories, the nature of propositions, and forms of argument. Emphasis on demonstration (proof of necessary truths) and its distinction from dialectical reasoning. Applications to philosophical texts. Prerequisite: PHIL 220

PHIL 325 Intermediate Symbolic Logic (4 credits)
A study of developments in twentieth-century symbolic logic. Possible topics include axiomatic systems, set theory, extensions of predicate logic (such as predicate logic with identity, quantified modal logic, relevance logic, deviant logics), and metatheorems (such as soundness and completeness theorems). Prerequisite: PHIL 220

PHIL 330 Philosophy of Mind (4 credits)
A study of central issues in the philosophy of mind and soul. Possible topics include the relation between mind and body; the senses, emotions, intellect and will; personal identity. Attention will be given to both the Aristotelian/Thomistic tradition and contemporary philosophy. Prerequisite: PHIL 110 or PHIL 115, and one other PHIL course.

PHIL 335 Aesthetics (4 credits)
This course addresses philosophical questions that arise in connection with art and aesthetic experience. Possible topics include: the nature of beauty, artistic representation, aesthetic properties, and the relationship between art and insight, between art and emotion, between art and morality, and between art and religious experience. Prerequisite: Two philosophy courses.

PHIL 340 Thought of Thomas Aquinas (4 credits)
An examination of some major topics in the philosophy of Thomas Aquinas. Possible topics include: Aquinas's conception of philosophy and its relation to faith; God; and the destiny of the human being. Prerequisite: PHIL 110 or PHIL 115, and one other PHIL course.

PHIL 342 Hist. & Philosophy of Medicine (4 credits)
This course presents an integrated, interdisciplinary examination of philosophical developments in the history of medical science and health care. Students will develop a critical and creative perspective on medicine and health care through philosophical exploration of their history, foundations, and purposes. Students will study important episodes and developments in the history of the theory and practice of medicine and explore philosophical analyses of and arguments about the nature of medical knowledge, health, disease and health care. Prerequisite: PHIL 110 or PHIL 115.

PHIL 350 Ethics (4 credits)
An inquiry into the foundations and methods of moral philosophy. The course focuses on such questions as: Is moral knowledge possible? What is the good life for human beings? Are there objective moral truths? What makes an action right or wrong? Are some types of action always wrong? How does one become a good person? How does morality relate to God? What is morality's relation to happiness? Special attention will be given to the Aristotelian-Thomistic tradition in conversation with other approaches such as Kantianism, Consequentialism, and Relativism. Prerequisite: PHIL 110.

PHIL 353 Machiavelli,Hobbes,Nietzsch (4 credits)
An examination of three central figures in the history of political theory, and the challenge each presents to the moral evaluation of the use of political power. Prerequisite: PHIL 214, or PHIL 110 and one other PHIL course.

PHIL 354 Biomedical Ethics (4 credits)
An investigation of ethical problems in medicine and biological technology. Possible topics include: genetic engineering, experimentation with human subjects, the right to health care, and the concept of mental illness. Prerequisite: PHIL 214 or 215

PHIL 356 Contemporary Social Issues (4 credits)
An investigation into conceptions of the human

person, ethics, and the law related to current issues with public policy implication. Issues chosen at the discretion of the instructor. Prerequisite: PHIL 214 or 215

PHIL 357 Political Philosophy (4 credits)
A study of the nature and justification of political authority. Possible topics include natural rights, liberty and equality, the common good and its relation to the individual good, the place of liberty and equality, and the common good in justifying state action. Attention is given to both classical and contemporary authors. Prerequisite: PHIL 214, or PHIL 110 and one other PHIL course.

PHIL 359 Philosophy of Law (4 credits)
A study of philosophical problems connected with human law and legal institutions. Possible topics include the nature and kinds of law, the relation of law and morality, analysis of legal concepts, the nature and justification of punishment, and the principles of legal interpretation and reasoning. Attention will be given to both classical and contemporary authors. Prerequisite: PHIL 214, or PHIL 110 and one other PHIL course.

PHIL 365 Natural Phil & Metaphysics (4 credits)
This course examines central topics in the philosophy of nature and in metaphysics. Possible topics include substance and accident, change and the conditions of substantial generation, matter and form, causality, necessity and possibility, time and persistence through time, universals and particulars, essence and existence, and the transcendentals (unity, truth, goodness, beauty). Attention will be paid both to classical and to contemporary authors. Prerequisite: PHIL 220.

PHIL 380 Epistemology (4 credits)
This course considers various accounts of the nature, origin, and limits of human knowledge. Attention will be paid to the main figures in the Western tradition as well as to contemporary authors. Prerequisite: PHIL 220

PHIL 385 Philosophy of Science (4 credits)
Possible topics include the natures of scientific methods, explanation, and theory; the presuppositions of science; how to understand scientific progress and development; whether some sciences are reducible to others; the limits of science; the relationship of science to philosophy, mathematics, religion, and other disciplines; and the difference between science and pseudoscience. Prerequisites: PHIL 110, and one other PHIL course. The second PHIL course prerequisite may be waived by the instructor for science and math majors or minors.

PHIL 389 Research (2 OR 4 credits)

PHIL 393 Individual Study (2 OR 4 credits)

PHIL 398 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHIL 460 Philosophy of God (4 credits)
Systematic treatment of philosophical arguments concerning the existence and attributes of God. Prerequisite: PHIL 365.

PHIL 476 Experiential Learning (2 to 4 credits)

PHIL 485 Seminar (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses and prerequisite requirements are available in the Searchable Class Schedule on Murphy Online, View Searchable Class Schedule

PHIL 486 Seminar (4 credits)

PHIL 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHIL 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHIL 495 Individual Study (2 OR 4 credits)

Physics

Program Overview

College of Arts and Sciences, Department of Physics

Owens Science Hall (OWS) 153, (651) 962-5213

Lopez del Puerto (chair), Green, Jalkio, Johnston, Ohmann, Ruch, Wood; Davies, Nellermoe, Schuler, Thomas

Department Web Site:
https://cas.stthomas.edu/departments/areas-of-study/physics/index.html

Physics majors learn the fundamental laws that govern the physical universe, from the smallest subatomic particle to the largest galaxies to the very structure of space and time. Emphasis is placed on

general understanding, problem solving, and the communication skills essential for success in a career grounded in science. In the laboratory, students use state-of-the-art instrumentation in applying physics to a wide variety of systems. Opportunities are available for students to participate in research projects during the school year and over the summer.

There are three educational options from which to choose: a Bachelor of Science (B.S.) degree; a Bachelor of Arts (B.A.) degree; or a minor in physics. The B.S. degree provides the necessary background for students interested in graduate school, engineering or industrial work; the Bachelor of Arts degree gives a solid background in physics with the flexibility to meet other needs, including preparation for professional programs such as medicine or patent law, or for students double majoring in areas such as mathematics or electrical engineering.

For students interested in teacher licensure, see the various combinations of science education in the School of Education Department of Teacher Education in this catalog.

Transfer students can transfer a maximum of 16 credits in physics towards the physics degree and 12 credits towards the minor. Physics courses taken at other colleges by students already matriculated at St. Thomas may be credited toward the requirements of the major only with prior and explicit written approval of the department chair.

The department offers courses for non-majors to fulfill the laboratory science component of the core curriculum.

Graduation with Honors in Physics

Students graduating with a B.A. or B.S. degree in physics may also qualify for departmental honors. Students interested in this designation must consult with the department chair one year or more before graduation. All requirements must be met one month before graduation.

1. Complete four credits in 400-level physics research or the equivalent research experience
2. Prepare a written thesis in the format of primary literature
3. Defend the thesis before a panel composed of:
    - Thesis director (chair of committee)
    - Two additional St. Thomas physics faculty
    - One St. Thomas faculty member outside of physics
4. Achieve a final cumulative grade point average in physics department courses of 3.50 and overall GPA of 3.50
5. Present their research at a scientific meeting beyond the St. Thomas community

Pre-Engineering

See Pre-Professional Programs: https://www.stthomas.edu/catalog/curricula/pre-professional-programs/index.html

Teacher Licensure

- Elementary Education with a Co-major in Science and Mathematics for Elementary Education
- Elementary Education with a Specialty in Science (5-8)
- Co-major in Science (5-8) – Physics (9-12) and a Co-major in Secondary Education

See Education

Majors in Physics

Major in Physics (B.S.)

76 credits

- PHYS 211 Introduction to Classical Physics I (4 credits)
- PHYS 212 Introduction to Classical Physics II (4 credits)
- PHYS 215 Foundations of Modern Physics (4 credits)
- PHYS 225 Applications of Modern Physics (4 credits)
- PHYS 331 Theoretical Mechanics (4 credits)
- PHYS 341 Electricity and Magnetism (4 credits)
- PHYS 347 Optics (4 credits)
- PHYS 354 Astrophysics (4 credits)
- PHYS 410 Statistical Mechanics and Thermodynamics (4 credits)
- PHYS 431 Quantum Mechanics (4 credits)

Plus 8 credits from the following:

- PHYS 323 Methods of Experimental Physics (4 credits)
- PHYS 325 Methods of Computational Physics (4 credits)
- ENGR 481 Engineering Design Clinic II (4 credits)

Plus:

- Four additional Physics elective credits

Allied Requirements:

- MATH 113 Calculus I (4 credits)
- MATH 114 Calculus II (4 credits)

- MATH 200 Multi-Variable Calculus (4 credits)
- MATH 210 Introduction to Differential Equations and Systems (4 credits)
- MATH 240 Linear Algebra (4 credits)
- CISC 130 Introduction to Programming and Problem Solving in the Sciences
  OR CISC 131 Introduction to Programming and Problem Solving (4 credits)

Physics Elective Courses:

- PHYS 104 Astronomy (4 credits)
- Any PHYS course numbered 150 or above.

Allied Elective Courses:

- CHEM 320 Instrumental Analysis (4 credits)
- CHEM 331 Chemical Thermodynamics (4 credits)
- CHEM 332 Quantum Chemistry (4 credits)
- Computer Science courses at or above CISC 230
- Engineering courses at or above ENGR 200
- Mathematics courses at or above MATH 300
- Statistics courses at or above STAT 303

Note: Depending on a student's interest and career goals, substitutions may be made for other advanced courses in Engineering, Mathematics, or Chemistry, for certain listed courses, in consultation with the physics department chair.

Major in Physics (B.A.)

56 credits

- PHYS 211 Introduction to Classical Physics I (4 credits)
- PHYS 212 Introduction to Classical Physics II (4 credits)
- PHYS 215 Foundations of Modern Physics (4 credits)
- PHYS 225 Applications of Modern Physics (4 credits)

Plus four credits from the following:

- PHYS 323 Methods of Experimental Physics (4 credits)
- PHYS 325 Methods of Computational Physics (4 credits)
- ENGR 481 Engineering Design Clinic II (4 credits)

Plus:

- Eight additional Physics elective credits

Plus:

- Eight additional Physics or Allied elective credits

Allied Requirements:

- MATH 113 Calculus I (4 credits)
- MATH 114 Calculus II (4 credits)
- MATH 200 Multi-variable Calculus (4 credits)
- MATH 210 Introduction to Differential Equations and Systems (4 credits)
- CISC 130 Introduction to Programming and Problem Solving in the Sciences
  OR CISC 131 Introduction to Programming and Problem Solving (4 credits)

Physics Electives Courses:

- Any PHYS course numbered 150 or above.

Allied Electives Courses:

- CHEM 320 Instrumental Analysis (4 credits)
- CHEM 331 Chemical Thermodynamics (4 credits)
- CHEM 332 Quantum Chemistry (4 credits)
- MATH 240 Linear Algebra (4 credits)
- Computer Science courses at or above CISC 230
- Engineering courses at or above ENGR 200
- Mathematics courses at or above MATH 300
- Statistics courses at or above STAT 303

Note: Depending on a student's interest and career goals, substitutions may be made for other advanced courses in Engineering, Mathematics, or Chemistry, for certain listed courses, in consultation with the physics department chair.

Additional Physics and Allied Electives Courses for Education Co-Majors:

- Either PHYS 104 Astronomy (4 credits) or PHYS 105 Musical Acoustics (4 credits)
- Biology courses at or above BIOL 207.
- Chemistry courses at or above CHEM 109.
- Engineering courses at or above ENGR 100.
- Geology courses at or above GEOL 111.

Minor in Physics

20 credits

- PHYS 211 Introduction to Classical Physics I (4 credits)
- PHYS 212 Introduction to Classical Physics II (4 credits)

Plus:

- Eight additional Physics elective credits

Plus:

- Four additional Physics or Allied elective credits

Physics Elective Courses:

- Either PHYS 104 Astronomy or PHYS 105 Musical Acoustics (4 credits)

- Any PHYS course numbered 150 or above.

Allied Elective Courses:

- CHEM 320 Instrumental Analysis (4 credits)
- CHEM 331 Chemical Thermodynamics (4 credits)
- CHEM 332 Quantum Chemistry (4 credits)
- MATH 240 Linear Algebra (4 credits)
- Computer and Information Science courses at or above CISC 230
- Engineering courses at or above ENGR 200
- Mathematics courses at or above MATH 300
- Statistics courses at or above STAT 303

Note: Depending on a student's interest and career goals, substitutions may be made for other advanced courses in Engineering, Mathematics, or Chemistry, for certain listed courses, in consultation with the physics department chair.

Physics Undergraduate Courses

PHYS 101 Physics for Liberal Arts I (4 credits)
Intended for non-science majors; treats fundamental principles of physics and their application to familiar phenomena, stressing qualitative understanding. The course will survey topics from mechanics, fluids, temperature and heat, oscillations, waves and sound, light and optics, and properties of matter. The course consists of lecture, discussion and laboratory. This course is designed especially for elementary education majors. It is not intended for students who have had high school physics. Prerequisite: Three years of high school mathematics NOTE: Students who receive credit for PHYS 101 may not receive credit for PHYS 109 or 211.

PHYS 104 Astronomy (0 to 4 credits)
Introduction to physical principles and their application to astronomy for non-science majors. Emphasis is on comprehension of ideas and principles. Topics include the motions of the sun, moon, stars and planets; properties of the solar system; the stars including giants, dwarfs, pulsars and black holes; nebulae, galaxies and quasars; cosmology and life. The course consists of lecture, discussion and laboratory.Prerequisite: MATH placement at or above 099, concurrent enrollment in either MATH 100 or MATH 101, or a grade of C- or better in MATH 007 or above.

PHYS 105 Musical Acoustics (0 or 4 credits)
An introductory course intended for non-science majors; treats fundamental principles of physics and acoustics as they relate to musical sounds and musical instruments. The course consists of lecture, discussion and laboratory. Prerequisites: High school algebra and a music background (one year practice, instrument or voice, or one course)

PHYS 109 Physics for Life Sciences I (0 or 4 credits)
This algebra-based course and its continuation PHYS 110 serve as a two-semester introduction to classical and modern physics. Applications are chosen that focus on the life sciences. Topics include principles of classical mechanics: description of motion, force, torque and rotational motion, energy, momentum and their conservation, fluid mechanics; thermodynamics. The course meets three times a week for two consecutive periods consisting of integrated lecture, discussion and laboratory. Prerequisite: Math placement at a level of MATH 111 or above. NOTE: Students who receive credit for PHYS 109 may not receive credit for PHYS 211.

PHYS 110 Physics for Life Sciences II (0 or 4 credits)
This algebra-based course is a continuation of PHYS 109. Topics include oscillations, waves and sound, electricity and magnetism; light and optics; atomic, quantum and nuclear physics. The course meets three times a week for two consecutive periods consisting of integrated lecture, discussion and laboratory. Prerequisite: A minimum grade of C- in PHYS 109, 111, or 211. NOTE: Students who receive credit for PHYS 110 may not receive credit for PHYS 212.

PHYS 211 Classical Physics I (0 to 4 credits)
This calculus-based course and its continuation PHYS 212 serve as a two-semester introduction to classical physics. Applications are chosen that focus on engineering and the physical sciences. Topics include principles of classical mechanics: vectors, kinematics, particle and rigid body rotational dynamics and statics; conservation laws; and thermodynamics. The course meets three times a week for two consecutive periods consisting of integrated lecture, discussion and laboratory. Prerequisite: A minimum grade of C- in MATH 109 or MATH 113. NOTE: Students who receive credit for PHYS 211 may not receive credit for PHYS 109.

PHYS 212 Classical Physics II (0 or 4 credits)
This calculus-based course is a continuation of PHYS 211. Topics include waves and sound; electricity and magnetism; geometric and physical optics. The course meets three times a week for two consecutive periods consisting of integrated lecture, discussion and laboratory. Prerequisites: A minimum grade of C- in both PHYS 211 and MATH 114 or 200 NOTE: Students who receive credit for PHYS 212 may not receive credit for PHYS 110.

PHYS 215 Foundations of Modern Physics (0 to 4 credits)
This course connects the subatomic world of particle and nuclear physics to the evolution of the universe after the Big Bang through the study of relativity and the four fundamental forces of nature. The course consists of lecture, discussion and laboratory. Prerequisite: A minimum grade of C- in either PHYS 110 or 212 and in MATH 114.

PHYS 225 Applications of Modern Physics (0 or 4 credits)
This course investigates the quantum theory of light, wave- particle duality, quantum mechanics in one-dimension, statistical physics, lasers, and solid state physics. The course consists of lecture, discussion and laboratory. Prerequisites: A minimum grade of C- in PHYS 212.

PHYS 243 Individual Study (1 TO 4 credits)

PHYS 269 Research (2 OR 4 credits)

PHYS 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHYS 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHYS 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHYS 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHYS 323 Methods of Exp. Physics (0 or 4 credits)
Standard tools and techniques used in experimental physics are introduced while conducting an in-depth investigation of a non-linear system. Technical topics include: identifying and characterizing chaotic systems, data acquisition and instrument control using LabVIEW, signal conditioning, data and error analysis, and experimental design. This course consists of lecture and discussion. Offered spring semester of even years. Prerequisite: A minimum grade of C- in PHYS 212 and MATH 200

PHYS 325 Methods of Comp. Physics (4 credits)
This is a one semester course in computational physics that provides a grounding in the standard tools and techniques involved in the use of computers to solve problems in physics. Topics include numerically solving differential equations, minimization and optimization as they apply to parameter estimation, software engineering and object oriented programming, Newtonian dynamics and N-body simulation, and animation and visualization of computational results. This course consists of lecture, lab, and discussion. Offered spring semester of odd years. Prerequisites: A minimum grade of C- in PHYS 212 and either CISC 131 or CISC 130 or permission of instructor.

PHYS 331 Theoretical Mechanics (4 credits)
Careful examination of Newtonian dynamics, conservation laws, development of variational calculus, the Lagrangian formulation and Hamiltonian dynamics. Applications to particles and systems of particles, rigid bodies, and coupled systems. Prerequisites: A minimum grade of C- in either PHYS 215 or 225 and in MATH 200 and either 210 or 230.

PHYS 341 Electricity & Magnetism (4 credits)
Electrostatic and magnetostatic fields in vacuum and material media; energy and force relations; methods for the solution of static problems; fields and currents in conducting media; Maxwell's equations and time-dependent fields. Lecture and discussion. Prerequisites: A minimum grade of C- in either PHYS 215 or 225 and in MATH 200 and either 210 or 230.

PHYS 347 Optics (0 or 4 credits)
This course will give you a mathematical and conceptual understanding of electromagnetic waves and their interactions with matter. You will also acquire practical laboratory skills using modern optical equipment. Typical lecture topics include general wave theory, Maxwell's equations, dipole radiation, the Poynting vector, polarization, coherence theory, interference, diffraction, scattering from particles, and optical properties of dielectrics, metals, plasmas, and crystals. Laboratory experiments typically include laser alignment techniques, small-signal detection with lock-in amplifiers, characterization of common optical components, Schlieren imaging, spectroscopy, polarimetry, interferometry, and construction of an optical tweezers system from scratch. (Maximum enrollment is limited by lab space and equipment.) Prerequisites: A minimum grade of C- in PHYS 212, plus either MATH 200 or MATH 210, plus one of the following: PHYS 215 or PHYS 225 or junior standing.

PHYS 354 Astrophysics (4 credits)
Introduction to advanced topics in astronomy.

Course topics will include stellar formation, structure, and evolution; spectroscopy and the interaction of light with stellar atmospheres; stellar nucleosynthesis; interactions of stars and the interstellar medium; and the morphology and formation of galaxies. Prerequisites: A minimum grade of C- in PHYS 212 and either PHYS 215 or PHYS 225 or CHEM 332.

PHYS 389 Research (2 OR 4 credits)

PHYS 393 Individual Study (2 OR 4 credits)

PHYS 398 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHYS 410 Stat Mech and Thermodynamics (4 credits)
Concepts and laws of thermodynamics and of statistical mechanics. Applications of these to various systems, including gases, liquids, solids and chemical systems. The course meets three times a week for two consecutive periods consisting of integrated lecture, discussion and laboratory. Prerequisite: A minimum grade of C- in PHYS 215, 225, and MATH 200 and 210.

PHYS 431 Quantum Mechanics (4 credits)
The foundation of Quantum Mechanics will be explored with mathematical rigor. Specific topics include the time-independent Schrodinger equation, the hydrogen atom, and angular momentum including spin. Discussion of identical particles will lead to an introduction of quantum statistical mechanics. Lecture and discussion. Prerequisite: A minimum grade of C- in PHYS 215, PHYS 225, MATH 200, either 210 or 230, and 240.

PHYS 487 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHYS 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHYS 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHYS 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PHYS 491 Individual Research (2 OR 4 credits)

PHYS 495 Individual Study (1 TO 4 credits)

Physics (9-12)

Co-Major – See Education

Political Science

Program Overview

College of Arts and Sciences, Department of Political Science
John Roach Center for the Liberal Arts (JRC) 432, (651) 962-5722
Buhr (chair), Goltz, High-Pippert, Lynch, Mazumdar

Political Science Department Web Site: https://cas.stthomas.edu/departments/areas-of-study/political-science

The Department of Political Science is dedicated to political inquiry and analysis, as well as teaching excellence. Our curriculum promotes a broad understanding of how politics affects both our individual and collective lives while also focusing on the specialized knowledge of particular subfields in the discipline.

We emphasize not only substantive knowledge about politics and governments but also the development of skills necessary to understand and analyze political phenomena in a complex world. Our faculty's range of expertise provides our students with a rich understanding of political science while preparing them for a life of active citizenship.

As one of the liberal arts, political science enables students to develop and strengthen research and writing skills, as well as skills in analysis and communication. A major in political science prepares students for many types of careers, including those in law, government, political campaigns, non-profit organizations, and the corporate sector.

Students graduating with a major in political science will have a broad overview of the discipline,

including coursework in Political Theory and Research Methods, as well as substantive familiarity with at least two of the following subfields: American Politics, Comparative Politics, International Relations, and Judicial Politics.

Students majoring in political science must take a minimum of twenty-eight credits in political science at St. Thomas. No more than eight of the credits taken outside of the department shall be numbered 300 or above.

Students minoring in political science must take a minimum of sixteen credits in political science at St. Thomas.

POLS 104: Government and Politics is a Writing Intensive course that fulfills the Social Scientific Analysis component of the core curriculum.

Political Science Honor Society

Pi Sigma Alpha, the national political science honor society, established the Chi Theta chapter at St. Thomas in 1999. The purpose of Pi Sigma Alpha is to acknowledge superior performance in the study of political science, to forge closer links between faculty and political science majors and minors, and to stimulate political interest in the St. Thomas community.

Pi Sigma Alpha is open to juniors and seniors who meet the following qualifications for membership. Students must have completed at least three political science courses and be currently enrolled in or have taken a fourth. Two of the four courses must be UST political science courses, and one of the four must be at least a 300-level course. Additionally, students must have a grade point average of at least 3.00 in political science courses and be within the top third of their graduating class.

Teacher Licensure

- Elementary Education with a Specialty in Social Studies (5-8)
- Co-major in Social Studies (5-12) and a Co-major in Secondary Education

See Education

Major in Political Science

- POLS 104: Government and Politics (4 credits)
- POLS 205: U.S. Policymaking (4 credits)
- POLS 225: World Politics (4 credits)
- POLS 240: Research Methods in Political Science (4 credits)
- POLS 370: Explorations in Political Theory (4 credits)

Plus:

- Sixteen credits in POLS 300-level courses (completed in at least two of the four subfields of American Politics, Comparative Politics, International Relations, or Judicial Politics)

Plus:

- One POLS 400-level seminar

Prerequisites:

- POLS 104 is a prerequisite for all other required courses within the major (POLS 205, POLS 225, POLS 240, and POLS 370).
- POLS 205 is a prerequisite for 300-level courses within the subfield of American Politics.
- POLS 225 is a prerequisite for 300-level courses within the subfields of Comparative Politics and International Relations.
- POLS 104 is a prerequisite for 300-level courses within the subfield of Judicial Politics. Junior or senior standing and prior completion of POLS 312 is strongly recommended for POLS 313 and POLS 314.
- Juniors and seniors may enroll in a 400-level seminar once they have completed a 300-level course within that subfield, or with permission of the instructor. Typically, two seminars are offered per semester, so you need to work with your advisor and plan ahead.

Strongly Recommended:

- It is strongly recommended that students take POLS 240 before enrolling in 300-level courses.
- It is also strongly recommended that students either complete POLS 313 or POLS 314 before taking POLS 414, or be concurrently enrolled in POLS 313 or POLS 314 along with POLS 414.

Minor in Political Science

- POLS 104 Government and Politics (4 credits)
- POLS 205 U.S. Policymaking (4 credits)
- POLS 225 World Politics (4 credits)

Plus:

- Twelve credits in 300-level courses (completed in at least two of the four subfields of American Politics, Judicial Politics, International Relations, or Comparative Politics). POLS 370 may also be completed as a 300-level course for the minor.

- One 400-level seminar (with appropriate prerequisites) may be completed in place of a 300-level course.

Political Science Undergraduate Courses

POLS 104 Government and Politics (4 credits)
An introduction to the concepts basic to an understanding of politics and government with an emphasis on the political systems of the United States. A comparative examination of political processes, decision making institutions and policy issues relevant to the contemporary world. An introduction to basic research methods used in the discipline.

POLS 115 Legal Research and Writing (4 credits)
This course introduces students to techniques of legal writing and research. Students analyze legal texts, use both primary and secondary sources to do research, and practice techniques and forms of written language unique to legal documents.

POLS 205 U.S. Policymaking (4 credits)
This course focuses on public policymaking within the United States, with an emphasis on what governments do, why they do it, and what difference it makes. It examines aspects of the policy process, such as agenda-setting and issue attention cycles, before covering substantive public policy issues such as education, civil rights, health care, energy and the environment, defense, and immigration. The ways in which people influence the public policy process through elections, interest groups, and measures of public opinion will also be considered. Prerequisite: POLS 104 or permission of instructor.

POLS 225 World Politics (4 credits)
This course serves as an introduction to international relations. It introduces a range of divergent theories and perspectives concerning world politics and the nature of the contemporary global political system. It also focuses on the interactions between states and the impact of both states and non-state actors (such as international organizations and multinational corporations) on domestic and international outcomes. Themes will likely include globalization and international trade, international security, foreign policy, international law and organizations, and the developing world. Prerequisite: POLS 104 or permission of instructor.

POLS 240 Research Methods Poli Sci (4 credits)
This course provides an introduction to empirical research methods in political science. Central topics include logic of the scientific method, measurement of political concepts, research design and methods of data collection, statistical techniques for describing data, and principles of statistical inference. Particular attention will be paid to methods for analyzing quantitative data and the use of SPSS. Prerequisite: POLS 104

POLS 301 Pol. Identity & Participation (4 credits)
This course focuses on how and why people participate in politics in the United States, with an emphasis on how intersecting identities of citizens affect measures of political behavior, including partisanship, voting, and other forms of political involvement. Relevant identities include those rooted in race, ethnicity, class, gender, sexual orientation, and religion. Prerequisite: POLS 205 or permission of the instructor.

POLS 302 Gender and Politics (4 credits)
An intersectional examination of the impact of gender within American politics, with a focus on representation. Campaign strategies and styles of candidates, election to local, state, and national office, and the impact that women make in public office will be emphasized. Differences between political lives across the gender spectrum will also be explored. Potential explanations for the political underrepresentation of women will be evaluated. Prerequisite: POLS 205 or permission of the instructor.

POLS 305 Congress and the Presidency (4 credits)
The institutions of Congress and the Presidency will be examined in this course, both independently and in the larger policymaking context of repeated interactions. Concepts such as representation, elections, cooperation, and what "success" looks like will be discussed, both in the contemporary context and with an eye towards the institution's historical development. Prerequisite: POLS 205 or permission of the instructor.

POLS 306 Campaigns and Elections (4 credits)
This course focuses on the connection between the people and their government by exploring mechanisms for selecting representatives in the United States. Features of the system are leveraged to forecast and explain electoral results and the implications for policymaking. The likelihood of reform proposals being adopted and achieving intended goals are also assessed. The findings are synthesized to assess the contributions of campaigns and elections to the state of democracy in America. Prerequisites: POLS 104 and POLS 205

POLS 309 Environmental Policy (4 credits)
An examination of environmental policy outcomes generated by institutions and organizations, including legislation, court decisions and administrative decisions. Additional focus is on the

nature of the decision-making process and those methods commonly used to assess public policy. Prerequisite: POLS 104 or permission of instructor

POLS 312 Judicial Process (4 credits)
This course delves into both criminal and civil judicial process, and also considers the politics of law and justice. Concepts relating to achieving legal justice are emphasized throughout this course. Additionally, many different players in the process, such as lawyers, judges, juries, and witnesses, and their influence on a case's outcome, are considered. Prerequisite: POLS 104 or permission of the instructor.

POLS 313 Constitutional Powers of Gov't (4 credits)
This course uses Supreme Court decisions primarily involving the first three articles of the Constitution to learn about the powers of both the federal and state governments in the United States. Questions of power, authority, and legitimacy are addressed throughout the course, both with respect to individual branches of government as well as interactions between the branches. Prerequisite: POLS 104 or permission of the instructor. Junior or senior standing strongly recommended.

POLS 314 Constit Rights & Liberties (4 credits)
This course examines individual freedoms protected in the U.S. Constitution through the lens of Supreme Court precedent. While many political hot button issues are discussed throughout the semester, understanding and analysis of the varying interpretations of the Constitution and Supreme Court precedents are emphasized. Prerequisite: POLS 104 or permission of the instructor. Junior or senior standing strongly recommended.

POLS 320 American Foreign Policy (4 credits)
This course will examine both the history and politics of U.S. foreign policy. As the United States developed from a small post-colonial government to a world power, its foreign policy philosophies, goals, and behaviors changed markedly. By outlining important periods in U.S. history, then examining the role of certain political actors such as the President, Congress, the bureaucracy, and the American public, we can gain a better understanding of the forces that have shaped U.S. foreign policy in the past and will continue to shape it into the distant future. Prerequisite: POLS 225 or permission of the instructor.

POLS 321 Comparative Foreign Policy (4 credits)
Examines the various theoretical approaches and frameworks that inform foreign policy decisions and behavior. Emphasis is placed upon the analysis of the domestic and external determinants of foreign policy in a comparative context. The theoretical approaches and frameworks are applied to the study of foreign policy of countries like Britain, Canada, China, France, Germany, India, Japan, and South Africa. Prerequisites: POLS 225 or permission of the instructor.

POLS 326 Intl Law & Organization (4 credits)
This course examines the ways in which state behavior is affected by international norms, international legal documents, and international organizations like the United Nations. It also looks closely at the ways in which states, individuals, and power relations shape the nature and objectives of international law and organizations. International law and organizations can be a force for good in the world; however, there is also the potential for "pathological behavior" to emerge in international organizations and their member states. This course aims to look beyond the simple explanations for IO pathologies and into the deeper causes and potential remedies for those pathologies. Prerequisite: POLS 225 or permission of the instructor.

POLS 328 International Security (4 credits)
This course allows students to develop a deeper understanding of theories, cases and concepts in security studies. Students examine "traditional" security topics such as IR theory, regime security, and WMD technology/proliferation. Students will also examine a number of topics that have been added to this subfield in the post-Cold War era, including ethnic conflict, democratic peace theory, terrorism and human security. A better understanding of all of the topics included in security studies, both traditional and contemporary, will allow students to be better consumers of U.S. security policy and will set the stage for those students who choose to study national security at the graduate level. Prerequisite: POLS 225 or permission of the instructor.

POLS 350 Comparative Politics of Europe (4 credits)
This course provides a deeper understanding of both the international relations and comparative politics aspects of politics in Europe. Topics include the evolution and role of the EU in European economics, governance, and reactions to crises. Additional topics focus on domestic politics and challenges faced by European states such as issues of national identity and discrimination, state "fragility" and persistent macroeconomic problems. Students will have ample opportunity to develop critical thinking skills, acquire the knowledge needed to be an informed consumer of news about Europe, and develop advanced theoretical and empirical knowledge that would prove useful for

graduate-level study. Prerequisite: POLS 225 or permission of the instructor.

POLS 352 Politics of Developing World (4 credits)
A survey of the politics and economy of Asia, Africa and Latin America. Focuses on issues such as colonialism, democratization, human rights, gender, population, poverty, environment, political leadership, economic development and relations between developed and developing countries. Prerequisites: POLS 225 or permission of the instructor.

POLS 354 Politics of Post-Soviet States (4 credits)
This course provides an in-depth understanding of the dynamics of political change in general and of the history of the Soviet Union and the fifteen post-Soviet states. General topics include revolution, totalitarian and authoritarian regimes, and problems of democratic transition experienced by many states both in and outside of the post-Soviet space. These topics are illustrated with case studies from the former Soviet Union, including Russia, East European and Central Asian states. Prerequisite: POLS 225 or permission of the instructor.

POLS 356 Pol: India, Pakistan, S. Asia (4 credits)
An examination of the politics, economy, and society of India, Pakistan, and other countries of South Asia, namely Afghanistan, Bangladesh, Nepal, and Sri Lanka. Involves comparison between these countries utilizing themes such as political culture, political institutions, government structures and processes, political economy, and political development and transitions. Prerequisite: POLS 225 or permission of the instructor.

POLS 358 Comp Pol of Asia: China India (4 credits)
This course examines the government, politics, economy, and international relations of three major Asian countries - China, India, and Japan. It will use a comparative approach to examine their history, political culture, political institutions, government structures and processes, political economy, political development and transitions, and international interactions. Prerequisites: POLS 225 or permission of the instructor

POLS 370 Exploration in Poli Theory (4 credits)
This course explores the central role of political theory in determining the meaning of concepts such as democracy, citizenship, justice, power, equality, and identity. Themes and topics may vary. Emphasis on methods of analysis and critique, through the development of skills in reading, critical thinking, and writing. Prerequisite: POLS 104

POLS 395 Topics (2 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

POLS 396 Topics (2 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

POLS 397 Topics (2 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

POLS 398 Topics (2 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

POLS 400 Signature Work Capstone (2 credits)
This course is intended to give political science majors and those in related fields an opportunity to reflect and to look forward. A number of class sessions will be dedicated to particular subfields of political science. POLS faculty will discuss the opportunities and challenges in their respective subfields, and will provide you with opportunities to think critically about crucial, timely issues that those subfields are uniquely positioned to address today and into the future. Other sessions will provide you with guidance and time to work on an interdisciplinary portfolio of work and accompanying integrative essay reflecting on your liberal arts training at UST. Prerequisites: Completion of at least two 300-level POLS courses or permission of instructor and 80 completed credits.

POLS 404 Seminar in American Politics (4 credits)
Seminars in political science provide an opportunity for students to synthesize and further develop knowledge gained in previous courses and enhance their critical and analytical skills. Students will engage in reading and discussion and undertake a major research project pertinent to the seminar's topic. Specific topics or themes of each seminar will vary. Seminars are offered in each of the sub-fields of the discipline. Prerequisite: Juniors and seniors may enroll in a seminar once they have completed at 300-level course within that subfield, or with permission of the instructor.

POLS 414 Seminar in Judicial Politics (4 credits)
Seminars in political science provide an opportunity for students to synthesize and further develop knowledge gained in previous courses and enhance

their critical and analytical skills. Students will engage in reading and discussion and undertake a major research project pertinent to the seminar's topic. Specific topics or themes of each seminar will vary. Seminars are offered in each of the sub-fields of the discipline. Prerequisite: Juniors and seniors may enroll in a seminar once they have completed at 300-level course within that subfield, or with permission of the instructor.

POLS 424 Seminar in Int'l Relations (4 credits) Seminars in political science provide an opportunity for students to synthesize and further develop knowledge gained in previous courses and enhance their critical and analytical skills. Students will engage in reading and discussion and undertake a major research project pertinent to the seminar's topic. Specific topics or themes of each seminar will vary. Seminars are offered in each of the sub-fields of the discipline. Prerequisite: Juniors and seniors may enroll in a seminar once they have completed at 300-level course within that subfield, or with permission of the instructor.

POLS 454 Sem in Comparative Politics (4 credits) Seminars in political science provide an opportunity for students to synthesize and further develop knowledge gained in previous courses and enhance their critical and analytical skills. Students will engage in reading and discussion and undertake a major research project pertinent to the seminar's topic. Specific topics or themes of each seminar will vary. Seminars are offered in each of the sub-fields of the discipline. Prerequisite: Juniors and seniors may enroll in a seminar once they have completed at 300-level course within that subfield, or with permission of the instructor.

POLS 495 Individual Study (2 OR 4 credits)

Pre-professional Programs

Program Overview

A carefully-crafted baccalaureate degree can prepare a student for entrance to a professional school. The following information will guide students toward the major field programs and supplementary courses that will prepare them for the various professional schools.

Preparation for the Catholic Priesthood

Cross-College Program

Preparation for entering a postgraduate seminary takes place best in a college-level seminary. St. John Vianney College Seminary, located on the University of St. Thomas campus, provides an integrated program of spiritual and apostolic formation, along with the academic coursework available through the university.

All seminarians major in Philosophy, with the possibility to double major in a variety of fields. In addition, seminarians must complete prerequisites of theology and languages, according to the direction of their diocese, as well as the graduation requirements of the University of St. Thomas. All of these together provide in large measure the balance needed for the future study of theology at the major theologate. St. John Vianney students will be expected to complete the following academic requirements in compliance with the Program of Priestly Formation:

- Forty credits of philosophy
- Twelve credits of theology
- Language requirements: Latin or Spanish if determined by the student's diocese.

Interested students should contact the rector, Rev. Michael Becker, at St. John Vianney Seminary: beck8065@stthomas.edu

Pre-Law

Cross-College Program

The best preparation for the study of law is a rigorous undergraduate program that combines depth of study in a major field with breadth of study in the liberal arts. The only true criterion for choice of a major is that it challenge the student's intellectual capabilities.

Regardless of major, pre-law students should include as wide a selection of the following courses, listed alphabetically by departmental designation, as their degree program allows. Each is beneficial for:

A. Increasing the student's knowledge of law

- BLAW 300: Law for Business Leaders I (2 credits)
- BLAW 304 Real Estate Law (4 credits)
- BLAW 310 Law for Business Leaders II (2 credits)
- BLAW 311 Advanced Business Law for Accounting (2 credits)
- BLAW 313 Essentials of Intellectual Property Law (2 credits)
- BLAW 314 Employment Law (2 credits)
- BLAW 315 Law and Ethics of Data (2 credits)

- BLAW 320 Compliance in Business Organizations (4 credits)
- BLAW 321 Law for Entrepreneurs and Innovators (4 credits)
- BLAW 322 Law for International Business (4 credits)
- BLAW 323 Health Care Law and Ethics (4 credits)
- BLAW 351 Environmental Law (4 credits)
- BLAW 352 Gender Issues and the Law (4 credits)
- CJUS 342 Criminal Law and Procedure (4 credits)
- ECON 321 Law and Economics (4 credits)
- HIST 365 U.S. Constitutional History (4 credits)
- JOUR 336 Media Law (4 credits)
- POLS 312 Judicial Process and Politics (4 credits)
- POLS 313 Constitutional Powers of Government (4 credits)
- POLS 314 Constitutional Rights and Liberties (4 credits)
- POLS 326 International Law and Organizations (4 credits)
- POLS 414 Seminar in Judicial Politics (4 credits)
- THEO 229 Professions: Faith and Law (4 credits)
- THEO 300 Signature Work: Faith and Law (4 credits)

B. Fostering critical thinking about society

- AMCD 200 American Culture: Power/Identity (4 credits)
- CATH 340 Church & Culture: Social Dimensions of Catholicism (4 credits)
- COMM 328 Communication of Race, Class Gender (4 credits)
- ENVR 151 Environmental Challenges and Sustainable Solutions (4 credits)
- PHIL 357 Political Philosophy (4 credits)
- PHIL 359 Philosophy of Law (4 credits)
- PHIL 398 Advanced Critical Thinking (4 credits)
- POLS 370 Exploration in Political Theory(4 credits)
- PSYC 207 Drugs, and Behavior
- SOCI 130 Homicide (4 credits)
- SOCI 200 Introduction to Criminal and Juvenile Justice (4 credits)
- SOCI 280 Hate Crimes (4 credits)
- SOCI 312 Crime and Delinquency (4 credits)
- SOCI 344 Police and Society (4 credits)
- SOCI 346 Corrections in America: Prisons, Probation and Parole (4 credits)
- SOWK 291 Anatomy of Violence (4 credits)
- THEO 225 Faith & Ethics: Love & Justice, Social Thought, Incarceration, or Immigration (4 credits)

C. Providing useful skills and improving analytical ability

- ACCT 100 Principles of Accounting I (4 credits)
- BLAW 401 Legal Research, Advocacy, and Dispute Resolution (4 credits)
- COMM 100 Public Speaking (4 credits)
- COMM 366 Persuasion & Social Influence (4 credits)
- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- ECON 355 Game Theory (4 credits)
- ENGL 256 Introduction to Professional Writing (4 credits)
- ENGL 304 Analytical and Persuasive Writing (4 credits)
- ENGL 314 Professional Editing (4 credits)
- MATH 101 Finite Mathematics (4 credits) or MATH 113 Calculus I (4 credits)
- PHIL 220 Logic (4 credits)
- POLS 115 Legal Research and Writing (4 credits)

Pre-Health Professions

Common Pre-Requisites

People train to be physicians, physician assistants, dentists, physical therapists, occupational therapists, and other "allied health professionals" during two or more years of post-baccalaureate training.

These graduate training programs do not require applicants to have completed specific undergraduate majors. They value a broad education that includes the life sciences, well developed communication skills, and rigorous training in the social sciences and humanities.

Students interested in graduate training programs will need to take specific courses required for admission, which can be completed as part of a major in the life sciences or separately from a major. Biology, Biochemistry, Chemistry, and Neuroscience are common majors, as are Exercise Science, Psychology, and disciplines in the humanities. Visit the Pre-Health Professions Department page for information on additional pre-health areas not listed below.

Students are encouraged to research the programs at a range of professional programs and seek the guidance of their faculty advisor, as well as the manager of pre-health professions advising located in the Julie H. Sullivan Center for Student Achievement.

Pre-Dentistry

Dental schools do not require a specific undergraduate major. Required courses vary from one school to another, and students are encouraged to research various programs early in their undergraduate program.

Typical requirements include:

- two semesters of biology
- two semesters of general chemistry
- two semesters of organic chemistry
- one semester of biochemistry
- two semesters of physics
- two semesters of English
- one semester of psychology
- statistics

Pre-Medicine

Medical schools do not require a specific undergraduate major. Required courses vary from one school to another, and students are encouraged to research various programs early in their undergraduate program.

Typical requirements include:

- two semesters of biology
- two semesters of general chemistry
- at least one semester of organic chemistry
- one semester of biochemistry
- two semesters of physics
- two semesters of English
- one semester of psychology
- one semester of sociology
- one semester of statistics

Pre-Nursing (MS in Nursing for Non-Nursing Majors)

Schools that award master's degrees in nursing for non-nursing majors (also known as "entry level master's of science in nursing" programs) do not require a specific undergraduate major. Required courses vary from one school to another, and students are encouraged to research various programs early in their undergraduate program.

Typical requirements include:

- one semester of chemistry
- one semester of anatomy with lab
- one semester of physiology with lab
- one semester of microbiology
- two semesters of psychology (including lifespan psychology)
- one semester of statistics

Pre-Occupational Therapy

Occupational therapy programs do not require a specific major. Required courses vary from one school to another, and students are encouraged to research various programs early in their undergraduate program.

Typical requirements include:

- one semester of anatomy with lab
- one semester of physiology with lab
- one semester of physics
- at least two semesters of psychology
- one semester of statistics
- one semester of medical terminology
- one semester of sociology

Pre-Optometry

Optometry programs do not require a specific major. Required courses vary from one school to another, and students are encouraged to research various programs early in their undergraduate program.

Typical requirements include:

- two semesters of biology
- one semester of microbiology
- two semesters of general chemistry
- two semesters of organic chemistry
- one semester of biochemistry
- two semesters of physics
- two semesters of English
- one semester of psychology
- one semester of statistics
- one semester of calculus

Pre-Pharmacy

Pharmacy schools do not require a specific undergraduate major. Required courses vary from one school to another, and students are encouraged to research various programs early in their undergraduate program.

Typical requirements include:

- two semesters of biology
- one semester of anatomy with lab
- one semester of physiology with lab
- one semester of microbiology
- two semesters of general chemistry
- two semesters of organic chemistry
- two semesters of physics
- one semester of calculus
- two semesters of behavioral science
- two semesters of English

Pre-Physical Therapy

Physical therapy programs do not require a specific major. Required courses vary from one school to another, and students are encouraged to research various programs early in their undergraduate program.

Typical requirements include:

- two semesters of biology
- two semesters of general chemistry
- one semester of anatomy with lab
- one semester of physiology with lab
- two semesters of physics
- two semesters of psychology
- one semester of statistics

Pre-Veterinary Medicine

Veterinary schools do not require a specific undergraduate major. Required courses vary from one school to another, and students are encouraged to research various programs early in their undergraduate program.

Typical requirements include:

- two semesters of biology
- two semesters of general chemistry
- one semester of organic chemistry
- one semester of biochemistry
- one semester of statistics
- two semesters of physics
- one semester of genetics
- one semester of microbiology
- two semesters of English

Psychology

Program Overview

College of Arts and Sciences, Department of Psychology
John Roach Center for the Liberal Arts (JRC) LL56, (651) 962-5030
Hankerson (chair), Amel, Bremner, Buri, Gades, Jessee, Johnson, Prichard, Robinson-Riegler, Scott, Wolfe

Psychology Department Web Site: https://cas.stthomas.edu/departments/areas-of-study/psychology

The courses and programs offered by the Department of Psychology are meant to be a part of a liberal arts education, teaching the basic principles and theory of psychology, the scientific study of human behavior, mental processes, and emotions. The psychology programs are designed to prepare students with the analytical and technical skills necessary for graduate study in psychology and for careers in human services and other occupations for which a psychology background is valuable. Courses are offered that introduce psychology to non-majors, enabling students to make practical applications of psychology to their own lives.

Students who graduate with a major in psychology will be able to produce a research paper written in accordance with American Psychological Association (APA) guidelines. They will be trained in those research and statistical skills frequently employed in the field of psychology. They will be able to complete an independent research project, and write a synthesis of the psychological literature in an area of psychological interest.

Students majoring in psychology must successfully complete a minimum of twenty-four credits in psychology at St. Thomas. Students minoring in psychology must successfully complete a minimum of 12 credits in psychology at St. Thomas. All courses counting toward the major or the minor must be graded using the regular (letter) grading system.

The department also offers General Psychology (PSYC 111) for students to fulfill the Social Analysis component of the core curriculum.

Psychology Honor Societies

Psi Chi, the National Honor Society in psychology, was founded in 1929 for the purpose of encouraging, stimulating, and maintaining excellence in scholarship and advancing the science of psychology. The St. Thomas chapter was established in 1997. Students who have a grade point average of at least 3.00 in psychology, rank in the highest 35 percent of their class, and who have completed at least three semesters of college coursework, including nine hours in psychology, are eligible to apply for membership.

Nu Rho Psi, the national Neuroscience Honor Society encourages professional interest and excellence in scholarship, particularly in neuroscience. The St. Thomas chapter was established in 2007. Students who have a 3.2 or higher overall grade point average and a 3.5 or higher grade point average in specific neuroscience courses are eligible to apply. For more information, visit the Neuroscience program page: https://www.stthomas.edu/academics/undergraduate/neuroscience-major/index.html

The Department of Psychology also recognizes selected students each year for outstanding research, service, and academic achievements.

Teacher Licensure

- Elementary Education with a Specialty in Social Studies (5-8)

- Co-major in Social Studies (5-12) and a Co-major in Secondary Education

See Education

Co-Major With Social Work and Psychology

See Social Work

Major in Psychology

- PSYC 111 General Psychology (4 credits)
- PSYC 212 Research Methods in Psychology (4 credits)
- PSYC 422 History and Systems (4 credits) (to be taken during the senior year)

Plus 8 additional courses:

- At least one from each perspective (5 classes)
- The remaining classes may be from the elective list or from the perspective lists
- Four of the eight must be 300/400 level
- Two must be lab courses (PSYC 212 is a pre-requisite for all lab courses)

Perspective-Based Courses
BIOLOGICAL

- PSYC 206 Brain and Human Behavior
- PSYC 207 Drugs, and Behavior
- PSYC 322 Sensation and Perception
- PSYC 401 Physiological Psychology

COGNITIVE

- PSYC 315 Cognition
- PSYC 323 Psychology of Learning and Memory
- PSYC 400 Seminar in Cognition
- PSYC 415 Research Issues in Cognition

SOCIAL

- PSYC 121 Social Psychology
- PSYC 151 Cross-Cultural Psychology
- PSYC 321 Research Issues in Social Psychology

DEVELOPMENTAL

- PSYC 200 Infancy and Childhood
- PSYC 202 Lifespan Development
- PSYC 203 Psychology of Adolescence
- PSYC 204 Adulthood and Aging
- PSYC 402 Developmental Psychology Research

CLINICAL

- PSYC 301 Psychopathology
- PSYC 302 Personality Theories
- PSYC 313 Psychological Testing
- PSYC 428 Counseling and Psychotherapy

ELECTIVE COURSES

- PSYC 205 Psychology of Women
- PSYC 250 Positive Psychology
- PSYC 288 Psychology of Marriage and Family
- PSYC 308 Motivation and Emotion
- PSYC 342 Psychology and Work
- PSYC 365 Health Psychology
- JPST 275 Qualitative Methods**
- SOCI 354 Sex in Society**

***Please note that only one elective outside of PSYC can be counted toward the major.*

Allied requirements

All of the following or an adequate substitute approved by the chair:

- BIOL 101 General Biology (4 credits)
  or BIOL 105 Human Biology (4 credits)
  or BIOL 106 Women, Medicine and Biology (4 credits)
  or BIOL 207 Genetics, Ecology, and Evolution (4 credits)
  or CHEM 100 (Chemistry in our World)
  or CHEM 101 (Environmental Chemistry)
  or CHEM 108 (Nursing Chemistry)
  or CHEM 109 (General Chem for ENGR)
  or CHEM 111 (General Chemistry)
  or CHEM 115 (Accelerated General Chemistry)
- *DASC 120 (or DASC 112) Introduction to Computational Statistics (4 credits)

*DASC 120 has prerequisites. Check the course description for current prerequisites.

Students should take the following courses in the following order:

- DASC 120
- PSYC 212

Note: These courses should be taken early in the college career, since they are prerequisites for some required courses in psychology. A student should consult early with her/his department adviser to have her/his plan approved.

Minor in Psychology

- PSYC 111 General Psychology (4 credits)
- Plus 16 credits in PSYC

- At least 8 credits must be numbered PSYC 300 or above

The following two stipulations apply only to NSCI majors looking to minor in Psychology:

1. No more than two classes may overlap between the PSYC minor and NSCI major. Note: for NSCI majors these will likely be PSYC 111 and PSYC 212

2. NSCI majors may not count PSYC 206 or 207 toward their PSYC minor as there is too much content overlap between these courses and courses available in the NSCI major.

Psychology Undergraduate Courses

PSYC 102 Lifespan Develop. for Nursing (2 credits)
This course will provide you with an opportunity to learn about growth and development throughout the human lifespan. We will use psychological theories and research to examine physical, cognitive and psychosocial development, while appreciating the important role of biological and cultural factors. Lifespan development is a very broad area, and we will not be able to cover all possible topics. We will instead focus on thinking critically, making meaningful connections between topics, and understanding diversity within development. The different topics and theoretical approaches we cover will enable you to have an integrated understanding of lifespan development. This introduction to developmental norms and differences will support the aspiring nurse's ability to help patients navigate life events and stages. Connections to healthcare contexts will be highlighted. Students cannot receive credit for both PSYC 102 and PSYC 202. PSYC 102 cannot count toward the developmental perspective requirement of the PSYC major. Prerequisite: PSYC 111

PSYC 111 General Psychology (4 credits)
An introduction to the research questions, concepts, theories, methods, and findings of psychological science. Although the selection varies with instructor, topics include brain function, psychological testing, sensation and perception, cognition (learning, memory, language), states of consciousness, motivation, human development, personality, origins and treatment of disorders, social behavior, stress and health, and applied psychology (workplace, community, environment).

PSYC 151 Cross-Cultural Psychology (4 credits)
This course is designed to cover the issues and themes current in the field of cross-cultural psychology. Examples of such issues include: cultural variation along the lines of collectivism and individualism; psychological principles that might be universal compared to those that are culturally specific; how content and context affect psychological functioning, and variation within as well as between cultures. A range of substantive areas within psychology will be examined, including social, developmental, organizational, cognitive, health psychology, and psychology of emotion. Examples will be drawn from a range of non-Western cultures (e.g., Japan, India, Liberia) as well as various cultures within the United States (e.g., African-American, Hispanic, American Indian). Emphasis will be placed on how Western and non-Western cultures differ from each other, on how non-Western cultures differ from each other, and on how intra-cultural variation also plays important roles in psychological functioning. Prerequisite: PSYC 111

PSYC 200 Infancy & Childhood (4 credits)
An introduction to issues and theories of development dealing with infancy, toddlerhood, and early and middle childhood. The course reviews the principles, theories, research and application of cognitive, emotional, personality, social and physical development. Also examined is how children develop the knowledge, skills, and personality characteristics that allow them to become successful adults as well as how differences among children come about. Prerequisite: PSYC 111 NOTE: Students who receive credit for PSYC 200 may not receive credit for PSYC 202.

PSYC 202 Lifespan Development (4 credits)
An introduction to developmental principles and theories throughout the life span. The course also includes research, application and the interplay among the physical, emotional, social and intellectual variables in the process of growth and development. Also examined is how individuals develop the knowledge, skills, and personality characteristics that allow them to become successful later in life as well as how differences among individuals come about. Prerequisite: PSYC 111 NOTE: Students who receive credit for PSYC 202 may not receive credit for PSYC 200.

PSYC 203 Psych of Adolescence (4 credits)
An introduction to issues and theories of development dealing with adolescence. The course reviews the principles, theories, research and application of cognitive, emotional, personality, social and physical development. Also examined is how adolescents develop the knowledge, skills, and personality characteristics that allow them to

become successful adults as well as how differences among teens come about. Prerequisite: PSYC 111

PSYC 204 Psych: Adulthood & Aging (4 credits)
Theories of and research in physical, emotional, social, personality and intellectual development in adulthood and in old age. This course will emphasize the psychological adjustment to the stresses and demands (e.g., vocation, marriage, retirement, bereavement) the individual encounters during those developmental stages. Prerequisite: PSYC 111

PSYC 205 Psychology of Women (4 credits)
An examination of physiological, experiential, and social factors affecting the psychological development of women and their status as adults. Addresses diversity among women and how factors such as class and race intersect with historical and contemporary gender inequalities in women's lives. Topics include: biological and social influences on the development of gender, research on sex-related differences in psychological traits and cognitive abilities, media image and stereotypes of women, close relationships and sexuality, mothering, employment, aging, violence against women, and psychological health. Prerequisite: PSYC 111

PSYC 206 Brain & Human Behavior (4 credits)
An examination of brain systems that subserve human behavior. Topics include: human development, consciousness, social behavior, cognition, emotion and abnormal behavior. Prerequisite: PSYC 111

PSYC 207 Drugs and Behavior (4 credits)
The course surveys some basic facts and principles of administration, absorption, transport, action, deactivation and elimination of drugs. Various classes of drugs; their effects on mood, behavior, and consciousness; their use and misuse; and phenomena of chemical dependency and its treatment modalities are discussed. Lectures, readings, films, tapes and invited speakers are employed. Prerequisite: PSYC 111

PSYC 212 Research Meth in Psych (0 or 4 credits)
Research designs and problems, with emphasis on operationalization of concepts, development of hypotheses, specific research designs, sources of error, literature reviews, data collection, data analysis and use of APA format. Prerequisites: PSYC 111, and DASC 120 or DASC 112

PSYC 221 Social Psychology (4 credits)
This is an introduction to the field of social psychology, which examines how an individual's thoughts, feelings, and behaviors are influenced by the social context. The course covers such topics as conformity, persuasion, stereotypes and prejudice, love and relationships, helping behavior and altruism, aggression, the self-concept, and group dynamics. Prerequisite: PSYC 111

PSYC 243 Individual Study (2 OR 4 credits)

PSYC 250 Positive Psychology (4 credits)
This course explores current research on positive emotions, well-being, positive thinking, character strengths, virtues, values, wellness, resilience, positive relationships, and aspects of institutions (family, school, business, etc.) that cultivate positive experiences for their members. In addition to examining research on these topics, students will be expected to engage in positive psychology exercises related to the recognition of their own character strengths and the cultivation of gratitude. Prerequisite: PSYC 111

PSYC 269 Research (2 OR 4 credits)

PSYC 288 Psy of Marriage & Family (4 credits)
An examination of the psychological concepts, issues, challenges and changes relevant to marriage and family today. Topics include intimacy, liking and loving, power and control, gender, marriage and family therapy, and the psychological effects of marriage vs. non-marriage, divorce, and various parenting styles. Prerequisites: PSYC 111 and junior standing or permission of the instructor

PSYC 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PSYC 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PSYC 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PSYC 301 Psychopathology (4 credits)
This course sets forth a framework for understanding abnormal or maladaptive behavior. It will investigate specific diagnostic categories (such as depression and schizophrenia), causal factors and treatments of these maladaptive patterns. Prerequisites: PSYC 111 and junior standing

PSYC 302 Personality Theories (4 credits)
A review of major theories of personality, including

psychoanalytic, behavioristic, humanistic and trait-factor approaches. Prerequisite: PSYC 111

PSYC 306 Sports & Performance Psych (4 credits)
This Sports and Performance Psychology course explores the psychological principles vital for excelling in athletics, the arts, and everyday life. The comprehensive program covers essential factors like motivation, focus, and stress management, alongside practical mental skills training techniques such as mindfulness, confidence building, and arousal regulation. It is ideal for athletes, performers, and anyone seeking to enhance their performance in high-pressure situations. The course will also address the mental health issues that can arise from the expectations associated with peak performance. Additionally, the course covers the social dynamics crucial for teamwork, such as leadership psychology, effective communication strategies, and group cohesion. Participants will acquire the tools to set, pursue, and achieve their goals, enabling them to reach their fullest potential in various aspects of their lives. Prerequisites: PSYC 111

PSYC 308 Motivation and Emotion (4 credits)
Survey of research and theories related to specific motives (such as hunger and thirst) as well as approaches to emotional states such as anger, happiness and sadness. Relevant research will be drawn from both the social and physiological branches of psychology. Prerequisites: PSYC 111 and junior standing

PSYC 313 Psychological Testing (0 or 4 credits)
This course provides an overview of the principles of testing and measurement, particularly as they relate to the practice of psychology and education. The course examines the theories underlying individual and group-administered tests in such areas as intelligence, aptitude, achievement, interests, personality, neuropsychological and educational tests. Various controversial issues in the field of testing will also be addressed including ethics, bias, computer-based assessment, and testing of special populations. Counts toward fulfilling the Psychology major lab course requirement. Prerequisite: PSYC 212 or NSCI 203

PSYC 315 Cognition (4 credits)
This course will provide an overview of cognitive processes, the processes that collectively comprise what is commonly termed "thinking." Topics discussed will include perception, attention, remembering, language, problem solving, reasoning, and social cognition. The course will focus on how these processes operate in everyday situations, as well as empirical (laboratory) investigations of these processes. Connections between cognitive psychology and other areas of psychology (e.g., clinical, biological) will also be discussed. Prerequisite: PSYC 111

PSYC 321 Res Issues: Social Psych (0 or 4 credits)
This laboratory course provides hand-on experience in the design, implementation, and presentation of a social psychology experiment. Class readings and discussion introduce social psychological research, link classic social psychological research to current social issues, and teach students to do what social psychology researchers do. Prerequisite: PSYC 212

PSYC 322 Sensation & Perception (0 or 4 credits)
A study of the structure and function of sensory systems, the information that these systems provide the brain, and the subsequent interpretation of sensory information that we call perception. The course focuses on visual perception (e.g., brightness, color, form, depth, movement, constancy, illusions) and auditory perception (e.g., detection, discrimination, loudness, pitch) and incorporates art and music. Prerequisite: PSYC 212

PSYC 323 Learning and Memory (0 or 4 credits)
The basic concepts involved in simple associative learning are presented, along with theoretical and applied concerns. The analysis and modification of animal and human behavior by means of classical and instrumental conditioning are discussed. The course also will trace the history of the study of learning from its roots in philosophy to the current cognitive approach. Prerequisite: PSYC 212 or NSCI 203

PSYC 327 Spooks, Psychics & Skeptics (0 TO 4 credits)

PSYC 330 Psychology and the Common Good (2 credits)
This course is intended to give Psychology majors an opportunity to reflect on their academic careers and plan for future career paths. Focusing on psychology subfields, applied practice, ethics, personal growth, and practical preparation, students will discuss opportunities and challenges in their planned fields while exploring strategies for thriving in their post-college lives. Students will also reflect on how their psychology training can prepare them to be engaged global citizens while contributing to the common good. Class activities will provide students with guidance and time to develop an interdisciplinary portfolio of work and accompanying integrative essay reflecting on their intellectual growth and skill-development. This reflection will include the importance of their Psychology and liberal arts training at St. Thomas, laying the foundation for career and graduate

school success. Prerequisites: Declared Psychology major AND earned at least 80 credits

PSYC 334 Psychology for Sustainability(4 credits)
Drawing from work in environmental psychology, ecopsychology, and conservation psychology we will address how psychological theory and research can be applied to promote a sustainable future and explore psychological aspects of the reciprocal relationship between humans and the rest of the natural world. This course will provide an overview of the basic knowledge, theories, and research methods that characterize the psychology of sustainable behavior. After completing this course, students will understand the causes and consequences of environmental degradation, understanding of the psychological underpinnings of the approaches being used to promote sustainable behavior and be able to describe important social, cultural, and policy factors that influence sustainable behavior. Prerequisite: One of the following PSYC 111, ENVR 151, ENGR 123, BIOL BIOL 102, BIOL 209, GEOL 115 OR CHEM 101, or permission of the instructor.

PSYC 342 Psychology and Work (4 credits)
This course presents basic concepts of psychology as they apply everyday in the workplace. Topics to be covered include measurement and its applications in the workplace (e.g., personnel decisions and performance appraisals), worker training, worker attitudes and motivation, worker adjustment, health and safety, leadership, communication and group behavior and development of the organization. Prerequisites: PSYC 111 and junior standing

PSYC 365 Health Psychology (4 credits)
This survey course will examine the contributions of psychological research to the understanding, prevention, and treatment of a variety of health concerns. This course will employ a biopsychosocial model, which means that we will study how social, emotional, behavioral, biological, and spiritual factors influence health. The specific topics include injury, stress, pain management, additions, sleep, patient-physician relations, and chronic illnesses such as Alzheimer's, diabetes, and AIDS. Prerequisite: PSYC 111

PSYC 389 Research (2 OR 4 credits)

PSYC 393 Individual Study (2 OR 4 credits)

PSYC 400 Seminar in Cognition (4 credits)
Current theory and research in a specific topic related to cognition. Topics will vary, but will include in-depth coverage of specific topics related to thinking and consciousness. Sample topics include (but will not be limited to) specific aspects of consciousness (e.g. Sleep and Cognition), memory (e.g. eyewitness memory or memory distortion), social cognition (e.g. stereotyping), developmental cognition (e.g. language development), cognitive neuroscience (e.g. brain mechanisms underlying attention), comparative cognition (e.g. animal language), and applied cognition (e.g. human-computer interaction). Prerequisite: PSYC 111 and PSYC 212 or permission of the instructor.

PSYC 401 Physiological Psychology (0 or 4 credits)
This laboratory course includes study of the brain, its function and its control of behavior. Neuroanatomical, neurophysiological, and biochemical substrates of behaviors associated with feeding, drinking, sex, sleep, arousal, emotion, learning and memory are examined. Prerequisites: PSYC 212 or NSCI 203; PSYC 206 or PSYC 322 or NSCI 202; and BIOL 101 or BIOL 207 or BIOL 208 or NSCI 201

PSYC 402 Developmental Psych Research (0 or 4 credits)
This laboratory course presents methods and designs in developmental research methodology. The course examines observational, experimental and quasi-experimental research as well as analyses, ethics, and other core issues in developmental psychology. Prerequisites: PSYC 200 or 202; and PSYC 212 or NSCI 203

PSYC 415 Research Issues in Cognition (0 or 4 credits)
This laboratory course explores research issues in cognitive psychology, with special emphasis on cognitive psychology methodology, current research issues, hands-on research, and discussion/analysis of primary research sources. Specific topics covered each semester may vary slightly. Examples of topics include: subliminal perception; automatic processing; implicit memory; eyewitness testimony; memory reconstruction; expertise and problem solving; the use of heuristics in decision making; person memory. Approximately four lectures and three laboratory hours per week. Prerequisites: PSYC 212 or NSCI 203

PSYC 422 History of Psych in Context (4 credits)
This course explores psychology's past with a special focus on events representing the discipline's sustained interest in applying science to enhance human welfare. From its early days, U.S. psychologists have applied our discipline's knowledge to solve social problems. This course examines psychology's complicity, in its early years, with questionable cultural practices and unjust social norms (e.g. the eugenics movement, racial bias). We also study the social/historical context surrounding

psychology's early applications. The goal is to promote reflection on the place of psychology in the broader culture and raise awareness of the complexities inherent in using science to solve social problems, in the service of preparing students to be "morally responsible leaders who think critically, act wisely, and work skillfully to advance the common good." Prerequisites: Senior standing and declared Psychology major

PSYC 428 Counseling & Psychotherapy (4 credits)
Theories and procedures of counseling and psychotherapy are discussed, including psychoanalysis, client-centered therapy, cognitive therapy, behavior therapy, and others. Prerequisites: PSYC 301 and three psychology courses

PSYC 476 Experiential Learning (1 TO 4 credits)

PSYC 478 Experiential Learning 0 Credit (0 credit)

PSYC 489 Topics (0 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PSYC 490 Topics (0 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

PSYC 491 Individual Research (2 OR 4 credits)

PSYC 495 Individual Study (2 OR 4 credits)

Risk Management and Insurance

Interdisciplinary Certificate – see Business

Science, Medicine and Society

Program Overview

College of Arts and Sciences, Interdisciplinary Program

Director: Dr. Peter Distelzweig (PHIL)

Department Web Site:
https://www.stthomas.edu/academics/undergraduate/science-medicine-society-minor/index.html

The "Science, Medicine, and Society" (SMDS) minor provides students with interdisciplinary, critical and constructive perspective on medicine, science, health and disease today. Through course offerings in the humanities and (mainly) social and behavioral sciences the minor explores contemporary and historical perspectives on: (1) the concepts of health and disease; and (2) the cultural, social, institutional, and geophysical context of science, medicine, and health care. It will help students better analyze, evaluate, and positively influence these important forces shaping society today.

Minor in Science, Medicine & Society

All students must take:

- PHIL 342 History and Philosophy of Medicine (4 credits)
  or PHIL 385 Philosophy of Science* with approval of program director
- PHIL 254 Biomedical Ethics (4 credits)

Plus one of the following 200-level Theology courses:

- THEO 225: Faith & Ethics: Bioethics (4 credits)
- THEO 229: Professions: Faith & Health (4 credits)
- THEO 229: Professions: Faith & Publ Hlth (4 credits)
- With approval of the program director:
  - THEO 224: Bridges: Theology & Science (4 credits)
  - THEO 229: Professions: Faith & ENGR (4 credits)
  - Another 200-level Theology course

Electives (12 Credits):

Group 1 - Humanities and Communication, choose up-to four credits:

- COMM 372 Communication & Environment (4 credits)
- ENGL 256 Introduction to Professional Writing (4 credits)
- PHIL 385 Philosophy of Science* (4 credits)
- Other courses as pre-approved by the program director

*PHIL 385 may not count towards both Science, Medicine and Society core AND elective requirements.

Group 2 - Social, Behavioral and Natural Sciences, choose up-to 12 credits:

- BIOL 106 Women, Medicine and Biology (4 credits)
- BIOL 110 Genetics and Society (4 credits)
- BIOL 161/GEOL 161 Medical Geology (4 credits)
- BIOL 361/GEOL 461 Medical Geology (4 credits)
- ECON 324 Health Economics (4 credits)
- GEOG 350 Geography of Global Health (4 credits)
- HLTH 120 Foundations of Health Promotion (2 credits)
- HLTH 250 Personal Health and Wellness (2 or 4 credits)
- POLS 205 Citizen Participation and Public Policy (4 credits)
- PSYC 121 Social Psychology or PSYC 151 Cross-Cultural Psychology (4 credits)
- PSYC 207 Drugs and Behavior (4 credits)
- PSYC 301 Psychopathology (4 credits)
- PSYC 365 Health Psychology (4 credits)
- PUBH 220 Intro to Public Health and Social Justice (4 credits)
- PUBH 225 Global Heath and Development (4 credits)
- SOCI 110 Social Problems (4 credits)
- SOCI 251 Race and Ethnicity (4 credits)
- Other courses as pre-approved by the program director.

Social Studies (5-12)

Co-Major – see Education

Social Work and Criminal Justice

Co-Major – See Social Work

Social Work and Psychology

Co-Major – See Social Work

Social Work and Sociology

Co-Major – See Social Work

Sociology

Program Overview

College of Arts and Sciences, Department of Justice and Society Studies
O'Shaughnessy Education Center (OEC) 431, (651) 962-5630
Klein (Chair)

Department of Justice and Society Studies Website: https://cas.stthomas.edu/departments/areas-of-study/justice-society-studies/index.html

Sociology is the scientific study of society and social relations. A major in sociology provides knowledge and skills applicable to careers in business, education, government, law, public health, public policy, and social service. Additionally, an undergraduate degree prepares students for graduate study in sociology and other closely related fields.

Students who graduate with a major in sociology will understand the methodological and theoretical foundations of sociology and possess skills to apply this knowledge in a practical way. They will have the opportunity to specialize in crime and criminology, family and the life course, inequalities and stratification, and work and organizations. We also offer courses with comparative perspectives on global issues such as crime, gender, and religion. The sociology curriculum reflects the breadth of the discipline, its place in the liberal arts tradition, and the application of sociological theories and methods to the critical issues and problems facing societies today.

Sociology majors pursue graduate and professional degrees in sociology, as well as business, law, public health, public policy, social work, and other fields. The Department of Justice and Society faculty also provide intensive support for students who wish to engage in individual research and preparation for graduate and professional school, as well as internships and career development.

A sociology major or minor is a strong complement to studies in American culture and difference, business administration (especially human resources, management, marketing), Catholic studies, family studies, international studies, communication and journalism, geography, justice and peace studies, legal studies, political science, psychology, social sciences, social work, urban studies, and women's studies.

Sociology majors and minors are encouraged to take advantage of HECUA, study abroad, and other

special learning opportunities. Specific courses may substitute for St. Thomas requirements. Students should consult with their academic adviser, the department chair, or a study abroad advisor in the International Education Center for program options. Also, see Academic Information & Programs in the front section of this catalog for more information.

At least 16 credits in the major must be taken at St. Thomas. Sociology minors need a minimum of 8 credits from St. Thomas.

Sociology Honor Society

The Iota Chapter of Minnesota of Alpha Kappa Delta, the international sociology honor society, was chartered at the University of St. Thomas in 1991. The purpose of the society is to promote an interest in the study of sociology, research of social problems, and such other social and intellectual activities as will lead to improvement in the human condition. Membership is open to juniors and seniors who have completed at least sixteen credits in sociology registered through the university, who are officially declared majors or minors in sociology, criminal justice, the sociology concentration of social science, or social studies and who have a minimum overall grade point average in the top 35th of their class and who have maintained a 3.0 grade point average in sociology courses taken at the University of St. Thomas.

Co-Major in Social Work and Sociology

See Social Work

Teacher Licensure

Elementary Education with a Specialty in Social Studies (5-8)
Co-major in Social Studies (5-12) and a Co-major in Secondary Education
See Education

Major in Sociology

- SOCI 100 Introduction to Sociology (4 credits)
- SOCI 210 Research Methods in Sociology (4 credits)
- SOCI 220 Sociological Analysis (4 credits)
- SOCI 474 Sociological Theory and Praxis: The Capstone Experience (4 credits)

Plus four credits from the following:

- SOCI 350 Social Inequality: Privilege and Power (4 credits)
- SOCI 365 Social Psychology (4 credits)
- SOCI 366 Self and Society (4 credits)

Plus:

- Twenty additional credits in Sociology (eight of which must be 300-level or higher)

Strongly recommended:
It is recommended that students take the following courses in this order:

- MATH 101 Finite Mathematics (4 credits) (or adequate substitute) in the first year
- SOCI 210 Research Methods in Sociology (4 credits)
- SOCI 220 Sociological Analysis (4 credits)

Finally, we recommend that students begin the SOCI 210/220 sequence during their sophomore year. This sequence must be completed by the end of the junior year. Students who have a double major in sociology and psychology and complete SOCI 210, PSYC 212, and DASC 120 may contact the department chair to waive SOCI 220.

Minor in Sociology

- SOCI 100 Introduction to Sociology (4 credits)

Plus at least four credits from the following:

- SOCI 210 Research Methods in Sociology (4 credits)
- SOCI 350 Social Inequality: Privilege and Power (4 credits)
- SOCI 365 Social Psychology (4 credits)
- SOCI 366 Self and Society (4 credits)

Plus twelve additional credits from the list above or below:

- SOCI 110 Social Problems (4 credits)
- SOCI 130 Homicide (4 credits)
- SOCI 220 Sociological Analysis (4 credits)
- SOCI 251 Race and Ethnicity (4 credits)
- SOCI 304 Adolescence in Society (4 credits)
- SOCI 312 Crime and Delinquency (4 credits)
- SOCI 315 Gender, Culture, and Society (4 Credits)
- SOCI 321 Marriages and Families (4 credits)
- SOCI 330 Religion in American Society (4 credits)
- SOCI 332 Urban Sociology (4 credits)
- SOCI 341 Work, Organizations, and Society (4 credits)
- *SOCI 344 Police and Society (4 credits)
- *SOCI 346 Corrections in America: Prisons, Probation, Parole (4 credit)

- SOCI 353 Global Perspectives on Gender (4 credits)
- SOCI 354 Sex in Society (4 credits)
- SOCI 380 Cross-Cultural Perspectives on Religion in Society (4 credits)
- SOCI 474 Sociological Theory and Praxis: The Capstone Experience (4 credits)
- SOCI 495 Individual Study (4 credits)

*Both SOCI 344 and 346 have SOCI 200 as a prerequisite. SOCI 200 does NOT count toward the SOCI minor.

Sociology Undergraduate Courses

SOCI 100 Intro to Sociology (4 credits)
Introduction to the concepts, theories, methods and applications of the scientific study of society and social concerns. Enables students to understand the connections between the individual and larger social and cultural forces. Heightens awareness of the diversity of American and other societies.

SOCI 110 Social Problems (4 credits)
Contemporary society is confronted with a number of serious problems that are often global in their impact. This course explores the causes, effects, and proposed solutions to some of these major social issues. Special attention is given to issues of inequality (such as racism, sexism, and poverty) and problems in core institutions (such as family violence, unequal educational opportunities, and unemployment). This course meets a requirement in the Justice and Peace Studies program.

SOCI 130 Homicide (4 credits)
Homicide is considered one of the most serious violent crimes. This course takes a sociological approach to examine the nature and extent of homicide with a focus on the history of homicide, the trends in homicide, and the patterns and sources of homicide. In addition to addressing more typical situations resulting in murder, such as domestic violence, the course will cover serial murder and mass murders.

SOCI 200 Intro to Criminal Justice (4 credits)
This course provides an introduction to the U.S. criminal justice system and the notions of justice within this system. Students explore the historical and current roles of police, courts and corrections within the criminal legal system, and are introduced to explanations of crime and topics such as wrongful convictions, capital punishment and more. This course meets a requirement in the Justice and Peace Studies program.

SOCI 210 Research Methods in Soc (4 credits)
Consideration of both quantitative and qualitative strategies for each stage of the research process. Emphasis is on the skills required to design and successfully perform research projects: selection of topics, development and testing of hypotheses, collection and analysis of data and reporting of findings. Data entry and recoding with SPSS will also be introduced. Prerequisite: SOCI 100

SOCI 220 Sociological Analysis (4 credits)
Methods of data analysis and hypothesis testing within the social sciences with an emphasis on sociological and criminal justice research questions. Emphasis is placed on applied statistics as employed in sociology with skill development in the use of data processing techniques and SPSS, the computer statistical package commonly employed by contemporary sociologists in the full range of research settings. Topics covered include descriptive statistics, confidence intervals, independent samples t-test, analysis of variance, chi-square, correlation, regression, and quantitative reasoning. Students may not substitute DASC 120 for SOCI 220. Prerequisite: SOCI 210 and MATH 101, 105, 108, 109, 111,113 or DASC 120.

SOCI 243 Individual Study (2 OR 4 credits)

SOCI 251 Race and Ethnicity (4 credits)
Race and ethnicity as significant components of U.S. social structure; the cognitive and normative aspects of culture which maintain and effect varying manifestations of social distance, tension, prejudice and discrimination between majority and minorities at both micro and macro levels, nationally and internationally. This course meets a requirement in American Cultural Studies and Justice and Peace Studies. Prerequisite: sophomore standing

SOCI 269 Research (2 OR 4 credits)

SOCI 275 Born this way? (4 credits)
While discussions of gender and its social construction have become common in our culture, there is less discussion of whether there are actually binary "biological sexes" that impact those conversations. In addition, while we have made many inclusive efforts in understanding the LGBTQIA+ community, our larger society correlates sexual orientation to biology leaving us to ask: are queer folks born that way and does it stay fixed throughout our lives? This course explores the convergence of sociology and biology in how we define gender, sex, sexual orientation, and sexual behavior as continua instead of binaries as once previously believed. Topics are examined in developmental order from conception to adulthood and include current issues relevant to the LGBTQIA+

community and society at-large. The course also considers these topics in non-human animals to ask 'what is normal?' in nature. This will be a BIOL - SOCI crosslisted course.

SOCI 280 Hate Crimes (4 credits)
Although hate crimes have long existed in the United States, the term "hate crime" is a relatively new addition to the social, political, and legal domains. This course examines the institutionalization of hate crime law within our legal system and explores the complexities surrounding the development and enforcement of hate crime laws. This course also examines the causes, manifestations, and consequences of hate crimes, and the effectiveness of formal and informal social controls in combating these crimes.

SOCI 285 Soc Policy in a Changing World (4 credits)
This course provides an overview of the concepts, debates and theories of global social policy, the key actors and policy-making processes, and the different approaches to social policy within different global contexts. It examines the major trends and challenges facing social policy in today's rapidly changing world and the values on which they are based as well as key critiques of those trends. Locating social policy within the context of globalization processes, this course explores a deeper understanding of the major challenges facing the global community, including poverty, inequality, education, health care, unemployment, population, migration, refugee resettlement, human trafficking, climate change, environmental governance, the growing influence of digital technologies, and the changing nature of work. The course explores the roles of international organizations, such as the United Nations, the World Bank, the World Health Organization, transnational corporations, international non-governmental organizations, and transnational advocacy networks in shaping global social policy. This course will equip students with the knowledge and skills to analyze global social policy issues and to be policy leaders in this context.

SOCI 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SOCI 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SOCI 301 General Anthropology (4 credits)
This course provides an overview of various components and dynamics of human societies throughout the world. It focuses on topics such as kinship patterns, language, religion, artistic expression, technology and economic/political organization. Major consideration is given to the practical significance of expanding intercultural awareness. This course fulfills a requirement in the Justice and Peace Studies program. Prerequisite: SOCI 100 or SOCI 110

SOCI 304 Adolescence in Society (4 credits)
The transition between childhood and adulthood is examined using a general sociological framework and including life course, socioeconomic, and systems theories. Particular attention is given to the social construction of adolescence; institutional contexts (family, education, employment) of adolescent relationships with parents, peers, and others; gender and sexual socialization in society; cultures of achievement and risk; social diversity. This course meets a requirement in Family Studies and in Women's Studies. Prerequisite: SOCI 100 or permission of the instructor

SOCI 312 Crime and Delinquency (4 credits)
Why do people commit crime? Why do crime rates vary over time? Why do some communities and societies have more crime than others? This course focuses on sociological theories and research that are designed to answer these questions. It addresses various types of crime including homicide, corporate crime, drug use, gangs and domestic violence and hate crime. Prerequisite: SOCI 100 or permission of the instructor

SOCI 315 Gender, Culture & Society (4 credits)
This course will examine how gender is socially constructed throughout the life-course in American society. An emphasis on social problems related to gender will also be examined on both an individual and structural level, while utilizing historical and modern theoretical perspectives. Topics for study include current sociological research on masculinities, sexual assault, sex trafficking, objectification and the intersections of identity around race/class and sexuality. This course meets a requirement in Women Studies and American Culture and Difference.

SOCI 321 Global Marriages and Families (4 credits)
This course explores the transformation of family life in the modern world through a global lens. Specific topics we will cover include dating and mate selection, love and romance, cohabitation, marriage, divorce, and parenting. We will examine how broader social forces such as globalization, technological development, and race/class/gender

inequalities have affected intimate relationships. Some of the questions we will discuss include: How are seemingly personal matters such as love and sex shaped by global economics and politics? What are some of the new desires, pleasures, and emotions that have emerged in the 21st century and through what processes are they circulated as commodities across cultural and geographical borders? This course explores family formation both within and outside the U.S. and encourages students to consider themselves part of a complex and fast-changing global environment. Prerequisite: SOCI 100 or permission of the instructor

SOCI 330 Religion in American Society (4 credits)
Theoretical and empirical examination of the sociological dimensions of religion, with a special emphasis on the religious situation in America. Topics include diverse religious expressions and values of each religion, including Christian denominations and other world religions with members living in the U.S., for example, Buddhism, Hinduism, Islam, and Judaism, as well as cultural contexts, organizational structures, individual religiosity, and emerging new forms. This course meets a requirement in Catholic Studies. Prerequisite: SOCI 100

SOCI 332 Urban Sociology (4 credits)
The study of the social organization of urban areas. Topics include the historical development of cities, interaction patterns in neighborhoods, cities and metropolitan areas, community power structures, and urban problems. Prerequisite: SOCI 100

SOCI 341 Work and Occupations (4 credits)
This course provides students with knowledge about the importance and role of work and organizations in society and in our everyday lives. Key topics include conflict in organizations, occupational choice and prestige, social control in work environments, the labor movement, the "McDonaldization" of the work environment and American culture, the clash between personal and organizational life, and many others. Prerequisite: SOCI 100

SOCI 344 Police and Society (4 credits)
An overview of the history of policing and the emergence of modern policing in democratic societies. This course takes a sociological approach in examining the changing roles and organizations of police, police socialization and police subculture as well as the impact of different organizational structures on service delivery. Topics include police conduct, community policing, professionalization of the police, ethical decision making in law enforcement and evidence-based policing. Prerequisite: SOCI 100 and SOCI 200

SOCI 346 Critical Issues in Corrections (4 credits)
This course critically examines the U.S. correctional system, including jails, prisons and community-based alternatives. Students examine the historical context of corrections, theories of punishment, and various correctional policies and practices and their impact on individuals and society. Topics include mass incarceration, reentry, restorative justice and more. Prerequisites: SOCI 100 and SOCI 200

SOCI 350 Social Inequality:Priv & Power (4 credits)
This course identifies and investigates the following topics: general principles of stratification, theoretical explanations by which inequality emerges and is maintained, the relationship between social class and other forms of inequality in the United States including gender, race, and changes in social hierarchy over time. The course will explore issues such as poverty, welfare, occupational prestige, meritocracy, and class prestige. Although primary focus is on the United States, the course also examines global inequality. Prerequisites: Junior or Senior Standing

SOCI 354 Sex in Society (4 credits)
Sexuality as a social construction is explored with a specific focus on cultural and institutional influences including the family, economy, religion, government, and the media. Current research findings are discussed within the context of historical change in American sexual behavior, attitudes and research methodologies. This course meets a requirement in Family Studies. Prerequisite: SOCI 100 or 110

SOCI 365 Social Psychology (4 credits)
This course provides a general survey of major social psychological theories and research. Topics include selfhood, socialization, conformity/deviance, attitudes, gender roles, and intergroup/intragroup dynamics. Through exposure to real life settings and simulations, students will explore key questions such as "What attracts us to each other?, "How do we respond to deviant behavior?" and, "Why do we conform?". This course meets a requirement in the Justice and Peace Studies program. Prerequisite: SOCI 100 or SOCI 110

SOCI 366 Self and Society (4 credits)
In what ways does the world around us shape who we are as individuals? This course exposes learners to the ways in various social forces such as family, social class, mass media, and school shape our lives. It includes the influence of "micro" elements of social structure (such as socialization processes and small groups), "macro" elements of social structure (organizations, communities and society), and important sociological concepts (inequality, power, conflict, social control, etc.).

SOCI 380 Cross-Cult Persp on Rel in Soc (4 credits)
This course considers the relationship between religion and society on a world-wide basis. It examines why people are religious and how the beliefs and practices of various religious traditions have influenced family life, education, morality, politics, and other social dimensions of life. The course includes discussion of all the major religious traditions, such as Christianity, Judaism, Hinduism, Buddhism, and Islam. Prerequisite: SOCI 100 or SOCI 110

SOCI 389 Research (2 OR 4 credits)

SOCI 393 Individual Study (2 OR 4 credits)

SOCI 398 Topics (0 TO 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SOCI 405 Internship in Criminal Justice (4 credits)
This course is designed to provide the student with an opportunity to apply academic training in a criminal justice setting. Students will spend a minimum of 10 hours per week in an agency or organization directly involved in some aspect of criminal justice. Students will be supervised by an on-site supervisor. They also will participate in a weekly meeting with other interns and a St. Thomas faculty member. Prerequisites: SOCI 200, 210, 320, and permission of the instructor

SOCI 474 Soci Theory & Praxis: Capstone (4 credits)
An examination of classical and contemporary theories in sociology, including functionalism, conflict theory, and symbolic interaction. Theories are explored in an applied manner to develop the ability to understand/solve social problems and issues in a sociological context. Key sociological principles and concepts will be utilized in the completion of a significant scholarly research project. Careers and preparation for graduate school will also be addressed. Prerequisite: SOCI 100 and SOCI 210 and 80 completed credits.

SOCI 476 Experiential Learning (1 TO 4 credits)

The senior seminar serves as a capstone experience for students to address several central issues in the study of crime and justice. The major focus is to build upon students knowledge from previous courses with a focus upon an integration of knowledge from material learned throughout the major. Students will complete a final project that demonstrates an in-depth understanding of a criminal justice topic that could lead to future work in the criminal justice field. Prerequisite: Completed SOCI 210 and SOCI 312 and completion of at least 80 credits or permission of instructor

SOCI 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SOCI 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SOCI 491 Individual Research (2 OR 4 credits)

SOCI 495 Individual Study (2 OR 4 credits)

Spanish

Program Overview

The Spanish program provides students the opportunity to develop a solid command of the Spanish language, and an understanding of the literature, culture, and linguistics of the Hispanic world. Diverse course offerings allow students, in consultation with their advisers, to tailor a program of studies consistent with various goals: to prepare for graduate school, to usefully complement a variety of majors (business, political science, psychology, etc.), to interact with Spanish-speaking people in the US and abroad, to analyze the Spanish language and apply what is learned to a variety of contexts, and to read great Spanish and Spanish American literature. We offer (and strongly recommend) study abroad as a fundamental component of the Spanish major.

Major in Spanish

- In consultation with their major field adviser, students must complete thirty-two (32) credits in courses numbered 300 and above:

Required Core Courses (12 credits):

- SPAN 300 Advanced Spanish Grammar (4 credits)
- SPAN 301 Advanced Written Spanish and Culture (4 credits)
- SPAN 305 Spanish Oral Expression and Culture (4 credits)

Areas of Concentration: Cultural and Literary Studies or Linguistics and Applied Language Studies

For the remaining 20 credits, students must choose an area of concentration and take a minimum of 12 credits in that area. Up to 8 of the remaining 20 credits may be taken from the other concentration or in courses numbered SPAN 393, SPAN 476, SPAN 478, SPAN 485, SPAN 487, SPAN 489, SPAN 490, or SPAN 495.

Cultural and Literary Studies

Required for concentration (8 credits):

- SPAN 335 Introduction to Spanish Literature (4 credits)
- SPAN 331 Spanish Culture and Civilization (4 credits) OR
  SPAN 332 Latin American Culture and Civilization

For the remaining 12 credits, students may choose from the following electives.

Up to 8 credits may be taken from the Linguistics and Applied Language Studies area or in courses numbered SPAN 393, SPAN 476, SPAN 478, SPAN 485, SPAN 487, SPAN 489, SPAN 490, SPAN 495, or LNGS 325. For the concentration in Cultural and Literary Studies, students must take a minimum of four (4) credits in courses numbered SPAN 340 or higher or SPAN 327:

- SPAN 327 Environment and Health in the Hispanic World (4 credits)
- SPAN 331 Spanish Culture and Civilization (4 credits)
- SPAN 332 Latin American Culture and Civilization (4 credits)
- SPAN 340 Themes in Spanish Literature (4 credits)
- SPAN 345 Transatlantic Visual Culture and Literature: Hispanic Connections (4 credits)
- SPAN 380 Themes in Latin American Literature (4 credits)
- SPAN 405 Spanish Genre Studies (4 credits)
- SPAN 410 Women and Discourse of the Spanish-speaking World (4 credits)
- SPAN 411 Ethnicity and Multiculturalism of the Spanish-speaking World (4 credits)
- SPAN 412 Chicano and U.S. Latino Culture(s) and Literature(s) (4 credits)
- SPAN 415 Hispanic Cinema Studies (4 credits)

Linguistics and Applied Language Studies

Required for concentration (4 credits):

- SPAN 315 Introduction to Hispanic Linguistics (4 credits)

For the remaining 16 credits, students may choose from the following electives.

Up to eight (8) credits may be taken from the Cultural and Literary Studies area or in courses numbered SPAN 393, SPAN 476, SPAN 478, SPAN 485, SPAN 487, SPAN 489, SPAN 490, SPAN 495, or LNGS 325:

- SPAN 316 Studies in Spanish Linguistics (4 credits)
- SPAN 317 Spanish Phonetics and Pronunciation (4 credits)
- SPAN 318 Introduction to Spanish Translation (4 credits)
- SPAN 320 Business Spanish (4 credits)
- SPAN 434 Spanish Applied Linguistics (4 credits)
- Students in teacher licensure programs must include a course in linguistics (recommended SPAN 315).
- Students majoring in Spanish must take a minimum of twelve (12) credits in Spanish at the 300-level or above at St. Thomas or in a St. Thomas-approved study abroad program.

Students must complete the introductory and intermediate language program (SPAN 111, 112, 211, 212), or its equivalent, with a C- or above in all coursework before moving on to SPAN 300. Spanish majors/minors must complete SPAN 300, 301, and 305 with a C- or above in each course before proceeding on to further courses in the Spanish major/minor.

For administrative purposes, students will complete assessment measures at the beginning of their major (in their 300 class) and during their final semester.

Minors in Spanish

Minor in Spanish

In consultation with their minor field adviser, students must complete twenty (20) credits in courses numbered 300 and above. After completing the core courses (SPAN 300, 301, 305), students may select two additional courses from any of the remaining upper-division Spanish courses (numbered above 305). Students must complete the introductory and intermediate language program (SPAN 111, 112, 211, 212), or its equivalent, with a C- or above in all coursework before moving on to SPAN 300. Spanish minors must complete SPAN 300, 301 and 305 with a C- or above in each course before proceeding on to further courses in Spanish.

Students minoring in Spanish must take a minimum of:

- eight (8) credits in Spanish at the 300-level or above or
- six (6) credits of Spanish at the 300-level plus LNGS 325 at St. Thomas or in a St. Thomas-approved study abroad program.

Minor in Spanish for Health Professions

A minor in Spanish for Health Professions gives students the linguistic and cultural competencies required to navigate healthcare settings in Spanish, and it provides additional training in health issues related to Latinx and Spanish-speaking populations.

Students must complete the introductory and intermediate language program (SPAN 111, 112, 211, 212 or 220), or its equivalent, with a C- or above in all coursework before moving on to SPAN 300. For students who need to take 212 or 220, SPAN 220 Spanish for Health Care Professions (4 credits) is suggested as the foundational course for this minor.*

After this, in consultation with their minor field advisor, students complete twenty (20) credits in courses numbered 300 and above, which will include:

- SPAN 300 Advanced Spanish Grammar (4 credits); and
- SPAN 305 Spanish Oral Expression and Culture (4 credits)

+ 12 credits from the following:

- SPAN 312 Introduction to Medical Interpreting (4 credits)
- SPAN 327 Environment and Health in the Hispanic World (4 credits)
- SPAN 350 Latinx Health and Migration (4 credits)
- SPAN 415 Hispanic Cinema: Ethical Discussions for the Professions (4 cr.)
- SPAN 393 Individual Study (2 or 4 cr.)
- SPAN 476 Experiential Learning: Community Engagement (1 to 4 cr.)

*Students who place into SPAN 300 or above must still complete 20 credits for the minor. They are not required to take SPAN 212 or 220 if they place higher than the SPAN 212 level, or if they receive credit for SPAN 212/SPAN 220 or higher (or the equivalent).

Spanish Undergraduate Courses

LNGS 325 Language Matters (2 credits)
This course examines the importance of languages and cultural knowledge in a globalized world. Drawing on examples from students' experiences and incorporating scholarly sources and information from different disciplines, students will learn about the intersection of languages and cultures from around the world. Topics will include issues of identity, power, social justice, dignity, diversity, global citizenship, and vocation. Prerequisite: Students must have at least 80 credits in order to register for this course.

SPAN 111 Elementary Spanish I (4 credits)
Pronunciation, essentials of grammatical structures, aural-oral practice, writing, reading of simple Spanish prose, introduction to the cultures of the Spanish-speaking world. For those with fewer than two years of high school Spanish. Registration by permission. SPAN 111 cannot be taken if credit for a more advanced SPAN course has already been received.

SPAN 112 Elementary Spanish II (4 credits)
Continuation of SPAN 111. Emphasis on grammatical structure, aural-oral practice, writing, reading. Continuation of Hispanic culture. Prerequisite: SPAN 111 or its equivalent with a grade of C- or better.

SPAN 122 Elementary Spanish II With Rev (4 credits)
SPAN 122 is a beginning level Spanish course developed for students with previous language experience. It begins with an accelerated review of SPAN 111 followed by material covered in SPAN 112. The course prepares students to communicate in Spanish in everyday situations at an elementary level of proficiency. It also introduces students to cultural products, practices and perspectives from different parts of the Spanish-speaking world. Cannot be taken if credit for SPAN 111 was received.

SPAN 211 Intermediate Spanish I (4 credits)
Designed to increase listening, speaking, reading, and writing skills in Spanish. Intensive review of grammatical structures of Elementary Spanish I and II. Continued exposure to Hispanic culture. Prerequisite: SPAN 112 or SPAN 122 or their equivalent with a grade of C- or better.

SPAN 212 Intermediate Spanish II (4 credits)
Continuation of SPAN 211. Emphasis on Hispanic culture, conversation, writing, and expansion of vocabulary based on thematic discussions and cultural readings. Prerequisite: SPAN 211 or its equivalent with a grade of C- or better.

SPAN 220 Spanish for Health Care Profes (4 credits)
This is an intermediate level Spanish language and culture course for students who plan to work in health-related careers such as medicine, nursing, medical translation/interpretation, physical therapy, or health education. The course provides students with the medical Spanish terminology and intercultural competence to improve their interactions with Spanish-speaking patients and clients. Prerequisites: SPAN 211 or its equivalent with a grade of C- or better; placement beyond the SPAN211 level

SPAN 243 Individual Study (2 OR 4 credits)

SPAN 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SPAN 300 Advanced Spanish Grammar (4 credits)
Advanced Grammar with emphasis on review of grammatical structures, language development, mechanics, and expansion of vocabulary. Writing of basic structures in expository prose. Prerequisite: Completion of SPAN 212 or SPAN 220 or equivalent with a C- or above.

SPAN 301 Adv Written Spanish & Culture (4 credits)
Intensive practice in written Spanish using selected materials to acquire a high level of competence in writing Spanish. This writing course aims to improve technique, expand syntactic depth, increase vocabulary and learn good writing through a process approach involving stages of idea development, thesis construction, structural development, bibliographic notation, evaluation of ideas and rewriting of the text. Lectures and class discussions are based on major topics that relate to the cultures of the Spanish-speaking world. Written skills will be assessed. Prerequisite: Completion of SPAN 300 or its equivalent with a C- or better.

SPAN 305 Span Oral Expression & Culture (4 credits)
The aim of this course is to develop aural and oral skills through the analysis and interpretation of representative cultural expressions of the Spanish-speaking world. This course is intended to stimulate creative, critical thinking in Spanish through activities that require students to argue, persuade, analyze, and interpret other points of view. Oral skills will be assessed. Prerequisite: Successful completion of SPAN 300 or its equivalent with a C- or better. May be taken simultaneously with SPAN 301 or 315.

SPAN 312 Intro to Medical Interpreting (4 credits)
This course introduces the complex task of spoken language for medical interpreting, focusing on developing critical thinking, decision-making, cognitive skills related to interpreting, and basic interpreting skills. Coursework includes theoretical knowledge and practical application of medical interpreting skills, medical terminology, glossary development, culturally responsive mediation skills, and role-plays in different healthcare settings. We welcome and encourage Spanish Heritage Learners to register for this course. Prerequisites: Completion of SPAN 220 or equivalent with a grade of C- or better or permission of instructor

SPAN 315 Hispanic Linguistics (4 credits)
An introduction to both contemporary and historical Hispanic linguistics. Descriptive Spanish phonetics and phonology. History of the Spanish language with emphasis on historical sound-change phenomena. Systematic study of dialectal variation in both Spain and Spanish America. Prerequisites: Successful completion of SPAN 301 and 305 or their equivalents with a C- or better in each course, (may be taken simultaneously with SPAN 305).

SPAN 316 Studies in Spanish Linguistics (4 credits)
This course provides an in-depth study into a particular area of Spanish Linguistics. Topics may vary with each offering and may include Phonology/Morphology, Syntax, Dialectology, Semantics/Pragmatics, Discourse Analysis, and Second Language Acquisition. Credit may be earned more than once under this number for different emphases. Prerequisites: Successful completion of SPAN 301 and 305 or their equivalents with a C- or better in each course (may be taken simultaneously with SPAN 305).

SPAN 317 Spanish Phonetics and Pronunc. (4 credits)
This course provides undergraduate students with an understanding of the basic concepts of phonetics and phonology. Students apply these concepts to achieve more native-like pronunciation in Spanish. Tasks include recognizing, producing, transcribing and describing in linguistic terms the sounds of Spanish. Prerequisites: Successful completion of SPAN 301 and 305 or their equivalents with a C- or better in each course, (may be taken simultaneously with SPAN 305).

SPAN 318 Intro to Spanish Translation (4 credits)
In this course students will learn introductory techniques and principles of translation, review Spanish grammar and improve their reading and writing skills. The main objective of this course will be to develop the necessary skills in order to become proficient communicators in bilingual contexts. We will mainly use Spanish as a source language to translate an array of journalistic, literary,

academic, and technical texts into English. At some specific instances, we will translate from English to Spanish to give students the opportunity to practice this skill as well. To enhance the practical component of the course, we will reflect on key theoretical issues related to translation practice through selected readings on translation as a process and as a product, cultural issues in translation, and the role of the translator today. Prerequisites: Successful completion of SPAN 301 and 305 or their equivalents with a C- or better in each course, (may be taken simultaneously with SPAN 305).

SPAN 320 Business Spanish (4 credits)
Practice in the language skills and vocabulary needed to conduct business in the Hispanic world; an overview of political, economic, social and cultural factors which affect business in the Hispanic countries. Prerequisites: Successful completion of SPAN 301 and 305 or their equivalents with a C- or better in each course (may be taken simultaneously with SPAN 305).

SPAN 327 Environment Health-Hisp World (4 credits)
The National Environmental Health Association has listed climate change as the biggest human health threat of the Twenty-First Century. In this course, we will explore the connection between health and the environment by examining the mutual dependency of all forms of life (human, social, animal, vegetal, etc.), with special attention to Spanish-speaking populations. We will scrutinize the interrelated effects of climate change on individual health and social health, and we will examine the effects of human action on environmental health in Spanish-speaking areas. Since unhealthy environments have an especially devastating effect on the mental and physical health of certain communities, this course will cover the above-mentioned topics from a social justice angle, examining both specific problems (environmental pollution, water contamination, pesticides and transgenics in food; hunger) and alternatives (such as food sovereignty, ecofeminism, sumak kawsay) that can be found in the Hispanophone world. The course is conducted 100% in Spanish. We welcome and encourage Spanish Heritage Learners to register for this course.

SPAN 331 Spanish Culture & Civil (4 credits)
A study of the evolution of the civilization of Spain from the time of early human settlements through the present. This course examines socio-economic developments, political movements and artistic creations within an historical context. Prerequisites: Successful completion of SPAN 300, 301, 305 or their equivalent with a C- or better in each course.

SPAN 332 Latin Amer Cult & Civil (4 credits)
Physical and human geography. History of Latin America from pre-Hispanic civilizations through modern times. Political problems. Rural Latin America. Latin American society, cultural values. Religion. Economic problems. Prerequisites: Successful completion of SPAN 300, 301, 305 or their equivalents with a C- or better in each course.

SPAN 335 Intro to Spanish Literature (4 credits)
An introduction to Spanish and Spanish American narrative, drama and poetry. Strongly recommended for students who minor in Spanish. The course is designed to teach students the skills of critical reading and literary analysis. Prerequisites: Successful completion of SPAN 300, 301, 305 or their equivalent with a C- or better in each course.

SPAN 340 Themes in Spanish Literature (4 credits)
A comparative study of major themes in the literature of Spain with the goal of understanding their cultural relevance. Works studied represent several of the following: the medieval era, the Golden Age, the baroque, romanticism, naturalism, modernism, and texts of the twentieth and twenty-first centuries. Genres may include poetry, theater, narrative, and essays, among others. Prerequisites: Successful completion of SPAN 300, 301, 305, and 335 or their equivalents with a C- or better in each course.

SPAN 345 Transatlantic Visual Cult&Lit (4 credits)
This course is an advanced survey of the literature and the arts produced within the Spanish-speaking transatlantic world. In this course, looking into the transatlantic world will mean paying attention to the Hispanic Atlantic beyond geographical borders. It will engage students in readings, discussions, and analysis of selected iconic paintings, prints, musical texts, maps, photographs, films, letters, short stories, poems and essays. These explorations will provide students with a broad understanding of Hispanic cultural, literary, and artistic production, and will build their familiarity with the movements, encounters, and connections between Hispanophone cultures from the Medieval Ages until today. Prerequisites: Successful completion of SPAN 300, 301, 305, or their equivalent with a C- or better in each course.

SPAN 350 Latinx Health and Migration (4 credits)
In this course, we will explore the specific healthcare needs of Hispanic/Latinx people in Minnesota and the US. Together we will explore access disparities and healthcare issues as they intersect with language, cultural identity, housing, and economic

opportunity. We will end the course with a compilation of video projects based on course readings and personalized research of community organizations. Due to the nature of the course, a portion of the bibliography is in English. All class lectures, discussions, final video projects, presentations, and assignments are in Spanish. We welcome and encourage Spanish Heritage Learners to register for this course. Prerequisites: Successful completion of SPAN 300 and SPAN 305 (or equivalent) with a grade of C- or better, or permission of instructor.

SPAN 380 Themes in Latin-Americ. Lit. (4 credits)
A comparative study of major themes in Latin American literature with the goal of understanding their cultural relevance. Works studied represent several of the following historical periods; the pre-Columbian era, the age of Spanish exploration of the Americas, the colonial era, the nineteenth and twentieth centuries, and beyond. Genres may include poetry, theater, narrative, and essays, among others. Prerequisites: Successful completion of SPAN 300, 301, 305, and 335 or their equivalents with a C- or better in each course.

SPAN 393 Individual Study (2 OR 4 credits)

SPAN 395 UD Spanish Linguistics (4 credits)
For transfer and study abroad purposes only

SPAN 405 Spanish Genre Studies (4 credits)
An examination of particular genres of Spain and Spanish America during defined literary periods. Topics will vary with each offering and may include the novel, non-fictional prose, short story, poetry, and theater of Spain and Spanish America. Credit may be earned more than once under this number for different emphases. May be taken twice with different topics. Prerequisites: Successful completion of SPAN 300, 301, 305 and 335 or their equivalents with a C- or better in each course.

SPAN 411 Ethnicity and Multiculturalism (4 credits)
This course aims to analyze the concepts of race, ethnicity and multiculturalism in the Spanish-speaking world. Due to the multiculturalism and diversity in the Hispanic world, this course could include topics such as literary/social interpretations of Islam, Judaism and Christianity in Muslim Spain, Gypsies in film, culture, music and poetry, Equatorial Guinean culture and the poetry of resistance and idealism, abolitionist and neo-slave narratives and their cultural contexts, indigenismo and indigenous cultures in Latin American literature, among many others. Emphasis will vary in the different offerings of the course. May be taken twice with different topics. Prerequisites: Successful completion of SPAN 300, 301, 305 and 335 or their equivalents with a C- or better in each course.

SPAN 412 Latinx Literature and Cultures (4 credits)
Overview of the different issues that concern the U.S. Latinx population. This course studies cultural artifacts and literary texts (in Spanish) relating to the multiple cultures of the Spanish-speaking U.S. Topics of class discussion could include: The United Farmers Workers and the Chicano Power movement in the 1960s, the role of César Chávez and Luis Valdez, and literary interpretations of the Latinx experience. Authors will be selected from a broad range of writers such as Cherríe Moraga, Sandra Cisneros, Rolando Hinojosa, Miguel Mendez, Julia Alvarez, Cristina Garcia, Gustavo Perez Firmat, Achy Obejas, Esmeralda Santiago, among others. Prerequisites: Successful completion of SPAN 300, 301, 305, and 335 or their equivalents with a C- or better in each course

SPAN 415 Hispanic Cinema Studies (4 credits)
Examination of the cinematic arts as they relate to the cultures and literatures of the Spanish-speaking World. Course topics may include some of the following: gender, class, and/or ethnicity/race in Hispanic Cinema, discussion of film techniques, narrative structures, major directors, cinematic movements of Spain, Latin America, and/or U.S. Latino film, or the relationship of film to history, culture and society. May be taken twice with different topics. Prerequisites: Successful completion of SPAN 300, 301, 305 and 335 or their equivalents with a C- or better in each course.

SPAN 434 Spanish Applied Linguistics (4 credits)
This course focuses on the theory and development of the field of Spanish second language acquisition and pedagogy. Special attention will be dedicated to the most common grammatical, linguistic, and methodological issues related to teaching Spanish to English native speakers. Topics covered will also include the role of technology in language teaching and methods for evaluating the linguistic competence of learners of Spanish. Prerequisites: Successful completion of SPAN 300, 301, 305, and 315 or their equivalents with a C- or better in each course.

SPAN 476 Experiential Learning (1 TO 4 credits)

SPAN 485 Seminar (4 credits)

SPAN 487 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SPAN 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SPAN 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SPAN 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SPAN 495 Individual Study (2 OR 4 credits)

Sports Management

Interdisciplinary Minor – See Business

Statistics

Statistics Program Website:
https://www.stthomas.edu/academics/undergraduate/statistics-major-and-minor

College of Arts and Sciences, Interdisciplinary Program

Director: Shemyakin (MATH)
Advisory Committee: Berg (CISC), Clark (MATH), Curran (CISC), Dragovic (MATH), Dwyer (CISC), McNamara (CISC), Weinburd (CISC), Werness (CISC)

Statistics is an interdisciplinary major that draws upon faculty and courses in the departments of Computer and Information Sciences and Mathematics. The major is administered by a committee of representatives from both departments, and integrates sophisticated technology with modern statistical methods to solve real-world problems.

Major in Statistics (B.S.)

52 credits

This joint major allows students to pursue an interest in statistics and related areas including biostatistics, operations research, and data mining.

Required courses:

- MATH 113* (or MATH 109* or MATH 112*) Calculus I (4 credits)
- MATH 114* Calculus II (4 credits)
- MATH 200* Multivariable Calculus (4 credits)
- MATH 240* Linear Algebra (4 credits)
- STAT 313* Probability (4 credits)
- STAT 314* Mathematical Statistics
- STAT 333* Predictive Modeling (4 credits)
- DASC 360* Multivariate Statistics and Data Analysis (4 credits)
- DASC 400* Data Mining and Machine Learning (4 credits)
- STAT 460* (or DASC 460*) Statistics and Data Science Practicum (4 credits)

*Note: A grade of C- or above must be earned by major candidates in these required courses.

Plus 8 credits from the following:

- STAT 370 Bayesian Statistical Models (4 credits)
- STAT 413 Generalized Linear Mixed Models (4 credits)
- STAT 296 (or DASC 296) Topics (2 credits)
- STAT 298 (or DASC 298) Topics (4 credits)
- STAT 488 (or DASC 488) Topics (2 credits)
- STAT 490 (or DASC 490) Topics (4 credits)
- DASC 210 Biostatistics (4 credits)
- DASC 336 Data Communication and Visualization (4 credits)
- DASC 380 Spatial Statistics (4 credits)
- DASC 420 Network Science and Graph Theory (4 credits)
- ACSC 364 Mathematical Finance (4 credits)
- ACSC 375 Short-Term Actuarial Models (4 credits)

Allied Requirements:

- CISC 131* (or CISC 130*) Introduction to Programming and Problem Solving (4 credits)

*Note: A grade of C- or above must be earned by major candidates in these allied courses.

Minor in Statistics

24 credits

This joint minor allows students to pursue an interest in statistics and related areas including biostatistics, operations research, and data mining.
Required courses:

- MATH 113* (or MATH 109* or MATH 112*) Calculus I (4 credits)
- MATH 114* Calculus II (4 credits)
- MATH 200* Multivariable Calculus (4 credits)
- MATH 240* Linear Algebra (4 credits)
- MATH 313* Probability (4 credits)
- STAT 314* Mathematical Statistics (4 credits)

* Note: A grade of C- or above must be earned by minor candidates in these required courses.

Statistics Undergraduate Courses

STAT 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

STAT 303 Statistics/Applied Sciences (4 credits)
Probability, Estimation, Hypothesis Testing, Analysis of Variance, Regression Analysis, Topics selected from Experimental Design, Statistical Process Control, Non-Parametric Methods, Factor Analysis as time permits. Prerequisite: A grade of C- or above in MATH 114. NOTE: Students who receive credit for STAT 303 may not receive credit for STAT 313 or STAT 314.

STAT 313 Probability (4 credits)
Probability theory in discrete and continuous sample spaces; random variables and distribution functions; moments; the moment-generating function; functions of random variables; law of large numbers; central limit theorem. Prerequisites: A grade of C- or above in MATH 200 (may be taken concurrently with consent of instructor). NOTE: Students who receive credit for STAT 313 may not receive credit for STAT 303.

STAT 314 Mathematical Statistics (4 credits)
Students will learn the theory and applications of point estimation, interval estimation, and hypothesis testing. Students will construct intervals and tests using a variety of statistical tools including frequentist statistical theory, Bayesian statistical theory, and resampling-based simulation. Prerequisites: Grades C- or higher in MATH 240 and STAT 313. NOTE: Students who receive credit for STAT 314 may not receive credit for STAT 303.

STAT 333 Predictive Modeling (4 credits)
The course introduces the theory and applications of simple and multiple regression methods, including model construction and selection, transformation of variables and residual analysis; introduction to GLM (generalized linear models) for categorical and count response variables; time series analysis with ARIMA (autoregressive integrated moving average models). Students are introduced to principles of data collection and analysis, learn to work with statistical literature. Students present a writing intensive small group course project. Prerequisites: Grades C- or higher in MATH 240 and in STAT 303 or STAT 314.

STAT 370 Bayesian Statistical Models (4 credits)
The course covers a range of statistical models used in applications including Actuarial Science, Finance, Health, and Social Sciences. It is oriented towards practical model construction and problem solving. The theory of Monte Carlo and Markov Chain Monte Carlo simulation is considered as well as its practical implementation. Credibility theory serves as one of the major applications. Prerequisites: MATH 109, 112 or 113; AND STAT 314 or DASC 240.

STAT 380 Spatial Statistics (4 credits)
This course provides students with the background necessary to investigate spatially-referenced data and processes. There is an emphasis on specifying and fitting hierarchical models to represent geostatistical or point-referenced data, lattice or aerial data, and point process data. Students will also be introduced to the use of formal spatial data structures, point pattern analysis and cluster detection, spatial interpolation and kriging, spatial autocorrelation and variogram analysis, and spatial autoregressive models. Prerequisites: STAT 320 or STAT 333

STAT 413 Generalized Linear Mixed Model (4 credits)
This course provides students we a review of methods of inference in the context of the linear model and generalized linear model. Students will then learn about correlation structures and linear models, and finally will create and conduct inference on generalized linear models. The course will emphasize analyzing real world data using modern statistical software. Additionally, students will understand the statistical theory underlying inference for generalized linear mixed models. Prerequisites: STAT DASC 360

STAT 460 STAT & Data Science Practicum (4 credits)
This course provides students the opportunity to develop and pursue an advanced statistical analysis with real world relevance and application. In addition to working with a faculty instructor, students are also given the opportunity to collaborate with professional mentors from various industries and to participate in national competitions. Previous sponsors include the Minnesota Department of Natural Resources, the Travelers Companies, U.S. Bancorp, SCOR Reinsurance, Drake Bank, and numerous professors from other departments at St. Thomas. Grade of C- or higher in STAT 360 and senior standing.

STAT 476 Experiential Learning (1 TO 4 credits)

STAT 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses.

Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

STAT 495 Individual Study (2 OR 4 credits)

Strategic and Business Communication

Co-Major

The Co-Major of Strategic and Business Communication offers a highly focused and streamlined curriculum for students interested in careers of strategic business communication, an integrated industry of marketing, public relations, advertising and digital communication, in businesses and non-profit organizations. Students with the co-major will develop both a solid and well-rounded foundation of business acumen and specialized and professional skills in strategic communication.

Students of the Co-Major in Strategic and Business Communication will take the following courses (total 82-88 credits)

Strategic Communication Major Core Courses (30-32 credits):

- STCM 111 Introduction to Journalism and Mass Media (4 credits)
- STCM 234 Principles of Strategic Communication (4 credits)
- STCM 244 Research, Measurement, and Evaluation (4 credits)
- STCM 344 Writing for Strategic Communication (4 credits)
- STCM 346 Digital Content and Strategy in Strategic Communication (4 credits)
- STCM 380 Ethics in Strategic Communication (4 credits)
- STCM 480 Capstone: Strategic Communication Campaigns (4 credits)

Business Communication Courses (32-36 credits):

- ACCT 100 Principles of Accounting I (4 credits)
- ACCT 200 Principles of Accounting II (2 credits)
- BETH 300 Ethical Principles in Business (2 credits)
- BLAW 300 Law for Business Leaders I (2 credits)
- BUSN 100 Business for the Common Good (2 credits)
- BUSN 200 Business Learning through Service (0 credits)
- ENTR 100 Introduction to Entrepreneurship & Innovation (2 credits)
- FINC 310 Core Financial Management (2 credits)
- MGMT 200 Working Skillfully in Organizations (2 credits)
- MKTG 200 Introduction to Marketing (2 credits)
- MKTG 201 Application in Marketing (2 credits)
- MKTG 320 Integrated Marketing Communications (4 credits)
- OPMT 200 Operations & Supply Chain Management (2 credits)
- BUSN 202 MS Excel Business Applications (0 credits)
- or CISC 200 Intro to Computer Technology & Business Applications (4 credits)

Plus four additional credits from the following courses (4 credits):

- BLAW 313 Essentials of Intellectual Property Law (2 credits)
- MGMT 367 Leading and Managing Change (2 credits)
- MKTG 340 Marketing Research (4 credits)
- MKTG 370 Consumer Behavior (4 credits)
- MKTG 380 Digital Marketing (4 credits)
- MKTG 390 Marketing Strategy (4 credits)

Allied Courses: (20 credits)

Twelve credits from the following (12 credits). Note: DASC 120 should be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete this course by the end of their first semester, junior year.

- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- DASC 120 Introduction to Computational Statistics (4 credits)

Plus four credits from the following (4 credits)

Note: The math requirement must be completed by the end of the sophomore year.

- MATH 101 Finite Mathematics (4 credits)
- MATH 109 Calculus with Review II (4 credits)

- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Plus four credits from the following (4 credits)

- STCM 250 Science, Media, and Social Impact (4 credits)
- STCM 260 Corporate Communication (4 credits)
- STCM 360 Brand Reputation and Crisis Management (4 credits)t
- STCM 476 Experiential Learning (2 or 4 credits)
- COMM 100 Public Speaking (4 credits)
- COMM 105 Communication in the Workplace (4 credits)
- COMM 212 Communication Criticism (4 credits)
- COMM 220 Interpersonal Communication (4 credits)
- COMM 244 Sport Communication (2 credits)
- COMM 246 Building Communication Skills Through Improvisation (2 credits)
- COMM 274 Small Group Communication (4 credits)
- COMM 320 Organizational Communication (4 credits)
- COMM 366 Persuasion & Social Influence (4 credits)
- COMM 370 Intercultural Communication (4 credits)
- DIMA/JOUR 232 Visual Media in Theory and Practice (4 credits)
- DIMA/JOUR 240 Digital Imagery and Sound (4 credits)
- DIMA 358 Writing and Designing for the Web (4 credits)

Strategic Communication: Advertising and Public Relations

Program Overview

College of Arts and Sciences, Department of E-Media

Strategic Communication trains students to become successful professionals in the integrated industry of public relations, advertising, and digital communication. The curriculum focuses on developing skills in strategic thinking, planning, and execution, interdisciplinary problem solving, and effective communication using multiple platforms. The curriculum combines both theoretical principles and project-based experiential learning to the accomplishment of goals and objectives in the organizational environment. The curriculum reflects the integrated industry through content and skill courses in strategic communication and flexible pathways to related disciplines. This is a distinct major from Communication Studies, a description of which can be found on the Communication Studies Catalog Page.

Major in Strat. Comm.: Adv'g and PR

Strategic Communication: Advertising and Public Relations majors must take 44 credits

Core Courses (28 credits):

- STCM 111 Introduction to Journalism and Mass Media (4 credits)
- STCM 234 Principles of Strategic Communication (4 credits)
- STCM 244 Research, Evaluation, and Measurement (4 credits)
- STCM 344 Writing for Strategic Communication (4 credits)
- STCM 346 Digital Content and Strategy in Strategic Communication (4 credits)
- STCM 380 Ethics in Strategic Communication (4 credits)
- STCM 480 Capstone: Strategic Communication Campaigns (4 credits)

Elective Courses (16 credits):

Choose additional 16 credits from the following approved courses with at least four credits (4) at the 300-level or above. These electives can include approved individual study, experiential learning for credit, study abroad or topic courses. No more than eight (8) credits from Internship and Experiential Learning can count towards the major.

- STCM 250 Science, Media, and Social Impact (4 credits)
- STCM 260 Corporate Communication (4 credits)
- STCM 272 Advertising Media and Connections Planning (4 credits)
- STCM360 Brand Reputation and Crisis Management (4 credits)
- STCM 368 Advertising Portfolio (4 credits)

- COMM 274 Small Group Communication or COMM 320 Organizational Communication (4 credits)
- COMM 328 Communication of Race, Class, and Gender or COMM 370 Intercultural Communication (4 credits)
- COMM 212 Communication Criticism or COMM366 Persuasion and Social Influence (4 credits)
- DIMA 240 Digital Imagery and Sound (4 credits)
- DIMA 256 Graphic Design (4 credits)
- DIMA 258 Writing and Design for the Web (4 credits)
- DIMA 360 Videography: TV Production in Field (4 credits)
- DIMA 456 Graphic Design Studio (4 credits)
- ECON 241 Quantitative Data Literacy (2 credits)
- ENGL 304 Analytical and Persuasive Writing (4 credits) or ENGL 314 Professional Editing (4 credits) or ENGL 315 Topics in Professional Writing (4 credits)
- JOUR 151 Internship: Tommie Media (1 credit)
- JOUR 232 Visual Media in Theory and Practice (4 credits)
- JOUR 252 Editing (4 credits)
- JOUR 330 Media History (4 credits)
- JOUR 334 Literary Journalism (4 credits)
- JOUR 336 Media Law (4 credits)
- JOUR 350 Magazine Writing (4 credits)
- BUSN 100 Business for the Common Good (2 credits) and MKTG 200 Introduction to Marketing (2 credits) or MKTG 300 Principles of Marketing (4 credits)
- MKTG 320 Integrated Marketing Communications (4 credits) or MKTG 380 Digital Marketing (4 credits) or MKTG 370 Consumer Behavior (4 credits)

Minor in Strat. Comm: Adv'g and PR

Strategic Communication: Advertising and Public Relations minors must take 20 credits with at least 12 credits in Strategic Communication (STCM), and at least four credits (4) must be from courses at 300-level or above. Courses can include approved individual study, experiential learning for credit, study abroad or topic courses. No more than a total of four (4) credits from Internship and Experiential Learning can count towards the minor.

Strat. Comm. Undergraduate Courses

STCM 111 Intro to Mass Media (4 credits)
This course will introduce the student to mass media, including news media, social media and entertainment media. The course examines the mass media as cultural industries. Students will consider how the mass media shape and are shaped by society, the history of particular media, current research and media trends. Students will be expected to obtain an understanding of how print, broadcast, social, film and other media work, as well as a sense of their influence. Students are also expected to learn to be critical media consumers, asking themselves why they watch or read or listen to what they do. Students are strongly encouraged to take this course before taking upper-level Strategic Communication courses. The course is cross listed as DIMA 111 and JOUR 111.

STCM 234 Principles of Strategic Comm (4 credits)
This course will introduce principles and career outlooks in public relations, advertising and digital communication, highlighting how these disciplines relate to marketing, business and media institutions. The course will adopt a case study approach to understanding the principles. Students should take STCM234 either after or in the same semester of taking STCM111 (cross-listed with JOUR111).

STCM 244 Research, Measurement, & Eval (4 credits)
This course introduces students with foundational research skills essential to strategic communication. Students will learn how to locate research, interpret research findings, and translate results into actionable strategy. Students will learn about different research methods and how to measure and evaluate public relations and advertising campaign effectiveness. Students are strongly encouraged to take this course after STCM111 and STCM234, or in the same semester of taking STCM234.

STCM 250 Science, Media & Social Impact (4 credits)
This course will introduce students to foundational concepts in science and its social impacts through discussion of the scientific method, boundaries of science, media construction of science, and the contribution of science in trust building and decision-making in various contexts. The course is designed to help students gain understanding and knowledge of contextual factors that shaped science and the uneven impacts on traditionally marginalized groups. Coursework will help students develop diverse and critical perspectives of communication about science concerning

marginalized communities. Prerequisite: Sophomore standing

STCM 260 Corporate Communication (4 credits)
This course introduces the roles and responsibilities of corporate communication function with its internal and external audiences and stakeholders. Students will learn how modern and contemporary corporations develop integrated communication strategies through branding, employee relations, consumer relations, investor relations, community relations, media relations, government relations, marketing and advertisement, and crisis communication. The course will also discuss the implications of corporate social responsibility (CSR) and corporate communication strategies in different types of organizations (e.g., public vs. private).

STCM 272 Advertising Media & Conn Plan (4 credits)
This course will help students develop an understanding of the use of mass media as advertising vehicles, the language of media planning, key media information sources, and how to develop a media plan. Students are strongly encouraged to take this course after STCM111 and STCM234.

STCM 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

STCM 344 Writing for Strategic Comm (4 credits)
This course focuses on practical experience in public relations and advertising writing such as strategic communication plans, advertising copy for different forms of media, and public relations writing for media and other stakeholder audiences. The course emphasizes weekly drafting and editing in class with the aim of giving students the fundamental skills that constitute excellent writing. Students leave the course with a portfolio of written work that can be used for internships and job interviews. Prerequisite: STCM 234.

STCM 346 Digital Content and Strategy (4 credits)
This course examines the ways digital platforms affect the integrated professions of public relations and advertising. Students will gain familiarities with various digital platforms to plan and develop digital content and strategy. This course will also introduce the basics in data metrics and analytics to assess outcomes and best achieve strategic goals. The course will combine in-class learning and online activities. Prerequisite: STCM244

STCM 360 Reputation and Crisis (4 credits)
This course aims to provide both conceptual knowledge and practical skills in developing, maintaining, and repairing an organization's reputation. The course will introduce concepts of brand identity, risk assessment, reputation and issues management, and crisis communication. The course will review a wide range of crisis cases and discuss concrete communication strategies and practical techniques to address risks and crises threatening an organization's brand and reputation. Prerequisite: STCM 234

STCM 368 Advertising Portfolio (4 credits)
This course develops creative advertising, refines skills used in evaluating the effectiveness of messages and strategies used in various media, and develops greater awareness of productive skills used in copywriting and other forms of creative development. Students will develop four major multimedia campaigns and receive feedback from advertising professionals. The campaigns and other individual ads and/or promotional pieces will be included in a portfolio the students will develop for use in interviewing and applying for creative positions in ad agencies or creative departments in businesses with marketing and/or communication departments. Prerequisite: STCM234

STCM 380 Ethics in Strategic Comm (4 credits)
This course focuses on professional ethics in the integrated field of strategic communication which is made up of Public Relations, Advertising, and Digital Communication. The course will cover theories and philosophies underlying the professional ethical codes, discuss moral challenges facing strategic communication professionals in today's digital world, examine ethics in the context of diversity and globalization, and explore strategies and best practices in resolving ethical dilemmas in public relations, advertising, and digital communication. The course relies on both case studies and real-life events to connect theory to practice. Prerequisite: STCM234 or Junior standing

STCM 476 Experiential Learning (1 TO 4 credits)

STCM 480 Capstone: Campaigns (4 credits)
This capstone course will integrate content knowledge with experiential skills to develop strategic communication campaigns. Students will work with clients in teams to identify client's goals, develop advertising, public relations, and media strategies, and set measures to evaluate the effectiveness of campaigns, while maintaining relationships with key audiences. Prerequisites: Graduating seniors or permission of department chair or program director

Sustainability

A minor in sustainability at the University of St. Thomas will prepare you to examine complex issues between people and the environment, ultimately giving you the skills, insights and experience needed to work effectively toward a sustainable future.

Minor in Sustainability

Available only to non-Environmental Studies majors

Required:

- ENVR 151 Environmental Challenges and Sustainable Solutions (4 credits)

Plus:

- 4 credits from a course in the EES Department with a SUST designation as listed on the Office of Sustainability Initiatives website (https://www.stthomas.edu/academics/undergraduate/sustainability-minor/index.html)
- 12 credits from Sustainability (SUST) designated courses as listed on the Office of Sustainability Initiatives website
- No more than 8 credits in this minor can be from any single discipline.
- 8 Credits must be at the 200 level or higher

Theater

Program Overview

College of Arts and Sciences Program

John Roach Center (JRC) 311, (651) 962-5600

Alexis Easley, Chair. Adjunct faculty: Shanan Custer

Department Web Site: https://cas.stthomas.edu/departments/areas-of-study/english/index.html

The study of theater develops personal creativity and confidence, collaborative skills, and knowledge of an art form that has played a central role in global history. It continues to provide a source of excitement, entertainment, and meaning in the contemporary world. Courses in theater teach the creative skills and techniques of theater performance, the history of theater, and the concepts of theater practice and criticism. Selected theater offerings fulfill the Fine Arts flag in the core curriculum. (Note: Theater offerings are administered through the Department of English.)

Theater Undergraduate Courses

THTR 111 Introduction to Theater (4 credits)
This course provides a foundation in theater and drama for students who have experienced theater first-hand as well as for those who have never seen a play. Emphasis on production practices as well as roles in theater will be used to introduce the customs and conventions of theatrical art and management, such as acting, directing, and stage managing as well as design (costume, light, set and sound). In addition, the course introduces historical movements and theories in theater as a way of engaging with trends in new plays and productions. Students should expect to attend a live performance during the semester as well as engage with playscripts from both classical theater as well as new works.

THTR 214 Beginning Acting (4 credits)
Provides a foundation for acting through examination of the research process essential to achieving physical and psychological characterization. Emphasis is on theory and the practical application of performance.

THTR 218 Acting for the Camera (4 credits)
Acting for the Camera is an introduction to principles, techniques, and performance methods relevant to acting on camera. Students will learn to apply principles and theory to analyze filmed performances and scripts, and we will apply techniques and methodology by preparing and performing dialogue and scenes with partners in class. Students will learn to analyze a film script in preparation for an audition and will learn best practices for self-recording for professional auditions, including the creative and technical acts of lighting, blocking, and sound.

THTR 221 Hist of Theater I: World (4 credits)
The history and analysis of theater forms, Western and non-Western, from ancient rituals to the 18th century with attention to the relationships between the plays and the audience, performers, and production methods of various periods.

THTR 222 Hist of Theater II:Mod/Contemp (4 credits)
Examination of 18th, 19th and 20th century world theater with special attention to both the contemporary and historic perspectives. Deals with major movements and styles of modern theater.

THTR 223 Hist of Theater III-American (4 credits)
Development of theater in the United States from its 17th century roots to the present, with special attention to contemporary American drama. Emphasis on the connections between theater and culture.

THTR 243 Individual Study (2 or 4 credits)

THTR 269 Research (2 or 4 credits)

THTR 285 Scenery Design (4 credits)

THTR 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

THTR 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

THTR 389 Research (2 or 4 credits)

THTR 393 Individual Study (2 or 4 credits)

THTR 412 Drama:Theory & Criticism (4 credits)
Study in abstract and applied dramatic theory. Selected playwrights and bodies of criticism that surround their work are examined closely in relation to various theoretical systems. Aristotle through post-modern.

THTR 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

THTR 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

THTR 495 Individual Study (2 or 4 credits)

THTR 497 Individual Study (4 credits)

THTR 498 Individual Study (4 credits)

Theology

College of Arts and Sciences

Department of Theology: https://cas.stthomas.edu/departments/areas-of-study/theology

John Roach Center for the Liberal Arts (JRC 109)

(651) 962-5300

Anthony, Brady, Carvalho, DelCogliano (Chair), Gavrilyuk, Landry, Levad, McMichael, Myers, Naeem, Niskanen, Pioske (Associate Chair), Potter, Rolnick, Sain, Ulrich, Wojda

THEOLOGY IN THE CORE CURRICULUM AT THE UNIVERSITY OF ST. THOMAS

In every historical period and cultural context, humans engage in a quest for meaning by asking fundamental questions. Does God exist? What does it mean to be human? What is the purpose of human life? Why is there evil and suffering? Is redemption possible?

The Theology Department invites students to enroll in a sequence of courses to assist them in articulating thoughtful responses to these questions that are formulated in light of Catholic tradition and Christian faith, and with a sincere openness to wisdom within the world's great religious traditions. These courses contribute to the liberal arts mission of the University to educate morally responsible leaders who think critically, act wisely, and work skillfully to advance the common good.

CORE CORNERSTONE COURSE

THEO 100: Foundations. In architecture, the cornerstone is the foundational stone that determines the structural integrity of a building. It provides a stable foundation for the rest of the stones that will be built upon it. In the theological curriculum at the University of St. Thomas, the cornerstone course is THEO 100: Foundations. This course introduces students to foundational concepts and skills associated with Christian theology. The course reflects critically upon the concepts of God and Christ, scripture, faith and reason, the human being, and the common good, especially in the context of Catholic Intellectual Tradition and Catholic Social Teaching. Students will gain a basic level of theological literacy through introduction to central texts within the Christian tradition, particularly the Bible. Students will also be introduced to connecting fundamental theological questions to the common good in the context of the pressing challenges of today's world.

CORE KEYSTONE COURSES

THEO 221-229. In the construction of an archway, the keystone is the wedge-shaped stone that is the final piece placed at the apex of the arch to lock all of the other stones in position. The keystone enables the arch to bear the weight of that which is built upon it. Just as there can be many arched windows and doorways in a building or cathedral, so can there be many keystones.

At St. Thomas, the keystone courses in Theology solidify the structure of our students' educational experience in the liberal arts at a Catholic University. Although none are required in the core curriculum, students are asked to choose between a second course in either Philosophy or Theology, and if chosen in Theology, this could be considered one theological keystone. Students are also required to take two "Integrations in the Humanities" courses, and Theology offers dozens each semester.

A student is able to complete a minor in Theology with only three keystone courses beyond the cornerstone course, and a student can major in Theology with the cornerstone, six keystones, and a capstone.

The keystone courses invite students to practice theology by engaging at a deeper level in the discipline of "faith seeking understanding." Courses at this level focus on a particular subdiscipline within Theology, namely, Bible, historical theology, systematic theology, moral theology, or comparative theology. Some of these courses focus on Christian spirituality, interdisciplinary topics, or theological concerns emerging out of particular cultural or professional contexts. Students critically examine core elements of the tradition, such as classic texts, concepts, persons, and/or events, while remaining mindful of the contemporary context and questions emerging from particular social locations and identities.

Theology keystone courses are:

THEO 221: Bible: [Select Topic]: topics include:
- Old Testament
- New Testament
- Historical Literature of Old Testament
- Pentateuch
- Wisdom Literature
- Prophetic Literature
- Apocalyptic Literature
- Gospels
- Letters of St. Paul
- Sex Love Friendship
- Garden of Eden

THEO 222: History: [Select Topic]: topics include:
- Early Christian Theology
- Medieval Theology
- Reformation
- Catholicism and Modernity
- Religion in America
- Second Vatican Council

THEO 223: Belief: [Select Topic]: topics include:
- Ancient & Contemporary
- Jesus Christ
- Sin & Salvation
- Grace, Hope, Eschatology
- Church & Sacramentality
- Contemporary Catholic Theologians
- Atheists & Apologists
- Thomas Aquinas
- Evil & Suffering

THEO 224: Bridges: [Select Topic]: topics include:
- Theology & Politics
- Theology & Art
- Theology & Literature
- Theology & Film
- Theology & Music
- Theology & Science
- Theology & Psychology
- Theology & Beauty
- Theology & Environment
- Theology & Mass Media
- Theology & Consumerism
- Theology & Discourse
- Theology & Technology
- Death & Afterlife

THEO 225: Faith & Ethics: [Select Topic]: topics include:
- Love & Justice
- Social Thought
- Bioethics
- Morality of War
- Incarceration
- Immigration

THEO 226: Spirituality: [Select Topic]: topics include:
- Christian Spirituality
- Christian Worship
- Christian Marriage
- Christian Formation
- Internship
- Pilgrimage in Italy
- Christian Spirituality in Rome
- Mysticism

THEO 227: Contexts: [Select Topic]: topics include:
- God
- Nazism & Apartheid
- Global Christianity
- Liberation Theology
- Church in Latin America
- Feminist Theology
- Bible & Culture
- Bible & Justice
- Women & Hebrew Bible
- Women & New Testament
- Bible & Women
- Women & Early Church
- Women & Christianity
- Justice & Peace

- Pope John Paul II in Poland

THEO 228: Comparative: [Select Topic]: topics include:

- World Religions
- Interfaith Encounter
- Interfaith Leadership
- Judaism
- Islam
- Buddhism & Hinduism
- Qur'an & Prophet
- Lived Religion
- Interreligious Dialogue
- New Norway/New Minnesota

THEO 229: Professions: [Select Topic]: topics include:

- Faith & Entrepreneurship
- Faith & Management
- Faith & Law
- Faith & Education
- Faith & Engineering
- Faith & Health Care
- Faith & Public Health
- Faith & Social Work

CORE CAPSTONE COURSE

THEO 300. In masonry, the capstone is the final stone that is laid at the top of a wall or structure. It is the highest achievement in construction. At the University of St. Thomas, all students are required to do signature work, a capstone experience that attempts to integrate the entire undergraduate career. THEO 300: Signature Work in Theology is open to students in all major fields. It is especially well suited to those who are looking for a capstone experience in the core curriculum that will help them integrate their entire experience at our Catholic University. Serving as a culminating point in the core curriculum, the signature course prepares students to build connections between their studies in the liberal arts and the broader world for which their St. Thomas education has prepared them. A principal concern of THEO 300: Signature Work in Theology is to invite students to focus on a pressing challenge in the modern world in conversation with systems of faith and meaning. Some sections are designed to guide the student in meaningful reflection about a sense of vocation in their professional, social, and familial lives. THEO 100 is a prerequisite for all courses at this level.

The three levels of courses form an integrated sequence in theological reasoning. The cornerstone foundations course (THEO 100) introduces biblical and theological foundations of the Christian tradition. The second-level keystone courses (THEO 221-229) invite students "to do" theology, whether as the second course in either Philosophy or Theology, or as "Integrations in the Humanities" courses. These courses ask students to engage in reasoning about faith even while integrating across disciplines or communities. In the "signature work" course (THEO 300), students bring theological concepts and methods into conversation with their chosen professions, or with pressing challenges in the modern world.

THEO 300: Signature Work: [Select Topic]; topics include:

- Faith & Management
- Faith & Law
- Faith & Education
- Faith & Engineering
- Faith & Health
- Faith & Public Health
- Faith & Social Work
- God
- Theology & Beauty
- Theology & Environment
- Theology & Immigration
- Theology & Incarceration
- Theology & Politics
- Theology & Art
- Theology & Film
- Theology & Science
- Justice & Peace
- Internship

National Honor Society for Religious Studies and Theology

Theta Alpha Kappa is devoted to encouraging and rewarding excellence in theology and the study of religion. The Greek letters stand for theos (God), anthropos (humans), and koinonia (community). In addition to recognizing excellence through induction into TAK, the Society also sponsors an essay contest, the winners of which are published in the TAK journal. An induction ceremony is held at St. Thomas each spring. Those invited to join must meet academic criteria based on the number of theology courses taken, their GPA in theology courses, and their overall GPA.

Study Abroad

Theology majors and minors are encouraged to study abroad. Specific courses taken abroad may substitute for St. Thomas requirements. The exchange with Australian Catholic University in Melbourne, Australia, is particularly suitable. See the Associate Chair of the Theology Department (Dr. Dan Pioske) or a study abroad advisor in the International Education Center for program options.

Major in Theology

- THEO 100: Foundations (4 credits)

Plus the following two courses:

- THEO 221: Bible: Old Testament … (4 credits)
- THEO 221: Bible: New Testament … (4 credits)

Plus three courses from the following nine categories (more than one course may be taken in the same category):

- THEO 221: Bible: … (4 credits)
- THEO 222: History: … (4 credits)
- THEO 223: Belief: … (4 credits)
- THEO 224: Bridges: … (4 credits)
- THEO 225: Faith & Ethics: … (4 credits)
- THEO 226: Spirituality:… (4 credits)
- THEO 227: Contexts: ... (4 credits)
- THEO 228: Comparative: … (4 credits)
- THEO 229: Professions:… (4 credits)

Plus:

- THEO 227: Contexts: God (4 credits)
- THEO 300: Signature Work: … (4 credits)

Minors & Certificate in Theology

Minor in Biblical Studies

A minor in biblical studies allows students to deepen their knowledge of sacred scripture. The minor is designed to build upon the skills of contemporary biblical exegesis introduced in THEO 100. The following courses are required for a minor in biblical studies:

- THEO 100: Foundations (4 credits)
- THEO 221: Bible: Old Testament (4 credits)
- THEO 221: Bible: New Testament (4 credits)
- THEO 221: Bible: [Choose Topic] (4 credits)

*This minor is only available for non-Theology majors.

Students may earn more than one minor in Theology, given the following stipulations:

- THEO 100, the first required course in every minor, need be taken only once;
- Beyond THEO 100, a student must take a minimum of six theology courses—three additional courses in each of the student's designated minors;
- Other than THEO 100, no single Theology course may count towards multiple minors;
- When a required course other than THEO 100 is shared between the two minors (e.g., THEO 225: Faith & Ethics: Social Teaching), the student will choose a suitable substitute course in consultation with the Associate Chair of the Department.

Minor in Theology

This minor allows students to create a course of study to deepen their engagement in theological reflection, methods, and topics. The following courses are required for a general theology minor:

The following four courses are required for a minor in theology:

- THEO 100: Foundations (4 credits)
- Plus 12 additional credits in Theology

*This minor is only available for non-Theology majors.

Students may earn more than one minor in Theology, given the following stipulations:

- THEO 100, the first required course in every minor, need be taken only once;
- Beyond THEO 100, a student must take a minimum of six theology courses—three additional courses in each of the student's designated minors;
- Other than THEO 100, no single Theology course may count towards multiple minors;
- When a required course other than THEO 100 is shared between the two minors (e.g., THEO 225: Faith & Ethics: Social Teaching), the student will choose a suitable substitute course in consultation with the Associate Chair of the Department.

Minor in Catholic Health Care Ethics

A minor in Heath Care Ethics gives students the basic competencies required for entry-level positions in ethics and/or mission integration units within both faith-based and secular health-care organizations.

- THEO 100 Foundations
- THEO 225 Faith & Ethics: Social Thought
- THEO 225 Faith & Ethics: Bioethics
- THEO 229 Professions: Faith & Health

*This minor is only available for non-Theology majors.

Students may earn more than one minor in Theology, given the following stipulations:

- THEO 100, the first required course in every minor, need be taken only once;
- Beyond THEO 100, a student must take a minimum of six theology courses—three

additional courses in each of the student's designated minors;
- Other than THEO 100, no single Theology course may count towards multiple minors;
- When a required course other than THEO 100 is shared between the two minors (e.g., THEO 225: Faith & Ethics: Social Teaching), the student will choose a suitable substitute course in consultation with the Associate Chair of the Department.

Minor in Theology and the Common Good

A minor in Theology and the Common Good engages the Catholic intellectual tradition, particularly Catholic social thought, to explore robust civil discourse, faithful citizenship, and the common good. It will enable students to examine the relationship of Christian faith and practice to moral, social, cultural, and economic issues of our times and to explore the meaning of faithful citizenship while advancing the common good. The following courses are required for a minor in theology and the common good:

- THEO 100: Foundations (4 credits)
- THEO 225: Faith & Ethics: Catholic Social Thought (4 credits)
- Plus any 225: Faith & Ethics: [Elective]
  —or— any 227: Contexts: [Elective]
- Plus 4 additional credits in theology

*This minor is only available for non-Theology majors.

Students may earn more than one minor in Theology, given the following stipulations:

- THEO 100, the first required course in every minor, need be taken only once;
- Beyond THEO 100, a student must take a minimum of six theology courses—three additional courses in each of the student's designated minors;
- Other than THEO 100, no single Theology course may count towards multiple minors;
- When a required course other than THEO 100 is shared between the two minors (e.g., THEO 225: Faith & Ethics: Social Teaching), the student will choose a suitable substitute course in consultation with the Associate Chair of the Department.

Minor Interfaith Leadership

Emphasizing practitioner and pre-professional preparation, the undergraduate minor in Interfaith Leadership examines contemporary and historical encounters between, among, and within religious communities, traditions, and individuals with various religious identities (including secular, nonreligious, and spiritual worldviews and ways of life), and prepares students to navigate and lead with a commitment to the common good at home, in community, and places of work. Designed to prepare students as leaders in a world increasing in religious diversity, this minor provides a skillset to analyze the dynamics of interreligious encounter and assess critically the efficacy of interfaith bridgebuilding initiatives. It can be uniquely tailored to complement a student's vocational and occupational aspirations and primary fields of study through the completion of a practical interfaith internship and/or faculty-mentored research project. The following courses are required for a minor in interfaith leadership:

- THEO 100: Foundations (4 credits)
- THEO 228: Comparative: Interreligious Encounter (4 credits)
- THEO 227: Contexts: Justice & Peace (4 credits)
- THEO 228: Comparative: [Select Topic] (4 credits);
  —or— directed internship or research

*This minor is only available for non-Theology majors.

Students may earn more than one minor in Theology, given the following stipulations:

- THEO 100, the first required course in every minor, need be taken only once;
- Beyond THEO 100, a student must take a minimum of six theology courses—three additional courses in each of the student's designated minors;
- Other than THEO 100, no single Theology course may count towards multiple minors;
- When a required course other than THEO 100 is shared between the two minors (e.g., THEO 225: Faith & Ethics: Social Teaching), the student will choose a suitable substitute course in consultation with the Associate Chair of the Department.

Minor in Comparative Theology

The minor in Comparative Theology invites students to reflect critically on their home religious tradition by engaging with traditions, texts, and practices outside their own religious tradition and community. In so doing, students not only generate new questions and insights about their own theological tradition and identity, but also increase their religious literacy and knowledge of one or more

traditions outside their own. The following courses are required for a minor in comparative theology:

- THEO 100: Foundations (4 credits)
- THEO 228: Comparative: [Choose Topic] (4 credits)
- THEO 228: Comparative: [Choose Topic] (4 credits)
- THEO 228: Comparative: [Choose Topic] (4 credits)

*This minor is only available for non-Theology majors.

Students may earn more than one minor in Theology, given the following stipulations:

- THEO 100, the first required course in every minor, need be taken only once;
- Beyond THEO 100, a student must take a minimum of six theology courses—three additional courses in each of the student's designated minors;
- Other than THEO 100, no single Theology course may count towards multiple minors;
- When a required course other than THEO 100 is shared between the two minors (e.g., THEO 225: Faith & Ethics: Social Teaching), the student will choose a suitable substitute course in consultation with the Associate Chair of the Department.

Certificate In Lay Ministry

The Certificate in Ministry will consist of six (6) four-credit undergraduate courses:

- THEO 100: Foundations
- THEO 221: Bible: Old Testament
- THEO 221: Bible: New Testament
- THEO 223: Belief: Jesus
- THEO 223: Belief: Church and Sacramentality
- THEO 225: Faith & Ethics: Love & Justice

All of the courses in the Certificate program are part of the standard offerings of the Theology department. These courses are taught by St. Thomas faculty at the same level and with the same standards as the coursework for a major in Theology. Thus, the coursework for the Certificate in Lay Ministry would be applicable toward a Baccalaureate of Arts degree, should the student decide to complete his or her studies at that level. Because they will be applicable toward the Theology major, all program standards will be the same as for the major. This means that students must maintain a grade point average of 2.0 within the program. No course can be taken on a Pass/Fail basis. If the department passes any other regulations for the major, these would automatically apply to the certificate program as well.

Because the students for which this program is designed likely will come with very different educational backgrounds and ministerial experiences, an advisor will work with each individual student to ensure the student's success. Insofar as their coursework will typically be taken within a cohort, students will attain a common educational experience by the time they have concluded the program.

Applicants for the Lay Ministry Certificate program should have at least 12 months of full-time or part-time professional ministry experience prior to admission. Prospective students will provide official high school transcript(s) or GED and official college transcript(s) (if any). They will also submit a writing sample, in which they reflect on their understanding of the vocation or theology of ministry, and a letter of recommendation from one of their supervisors in ministry. Students can transfer up to three courses into the certificate, if approved by the program director.

Theology Undergraduate Courses

THEO 100 Foundations (4 credits)
This course introduces students to foundational concepts and skills associated with Christian theology. The course reflects critically upon the concepts of God and Christ, Scripture, Faith and Reason, the Human Being, and the Common Good, especially in the context of Catholic Intellectual Tradition and Catholic Social Teaching. Students will gain a basic level of theological literacy through introduction to central texts within Christian tradition, particularly the Bible. Students will also be introduced to connecting fundamental theological questions to the common good in the context of the pressing challenges of today's world.

THEO 221 Bible (4 credits)
This course involves the student in a literary, historical, and theological reading of major portions of the Hebrew Bible (Old Testament) or New Testament. All sections explore the Bible as a foundational document for the Jewish and Christian traditions (both ancient and modern), examining to varying degrees how the texts have been used in the development of doctrine, in the expressions of worship, and in the articulation of moral principles. The course also examines elements of power and privilege, both with respect to the social and political positions of the authors and the settings in

which the texts were written, and also with respect to how the biblical texts have been appropriated in different time periods and by different communities (in history and today), and used as vehicles of both oppression and liberation. The course investigates the literature and theologies of the Israelite people in their ancient Near Eastern context, or in their Jewish and Greco-Roman contexts, applying modern methods of biblical interpretation. Students may examine a specialized biblical topic of the instructor's choosing such as the Pentateuch, historical literature, wisdom literature, prophetic literature, or apocalyptic literature in the Hebrew Bible; or the Gospels, the Letters of Paul, or apocalyptic literature in the New Testament. Courses might focus on a particular theme, such as justice in the Bible, or how Jesus approached forgiveness or nonviolence.

THEO 222 History (4 credits)
This course introduces students to a historical examination of a particular period or periods of Christian history, such as the emergence and development of the Christian Church in the early centuries, the Middle Ages, or the period of the Reformation, or students may delve into a specialized topic in Christian history with a focus on a topic of the instructor's choosing, such as Christianity and Nazism, the Second Vatican Council, contemporary Catholic theologians, etc.

THEO 223 Belief (4 credits)
This course either introduces systematic theology, a discipline that tries to understand how Christian teachings relate to each other and to other beliefs about the world, or it focuses on a particular teaching of the Church, such as Christ, salvation, or death and the afterlife. It explores both traditional and contemporary interpretations of the most significant teachings in Catholic and Protestant traditions, emphasizing the relationship of scripture, tradition, experience, and reason as sources for Christian theology. Special emphasis is given to the role of grace in history and human experience. All sections explore the ways in which Christian doctrine has influenced and been influenced by the culture in which it is lived, and the role that Christian teachings play in responding to social need.

THEO 224 Bridges (4 credits)
In this course, students will conduct a theological examination of a topic of the instructor's choosing that is held in conversation with another area of study, such as theology and aesthetics, art, literature film, music, science, psychology, politics, mass media, consumerism, public discourse, technology, or the environment.

THEO 225 Faith & Ethics (4 credits)
This course explores principles, methods, and topics of Christian theological ethics. It addresses the relation of Christian faith to moral reflection and decision making (both individual and social); the contribution of the Christian tradition to understanding the human person; the significance of love, justice, and commitment to the common good in Christian moral life; and the role of the believing community in its relation to culture. Topics might include sex, marriage, and family; crime, justice, and forgiveness; war, peace, and revolution; immigration; environmental sustainability and animal rights; poverty and economic justice, among others.

THEO 226 Spirituality (4 credits)
This course either introduces diverse expressions of Christian spirituality or focuses on topics within a distinctly Christian spirituality according to the discretion of the instructor such as Christian styles of worship, Christian understandings of sacramentality (especially Christian marriage), or stages of spiritual formation. Students will consider methodological issues in the academic study of spirituality. Emphasis is placed on a wide reading in the Christian tradition of both primary and secondary literature in order to assist the student in grasping the integral link between the lived faith of Christians and the theological articulation of that faith.

THEO 227 Contexts (4 credits)
In this course, students will explore approaches to theology that emerge out of diverse cultural contexts. Sections may focus on biblical interpretation, dynamics of church life, mission work, or transnational solidarity through the eyes of the marginalized, or they may focus on efforts to articulate and bear witness to the gospel amid new cultures and historical challenges, according to the instructor's discretion. Sections may focus on experiences of marginalization and oppression as a source for theological reflection for women (giving rise to feminist/womanist/mujerista theologies, for example), or for people of color or indigenous peoples (giving rise to Latin American, African-American, Minjung, and South African liberation theologies, for example), or for economically exploited classes (also giving rise to liberation theologies). This course will thus provide an opportunity to learn how the global Christian community is gaining fresh insights into the gospel that were missed when the dominant perspective on theology reflected primarily the experience of European men, or to learn how claims by Christians have at various times served both to challenge and to reinforce systems of power and privilege.

THEO 228 Comparative (4 credits)
This course invites students to explore Judaism, Islam, Hinduism, Buddhism, Sikhism, Indigenous worldviews, or other traditions, in relation to Christianity. They may also examine distinctions within a single religious tradition (between Sunni and Shia sects within Islam, for example). Classes may focus on lived practice, modes of inter- and intrareligious dialogue, theologies of religious pluralism, or sacred texts. Students will critically and creatively reflect on the theological opportunities and challenges posed by the reality of religious pluralism in our contemporary world.

THEO 229 Professions (4 credits)
In this course, students will conduct a theological examination of vocation or professional life in conversation with a chosen profession, such as management, law, education, engineering, medicine, healthcare, public health, or social work.

THEO 243 Individual Study (2 or 4 credits)

THEO 300 Signature Work in Theology (4 credits)
Open to all students, not only theology majors, the signature work in theology course is designed as a capstone experience to integrate a student's entire college career, bringing fullness of expression to the University's efforts through the liberal arts core to educate morally responsible leaders who, grounded in the Catholic intellectual tradition, think critically, act wisely, and work skillfully to advance the common good. There are two types of signature work in theology: signature work that is focused on contemporary challenges, or signature work that is focused on faith and the professions. Signature work that is focused on contemporary challenges will invite students to conduct research and/or experiential learning around matters of pressing concern according to the instructor's discretion, such as fostering understanding across lines of religious difference; cultivating interfaith leadership; searching for beauty; establishing justice and peace; or responding to contemporary challenges such as environmental sustainability, immigration, or mass incarceration. Signature work that is focused on vocation may explore the integration of theology with a profession of the instructor's choosing, such as the management professions, the legal professions, the medical professions, the public health professions, the psychological professions, or the engineering professions. Prerequisites: THEO 100 and a student must have at least 80 credits completed.

THEO 403 Theology and Genetics (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. In the half-century since Watson and Crick first deduced the structure of DNA (1953), our knowledge of the fundamental properties of organic life has grown exponentially. So too has our ability to manipulate those properties for the relief of suffering and the improvement of human life. Our continued pursuit of genetic knowledge and the application of that knowledge to human life have sparked vigorous debate on a variety of distinct but related levels of inquiry: scientific, practical, moral, political, philosophical, and theological. This course aims to introduce students to a representative sampling of these debates. It emphasizes the inescapably theological dimension underlying them all. Prerequisite: one 200-level or 300-level THEO course

THEO 405 Spiritual Formation (0 credits)
Person involved in lay ministry can provide appropriate spiritual leadership only if they themselves pursue a vibrant, adult faith life. This zero credit course introduces student to resources and religious practices from a variety of faith traditions that will contribute to their own spiritual development. Through group discussion and reflective assignments, they will also have opportunities to reflect upon their gifts, strengths and limitations for lay ministry. Required of all students completing the ministry concentration. Enrollment in the lay ministry program or permission of instructor required. Prerequisite: Enrollment in lay ministry program or permission of instructor.

THEO 407 Catechesis & Faith Formation (4 credits)
Ecumenical in nature, this course is designed to help students connect the knowledge and skills they have gained in previous theology courses to the practice of catechetical ministry and adult faith formation in a parish or church setting. Students will investigate various strategies for evangelization, particularly for outreach to people of diverse backgrounds. They will learn how one's faith development is related to the various stages of events in one's life and investigate ways to relate church teachings and Christian scriptures to the faith development and formation of both youth and adults. To this end, they will study relevant catechal documents and learn how to assess catechetical and faith formation programs for their appropriateness to a particular community of faith. Emphasis will be placed on the Rites of Christian Initiation of Adults as paradigmatic for Christian formation across the life span. This course is intended for students pursuing the concentration in lay ministry. Field observation is required Prerequisites: Four college-level courses in theology.

THEO 411 Catholicism and Modernity (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. The course addresses the development of the Catholic Church and Catholic theology from the medieval age to contemporary times. A key theme in this history is an understanding of the "political culture" of Catholicism, that is to say, its developing theology of government, power, rights, revolution, geopolitics, and globalization. The course relies on history, canon law, and political science as sources of its theological evaluation of the continuing encounter of Catholicism and modernity. Prerequisites: one 200-level or 300-level THEO course

THEO 417 Internship in Ministry (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This internship complements the student's academic work by providing a supervised ministerial experience. Working with an on-site ministry staff person, the student will apply their academic training to their chosen area of ministry. A minimum of 10 hours per week at the selected agency or church is required, as well as a weekly seminar session led by a UST Theology faculty member. Prerequisite: Completion of 24 credits in theology, including 215

THEO 420 Theology & Biomedical Revol (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course examines the contributions of Christian faith to reflecting upon, understanding, and resolving issues and ethical questions raised by revolutionary developments in the life sciences, e.g. innovation birth technologies, genetic manipulation and control, human experimentation, the prolonging of life and allocation of scarce medical resources. Prerequisite: one 200-level or 300-level THEO course

THEO 421 Theologies of Justice & Peace (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. An examination of the views of various religions and ideologies on issues of justice and peace, with special attention to the Catholic and other Christian teachings on such issues as war and peace, violence, economic justice, the environment, criminal justice, and social justice. Special attention is given to how fundamental presuppositions and principles of each group studied affect their views on justice and peace, and contribute to or hinder dialogue and peaceful interaction with other groups. In addition to Christianity, students will study (at least) one far eastern worldview (e.g. Buddhism, Hinduism, Jainism), one tribal religion (Native American, African Tribal), Islam, and one secular worldview (e.g. Marxism, capitalism, secular humanism). Students are required to investigate one worldview in depth through a semester-long research project. Prerequisite: one 200-level or 300-level THEO course

THEO 422 Christ Faith & Mgmt Profesn (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. What is a good manager and how does he or she contribute to the common good? This course pursues these questions within the Christian social tradition broadly understood through an exploration of the theological relationship between work as a vocation and leisure as contemplation. Within this theological context, the course examines the financial, organizational, technological, and cultural forces that managers and organizations encounter daily. Prerequisite: one 200-level or 300-level THEO course

THEO 423 Christian Marriage (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course is designed to acquaint students with the theology of Christian marriage, understood as covenant relationship and as sacrament, that is, an effective sign of God's love in our world. Primary though not exclusive emphasis will be on the Roman Catholic tradition. Students will also examine contemporary cultural attitudes toward sexuality, marriage, and the family in the light of Christian theology. Prerequisite: one 200-level or 300-level THEO course

THEO 424 Christianity/World Religion (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course is a comparison of the teachings and practices of Christianity with the teachings and practices of selected non-

Christian religions, for example, American Indian (Lakota), Judaism, Islam, Hinduism and Buddhism. The aim of the course will be to clarify similarities and differences between Christianity and other religions, to reflect on the problem posed by religious pluralism in modern culture, and to develop a Christian theology of world religions. Prerequisite: one 200-level or 300-level THEO course

THEO 425 Judaism (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. An examination of Judaism, its history, literature, religious concepts, practices and personalities. Prerequisite: one 200-level or 300-level THEO course

THEO 426 Islam (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course is designed to familiarize students with the basic beliefs and practices of Islam in its diverse cultural expressions worldwide, including worship, family life, and intellectual and artistic traditions. Through a close reading of Qur'anic and biblical texts, students will consider how Islam is both similar to and different from the other two major monotheistic faiths, Judaism and Christianity. Finally, the course will examine how both Islam and Christianity are meeting the challenges of modern culture. This course fulfills the Human Diversity requirement in the core curriculum. Prerequisite: one 200-level or 300-level THEO course

THEO 427 Evil & Suffering (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course analyzes some of the most profound evils of the modern era, and attempts to relate them to traditional and contemporary discussions of divine and human responsibility. It is especially concerned with the unique features of modern evils, including their presence in certain social structures, political systems and scientific technologies. Specific subjects for study, which will vary from year to year, may include, the Holocaust; slave trade; genocidal colonization in Africa, Asia, and the Americas; the threat of nuclear annihilation. This course investigates how religious faith might be re-interpreted in light of these evils, and whether the notion of a suffering deity is theologically appropriate for Christian faith. Prerequisite: one 200-level or 300-level THEO course

THEO 428 Women & the Old Testament (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course explores the topic of women and the Old Testament from several different vantage points. In the first place, it will try to reconstruct the status and roles of women during the biblical periods at various points in their ancient Near Eastern context. This reconstruction will involve an examination of the legal and narrative material of the Old Testament and cross-cultural studies on women and family life in non-industrial countries. Secondly, the course investigates the conceptions of gender in the Old Testament, including key texts such as the creation stories, the stories about the ancestors, the stories about family honor, the female characters of the historical books of the Bible, the books named after women (Ruth, Esther, Judith), the texts symbolizing women as evil (e.g., the foreign woman, the adulterous wife, the whore of Babylon). Finally, the course studies the interpretive work of biblical scholars and how they utilize various historical and literary-critical methodologies in order to bring issues of gender, race, and class to bear upon the biblical text. Prerequisite: one 200-level or 300-level THEO course

THEO 429 Women & Christian Tradition (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course explores the ways in which the Judeo-Christian religious tradition has profoundly influenced our society's definition of women. It will focus on what some of the major works of this tradition assert about the nature and place of women in their particular historical communities. Students will also read religious literature by women in order to acquire a sense of women's religious experience both throughout history and in the present day. Prerequisite: one 200-level or 300-level THEO course

THEO 430 Music & the Bible (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course explores the social, cultural and religious contexts for music-

making among biblical peoples and the primitive Christian communities. Students will learn to do detailed analysis of psalm and canticle texts in the Old Testament and acclamations, infancy canticles, God-hymns, Christ-hymns and psalmody in the New Testament. Implications for present-day worship and spirituality will also be addressed. Prerequisite: one 200-level or 300-level THEO course

THEO 431 Women in the Early Church (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. The literature of early Christianity is filled with ambiguity concerning women's role in the churches and in the story of salvation. Women's subordination was justified on the basis of Eve's role in bringing evil and sin into the world. At the same time, women were presented as heroines and models of the ideal Christian life. They held roles of leadership within early church communities, even while early church writers argued against their right to do so. This course will examine a wide range of primary texts by and about women in the early Christian churches in order to explore the relationship between faith and culture as the context for understanding women's role and status in the early church. It will also look at ways in which these texts might be relevant for the modern context. Prerequisite: one 200-level or 300-level THEO course

THEO 432 Black Religious Experience (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course explores Black theological development as a cultural, functional and cognitive dimension of traditional Afro-American society, including belief, worship, expression, symbol, spirituality and God. Attention will be given to the meaning and roots of the notions of culture, nationalism and racism as they appear as questions in Black theological though, including African religions, Islam and The Nation of Islam, along with Afro-American Christian theologies. African as well as Afro-American religious experience combined with the affirmation of the Christian creed are identified in order to evaluate the questions of Black Catholic theology in America today. Prerequisite: one 200-level or 300-level THEO course

THEO 433 Theology & Politics (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. A theological investigation of changing relationships between Christianity and the political order, principally in religious terms as understood by Christians themselves but also from the vantage point of government. Emphasis in the first half of the course is on the foundational events of the New Testament and the early Christian era, and in the second half on Christianity's experience with secular and democratic modernity in America. The aim of the course is to measure the effect, in changing historical contexts, of persecution, establishment, and disestablishment, on a religion which professes both to be rooted in transcendent reality, and to have direct implications for life in this world. Primary readings from scripture, ancient and modern theology, speeches, sermons, Supreme Court decisions, and political, sociological and religious reflections on the American experiment with democracy and freedom of religion. Prerequisite: one 200-level or 300-level THEO course

THEO 434 Science & Christian Theo (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course is an introduction to the interrelationship between Christian theology (the understanding of the Christian faith), and the natural sciences. It explores the relationship between scientific and theological methods and modes of knowledge, and considers some of the central topics of Christian theology - God, creation, providence, resurrections, and afterlife - in the light of modern scientific evidence and theories. Prerequisite: one 200-level or 300-level THEO course and one Science course

THEO 435 Atheists & Apologists (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course explores the problem of religious beliefs in a secular society by focusing on the effects of the empirical and human sciences on the classical understanding of God. Considering original thinkers, such as Descartes, Kant, Hegel, Marx, Darwin, Nietzsche, and Freud, the course will explore the emergence of several types of atheism and the intellectual defense of religious belief. Students will do a detailed reading of selected texts, which may include theological, philosophical, scientific, and literary works.

Prerequisite: one 200-level or 300-level THEO course

THEO 436 Chrstian Fath & Legal Profes (4 credits) NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. If to work is to share in the creative activity of God, then what specific challenge does this pose for an attorney given the grinding realities of the legal profession? If to be a professional is to live out a tripartite relationship between self, client, and a higher standard, then how does an attorney determine, much less respond to such a standard? Through a close reading of a variety of theological texts, treaties, case studies and rules of professional conduct, this course will address these questions and, in so doing, attempt to fashion a paradigm for the Christian practice of law. Within this paradigm, emphasis will be placed on the meaning of justice, law, rights and responsibilities. An ethic of care that fosters the development of a compassionate world and a common life will be emphasized. Prerequisite: one 200-level or 300-level THEO course

THEO 437 Chrstn Faith & Hlth Care Prof (4 credits) NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. What is a good health care professional? This course pursues this question and possible answers to it, from a historical, moral, and theological point of view. Reading and discussion will be guided by a detailed investigation of the scientific/technological, economic, and cultural forces that are presently complicating our traditional understanding of health care. Emphasis throughout will be on the Christian tradition of moral inquiry as a resource for responding to this question. Prerequisite: one 200-level or 300-level THEO course

THEO 438 Theo-Crime, Punish, Forgive (4 credits) NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course will (a) explore U.S. criminal justice systems from several theological viewpoints and (b) cultivate a conversation between the resources of theology and criminology in the search for responses to the current issues in these systems. The overlapping themes in criminology and theology of crime and sin, punishment and rehabilitation and redemption, restoration and forgiveness will shape the discussion. Students pursuing vocations in criminal justice will have an opportunity to consider the relationship between their work and Christian theology, while students who are interested in the topic as involved citizens may come to see how they may play a part in addressing this issue. Prerequisite: one THEO course numbered 200-399

THEO 439 History of Religion in America (4 credits) NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course traces the evolution of religion in the territories that constitute the United States of America today. This collection of believers (Native, Catholic, Protestant, Jewish, and Muslim, etc.) initially emerged from the complex encounters between the indigenous Native American residents and triduum of European explorers (Spanish, French, and English). Ultimately it not only incorporated several additional imported communities and belief systems, but also created a unique blend of the sacred and secular. Attention will be given to the social dynamics of these communities, their understanding of God, and the theologies that developed. The polemic and harmonious relationships of these communities will serve as a backdrop to the development of key concepts (religion, culture, belief, common good, values, etc.) as they appear in the religious vocabulary of citizens of the USA. Prerequisite: one 200-level or 300-level THEO course

THEO 440 Hinduism & Buddhism (4 credits) NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course investigates Hinduism and Buddhism, two great Asian religions that have had world-wide impact. We will examine the historical and theological foundations of each religion as well as the plurality of expressions within each. Considerable attention will be paid to classical Hindu and Buddhist texts. This course will also attend to issues of comparative religion and interreligious dialogue, particularly with regard to Christianity. Prerequisite: one 200-level or 300-level THEO course

THEO 445 Theology and Education (4 credits) NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. A study of topics and

procedures for teaching religion. Using previously acquired theological knowledge, the course examines the tasks of translating and transmitting that knowledge as a series of insights to elementary and secondary students. Prerequisite: one 200-level or 300-level THEO course

THEO 446 Theology & Psychology (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course will investigate the relationship between psychology and theological approaches to human existence. This course will address interfacing issues such as how the human person is variously conceived, the relationship between human flourishing and spiritual development. There is an inherent, creative tension between the assumptions and methods of both disciplines, one typically seeking adjustment and individuation and the other seeking holiness and realizing the reign of God. Through lecture, critical reading, class discussion, and student research this course shall examine how both academic disciplines inform and challenge each other. Prerequisite: one 200-level or 300-level THEO course

THEO 447 Faith, Social Transform & SOWK (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. There are strong ties between the profession of social work and Christian social morality. Social workers promote social change, healthy human relationships and the enhancement of personal well-being. Many social workers see their work as a vocation. They are often moved to join the profession and are motivated in profession by spiritual beliefs. Christian social ethics affirms these goals. This course will explore the ties and the tensions between social work, social transformation and Christian ethics. Prerequisite: one 200-level or 300-level THEO course, one SOWK course

THEO 448 Theology & Literature (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. How do various writers explore and convey their understandings or theological categories such as God, humanity, creation, redemption, faith, doubt, good, and evil? How does looking at the interplay of form and content, the elements and purpose of storytelling, and the connections of culture and ideology to artistic expression shed light on key theological questions? This team-taught course will explore these literary and theological questions through critical engagement with texts from a variety of time periods, literary genres, and religious perspectives. Prerequisite: one 200-level or 300-level THEO course, and one English course

THEO 449 Christian Faith & ENGR Prof (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course explores the relation of theology and engineering, focusing on how the two disciplines come together in the contemporary profession of engineering. Study of theological topics, such as the nature of the created world, the dignity and vocation of the human person, and a theological understanding of work, provides a foundational Christian vision. Extensive case study analysis assists the integrated comprehension of that vision and its application to the social, moral, and professional obligations of engineers. Emphasis is given to issues encountered by mechanical and electrical engineers, such as product impact on the environment, the social implications of engineering, and engineering for the military. Prerequisite: one 200-level or 300-level THEO course, one engineering course

THEO 450 Theology & Mass Media (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course will analyze and evaluate the coverage of religion and religious issues in the mass media (primarily in newspaper and magazines) and analyze religiously-inspired or religiously-themed media products (primarily in films, radio, television programs, and books). This course attempts to develop skills in detecting the religious thread in the tapestry of modern culture, interpreting the theological content in popular culture, critically analyzing the coverage of religion in the news, and appreciating the ways in which the finest examples of religiously-themed popular culture have advanced the theological conversation of which all modern believers are a part. Prerequisite: one 200-level or 300-level THEO course

THEO 451 Christianity & Nazism (4 credits)
NOTE: This course is for students on the "old core."

Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course studies both Catholic and Protestant Christianity in Germany from the First World War to the end of the Second World War. The basic theme is Christianity's relationship with its host culture, and the ways in which the churches, both theologians and lay people, understood that relationship, especially in its political dimension, amidst the crises that convulsed Germany in the twenties, thirties, and forties. Attention is given both to cases that demonstrate the conflict between Christianity and culture, and to cases in which the conflict was not acknowledged, whether through defects of character, theological blind spots, or political miscalculations. Prerequisite: one 200-level or 300-level THEO course

THEO 452 Theology & Beauty (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. Is beauty "in the eye of the beholder"? Are "beauty" and "prettiness" synonymous? Are "beauty" and "ugliness" opposites? Might beauty still be considered a transcendental aspect of being along with the true and the good? Is it possible that Beauty is a name for God, or a means by which God reveals God's self in the created order? This course examines a variety of theological approaches to these questions, both ancient and modern. It also explores the implications of varying answers to these questions for the arts, and for lives of faith. Prerequisite: one 200-level or 300-level THEO course

THEO 453 Theology & Art (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. Through the ages, the relationship between theology and the arts has been mutually enriching, resulting in some of the world's masterpieces of visual art, architecture, music, and literature. The relationship, too, has been strained by iconoclastic movements which express fear that the arts tempt people with idolatry. In this course, students will consider the theological dimensions of the complex relationship between theology and the arts. Emphasis on historical periods, themes, doctrines, intersections, and types of art will vary according to the expertise of the instructors. Prerequisite: one 200-level or 300-level THEO course, one Art History course

THEO 454 The Morality of War (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. Against the background of historical debates within the Christian tradition, this course examines circumstances in which military force may be justified and the moral constraints that apply to its conduct. Major attention to concrete case studies will familiarize students with standard just war criteria and develop their capacity to apply them in difficult situations. Students explore emerging debates over questions such as: Who decides whether a war is just? What place does war have in the evolving international system? What prospects has Gandhian nonviolence opened up for transarmament? Is there an obligation for humanitarian intervention even in the absence of national self-interest? Prerequisite: one 200-level or 300-level THEO course

THEO 455 Church in Latin America (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. In this course we will study Christian theology and practice in a context of great suffering and struggle. We analyze the various forms that Christianity has taken in Latin America from the period of the Spanish Conquest to the present. We will study the history of the Church in Latin America, but more importantly we will examine the theological issues raised in each era to see how Christians have lived their faith under different circumstances. As we examine the complex interplay of Church, poverty, and power in Latin American history, we will examine theologies and spiritualties of evangelization, liberation, martyrdom, poverty, and the Church. We will also study and critique specifically Latin American methods and approaches to the theological task itself. Finally, we will examine the coming of the Latin American Church to the United States through immigration. Prerequisite: one 200-level or 300-level THEO course

THEO 456 Christianity & Consumer Cultr (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. Consumerism can be defined as the tendency to reduce both the material and the spiritual to commodities. This course is an extended investigation of the dynamics of consumerism in American culture from the

perspective of the Christian intellectual tradition. Sources drawn upon will include materials from theology, political theory, philosophy, and economic theory. Attention will be given to the history of consumerism, the theology implicit in consumerism, and different Christian reactions to the phenomenon of consumerism. Prerequisite: one 200-level or 300-level THEO course

THEO 457 Theology & Public Discourse (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course addresses students as citizen believers, mapping out what role they can play in public life. It first examines the Christian tradition and its teachings on responsible citizenship. It then examines the question using legal and political theory from before our founding as a nation through the debates about the nature of our democracy today. The rest of the course is focused on preparing students as citizen believers to enter the public square with their own theological argument on a contemporary political topic of interest to them, which will make public through varied written formats and class debate. Prerequisite: one 200-level or 300-level THEO course

THEO 458 The Bible/ Multicltr Perspect (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course examines the interaction between biblical interpretation and diverse contemporary cultures. The course defines multiculturalism broadly to include race/ethnicity, gender, sexual orientation, class and/or religion. The course has three goals: a reconstruction of the cultural context of the ancient world; an examination of challenges posed by cultural theories; and the impact diverse readings have for contemporary theologies based on the bible. Prerequisite: one 200-level or 300-level THEO courses

THEO 459 Theology & Environment (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course examines Christian theological and moral reflection on the relation between human activity and the natural environment. It will address environmental issues that are of mutual concern to theologians and the natural or social sciences; thus it will study scientific analysis along with theological perspectives. The course will also review contemporary practices and/or policies that address environmental problems. Prerequisite: one 200-level or 300-level THEO course

THEO 460 Christian Ethics & US Immigrtn (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course will bring the tools and the methods of Christian ethics to bear on the issues of economic immigration in the contemporary, U.S. context. The first part of the course examines the economic, political, historical, social and cultural dimensions of transnational migration in the U.S. context. The second part of the course will bring the resources of Christian ethics to the ethical issues of immigration raised in the first part of the course. This second part of the course will examine the centrality of alterity (otherness) in the Bible and the Christian tradition. The course will conclude with the discussion of how Christian ethics can inform the national discourse on these issues and conversely, how the issues of migration must shape Christian ethics. This course will have a service learning component that will bring students into contact with immigrant communities in the Twin Cities. Prerequisite: one 200-level or 300-level THEO course

THEO 461 Comp.Theo. of Sex/Gender/Body (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course provides an introduction to theological reflection on sex, gender, and the body in the Christian tradition and the Islamic religious traditions. It is a comparative theological course in that it juxtaposes texts of diverse perspectives from these two religious traditions in order to seek deeper understanding of sex, gender, and the body. This "Bridge 2 course" prompts students to reflect on their vocation as a sexual, gendered, and embodied being, and to do so interreligiously. While the course will take into consideration how theology has collaborated with patriarchal, imperial, ethnic, heteronormative, and socio-economic powers, the central focus will be on contemporary feminist, queer, and post-colonial theologies that attempt to undermine oppressive systems in Asian, Latin American, North American, Middle Eastern, and/or other contexts. Crosslisted with Women's Studies. Prerequisites: THEO 2xx or THEO 3xx

THEO 462 Theo and Lit - C.S. Lewis (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This is a Bridge Course whose readings will focus primarily on C.S. Lewis's literary works, especially, but not exclusively, on his fiction. The course will also include some critical works, both Lewis's as well as others' work about Lewis. In addition, numerous biblical passages will be examined, including the parables of Jesus, which, as a parallel to Lewis's work, can demonstrate the theological possibility of narrative. Class lectures and readings in and about Lewis will explore Christian theology and its interdisciplinary relations to literature, especially myth. Through the lens of Lewis's literature, historical, philosophical, moral, educational, and global issues will be considered. Prerequisite: one 200-level or 300-level THEO course

THEO 463 The Bible & American Politics (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course examines the use and misuse of the Bible and its political teachings in American political history. Readings and discussions will address the political message of the Bible, the question of whether the Bible played any substantial role in the creation of the American polity, and the way in which particular biblical passages, themes, and schools of interpretation have functioned in American political discourse and have influenced the development of American history. Prerequisite: one 200-level or 300-level THEO course

THEO 464 Jesus Christ & Intrelg Dialg (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course will explore the identity and role of Jesus in Christianity in relation to Judaism, Islam, Hinduism and Buddhism. It will show the similarities and differences in the various approaches to Jesus in the context of each of these respective religions and of interfaith dialogue. Prerequisite: one 200-level or 300-level THEO course

THEO 465 Justice & the Bible (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course will investigate ways that the Bible has been and can be used to address issues of social justice and peace in today's world, both within Christian faith communities and in public debate. Topics of investigation may include war, poverty, oppression, human rights, world hunger, immigration, ecology, globalization, capital punishment, genocide, euthanasia, and racial, gender and economic inequities. Attention will be given to contemporary approaches to the study of the Bible that lend themselves to exploring these issues. The instructor may opt to focus on the Old Testament or the New Testament of the Christian scriptures. Prerequisite: one 200-level or 300-level THEO course

THEO 466 The Qur'an and the Bible (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course will examine the Bible and Qur'an and compare them. Points of comparison might include: competing claims of divine inspiration; creation, Adam and Eve; Joseph; the law; Mary and Jesus; Mohammed and Jesus. This course has three goals. First, to gain an understanding of each broad tradition (Islamic from the Qur'an, and Jewish and Christian from the Bible); second, to develop a method by which to approach sacred texts, a way to see their relevance and power; and third, to appreciate both the differences and similarities in these two sacred texts, both in their literary features, and in their effect upon society. Prerequisite: one 200-level or 300-level THEO course

THEO 467 Muslim & Christian Dialogue (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course will explore what Christianity and Islam have in common, where they differ, and what are the most fruitful points of dialogue between the two religions. We will examine both Muslim and Christian perspectives on a range of topics, including God, revelation/prophecy, Jesus, Muhammad, scripture, human nature, women and marriage, morality, peace and war, religion and politics, salvation, and eschatology. We will also consider some ongoing examples of Muslim-Christian dialogue, as well as papal statements concerning Islam and Muslim responses to those statements. Prerequisite: one 200-level or 300-level THEO course

THEO 468 Interreligious Encounter (2 OR 4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. In the last half century religious diversity in the West has rapidly increased, bringing people from different religious traditions into daily contact. This has resulted in new conflicts, sometimes in violence, but also in new collaborations and friendships. Drawing on several approaches to interreligious conflict and relations, this course will examine the dynamic encounters that take place between and among people of different religious identities and ask students to reflect on their own role in religiously complex situations. Students will consider this interreligious reality and their role in it against the backdrop of their own individual relationship to spirituality, faith, and theology. To foster interreligious understanding beyond the classroom, students in this course will spend significant time outside the classroom directly engaging religious diversity. Prerequisites: and one 200-level or 300-level THEO course

THEO 470 Happiness, Suffering, and God (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This seminar addresses the perennial problem of suffering and evil in light of contemporary research on human flourishing and happiness. The central question of the course is whether suffering can play a constructive role in the good life. While some forms of suffering are destructive, other forms of suffering, given the right attitude, can be conducive to the building of character and leading a life that has a richer meaning. The course brings a theological viewpoint to bear on these issues; it also draws on the resources of philosophy, psychology, literature, and history. The written assignments will encourage the students to integrate course material, articulate their own assumptions about suffering and human flourishing, and apply general principles to real-life situations. Prerequisites: one THEO course numbered 200-399

THEO 472 Theology and Public Health (4 credits)
NOTE: This course is for students on the "old core." Students on the new core should take any THEO 221-229 if they are choosing to take the third required course on philosophical and theological reasoning in Theology. This course will explore the relationship between theology and the public health professions. "Public health" is a term that refers to the art and science of a society's efforts to prevent disease and to promote health and human thriving. Topics will include biblical, theological, ethical, sociological, and epidemiological approaches to gender and economic-based disparities in health care. Special attention will be given to the religious dimension of global responses to crises in public health. Focus of sections will vary depending on the expertise of the faculty. Prerequisites: a 200 or 300 level THEO course

THEO 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

THEO 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

THEO 490 Topics (0 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

THEO 491 Research (2 OR 4 credits)

THEO 495 Individual Study (2 OR 4 credits)

THEO 498 Individual Study (4 credits)

Vocal Music Education (K-12)

Co-Major – See Education

Women, Gender, and Sexuality Studies

Program Overview

College of Arts and Sciences, Interdisciplinary Program
O'Shaughnessy Educational Center (OEC) 205B, (651) 962-5159
Martinović-Weigelt, director

Women, Gender, and Sexuality StudiesDepartment Web Site:
https://cas.stthomas.edu/departments/areas-of-study/women-gender-sexuality-studies

Women, Gender, and Sexuality Studies is an interdisciplinary program which takes gender as its critical term of inquiry, exploring it as a social construct and analyzing its impact on traditional disciplines. As an interdisciplinary major and minor, Women, Gender, and Sexuality Studies spans the curriculum, incorporating many disciplines in a diverse and stimulating package of courses. Courses consider historical and contemporary contexts from multicultural and multiracial perspectives and focus on the intersections of race, class, gender, ethnicity, sexuality, religion, and culture.

Students in the program learn how to analyze social forces and assumptions that have shaped the lives of women and men, as well as the lives of gender and sexual minorities, on individual, national, and global levels. This flexible program of study combines theoretical, practical, and research components and provides preparation for both advanced study and professional work in a variety of professions, for example, in organizations focusing on women, in human relations departments of corporations, and in health or legal professions.

Study Abroad

Women, Gender, and Sexuality Studies majors and minors are encouraged to study abroad. Specific courses taken abroad may substitute for St. Thomas requirements. See the director of Women's Studies, a study abroad advisor in the International Education Center, or Academic Information & Programs in the front section of this catalog for program options.

Students are encouraged to speak with the program director early in their academic careers for assistance in choosing courses or arranging schedules that will most effectively serve the student's interests.

Transfer students:

Students who transfer to St. Thomas and wish to complete a major or minor in Women's Studies are urged to consult with the director of Women's Studies immediately upon transfer.

Major in Women, Gender & Sexuality Studies

- WGSS 205 Foundations in Women, Gender, and Sexuality Studies (4 credits)
- WGSS 327 Feminist Theory (4 credits)
- Internship Course (designated as Individual Study)
- WGSS 480 Women's Studies Seminar (4 credits)
  or WGSS 495 Independent Study (4 credits)

Plus:
Approved Women's Studies electives within the following categories:

- Eight (8) elective credits
- Twelve (12) upper-level elective credits
- Four (4) credits in global/racial/ethnic elective

Note: The elective credits must be either eight (8) credits within the Humanities and 12 credits within Social /Natural Sciences, or 12 credits within Humanities and eight (8) credits within Social/Natural Sciences.

Minor in Women, Gender & Sexuality Studies

- WGSS 205 Foundations in Women, Gender, and Sexuality Studies (4 credits)

Plus:
Approved Women's Studies electives within the following categories:

- Eight (8) credits in Humanities
- Eight (8) credits in Social Sciences/Natural Sciences

Recommended:

- WGSS 480 Women's Studies Seminar (4 credits)
  or a Directed Research Project may be substituted with approval of campus director

Note: The seminar can count as one of the Humanities or Social/Natural science courses.

Courses available for this program

Because the women's studies program at the University of St. Thomas is part of a consortium with three other area schools (Augsburg College, Hamline University, and the University of St. Catherine), appropriate courses may be taken at any of these institutions without the exchange course limitation. There is, however, potential for duplication of courses between schools, so students are urged to speak with the program director with any questions. Courses offered within the consortium are publicized by the program director, who can guide students in choosing eligible courses. Listed below are UST courses only.

The following courses may also have an attribute attached that is searchable in the class finder and

Murphy. WSMJ = Major approved, WSMN = Minor approved.

Humanities Courses

- ARTH 260 Women in Ancient Art and Culture
- CLAS 245 Classical Mythology [also offered as ENGL 203]
- COMM 328 Communication of Race, Class, and Gender [Certain sections only]
- COMM 374 Family and Couple Communication
- ENGL 203 Classical Mythology [also offered as CLAS 245]
- ENGL 217 Multicultural Literature: LGBTQ+ Writers of Color
- ENGL 218 Literature by Women: Critical History
- ENGL 337 Latina Women Writers
- ENGL 341 Literature by Women: Critical Questions
- FILM 225/WGSS 225 Women and Gender in Film
- HIST 112 The History of the Modern World since 1550 [Certain sections only]
- HIST 211 Women and Family in the Americas
- ITAL 489 Women and Nature: A Relationship to Recast
- MUSC 115 Music and Culture: Feminine Lens (only section 02)
- SPAN 489 Topics Women in the Zone of Conflict
- THEO 227 Contexts: Women & Bible
- THEO 227 Contexts: Bible & Culture
- THEO 227 Contexts: Women & Christianity
- THEO 227 Contexts: Women & Early Church
- SOWK 291: The Anatomy of Violence
- WGSS 297 Topics Making and Unmaking Masculinities
- WGSS 488 Topics Women Food Justice Envr
- WGSS 490 Topics Migration and Gender

Social Science and Natural Science

- BIOL 106 Women, Medicine, and Biology
- BIOL 275/SOCI 275 Born this Way?
- BLAW 352 Gender Issues and the Law (J-Term)
- COMM 220 Interpersonal Communications
- COMM/FAST 378 Communication and Underrepresented Families
- FAST 220 Foundations of Family Studies
- NSCI 398 Neuroscience of Gender
- POLS 302 Women and Politics
- PSYC 205 Psychology of Women
- PSYC 298 Topics: Neuroscience and Gender
- SOCI 280 Hate Crimes
- SOCI 304 Adolescence in Society
- SOCI 321 Global Marriages and Families
- SOCI 354 Sex in Society
- SOWK 391 Social Policy for Social Change
- WGSS 297 Topics Making and Unmaking Masculinities
- WGSS 488 Topics Women Food Justice Envr
- WGSS 490 Topics Migration and Gender

Multicultural or Ethnic Studies

- ARTH 284 Arts of the African Diaspora
- COMM 370 Intercultural Communication
- HIST 117 Latin America in Global Perspective
- HIST 216 African-American History
- MUSC 216 Jazz in America
- SOCI 251 Race and Ethnicity
- SOCI 301 General Anthropology

Women, Gender, & Sexuality Undergraduate Courses

WGSS 205 Found in Women/Gen/Sexuality (4 credits)
This multi-disciplinary course is designed to raise awareness of women's status and women's diversity, to explore gender identities and interrogate the way that these categories are constructed, and to critically examine disciplines and social practices through the lens of feminist theory. Course readings and discussion will examine ideas about race, class, sexuality, and other aspects of identity as they intersect with sex and gender. Available once a year, usually offered in the Fall semester.

WGSS 225 Women and Gender in Film (4 credits)
Women and Gender in Film explores the diverse roles women have taken in film from an intersectional perspective that includes analysis of gender along with considerations of race, class, migrant status, disability status, religious/spiritual identity, or other dimensions of diversity. Through readings, lectures and film analysis students will be able to consider how gender constructions have influenced the roles women and non-gender conforming individuals could take in film as an industry and in film as an art, focusing primarily in film production in the United States. Through a social justice lens, this course will lead students to become aware of how gender constructions are circulated, recast, and reinforced through film, which can also be a space for resistance, change and imagination of a more egalitarian future.

WGSS 243 Individual Study (0 OR 4 credits)

WGSS 269 Research (2 OR 4 credits)

WGSS 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

WGSS 327 Feminist Theory (4 credits)
This interdisciplinary feminist theory course is designed as a mid-level course to serve as a bridge between the Foundations in Women's Studies course and the Senior Seminar. The content of the course will focus on theorizing around multiple differences of gender, race, ethnicity, class, and sexuality. As an interdisciplinary course, it provides an overview of historical and ideological trends in feminist thought around these differences. The focus may vary, and may include feminist theories from the fine arts, history, literary studies, philosophy, psychology, the sciences, and sociology. Prerequisites: WGSS 205

WGSS 389 Research (2 OR 4 credits)

WGSS 393 Individual Study (2 OR 4 credits)

WGSS 476 Experiential Learning (1 TO 4 credits)

WGSS 480 Women's Studies Seminar (4 credits)
This advanced capstone course for the Women's Studies major is a multi-disciplinary seminar usually taken during the student's senior year. The course will include student research and presentations that incorporate feminist theory. It will rotate among the different campuses of the ACTC. Prerequisite: WGSS 205

WGSS 487 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

WGSS 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

WGSS 489 Topic (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

WGSS 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

WGSS 491 Individual Study (2 OR 4 credits)

WGSS 495 Individual Study (2 OR 4 credits)

World Language and Cultures Education (K-12)

Co-Major – See Education

MORRISON FAMILY COLLEGE OF HEALTH

Exercise Science (EXSC)

College of Health, Department of Health & Exercise Science

Anderson Athletic Recreation Center (AARC) 206, (651) 962-5982

Mellick (Chair), Arogbokun, Bruininks, Hedman-Robertson, Korak, Mead, Mellick, Roy, Sage, Scibora

Department Web Site:
https://health.stthomas.edu/health-exercise-science/index.html

A major in exercise science prepares students for entrance into a doctor of physical therapy program or other related medical field. A student graduating with a major in exercise science will be trained on highly sophisticated assessment equipment and gain real-world experience outside the classroom.

Major in Exercise Science

Major Courses:

- NUTR 245 Introduction to Nutrition (4 credits)
- EXSC 130 Foundations of Exercise Science (2 credits)
- EXSC 211 Introduction to Research Methods (2 credits)
- EXSC 213 Human Anatomy and Lab (4 credits)
- EXSC 214 Physiology (4 credits)
- EXSC 214L Physiology Lab (0 credits)
- EXSC 326 Kinesiology (4 credits)

- EXSC 332 Exercise Physiology (4 credits)
- EXSC 332L Exercise Physiology Lab (0 credits)
- EXSC 413 Exercise Testing & Prescription (4 credits), OR
  EXSC 414 Essentials of Strength & Condition (4 credits)
- EXSC 426 Biomechanics (4 credits)
- EXSC 426L Biomechanics Lab (0 credits)
- EXSC 449 Exercise Science Research Methods (2 credits)
- EXSC 450 Ex Sci/Hlth Prom Internship (100 hours) (2 credits)

Elective Courses (select 8 credits):

- HLTH 250 Personal Health & Wellness (4 credits)
- EXSC 313 Motor Development (4 credits)
- EXSC 314 Aging & Exercise (4 credits)
- EXSC 413 Exercise Testing & Prescription (4 credits)
- EXSC 414 Essentials of Strength & Condition (4 credits)
- EXSC 432 Advanced Exercise Physiology (4 credits)
- PHYS 110 General Physics II (4 credits)
- CHEM 112 General Chemistry II (4 credits)

Allied Courses:

- BIOL 207 Genetics, Ecology, and Evolution (4 credits)
- BIOL 208 Biological Communication and Energetics (4 credits)
- CHEM 111 General Chemistry I (4 credits)
- PHYS 109 General Physics I (4 credits)
- DASC 120 Intro to Computational Statistics (4 credits)
- PSYC 111 General Psychology (4 credits)
- PSYC 301 Psychopathology (4 credits)
- Select one of the following:
  - MATH 108/109 Calculus with Review I & Review II (4 credits each)
  - MATH 113 Calculus (4 credits)

Minor in Exercise Science

This minor is for students looking to enhance their career objectives and goals who may be considering work in the allied health, wellness or fitness world. A minor increases a student's knowledge base, enhances qualifications, provides for a greater competitive edge in the job market and builds individual credibility.

This minor is a good complement to a number of other disciplines such as business, marketing, communications and psychology. Students interested in pursuing careers in fields such as sports broadcasting, sports marketing, and advertising and promotions may also be interested in this minor.

Core Courses:

- EXSC 213 - Human Anatomy and Lab (4 credits)
- EXSC 214 - Human Physiology and Lab (4 credits)
- EXSC 326 - Kinesiology (4 credits)
- EXSC 332 - Exercise Physiology (4 credits)

Select one of the following:

- EXSC 426 Biomechanics (4 credits)
  or EXSC 432 Advanced Exercise Physiology (4 credits)

The following prerequisites must be observed:

- EXSC 213 is a prerequisite for EXSC 326
- EXSC 214 is a prerequisite for EXSC 332
- EXSC 326 is a prerequisite for EXSC 426
- EXSC 332 is a prerequisite for EXSC 432

Please note: Health Promotion majors may not earn an Exercise Science Minor.

Exercise Science Undergraduate Courses

EXSC 130 Foundations Exercise Science (2 credits)
This is the introductory course in the Exercise Science major and provides and overview of the field of applied exercise science. The student will gain exposure to various career options and possible settings for professional practice of exercise science, and will be introduced to the foundations of Biomechanics, Exercise Physiology, Exercise Psychology and Sociology. (Formerly PHED 130)

EXSC 211 Intro to Research in EXSC (2 credits)
This course allows students the opportunity to be engaged in hands-on research methodology focused on exercise science. This includes instruction regarding obtaining and reading research, the IRB process, the use of equipment in the exercise science labs, working with human participants, and the process of manuscript preparation.

EXSC 213 Human Anatomy (0 OR 4 credits)
This course is a study of human anatomical structure using a body systems approach from the microscopic to gross levels of organization. Of particular emphasis are unifying themes including the complementarity of human anatomy form and function, interrelationships between organ systems and the application of knowledge to homeostatic disruptions observed in human disease and other clinical conditions. This workshop-style course combines the lecture and laboratory components (three laboratory hours per week) to provide students with hands-on experiences learning anatomical concepts, developing critical thinking, understanding scientific methodology and the application of scientific principles. Prerequisite: Sophomore standing

EXSC 214 Human Physiology (0 OR 4 credits)
This is a course designed to provide students with an understanding of the regulation and function of the human body and physiological integration for the maintenance of homeostasis. Areas of study include muscular, neural, cardiovascular, respiratory, renal, endocrine and reproductive systems. This course is a three-hour lecture course with a two-hour lab section. Two laboratory hours per week. (Formerly PHED 214)

EXSC 240 Medical Terminology (2 credits)
This course is intended to introduce students to technical terminology used in the health profession. Emphasis will be placed on nomenclature, medical vocabulary, pronunciation, spelling, and accurate definition. The Greek and Latin root words that form the basis of the technical terminology used in the health profession will be studied, thus providing students with an understanding of the fundamental building blocks of this terminology. (Formerly PHED 240)

EXSC 243 Individual Study (2 OR 4 credits)

EXSC 269 Research (2 OR 4 credits)

EXSC 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online, (Formerly PHED 295)

EXSC 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online (Formerly PHED 296)

EXSC 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online (Formerly PHED 297)

EXSC 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online (Formerly PHED 298)

EXSC 313 Motor Development (2 credits)
This course provides an in-depth study of the principles of human growth and life span motor development and motor learning. Topics of study will include physical growth and aging, development of motor skills across the life span, perceptual motor development and the interaction of exercise and structural constraints.

EXSC 314 Aging and Exercise (2 credits)
This course is designed to apply the principles of anatomy and physiology to the study of aging and physical activity. The student will gain an understanding for how exercise adaptations are impacted by the aging experience, and how exercise can be programmed and prescribed in an aging population. Prerequisites: EXSC 213 and 214.

EXSC 326 Kinesiology (4 credits)
Structure and function of the human skeletal and muscular systems with respect to movement will be examined. Neuromuscular aspects of movement, forces, torque, balance and stability are studied with applications to sport, physical activity and activities of daily living. Observing and analyzing skill performance are experienced. Laboratory experiences will be done within the scheduled class time. Prerequisite: EXSC 213

EXSC 332 Exercise Physiology (0 OR 4 credits)
This course is designed to provide an introduction to physiological responses experienced when training for, and participating in, sport and physical activity. Basic exercise physiology topics will be covered including the principles of exercise as well as adaptations to exercise for the purpose of cardiovascular fitness, muscular strength and/or endurance. Training for sport, detraining and ergogenic aids, cardiovascular disease, and obesity will also be studied. Laboratory experiences will be done within the scheduled class time. (Formerly PHED 332) Prerequisite: PHED 208 or EXSC 214 (Formerly PHED 214)

EXSC 389 Research (2 OR 4 credits)

EXSC 393 Individual Study (2 OR 4 credits)

EXSC 413 Testing and Prescription (4 credits)
Exercise Testing and Prescription follows the current recommended guidelines set forth by the American College of Sports Medicine (ACSM) and introduces undergraduate students to the scientifically-based standards related to human physiology assessment, health screening, health-related physical fitness testing and interpretation, prescription/program design, and exercise program adherence commonly used in healthcare and clinical settings, progressive health club, and elite athletics environments. Prerequisite: EXSC 332

EXSC 414 Essentials: Strength Training (4 credits)
Essentials of strength training and conditioning is a professional preparation course addressing the theory and practical skills necessary to design and implement a variety of resistance training programs across a diverse population. The use of different resistance training modalities typically used to improve muscular endurance or muscular strength will be considered as well as physiological, biomechanical, and safety aspects of resistance, anaerobic, and aerobic training. Prerequisites: EXSC 326 or 332.

EXSC 426 Biomechanics (0 TO 4 credits)
This course is designed to build on the basic understanding of the skeletal and muscular systems as they relate to human movement and examine the mechanics of movement in exercise and sport. Techniques for observing movement, data collection and analyzing sport performance and movement will be emphasized. Research techniques will be introduced and students will participate in designing and conducting a Biomechanics research project. Two hour laboratory per week. Prerequisite: Minimum grade of C- in EXSC 326

EXSC 432 Advanced Exercise Physiology (0 OR 4 credits)
Application of the principles of anatomy and physiology to the study of metabolic, respiratory, cardiovascular, musculoskeletal, and nervous system changes during exercise and physical activity. The student will gain an understanding of the acute and chronic adaptations of these systems and how to impose these adaptations. In addition, students will gain hands-on experience in the testing and measurement of individuals in an exercise physiology laboratory. This course is a three-hour lecture course with a two-hour lab section. (Formerly PHED 432) Prerequisite: PHED 208 or EXSC 214 (formerly PHED 214); EXSC 332 (formerly PHED 332) or PHED 304

EXSC 449 Research Seminar (2 credits)
This course is designed to teach research methodology specific to the field of Exercise Science. Students are required to engage in hands-on research focused on an area of interest in the field of Exercise Science. Students will learn research skills, through locating primary literature sources, formulating a research question, conducting an original research study, and presenting it in several formats. Prerequisite: EXSC 211, 326, 332

EXSC 450 Ex Sci/Hlth Prom Internship (2 credits)
This course meets the internship requirement for majors in the Exercise Science and Health Promotion programs. The required 100 observational hours fulfills a requirement for application to graduate clinical programs (e.g. physical therapy, chiropractic school, physician assistant school). S-R grading option only. Prerequisite: EXSC 326 and EXSC 332 must be successfully completed prior to (not at the same time as) enrolling in EXSC 450.

EXSC 476 Exer Sci Experiential Lrng (1 TO 4 credits)
Experiential learning in Exercise Science.

Exsc 478 Exer Sci Experiential Lrng (0 credits)
Experiential learning in Exercise Science

EXSC 483 Exercise Science Seminar (2 credits)
Seminar in Exercise Science

EXSC 484 Exercise Science Seminar (2 credits)
Exercise Science Seminar

EXSC 485 Exercise Science Seminar (4 credits)
Seminar in Exercise Science

EXSC 486 Exercise Science Seminar (4 credits)
Exercise Science Seminar

EXSC 487 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

EXSC 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

EXSC 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

EXSC 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses.

Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

EXSC 491 Research (2 OR 4 credits)

EXSC 495 Individual Study (2 OR 4 credits)

Health Promotion & Wellness

Program Overview

College of Health, Department of Health & Exercise Science

Anderson Athletic Recreation Center (AARC) 206, (651) 962-5982

Mellick (Chair), Arogbokun, Bruininks, Hedman-Robertson, Korak, Mead, Mellick, Roy, Sage, Scibora

A major in health promotion & wellness which prepares the student for work as a fitness specialist outside the school setting. Students graduating with a major in health promotion & wellness will have had experience at a work site. They will demonstrate the skill and knowledge expected of the entry-level exercise science professional in the areas of fitness evaluation, exercise prescription, and delivery of exercise programs to normal and special populations. They will effectively assess theory and interface it with practice.

Major in Health Promotion & Wellness

- HLTH 250 Personal Health and Wellness (4 credits)
- HLTH 420 Lifestyle Changes Promoting Health (4 credits)
- HLTH 430 Worksite Health Promotion (4 credits)
- EXSC 213 Human Anatomy (4 credits)
- EXSC 214 Human Physiology (4 credits)
- EXSC 240 Medical Terminology (2 credits)
- EXSC 326 Kinesiology (4 credits)
- EXSC 332 Exercise Physiology (4 credits)
- EXSC 450 Ex Sci/Hlth Prom Internship (2 credits)
- PUBH 220 Introduction to Public Health and Social Justice (4 credits)
- PUBH 300 Epidemiology (4 credits)
- PUBH 340 Health Education: Program Planning and Evaluation (4 credits)
- NUTR 245, any EXSC, or PUBH 300+ level (4 credits)

Allied Courses

- BUSN 100 Business for the Common Good (2 credits)
- ENTR 100 Introduction to Entrepreneurship and Innovation (2 credits)
- MKTG 200 Introduction to Marketing (2 credits)
- MGMT 200 Working Skillfully in Organizations (2 credits)
- PSYC 111 General Psychology (4 credits)
- PSYC 365 Health Psychology (4 credits)

Plus four credits from the following:

- BIOL 101 General Biology (4 credits)
- BIOL 105 Human Biology (4 credits)

Plus four credits from the following:

- CHEM 100 Chemistry in our World (4 credits)
- CHEM 101 Environmental Chemistry (4 credits)
- CHEM 111 General Chemistry (4 credits)

Plus four credits from the following:

- COMM 100 Public Speaking (4 credits)
- COMM 105 Communication in the Workplace (4 credits)

Undergraduate Health Courses

HLTH 120 Foundations of Health Promo. (2 credits)
This course is designed as an entry-level foundations course for Health Promotion majors and those considering entering the Health Promotions field. This course examines the historical foundations of worksite health promotion, and methods of identification and assessment of employee needs. Students will learn effective ways of planning worksite Health Promotion programs, selecting healthy lifestyle programs, and preparing for the financial aspects of Health Promotion program delivery. They will also learn how to launch worksite health programs and evaluate them. Shadowing Health Promotion professionals in the field is a required component of this course.

HLTH 243 Individual Study (2 OR 4 credits)

HLTH 250 Personal Health & Wellness (2 OR 4 credits)
This course will entail an examination of the components of a healthful lifestyle. The interrelationship of physical, intellectual, spiritual and emotional health will be the focal point. Specific areas such as mental health, stress and coping,

human sexuality, resiliency enhancement, disease prevention, aging, grief and loss will be addressed.

HLTH 269 Research (2 OR 4 credits)

HLTH 275 Lifelong Stress Management (2 credits)
The focus of the course is on exploration of effective, healthful strategies of stress management. This course is an opportunity to expand ones understanding of how to redirect stress responses into positive sources of energy. For those going into health education either in the field or for licensure, there will be ample items that you could adopt into your own teaching and classroom. This course is open to students from all fields.

HLTH 280 Exploring Medicine (2 credits)
Exploring Medicine: A physician or faculty-physician taught 2-credit course that applies basic science to clinical cases. This course involves job-shadowing. Prerequisites, other than an interest in medicine, include: Sophomore standing, and completion of or concurrent registration in BIO 207 or EXSC 213 (formerly PHED 213)

HLTH 285 Alcohol, Tobacco & Other drugs (2 credits)
This course will introduce students to the current drug abuse issues. An overview of the various drugs of abuse, public policies concerning those drugs, and the related consequences and concerns will be discussed. The primary goals of the course are to provide students with current information regarding drugs of abuse and to increase their awareness of the issues and consequences surrounding drug use, abuse, and addiction. Trends in drug abuse, legal issues, determinants of use, pharmacology, and other issues will all be covered in this course.

HLTH 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

HLTH 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

HLTH 298 Topics (0 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

HLTH 341 Hlth Educ: 5-12 Curric & Asses (4 credits)
Learners will explore effective strategies for development and evaluation of 5-12 health education curriculum with emphasis on comprehensive school health education concepts. Growth and developmental concerns, innovative learning theories, learner-centered and proactive learning, dynamic partnerships with families and communities (including medical, business, and health agencies), interactive and interdisciplinary learning paradigms, global networking, appreciation for diversity, and current mind-body-spirit approaches to health care will. be discussed. There will be opportunities for learners to engage in review and development of authentic assessment strategies. Learners will evaluate real-world health programs in the field and demonstrate effective in-service strategies and networking. Learners will engage in leadership approaches in enhancement of quality coordinated health education programs for families, schools and communities.

HLTH 351 Hlth Ed: 5-12 Meth & Instructi (4 credits)
Learners will identify, practice, and demonstrate effective methods of facilitating 5-12 health education. Off-campus observations and teaching of health lessons in elementary, middle and secondary school settings are included in the requirements. An off-campus tutorial experience with elementary or middle school aged learners is required. Learners will also explore and assess various educational resources from medical, insurance, health agency, business and private organizations that effectively could be used with 5-12 learners. This will include development of a professional telecommunications network. Learners will learn strategies for effectively using and evaluating telecommunications and interactive multimedia for 5-12 health education. Learners will also investigate and design active partnerships with parents/guardians and communities.

HLTH 352 Cmty Hlth Educ: Meth & Instruc (4 credits)
Learners will identify, practice, and demonstrate effective methods for facilitating community health education. Off-campus observations and presentations of health issues in community settings are required. Learners will explore and assess various resources from medical, insurance, health agency, business and private organizations that could effectively be used in community health settings. Strategies for effectively using and evaluating telecommunications and interactive multimedia in community health programs will be discussed. In addition, learners will investigate and design active partnerships with clients, representatives of the medical field, health insurance agencies and business communities.

HLTH 353 Consumer,Community,Envr Hlt (4 credits)
This course uses popular and academic texts and

video and online technology as well as external educators and events to bring to life the reality of community health. In the course, you will examine the theories and principles of health promotion, disease prevention and health behavior change within the context of consumer, environmental and community health. In addition, many examples used are from adolescent health. This course provides a foundation for future health professionals, allied health professionals, teachers, journalists, clergy and others with the ability to provide population centered, interdisciplinary, prevention oriented health care through an understanding of what creates health in individuals and more so in communities. Models are examined for effectiveness within various social, psychological, cultural, political and economic contexts.

HLTH 389 Research (2 OR 4 credits)

HLTH 393 Individual Study (2 OR 4 credits)

HLTH 420 Lifestyle Change & Hlth Prom (4 credits)
This course will examine health behavior change theories and individual, social, political, organizational, environmental, cultural, technological and economic factors influencing health behavior. Through literature review, case studies and role play exercises, students will identify and utilize evidence-based behavior change interventions to promote positive behavior change. Additionally, students will apply behavior change theories and foundations in developing a behavior modification plan, practicing health coaching, and delivering health information and support. Prerequisites: HLTH 250 or PUBH 220 or instructor approval.

HLTH 430 Worksite HP (4 credits)
This course provides comprehensive coverage of worksite health promotion. Students will learn how to identify employees' needs and interests for the purposes of planning worksite health promotion programs and strategies. Students will learn a variety of methods to promote a culture of health and prevention within a business. Project management principles covered in the course include goal setting and timeline development, employee engagement, budgeting, ethical and legal standards, vendor and community partnerships, communication, and leadership. Program evaluation approaches and designs will be discussed as well unique planning considerations for small businesses. Prerequisites: HLTH 250 or PUBH 220 or instructor approval and 80 completed credits

HLTH 462 Human Sexuality Education (4 credits)
The examination of the strategies and techniques for the development of human sexuality education for personal and professional needs. The course also addresses the curricular and community needs and concerns of K-12 students. Effective and appropriate teaching strategies and learning activities reflecting approved educational content and guidelines for a variety of audiences will be examined and practiced. Prerequisite: Sophomore standing

HLTH 464 Issues in Health Education (4 credits)
An in-depth examination of relevant, critical health issues. Techniques for identifying and researching the issues plus appropriate teaching strategies will be addressed along with effective health and wellness promotional strategies. Examples of health issues include stress management, death education, HIV/AIDS, teen pregnancy, national and global health issues, etc. Advanced helping skills will be included. Emphasis on mastery of telecommunication including: Web page design, Internet research, grant writing, and computer-enhanced presentations and teaching. Prerequisites: HLTH 341/342 and 351/352 (may be taken concurrently) or permission of instructor

HLTH 470 Health Internship I00 Hours (2 credits)
This is the internship course that meets the internship requirement for a major or minor in Community Health Education. HLTH 470 is designed to provide the student with an opportunity to observe and when appropriate assist with a community health educational program in a medical clinic, community or public health center or agency setting. Students are required to complete 100 hours at a site that is directly involved in some aspect of the community health education field. Students will be under the direct guidance of an on-site community health supervisor. S-R grading option only. Prerequisite: Permission of department chair

HLTH 476 Experiential Learning (1 TO 4 credits)

HLTH 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

HLTH 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

HLTH 495 Individual Study (2 OR 4 credits)

Nursing

Program Overview

The Bachelor of Science in Nursing prepares students for entry into professional Registered Nurse practice through integrating natural and social sciences with theories and concepts unique to the discipline of nursing. Our program prepares students to provide nursing care across the spectrum of health care settings, including community-based settings, hospitals, and clinics. Our program's unique focus on whole person wellness, social determinants of health and health equity, healthcare advocacy and systems change, and interprofessional collaboration prepares students to provide culturally responsive care with clinical excellence and ingenuity.

Major in Nursing (BSN)

- NRSG 110: Foundations of Nursing Practice (2 credits)
- NRSG 220: Nursing Clinical Skills and Health Assessment* (4 credits)
- NRSG 240: Pathophysiology and Pharmacology for Nursing Practice I (2 credits)
- NRSG 250: Pathophysiology and Pharmacology for Nursing Practice II (4 credits)
- NRSG 300: Psychiatric/Mental Health Nursing* (4 credits)
- NRSG 305: Complex Nursing Care I* (4 credits)
- NRSG 350: Complex Nursing Care II* (4 credits)
- NRSG 360: Nursing Research and Evidence-Based Practice (4 credits)
- NRSG 370: Nursing Care for Children and Families* (4 credits)
- NRSG 410: Healthcare Ethics, Policy and Advocacy (4 credits)
- NRSG 420: Population Health Nursing* (4 credits)
- NRSG 430: Nursing Care for Women and Childbearing Families* (4 credits)
- NRSG 440: Informatics and Healthcare Technologies in Nursing Practice (4 credits)
- NRSG 450: Capstone Complex Care III* (4 credits)
- NRSG 470: Leadership in Nursing Practice (4 credits)

*Indicates a NRSG course that includes a significant laboratory, simulation and/or clinical component.

Allied requirements

- MATH 100 Mathematical Sampler or MATH 101: Finite Mathematics (4 credits) or math placement into MATH 108
- CHEM 108: Principles of General, Organic, and Biochemistry (4 credits)
- BIOL 105: Human Biology (4 credits)
- BIOL 256: Foundations of Microbio/Health (4 credits)
- DASC 120: Intro to Computational Statistics, recommended with JMP or SPSS lab (4 credits)
- PSYC 111: General Psychology (4 credits)
- PSYC 102: Lifespan Development (2 credits)
- EXSC 213: Human Anatomy (4 credits)
- EXSC 214: Human Physiology (4 credits)

Nursing Undergraduate Courses

NRSG 210 Foundations of Nursing Practic (2 credits)
This course introduces students to nursing practice in the context of nursing's metaparadigm: person, environment, health, and nursing. Emphasis is on understanding nursing as a profession, person-centered care, and issues and trends in health and health care. The course will include examination of nursing care within health care systems and nurses' role in influencing health outcomes. Students will be introduced to whole-person wellness, social determinants of health and health equity, health care advocacy and systems change, and interprofessional collaboration. Prerequisites: Admission to the professional nursing sequence and co-enrollment in NRSG 240.

NRSG 220 Nursing Skills and Assessment (0 or 4 credits)
This course introduces students to person-centered clinical skills and health assessment techniques. Emphasis is on whole person wellness, understanding persons in the context of their environments, clinical judgement, and safety and quality. The course will include examining the influence of social determinants of health and health equity, healthcare advocacy and systems change, and interprofessional collaboration on the provision of clinical skills and health assessment. Prerequisites: C- or better in NRSG 240; Co-Requisites: EXSC 213: Human Anatomy and EXSC 214: Human Physiology and being a declared nursing major. Co-enrollment in NRSG 250 required.

NRSG 240 Patho/Pharm for Nursing I (2 credits)
This course introduces students to the integration of pathophysiology and pharmacology. Emphasis is on mechanisms underlying disease and concomitant therapeutic agents to treat disease. The course will encompass pathophysiology and pharmacology in

the context of whole person wellness, social determinants of health and health equity, healthcare advocacy and systems change, and interprofessional collaboration. Prerequisite: being a declared Nursing student. Co-enrollment in NRSG 210 required.

NRSG 250 Patho/Pharm for Nursing II (4 credits)
This course advances students' knowledge about the integration of pathophysiology and pharmacology. Emphasis is on analyzing multifaceted disease processes and concomitant pharmacotherapies. The course will build on Pathophysiology and Pharmacology for Nursing Practice I and continue encompassing pathophysiology and pharmacology in the context of whole person wellness, social determinants of health and health equity, healthcare advocacy and systems change, and interprofessional collaboration. Prerequisite: C- or better in NRSG 210; EXSC 213 and 214; and restricted to declared nursing majors. Co-enrollment in NRSG 220 required.

NRSG 300 Psychiatric/Mental Health Nurs (0 or 4 credits)
This course prepares students in concepts and theories related to the provision of psychiatric/mental health nursing practice. Emphasis will be on nursing therapeutics aimed at mental health and the care of persons with mental illnesses within the context of disease prevention/promotion of health and well-being, chronic disease care, and hospice/palliative/supportive care, whole person wellness, social determinants of health and health equity, healthcare advocacy and systems change, and interprofessional collaboration. The course includes integration of didactic and clinical learning in a variety of settings. Prerequisite: C- or better in NRSG 220; 250; BIOL 250; and being a declared nursing student. Co-enrollment in NRSG 305 required.

NRSG 305 Complex Nursing Care I (0 or 4 credits)
This course introduces students to the spheres of care essential for entry level nursing practice. Emphasis is on disease prevention/promotion of health and well-being, chronic disease care, and hospice/palliative care/supportive care. The study and application of the spheres of care are within the context of whole person wellness, social determinants of health and health equity, healthcare advocacy and systems change, and interprofessional collaboration. The course includes integration of didactic and clinical learning in a variety of settings across the lifespan within families and communities. Prerequisite: C- or better in NRSG 220; 250; BIOL 256; and being a declared nursing student. Co-enrollment in NRSG 300 required.

NRSG 350 Complex Nursing Care II (4 credits)
This course advances students' knowledge of and skills in the spheres of care essential for entry level nursing practice. Emphasis will be on restorative care, including critical/trauma care, complex acute care, chronic disease care, and hospice/palliative care/supportive care. The study and application of the spheres of care are within the context of whole person wellness, social determinants of health and health equity, healthcare advocacy and systems change, and interprofessional collaboration. The course includes integration of didactic and clinical learning in a variety of settings across the lifespan within families and communities. Prerequisites: C- or better in NRSG 300; 305; and restricted to declared nursing majors. Co-enrollment in NRSG 360 and 370 required.

NRSG 360 Applied Research & EBP (4 credits)
This course prepares students to apply research and evidence-based practice in providing nursing care. Emphasis will be on relationships between professional, scholarly nursing practice, health systems and the spheres of care (disease prevention/promotion of health and well-being, chronic disease care, restorative care, and hospice/palliative/ supportive care), whole-person wellness, social determinants of health and health equity, health care advocacy and systems change, and interprofessional collaboration. Prerequisites: C- of better in NRSG 300; 305; DASC 120; and being a declared nursing student. Co-enrollment in NRSG 350 and 370 required.

NRSG 370 Perinatal and Childbearing (4 credits)
This course prepares students to care for women, infants, and childbearing families across the spheres of care (disease prevention/promotion of health and well-being, chronic disease care, restorative care, and hospice/palliative/supportive care). The study and application of these spheres are within the context of maternal-newborn nursing, women's health, care of families, whole person wellness, social determinants of health and health equity, healthcare advocacy and systems change, and. interprofessional collaboration. The course includes integration of didactic and clinical learning in a variety of settings. Prerequisite: C- or better in NRSG 350; 360; 430; and restricted to declared nursing majors. Co-enrollment in NRSG 410 and 420 required.

NRSG 410 Healthcare Ethics/Adv/Policy (4 credits)
This course prepares students in concepts and theories to practice safe and ethical care within an advocacy framework. Emphasis will be on ethical principles, health policy analysis, political competence, and principles and practices of

advocacy in the context of spheres of care (disease prevention/promotion of health and well-being, chronic disease care, restorative care, and hospice/palliative/supportive care), whole person wellness, social determinants of health and health equity, healthcare advocacy and systems change, and interprofessional collaboration. Prerequisite: C- or higher in NRSG 350; 3430; 370; and a declared nursing students. Co-enrollment in NRSG 420 required.

NRSG 420 Population Health Nursing (4 credits) This course prepares students in concepts and theories related to the provision of public health nursing practice. Emphasis will be on promoting and protecting the health of the public within the context of disease prevention/promotion of health and well-being, chronic disease care, and hospice/palliative/supportive care, whole person wellness, social determinants of health and health equity, healthcare advocacy and systems change, and interprofessional collaboration. The course includes integration of didactic and clinical learning in a variety of community and public health settings. Prerequisites: C- or better in NRSG 350; 360; 430; and being a declared nursing student. Co-enrollment in NRSG 410 and 370 required.

NRSG 430 Nursing Care for Children/Fam (4 credits) This course prepares students to care for children and families across the spheres of care (disease prevention/promotion of health and well-being, chronic disease care, restorative care, and hospice/palliative/supportive care). The study and application of these spheres are within the context of pediatric nursing, care of the family, whole person wellness, social determinants of health and health equity, healthcare advocacy and systems change, and interprofessional collaboration. The course includes integration of didactic and clinical learning in a variety of settings. Prerequisite: C- or better in NRSG 300; 305; and restricted to declared nursing majors. Co-enrollment in NRSG 350 and 360 required.

NRSG 440 Informatics and HCT in Nursg (4 credits) This course prepares students in informatics concepts, theories and practices to prepare them to use technology responsibly, ethically, and creatively to meet the health care needs of patients/families/communities. Emphasis will be on technology tools, technological systems, informatics processes, and care documentation processes across the spheres of care (disease prevention/promotion of health and well-being, chronic disease care, restorative care, and hospice/palliative/supportive care) within the context of whole person wellness, social determinants of health and health equity, healthcare advocacy and systems change, and interprofessional collaboration. Prerequisites: C- or better in NRSG 410; 420; 370; and being a declared nursing student. Co-enrollment in NRSG 450 and 470 required.

NRSG 450 Capstone: Cmplx Nrsg Care III (4 credits) This course positions students to summarize, evaluate, and integrate the most remarkable, influential, and transformative aspects of their professional Registered Nurse preparation. Their transition to professional Registered Nurse practice requires them to integrate the spheres of care and Morrison Family College of Health principles along with knowledge, concepts, theories, practices and/or perspectives encountered in the core and nursing curriculum with important issues in nursing practice and health care delivery. The course includes a precepted practicum with final preparation for the NCLEX-RN examination. Prerequisites: C- or better in NRSG 410; 420; 370; as well as being a declared nursing student. Co-enrollment in NRSG 440and 470 required.

NRSG 470 Leadership in Nursing Prac (4 credits) This course prepares students to apply leadership concepts and theories to skillfully practice as leaders to achieve clinical excellence and improve nursing care and health outcomes. Emphasis will be on professional Registered Nurse leadership role development, complexity theory, innovation and ingenuity, courage and resilience within the context of the spheres of care (disease prevention/promotion of health and well-being, chronic disease care, restorative care, and hospice/palliative/supportive care), whole person wellness, social determinants of health and health equity, healthcare advocacy and systems change, and interprofessional collaboration. Prerequisites: C- or better in NRSG 410; 420; 370; and being a declared nursing student. Co-enrollment in NRSG 450 and 440 required.

NRSG 476 – Experiential Learning (1 to 4 credits)

NRSG 478 – Experiential Learning (0 to 4 credits)

Nutrition

Program Overview

Nutrition studies the nutrients in food and the influence food intake has on an individual's well-being. Nutrition uses knowledge about the relationship among eating patterns, health, and disease to promote well-being among diverse populations.

You will learn about nutrition and how a balanced diet supports well-being throughout life. Additionally, you will develop skills to critically evaluate and navigate nutrition information for both personal and professional use.

Career Paths

- Nutritionist
- Health Coach
- Clinical Dietitian
- Sport Nutritionist
- Food Service Manager
- Public Health Nutritionist

Quick Facts

- Careers in nutrition are projected to grow 8% over the next 10 years.
- Pursuing the field of health and nutrition will enable you to help others achieve wellness and reduce chronic disease.

Major in Nutrition (B.S.)

Required major courses (26 credits):

- NUTR 245: Introduction to Nutrition (4 credits)
- NUTR 260: Introduction to Food Science (4 credits)
- NUTR 360: Sports Nutrition (4 credits)
- NUTR 460: Food & Nutrition Communication (4 credits)
- NUTR 310: Nutrition Internship (2 credits)
- EXSC 213: Human Anatomy with lab (4 credits)
- EXSC 214: Human Physiology + lab (4 credits)

Elective Courses (from PUBH, HLTH, or EXSC): (12 credits) (all 200 or above)

- EXSC 211: Intro to Research (2 credits)
- EXSC 240: Medical Terminology (2 credits)
- PUBH 200: Emerging Disease and Global Health (4 credits)
- PUBH 225: Global Health and Development (4 credits)
- PUBH 230: Public Health Communications (2 credits)
- HLTH 250: Personal Health and Wellness (4 credits)
- HLTH 420: Lifestyle Change & Health Promotion (4 credits) Prerequisites: HLTH 250 or PUBH 220 or instructor approval
- HLTH 430: Worksite Health Promotion (4 credits) Prerequisites: HLTH 250 or PUBH 220 or instructor approval and 80 completed credit

Allied Requirements (from CHEM, BIOL, PSYCH, STAT): (40 credits) (24 at 200 or above)

- CHEM 111: General Chemistry 1 + lab (4 credits)
- CHEM 112: General Chemistry 2 + lab (4 credits)
- CHEM 201: Organic Chemistry 1 + lab (4 credits)
- BIOL 105: Human Biology + lab (4 credits) OR BIOL 207: Genetics Ecology Evolution (4 credits)
- BIOL 208: Biological Communication & Energetics(4 credits)
- *BIOL 209: Biology of Sustainability(4 credits)
- BIOL 256: Foundations of Microbiology & Health + lab (4 credits)
- *BIOL 340: Principles of Biochemistry (4 credits)
- PSYC 111: General Psychology (4 credits)
- DASC 120: Introduction to Computational Statistics + lab (4 credits)

NOTES:

*Most students will need BIOL 240 for their biochemistry. Those planning to apply to non-dietetic/healthcare graduate programs (such as nutritional science or food science) may need to take CHEM 440: Biochemistry with lab. If so, they will need to take CHEM 202 instead of BIOL 209.

Minor in Nutrition

The purpose of the nutrition minor is to provide students an opportunity to further study the area of nutrition. This minor includes opportunities for students to apply knowledge of nutrient metabolism, functions, food sources and physiological systems, to communicate behaviors that align with healthy eating patterns and meet nutrient requirements for different stages and diverse populations, and to critically evaluate nutrition-related information.

All students must take:

- NUTR 245: Introduction to Nutrition (4 credits)

- NUTR 260: Introduction to Food Science (4 credits)
- NUTR 360: Sports Nutrition (4 credits)
- NUTR 460: Food & Nutrition Seminar (4 credits)

Nutrition Undergraduate Courses

NUTR 245 Introduction to Nutrition (4 credits)
An overview of essential nutrients and metabolism, food sources, energy balancing, navigating nutrition information, and the impact of eating patterns on health and disease risk. Other topics include nutritional needs across the lifespan, nutritional status, food security and sustainability, food safety, disordered eating, and nutrition for sports and fitness. This course is open to all students from all fields of study.

NUTR 260 Introduction to Food Science (4 credits)
This course is an overview of food science, mainly from a consumer perspective. The course covers topics such as food selection, evaluation, chemistry, preparation, and safety. Students will learn about food ingredients and their functional properties. The course also includes an examination of intersections between food science and culture. This course is open to all students from all fields of study.

NUTR 310 Nutrition Internship (2 credits)
This course meets the internship requirement for majors in the Nutrition program. S-R grading option only. This course includes a required 100 hours of experiential learning in a nutrition-focused setting. Throughout the semester, students are required to complete at minimum 100 hours of work for the site. This work should provide experience in a food or nutrition setting utilizing knowledge and skills gained from food and nutrition coursework at the University of St. Thomas. The course also includes development of a professional portfolio and a summative reflection paper. Pre-requisites: C- or above in HLTH/NUTR 245, 80 completed credits, and Instructor Permission.

NUTR 360 Nutrition for Sports & Fitness (4 credits)
The focus of this course is to develop a deeper understanding of how metabolism and nutritional requirements may be altered in physically active individuals (from general fitness enthusiasts to elite athletes). We will study how supplements and other ergogenic aids may or may not impact metabolism and performance. We will critically analyze common sports nutrition claims and discuss topics such as nutrient timing, fat adaptation, and the training effect. Pre-requisites: C- or above in HLTH 345 or NUTR 245 AND C- or above in either BIOL 100 or CHEM 100 or higher.

NUTR 460 Food & Nutrition Seminar (4 credits)
Students will develop skills needed to understand, interpret, and communicate various types of food and nutrition information. Students will develop and present audience-focused, evidence-based food and nutrition communication materials in class. Pre-requisites: C- or above in HLTH/NUTR 245 AND C- or above in either BIOL 100 or CHEM 100 or higher.

Pre-professional Programs

Preparation for post-graduate professional school – See College of Arts & Sciences

Public Health

Program Overview

College of Health, Department of Health & Exercise Science
Anderson Athletic Recreation Center (AARC) 206, (651) 962-5982
Mellick (Chair), Arogbokun, Bruininks, Hedman-Robertson, Korak, Mead, Roy, Sage, Scibora

Department
Website: https://health.stthomas.edu/health-exercise-science/index.html

Public health is an exciting and growing field of study. The course of study in the major reflects a broad exploration of public health issues, methods, and strategies. The field challenges its professionals to confront complex health issues, such as improving access to health care, controlling infectious disease, and reducing environmental hazards, violence, substance abuse, and injury.

Public health is a field that offers an abundance of job opportunities to suit a variety of interests and skills. Whether you are more interested in crunching numbers, conducting research, or working with people, there is a place for you in the field of public health. Those interested in working for a non-profit organization can find jobs in health advocacy, policy, or research for organizations such as the American Cancer Society, the Red Cross, or a local non-profit that focuses on specific health issues. Careers are also available at local, county, state and federal health agencies, as well as health care providers.

Major in Public Health (B.S.)

Major Courses:

- PUBH 220 Introduction to Public Heath (4 credits)

- PUBH 225 Global Health & Development (4 credits)
- PUBH 230 Public Health Communications (2 credits)
- PUBH 240 US Health Care Delivery System (4 credits)
- PUBH 300 Introduction to Epidemiology (4 credits)
- PUBH 330 Health Policy (4 credits),
- PUBH 340 Health Education: Program Planning Evaluation (4 credits)
- PUBH 350 Environment, Health & Justice (4 credits)
- PUBH 465 Public Health Research (4 credits)
- PUBH 470 Experiential Learning in Public Health (2 credits)
- PUBH 485 Senior Seminar: Public Health (4 credits)
- 4 elective credits in:
    - PUBH 200 Emerging Infectious Diseases
    - PUBH 210 One Health
    - HLTH 250 Personal Health & Wellness
    - HLTH 420 Lifestyle Changes
    - HLTH 430 Worksite Health Promotion
    - NUTR 245 Introduction to Nutrition
    - EXSC 213 Human Anatomy with Lab
    - EXSC 214 Human Physiology with Lab
    - EXSC 240 Medical Terminology

Allied Courses:

- DASC 120 Intro to Computational Statistics (4 credits)
- PSYC 111 General Psychology (4 credits)
- Select one of the following: (4 credits)
    - BIOL 105 Human Biology
    - BIOL 106 Women, Medicine & Biology
    - BIOL 207 Genetics, Ecology & Evolution
- Select one of the following: (4 credits)
    - COMM 100 Public Speaking
    - COMM 105 Communication in the Workplace
- Select one of the following: (4 credits)
    - ENVR 151 Environmental Challenges
    - BIOL 209 Biology of Sustainability
- Select one of the following: (4 credits)
    - JPST 250 Introduction Justice & Peace Studies
    - GEOG 350 Geography of Global Health
    - BIOL 161/GEOL 361 Medical Geology
- Select one of the following: (4 credits)
    - SOCI 100 Introduction to Sociology
    - SOCI 110 Social Problems
    - SOCI 251 Race & Ethnicity

Minor in Public Health

Required:

- PUBH 220: Intro to Public Health and Social Justice (4 credits)
- PUBH 225: Global Health and Development
- PUBH 300: Intro to Epidemiology (4 credits)
- DASC 120: Intro to Computational Statistics (4 credits)

Plus one from:

- PUBH 200: Emerging Infectious Disease and Global Health (4 credits)
- PUBH 210: One Health: Humans, Animals and the Environment (4 credits)
- PUBH 330: Heath Policy (4 credits)
- PUBH 340: Human Education Program Planning and Evaluation (4 credits)
- PUBH 350: Environment, Health and Justice (4 credits)

Public Health Courses

PUBH 200 Emerging Disease & Glob Health (0 or 4 credits)
In recent decades, infectious diseases such as West Nile virus, Ebola, Zika, MERS, HIV, H5N1 and H1N1 influenza virus have jumped geographical boundaries and even species boundaries to emerge in new populations. This class offers an introduction to emerging and reemerging infectious disease and focuses on the underlying mechanisms of microbial emergence, epidemiology, and the strategies available to contain them. In this age of antibiotics and vaccines, why do millions die each year from infectious diseases worldwide? With new pathogens continuing to emerge, can we ever hope to win the battle? The emergence and re-emergence of infectious diseases involves many interrelated factors. Global interconnectedness continues to increase with international travel and trade; economic, political, and cultural interactions; and human-to-human and animal-to-human interactions. This course will address the biological mechanism of infectious disease and the socioeconomic and ecological factors that influence the outbreak of infectious diseases.

PUBH 210 One Health (0 or 4 credits)
This course is designed to provide students with an understanding of the biology of human/animal/environmental interactions that impact health. Students will practice evidence-based approaches to these public health issues including identifying problems and risk factors, considering evidence-based recommendations for interventionism developing strategies for putting interventions in place, and evaluating outcomes. The University of St. Thomas challenges students "...

to be morally responsible leaders, who think critically, act wisely, and work skillfully towards the common good." Students completing this course will build critical thinking skills while learning fundamental concepts and practices that benefit the health of global and local communities.

PUBH 220 Intro to Pub Hlth & Soc Just (4 credits)
Public health impacts each of us on a daily basis, yet too few of us can explain exactly what it is ordescribe the numerous ways in which it "touches" our daily lives. For students interested in the health sciences it is critical that you understand how public health has and continues to influence our collective health. In this course you will acquire an understanding of the academic discipline of public health, major public health problems, and public health systems intended to protect and maintain the health of the public. The course will orient you to core principles of public health, including social justice, and provide opportunities for you to apply your knowledge of public health to address complex population health problems that affect the population. Course activities will challenge you to think critically about various complex health problems while you compare, contrast and devise "solutions" or interventions to address them. This class will equip you with tools to begin to address the critical public health issues that face you, your community, and your world.

PUBH 225 Global Health & Development (4 credits)
Some of the major global health challenges we will discuss include communicable and non-communicable diseases, as well as environmental, women's, and refugee health issues. We will pay particular attention to health systems and the role these systems play in promoting health and development around the globe. The course is global in its scope, but the focus of many of our discussions will be on low- and middle-income countries, the health of the poor, and health inequity. The relationship between health and socio-economic development will be examined throughout the course. The course will expose students to concepts from social epidemiology, such as social determinants of health and the impact of various social, economic, political, and historical contexts on health.

PUBH 230 Public Health Communications (2 credits)
This course provides students with a foundation of knowledge to develop communication and advocacy skills for the public health profession. Students will learn how to apply health communication strategies and recommended practices in developing, implementing, and evaluating a health communication campaign as well as engaging in advocacy-related communications. Students will apply and discuss health communication concepts, theories, and models in critiquing past communication campaigns. Emergency and risk communication, health literacy and patient-client education, communicating with stakeholders and decision/policy makers, and e-health technologies will also be explored.

PUBH 240 U.S. Health Care Delivery (4 credits)
This course will provide an introduction into the legal, ethical, social, economic, and regulatory dimensions of U.S. health care, through a public health and social justice lens. Students will analyze the U.S. health care system structure and functions. Systems of care (government, private, and non-profit) as well as types of care (medical care, behavioral health care, public health, etc.) will be explored. Coursework will require students to conduct a comparative analysis of health care delivery system in the U.S. and another country. The course will explore challenges within the U.S. health care delivery system and engage students to investigate proposed solutions to reduce health care costs, improve health care quality, and reduce health disparities. A culminating class project will provide opportunities for students to share what they have learned in the course with a larger audience.

PUBH 300 Intro to Epidemiology (4 credits)
Epidemiology ("epi") is the study of the distribution and determinants of health and disease patterns in human populations. As a scientific method, epidemiology can be used to investigate, analyze, and ultimately prevent or control health problems on the population level. In this course you will develop your understanding of the epidemiologic approach for addressing important population health problems. You will have the opportunity to examine various population health issues from an epidemiologic perspective. Initially, you will learn to speak the "epi" language such that you can describe data in epidemiologic terms and examine associations between exposures and health/disease outcomes. You will also develop skills to conduct basic data analysis, critically analyze epidemiologic study methods, and assess the validity of "epi" study results. You will leave this course with a better understanding of both the significant impact of epidemiology on human health as well as some of the limitations of the science. Prerequisites: PUBH 220 and DASC 120, or Junior Standing and DASC 120, or Permission of the instructor.

PUBH 330 Public Health Policy (4 credits)
Public Health policies are inescapable, critical, but

often invisible components of our everyday lives. The accessibility, cost and quality of health care; our preparedness for disasters; the safety of our food, water, environment and medications; the right to make individual decisions about our personal health and well-being; and many other issues are vitally tied to health policies and laws. Health policies and laws may have a lasting effect on our quality of life as individuals and on our welfare as a nation. This course examines the relationship between public health research and policymaking. Complex health policy problems facing policymakers today will be discussed. Specifically, this course examines healthcare policy from a public health perspective. Over the course of the semester, we will discuss federal, state, and local health policies in order to improve our understanding of how and why policies were and are developed and how research, politics, and other social factors inform the health policymaking process. Many of the contemporary health policy problems facing federal, state, and local policymakers today will be explored. Prerequisites: PUBH 220 or approval of the instructor

PUBH 340 Planning, Implementation & Eva (4 credits)
This course will cover effective approaches for planning, implementing, and evaluating public health education programs. Students will engage in quantitative and qualitative needs assessment procedures to guide program goal and objective setting. The course will emphasize theoretical and evidence-based interventions and tools to optimize program implementation. Fundamental concepts and methods of evaluation will be covered. This course covers important planning skill sets beneficial to other disciplines. Prerequisite: PUBH 220 and 225 or instructor approval

PUBH 350 Environment, Health & Justice (4 credits)
Welcome to PUBH 350: Environment, Health and Justice. In this course we will examine public health structures, principles, tools, and programs used to address current and historical environmental health issues. Throughout the course we will consider how the world we live in impacts our health, how we negatively impact the environment and our own health, and what can be done to improve population health. We will consider these topics from an environmental justice perspective because around the world environmental hazards and diseases are not equally distributed across all populations. Environmental health issues are complex and in order to more fully understand them we will draw on ideas and concepts from sociology, economics and environmental epidemiology, toxicology, and regulation. This course will encourage you to understand and think critically about ways public health systems measure, control, and remove exposures to environmental hazards to protect population health. Prerequisites: PUBH 220 or approval of the instructor

PUBH 465 Public Health Research Methods (4 credits)
This course is intended to guide students thorough a five-step process for conducting health research. Students will develop skills necessary to understand, interpret, design various types of health research, as well as contribute to the scholarly conversation in public health. Students will have the opportunity to develop a research question, design a research project to address their question, draft a manuscript, and present their findings to their peers and faculty. Topics to be covered in this course include: identifying an appropriate research study question, selecting an effective study approach, designing a study, collecting data, analyzing data, and reporting findings. This course serves as a hands-on, writing intensive course for students majoring in Public Health. Prerequisites: PUBH 220 and PUBH 300

PUBH 470 Internship: Public Health (2 OR 4 credits)
The Public Health undergraduate internship learning experience has a three central goals: 1) to broaden student exposure to public health professionals and agencies, 2) facilitate opportunities for students to integrate, synthesize, and apply knowledge gained from coursework , and 3) provide opportunities for students to observe public health leadership in action. This course requires students to complete 100 hours engaging in public health-related competencies. Prior to registering for this class, students must receive internship site approval by faculty or advisor and secure an agreement, in writing, with an internship site. Prerequisites: DASC 120, PUBH 300, and PUBH 340

PUBH 478 Experiential Learning (0 credit)

PUBH 485 Senior Seminar: PUBH (4 credits)
This is the senior capstone seminar for public health majors. The overarching aim of the course is to provide students with a culminating experience to their overall studies in undergraduate public health. Students will bring to this course all of the knowledge and tools of analysis that they have learned in public health throughout their undergraduate tenure. This seminar allows students majoring in public health to analyze specific issues and problems using the knowledge and understanding gained by completing the required courses in the program and an experiential learning or research experience. Prerequisites: PUBH 465 or 470 and be senior standing or get permission of the instructor.

PUBH 491 Individual Study/Research (2 TO 4 credits)

PUBH 495 Individual Study/Research (2 OR 4 credits)

Social Work

Program Overview

School of Social Work

Susan S. Morrison Hall (formerly Summit Classroom Building) 201, (651) 962-5800
Aspholm, Chigbu, Hepperlen, Hill, Hollidge, Horn, Lundquist, Marrs, Fuchsel, Moua, Nesmith, Peterson, Powers, Rand, Roseborough, Solomonson, Theisen, Whitebird

Department website:
https://health.stthomas.edu/social-work/ug-experience/index.html

At the University of St. Thomas, social work is seen as a critical part of health and well-being for individuals, communities and society. Social work is one of the fastest growing careers in the U.S. We prepare you to become a licensed professional, equipped to work in direct practice with children or adults, families, groups and organizations, or as an advocate for policies to advance the common good. Our graduates are committed to social justice and to helping people make positive changes in their lives.

Why Study Social Work at St. Thomas?

With an increase in jobs estimated at 16 percent or higher in the field over the next decade (U.S. Bureau of Labor Statistics), social work offers vast career opportunities. Health care social work, along with mental health and substance abuse social work are among the fastest growing areas, while opportunities to work with children, families and schools are also growing faster than average. With a bachelor's degree in social work, you can begin work upon graduation or enter a master of social work (MSW) program as an "advanced standing" student, and save a year of time and investment achieving your MSW.

With our bachelor's degree in social work, you'll be prepared to work with diverse populations across a wide variety of settings such as schools, health systems, nonprofits, and social services agencies including child welfare agencies. You will gain real-world practice experience during 475 hours of fieldwork (internships), and graduate prepared to take the bachelors-level social work licensure exam in any state.

The curriculum is rooted in a philosophy of social responsibility and respect for individuals' rights. Drawing from the Judeo-Christian traditions of social caring, we prepare students to use social work knowledge, values and skills to demonstrate the intrinsic value of all humankind as they serve those in need and promote social justice and human rights. Our program prepares generalist social workers committed to professional ethics and values, service, social justice and human rights. Our comprehensive program integrates theory, research, field and personal growth components. Social work majors also take courses in human biology, introduction to sociology, general psychology and lifespan developmental psychology.

Majors will expand their knowledge of social work beyond the boundaries of the classroom by completing two field education placements. During their junior and senior years, students will complete 475 hours of field practice experience (75 hours as Juniors, 400 hours as Seniors), engaging them in hands-on learning opportunities in a variety of settings. We have developed strong agency partners and guide students through the process of interviewing and placement with these agencies. Field placements include opportunities such as case management, shelter advocacy, supervised visitation, community education and organizing, school social work, medical social work, research and grant writing, and county social work.

The School of Social Work includes 18 faculty who are known for their teaching excellence and scholarship and are eager to lend their expertise concerning academic and professional issues. Our faculty members hold leadership positions in local, regional and national professional organizations and have expertise in areas such as medical social work, school social work, social policy, child welfare, social work with immigrants and refugees and counseling and mental health. Your professors will enthusiastically challenge you and encourage you to reach your full potential.

The School of Social Work is recognized as a national leader for its strong commitment to social justice. Social Work for Social Justice: Ten Principles, developed by the program and used in the baccalaureate and graduate programs, have been adopted by programs across the country. The social work program also has an active Social Work Club.

The social work program requires students to be formally admitted to the major. This process takes place in February of the junior year. Prospective majors must have a grade point average of 2.25 and must be interviewed by the School of Social Work faculty.

Major in Social Work (B.A.)

Required courses (44 credits):

- SOWK 181 Introduction to Social Work (4 credits)
- SOWK 240 People and the Environment: Theories of Justice, Behavior, & Impact
- SOWK 355 Communication and Interviewing Skills (4 credits)
- SOWK 375 Junior Field Placement and Integrative Seminar (2 credits)
- SOWK 380 Social Work Research (4 credits)
- SOWK 385 Group Work Skills (4 credits)
- SOWK 391 Social Policy for Social Change (4 credits)
- SOWK 401 Practice with Individuals and Families (4 credits)
- SOWK 402 Practice with Organizations and Communities (4 credits)
- SOWK 405 Senior Field Practicum & Integrated Seminar I (4 credits)
- SOWK 406 Senior Field Practicum & Integrated Seminar II (4 credits)
- One Elective course in SOWK (2 credits)*

*Elective courses

Electives are updated frequently. Visit www.stthomas.edu/socialwork/undergraduate/curriculum/default.html for a current list of electives.

- SOWK 291 The Anatomy of Violence (4 credits)
- SOWK 293 A Celebration and Critical Analysis of Race and Self, Social Work, and Social Movements (2 credits)
- SOWK 295 Grief, Loss, Resiliency, and Transformation (2 credits)
- SOWK 297 Dying in America (4 credits)

Allied requirements

- BIOL 101 General Biology (4 credits) or BIOL 105 Human Biology (4 credits) or BIOL 106 Women, Medicine and Biology (4 credits)
- PSYC 111 General Psychology (4 credits)
- PSYC 202 Lifespan Development (4 credits)
- SOCI 100 Introduction to Sociology (4 credits)

Required Fieldwork Experience

Field placements, arranged by the School of Social Work, provide hands-on practice experience in social work agencies, institutions, and/or departments to complement your academic work through integration of theory and practice.

Junior year:

Approximately six hours per week off campus in a field agency setting totaling 75 hours, plus a weekly seminar course on campus. As a social work student contact your social work adviser or program director during the second semester of sophomore year to discuss the placement process.

Senior year:

Two semesters of approximately 12-16 hours per week off campus in a field agency setting totaling 400 hours, plus bi-weekly seminar course on campus.

Admission Process

The School of Social Work requires you to be formally admitted to the BSW program. This process takes place at the middle of the junior year. As a prospective major, you must have a GPA of 2.25 and be interviewed by faculty of the school. Contact your adviser for more details.

Minor in Social Welfare

A minor in social welfare is available through School of Social Work. A minor in social welfare is not accepted by the Council on Social Work Education as preparation for beginning-level generalist social work practice. A minor is offered for your own learning in the area of social welfare.

- SOWK 181 Introduction to Social Work (4 credits)
- SOWK 240 People and the Environment: Theories of Justice, Behavior, & Impact
- SOWK 391 Social Policy for Social Change (4 credits)

Plus eight credits from the following:

- PSYC 202 Lifespan Development (4 credits)
- PSYC 207 Drugs and Behavior (4 credits)
- SOCI 251 Race and Ethnicity (4 credits)
- SOWK 291 Anatomy of Violence (4 credits)
- SOWK 380 Social Work Research Methods

Social Work Undergraduate Courses

SOWK 181 Introduction to Social Work (4 credits)
This course introduces the student to the profession of social work within the context of the social welfare system. It provides an overview of an integrative approach to generalist social work practice which

emphasizes intervention on individual, community and societal levels. Special emphasis is placed on values, human diversity, social justice and social work fields of practice. This course is a prerequisite for all Social Work course work or must be taken concurrently with second course taken in the major.

SOWK 240 People and Environment (4 credits)
This a theory-driven course focusing on metacognition- training students to think about the way we think. The course takes a multidisciplinary approach to theoretical knowledge, introducing students to many ways of understanding how humans behave in, impact, and are impacted by multiple environments. Students learn to apply theories to understand human behavior in regard to their social and natural environments as well as reciprocal impact of humans and their environments. Theories are examined through a multidimensional framework constituting biological, psychological, spiritual, socio-cultural, political, environmental, and economic factors. Emphasis is on these factors within and between multiple systems: individual, family, small group, organization, community, and society, including political, economic, and natural systems. The course consists of five modules: interpersonal relations and empowerment, social systems, political and economic systems, social and environmental justice, and multiculturalism. The course investigates the multiple dimensions and intersections of diversity including gender, race/ethnicity, age, religion, ability, sexual orientation, nationality, and global and international perspectives. Students leave the class with a holistic understanding of the human experience within the environments that surround them. Recommended prerequisite or concurrent registration: SOWK 181 (or 281 under the old course number); Required Prerequisites: PSYC 202, or consent of the program director.

SOWK 243 Individual Study (2 OR 4 credits)

SOWK 269 Research (2 OR 4 credits)

SOWK 291 The Anatomy of Violence (4 credits)
The purpose of this course is to increase the knowledge and understanding of cultural, racial and interpersonal violence and develop a commitment to promoting a violence-free society. Emphasis is on exploration of the extent, causes and effects of violence and strategies for intervention on the micro and macro levels. Specific areas of study include domestic/partner abuse, child abuse/neglect, peer/date violence, elder abuse, sexual assault/sexual harassment, cultural violence, racism and other systemic oppression.

SOWK 292 Loss, Grief, Resil, & Transf (2 credits)
Loss and grief, though painful, are a universal part of human experience and yet also profoundly unique. Service professionals across areas of practice will inevitably encounter people who are experiencing grief in reaction to some type of loss whether it is a relationship, an ability, a community, a culture, and/or the sense of a just world. This course will explore these varied forms of loss and the many ways individuals, families and communities grieve those losses. We will discuss resilience as nurtured and sustained through connection and examine the enormous positive societal impact those who are grieving have made and continue to make in our community, in our nation, and across the globe.

SOWK 293 Race, Self & Social Work (2 credits)
As a socially constructed membership-based identity, race in the Americas is both false and true. Needless to say, it's complicated. As such, social workers need to not only better understand our racialized selves, but also better understand the history of race and racism, as well as its role in the profession. To this end, this course will both celebrate and interrogate. We will also explore a selection of popular social movements and critically reflect upon their own racialized living and learning experiences.

SOWK 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SOWK 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SOWK 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SOWK 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SOWK 355 Comm/Interviewing Skills (4 credits)
This course is the first of a four-course practice sequence. The primary focus is on communication theory and skills as applied to social work with individuals, families, small groups, communities and organizations. There is an emphasis on self-

awareness, beginning assessment skills and diversity issues. An integrative approach to generalist social work practice provides the context for intervention on individual, environmental and societal levels. SOWK 355 is taken with SOWK 375 (or 378) in the fall. Prerequisites or concurrent registration with: SOWK 181 (or 281 under the old course number) or consent of the program director.

SOWK 375 Jr Field Practicum & Integ Sem (2 credits)
In this course, students will complete a 75-hour practicum in a social service agency under the supervision of a licensed social worker. While in the host agency, students will engage in observation, beginning social service tasks, and group supervision. Students participate in a weekly on-campus seminar that helps students integrate essential practice concepts with this first experiential learning in the field. Open to social work majors only. Prerequisites: SOWK 181. Prerequisite or concurrent with SOWK 355 or SOWK 385.

SOWK 376 Jr Field Place & Integ Seminar (2 credits)
Junior Fieldwork complements your academic work through practical experience in a social work agency, institution or department. Under the supervision of an agency field instructor, the student learns beginning social work tasks and functions while applying theory to actual social work situations. Students participate in an on-campus seminar with other junior social work majors while in placement. The placement is 10–12 hours per week throughout two consecutive terms (fall and spring semesters) for day social work students. SOWK 378 (4 credits) is designed for students taking a semester abroad in their junior year. It combines SOWK 375 and SOWK 376 into a single semester. Day students must consult with the program director before registering for this course. Prerequisites: SOWK 375 must be taken before SOWK 376. Prerequisites with concurrency: For SOWK 375: SOWK 181 (or 281 under the old course number) and SOWK 355.

SOWK 378 Jr Field Place & Integ Seminar (4 credits)
Junior Fieldwork complements your academic work through practical experience in a social work agency, institution or department. Under the supervision of an agency field instructor, the student learns beginning social work tasks and functions while applying theory to actual social work situations. Students participate in an on-campus seminar with other junior social work majors while in placement. The placement is 10–12 hours per week throughout two consecutive terms (fall and spring semesters) for day social work students. SOWK 378 (4 credits) is designed for students taking a semester abroad in their junior year. It combines SOWK 375 and SOWK 376 into a single semester. Day students must consult with the program director before registering for this course. Prerequisites: SOWK 375 must be taken before SOWK 376. Prerequisites with concurrency: For SOWK 375: SOWK 181 (or 281 under the old course number) and SOWK 355.

SOWK 380 Social Work Research (4 credits)
This course fosters competence in the research skills needed for generalist social work practice. Students will gain knowledge in the steps of conducting research; practice evaluation; conducting research with vulnerable participants; locating and critically evaluating relevant research to inform practice; and evidence-based practice. They will learn values of ethical research practice, using the Belmont Report and the NASW Code of Ethics as guidelines. Particular emphasis is placed on protecting vulnerable research participants. Students will also gain skills in writing and presenting a literature review, developing a research proposal, and applying relevant research to practice. Prerequisites: SOWK 181 (or 281 under the old course number) and junior status or consent of the program director.

SOWK 385 Group Work Skills (4 credits)
This course is the second of the four-course practice sequence. The primary focus of the course is on the study of human behavior in groups with emphasis on the use of groups in generalist social work practice to accomplish individual, family, organizational and/or community goals. This course provides experiential learning opportunities to integrate knowledge, values, and skills as both a group leader and a group member. The effects of diversity on group interaction are stressed. SOWK 385 is taken with 376 or 378 for students in the spring semester. Prerequisite: SOWK 355 or consent of the Program Director.

SOWK 389 Research (2 OR 4 credits)

SOWK 391 Social Policy for Change (4 credits)
This course equips students to understand and critically analyze current and past social policies. Policy alternatives are explored with a focus on the values and attitudes as well as the societal, economic and political dynamics from which they originate. Roles and responsibilities of citizens and professionals in formulating and implementing policies responsive to actual social needs are addressed. Prerequisite: SOWK 181 (or 281 under the old course number) or consent of the Program Director.

SOWK 393 Individual Study (2 OR 4 credits)

SOWK 401 Practice with Indiv & Fam (4 credits)
This is the third course in the four-part practice sequence. This course prepares students for

generalist social work practice with individuals, families and groups in the context of their social environments with emphasis on aspects of diversity. A primary focus is the application of social work knowledge through increased development of skills. The overall goal of the course is integration and application of the stages of the generalist social work method. SOWK 401 is taken with 405 in the fall by seniors. Prerequisites: SOWK 355 and SOWK 385.

SOWK 402 Practice with Organ & Comm (4 credits)
This course is a continuation of SOWK 401 and the final of four courses in the practice sequence of the social work curriculum. The focus is on prevention/intervention methods based on generalist social work knowledge that can be applied to client systems of all sizes. A special emphasis is placed on effecting planned change in groups, organizations, communities, and national and global society toward the pursuit of social justice. A combination of lecture, discussion, experiential learning, and small group activities provides students with knowledge and skills for client advocacy and social change. SOWK 402 is taken with 406 in the spring semester. Prerequisites: SOWK 401.

SOWK 405 Sr Field Pract & Integ Sem I (4 credits)
Senior Fieldwork complements the student's academic work through practical experiences in a social work agency, institution or department. Under the supervision of an agency field instructor, the student learns social work tasks and functions while applying theory to actual social work situations. Students participate in an on-campus seminar with other senior social work majors while in placement. The placement is approximately 15-20 hours per week throughout two consecutive terms (fall and spring semesters). Concurrent registration in SOWK 401 is required. SOWK 405 is the fall course.

SOWK 406 Sr Field Pract & Integ Sem II (4 credits)
See description for SOWK 405. SOWK 406 is the spring course. Concurrent registration in SOWK 402 is required.

SOWK 416 Child Welfare Policy (4 credits)
This course is designed to give students an overview of important topics in child welfare practice and policy. Students will be asked to examine their own values about orientations toward child welfare, children's rights and responsibilities, the nature of maltreatment, and other issues facing the field today, as they affect diverse families. Additionally, students will be given tools to advocate for children, and an opportunity to exercise new advocacy skills.

SOWK 430 Ldrshp, Advocacy & Fundraising (4 credits)
The purpose of this class is to provide students with an overview of key elements of supporting and expanding programs in nonprofit agencies. Topics covered include nonprofit governance and administrative structures, fundraising, program design and development, philanthropy, supervision of paid staff and volunteers, and grant-writing and program evaluation. An emphasis will be placed on linking agency work and agency mission. The course will emphasize application and synthesis of course concepts through community-based projects. Prerequisite: Junior or Senior standing

SOWK 476 Experiential Learning (1 TO 4 credits)

SOWK 483 Seminar (2 credits)

SOWK 484 Seminar (2 credits)

SOWK 485 Seminar (4 credits)

SOWK 486 Seminar (4 credits)

SOWK 487 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SOWK 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SOWK 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SOWK 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

SOWK 491 Research (2 OR 4 credits)

SOWK 495 Individual Study (2 OR 4 credits)

Social Work and Criminal Justice

Co-Major

Completing a co-major in Criminal Justice and Social Work will allow students to combine the

strengths of two areas of study in order to learn more about responding to human needs and social problems.

The Criminal Justice major provides students with an understanding of the entire criminal justice system. The major emphasizes the interrelationships among the various components of the criminal justice system (e.g. law enforcement, prosecution, counts and corrections) and examines how they deal with adult offenders and juvenile delinquents.

The social work major prepares graduates for generalist social work practice and licensure, and for graduate study. The St. Thomas School of Social Work recognizes two goals for generalist social work practices:

1. To restore and enhance the social functioning of systems of all sizes (individuals, families, groups, organization, and communities)

2. To promote a more just society

At the completion of the co-major, students will have excellent analytical and research knowledge, a deeper understanding of social problems, specifically within and related to the criminal justice systems, including a social theoretical background for policy change, and practical, licensable skills and practice experience in the field. In addition, students will be eligible to apply to most MSW problems as "advanced standing", meaning that they will be able to complete their MSW studies on an accelerated timeline.

Requirements:

Social Work (36 credits)

- SOWK 181 Introduction to Social Work (4 credits)
- SOWK 240 Human Behavior and the Social Environment (4 credits)
- SOWK 355 Communication and Interviewing Skills (4 credits)
- SOWK 375 Junior Fieldwork (2 credits)
- SOWK 376 Junior Fieldwork (2 credits)
- SOWK 385 Group Work Skills (4 credits)
- SOWK 401 Practice with Individuals and Families (4 credits)
- SOWK 402 Practice with Organizations and Communities (4 credits)
- SOWK 405 Senior Field Practicum & Integrated Seminar I (4 credits)
- SOWK 406 Senior Field Practicum & Integrated Seminar II (4 credits)

Allied Requirements (12 credits)

- BIOL105 Human Biology or BIOL 106 Human, Medicine, and Biology (4 credits)
- PSYC 111 General Psychology (4 credits)
- PSYC 202 Lifespan Developmental Psychology (4 credits)

Criminal Justice (28 credits)

- SOCI 100 Intro to Sociology (4 credits)
- SOCI 200 Intro to Criminal Justice (4 credits)
- SOCI 210 Research Methods in Sociology (WAC:WID) (4 credits)
- SOCI 220 Sociological Analysis (4 credits)
- SOCI 312 Crime & Delinquency (4 credits)
- SOCI 480 Seminar in Criminal Justice (4 credits)

One of the following:

- CJUS 342 Criminal Law & Criminal Procedure (4 credits)
  Or SOCI 344 Police & Society (4 credits)
  Or SOCI 346 Corrections in America (4 credits)

Social Work and Psychology

Co-Major

The fields of psychology and social work share common commitments to understanding individual's physical, mental, and social wellbeing. Many students of psychology and social work are particularly interested in developing a deeper understanding of mental health, healthy brain development, and interventions that positively impact people's lives. The psychology/social work co-major crosses disciplinary boundaries, allowing students to address some of the world's most pressing problems, combining excellence in social work education with in-depth perspectives in psychology. A co-major in psychology and social work allows students to integrate psychology's emphasis on scientific analysis of human behavior and thought with social work's emphasis on application of strengths-based interventions to build individual and structural well-being. Psychology/social work graduates will be well prepared for careers in a variety of settings, clinical healthcare settings, non profit organizations, schools, social service agencies, and educational/research institutions.

Courses in the social work major will prepare students for generalist social work practice and for

entry into graduate social work programs (MSW) with advanced standing. The program is accredited by the Council on Social Work Education at the baccalaureate level and qualifies graduates to take the examination for licensure at the licensed social worker (LSW) level.

Psychology (36 credits)

- PSYC 111 General Psychology (4 credits)
- PSYC 202 Lifespan Development (4 credits)
- PSYC 207 Drugs and Behavior (4 credits)
- PSYC 212 Research Meth in Psych (4 credits)
- PSYC 301 Psychopathology (4 credits)

PSYC Lab I choose from:

- PSYC 313 Psychological Testing (4 credits)
- PSYC 321 Res Issues: Social Psych (4 credits)
- PSYC 322 Sensation & Perception (4 credits)
- PSYC 323 Learning and Memory (4 credits)
- PSYC 401 Physiological Psychology (4 credits)
- PSYC 402 Developmental Psych Research (4 credits)
- PSYC 415 Research Issues in Cognition (4 credits)

PSYC Lab II choose from:

- PSYC 313 Psychological Testing (4 credits)
- PSYC 321 Res Issues: Social Psych (4 credits)
- PSYC 322 Sensation & Perception (4 credits)
- PSYC 323 Learning and Memory (4 credits)
- PSYC 401 Physiological Psychology (4 credits)
- PSYC 402 Developmental Psych Research (4 credits)
- PSYC 415 Research Issues in Cognition (4 credits)

Plus:

- PSYC 422 History of Psych in Context (4 credits)
- one additional upper level (300/400) elective

Note: the 2 labs and 1 elective listed must include at least one Cognitive area course and one Social Area course.

Social Work (38 credits)

- SOWK 181 Introduction to Social Work (4 credits)
- SOWK 240 Human Behavior and the Social Environment (4 credits)
- SOWK 355 Communication and Interviewing Skills (4 credits)
- SOWK 375 Junior Fieldwork (2 credits)
- SOWK 385 Group Work Skills (4 credits)
- SOWK 391 Social Policy for Change (4 credits)
- SOWK 401 Generalist Practice I: Small Client Systems (4 credits)
- SOWK 402 Generalist Practice II: Large Client Systems (4 credits)
- SOWK 405 Senior Fieldwork (4 credits)
- SOWK 406 Senior Fieldwork (4 credits)

Allied Requirements (12 credits)

- One of the following lab sciences: BIOL 101 or 105 or 106 or 207 or CHEM 100, 101, 108, 109, 111, OR 115

plus

- SOCI 100 Intro to Sociology (4 credits)
- DASC 120 Intro to Computational Statistics (4 credits)

Social Work and Sociology

Co-Major

Completing a co-major in Sociology and Social Work will allow students to combine the strengths of two areas of study in order to learn more about responding to human needs and social problems.

Sociology is the scientific study of society and social relations and it teaches students the skills they need to communicate, advocate and problem solve in this increasing globalized and socially diverse world. If you are interested in understanding and investigating the role society and social institutions play in influencing human behavior or how we must go beyond individual solutions to tackle social problems, then sociology might be for you! Employers want employees who have intercultural competence, can work comfortably with team members from diverse backgrounds, and can apply knowledge in real world settings. Course work in Sociology develops this along with intellectual skills such as quantitative and qualitative analytic reasoning and interpersonal communication skills.

The Social Work prepares graduates for generalist social work practice and licensure, and for graduate study. The St. Thomas School of Social Work recognizes two goals for generalist social work practices:

1. To restore and enhance the social functioning of systems of all sizes (individuals, families, groups, organization, and communities)

2. To promote a more just society

At the completion of the co-major, students will have excellent analytical and research knowledge, a deeper understanding of social problems including a solid theoretical background for policy change, and practical, licensable skills and practice experience in the field. In addition, students will be eligible to apply to most MSW problems as "advanced standing", meaning that they will be able to complete their MSW studies on an accelerated timeline.

Requirements:

Social Work (40 credits)

- SOWK 181 Introduction to Social Work (4 credits) cobundergrad@stthomas.edu
- SOWK 240 Human Behavior and the Social Environment (4 credits)
- SOWK 355 Communication and Interviewing Skills (4 credits)
- SOWK 375 Junior Fieldwork (2 credits)
- SOWK 376 Junior Fieldwork (2 credits)
- SOWK 385 Group Work Skills (4 credits)
- SOWK 391 Social Policy for Social Change (4 credits)
- SOWK 401 Practice with Individuals and Families (4 credits)
- SOWK 402 Practice with Organizations and Communities (4 credits)
- SOWK 405 Senior Field Practicum & Integrated Seminar I (4 credits)
- SOWK 406 Senior Field Practicum & Integrated Seminar II (4 credits)

Allied Requirements (12 credits)

- BIOL 105 Human Biology *or* BIOL 106 Human, Medicine, and Biology (4 credits)
- PSYC 111 General Psychology (4 credits)
- PSYC 202 Lifespan Developmental Psychology (4 credits)

Sociology (28 credits)

- SOCI 100 Intro to Sociology (4 credits)
- SOCI 210 Research Methods in Sociology (WAC:WID) (4 credits)
- SOCI 220 Sociological Analysis (4 credits)
- SOCI 370 Sociological Theory and Praxis: The Capstone Experience (4 credits)

One of the two:

- SOCI 3XX Elective (4 credits)
  or SOCI 251 Race and Ethnicity (4 credits)

One of the two:

- SOCI 365 Social Psychology (4 credits)
  or *SOCI* 366 Self and Society (4 credits)

One of the three:

- *SOCI 304 Adolescence in Society (4 credits)*
  or *SOCI 321 Global Marriages and Families (4 credits)*
  or *SOCI* 354 Sex in Society (4 credits)

OPUS COLLEGE OF BUSINESS

Overview

Undergraduate Business Programs Office
McNeely Hall (MCH) 128,
cobundergrad@stthomas.edu
(651) 962-5544

Opus College of Business Web Site:
https://business.stthomas.edu/degrees-programs/undergraduate

The Opus College of Business majors all provide carefully designed curriculums that strive to balance practice and theory. Students begin by developing their analytical and critical thinking skills with allied courses in economics, statistics and mathematics, while a series of first and second-year common business core courses provide a broad foundational knowledge of all the key functional areas within business, including accounting, business law, finance, operations/supply chain, and management, and marketing. A specific business ethics core course is also included, but ethical managerial decision-making is woven into the entire curriculum, helping students not only align their values with their future business practices, but helping them understand the conflicts and challenges modern business leaders face.

Most business majors provide students the opportunity to stack specialized, focused knowledge and skills in a specific functional area (listed below) on top of the common business core, while the business administration major (BA program) offers an efficient, general business degree with maximum flexibility. It is a good option for students seeking to combine business with a second major outside of business, and/or one or more minors in other fields.

Opus College of Business faculty provide students with hands-on, interactive learning experiences such as presentations, group projects, case studies, simulations, and guest speakers - as well as stimulating discussion and debate. Several business elective or specialized major courses offer opportunities for collaboration or consulting

experiences with external companies and community/nonprofit organizations.

Academic Policies for Business Majors

All business and allied courses applied towards an Opus College of Business major or minor must be taken for a letter grade. These courses may not be taken on a pass/fail basis.

It is expected that students earning an Opus College of Business degree will take their major coursework at St. Thomas. Once matriculated, students must have prior approval before registering for a business course at another university.

All students who major in a business field must complete a minimum of 28 credits in Opus College of Business coursework at the University of St. Thomas, and at least 16 of these 28 credits must be in courses from the specific Opus department of the student's major. For students completing the general business management major, the residency requirement is a minimum of 22 credits in Opus business courses, with at least 8 of these 22 credits in MGMT courses. Credits earned at ACTC colleges and through affiliated study abroad programs do not count toward this residency requirement. (London Business Semester coursework is considered in residence.)

Opus College of Business courses taken more than eight years ago may need to be reviewed for alignment with the current major/degree requirements, and/or a student may need to petition the university's Committee on Studies to graduate from a prior catalog.

Student Honor Pledge

The Opus College of Business aspires to develop and graduate highly principled global business leaders, so students are appropriately expected to maintain the highest standards of integrity while enrolled in the business program. Academic honesty is fundamental to the principle of independent learning and growth. The Honor Pledge (below) is signed by undergraduate business students at the time they declare their business major or minor, as an affirmation of their commitment to accept personal responsibility for their own behavior, and conduct themselves in an ethical manner with honesty and integrity in all their actions.

Opus Student Honor Pledge: *As a student in the Undergraduate Program of the Opus College of Business, I will adhere to the University's academic integrity policies and act with honesty, integrity, respect, and accountability in all my actions.*

Beta Gamma Sigma (Honor Society)

Beta Gamma Sigma (BGS) is the International Honor Society for business students at AACSB accredited business schools. This is the highest academic honor that can be achieved in the Opus College of Business. Each year, Opus students in the top 10% of their class by institutional GPA are invited to join BGS.

Opus Academic Programs

Bachelor of Science in Business Administration (BSBA):

- Accounting
- Business Communication
- Entrepreneurship
- Financial Management
- Human Resource Management
- International Business
- Leadership & Management
- Law and Compliance
- Marketing
- Supply Chain Management
- Real Estate Studies (B.S.)

Bachelor of Arts (BA):

- Business Administration (General Business)
- Strategic & Business Communication (Co-Major)

Business Undergraduate Courses

BUID 220 Introduction to Sports Mgmt (4 credits)
This course introduces students to the field of sport management, including the history, societal influence, structure, and current issues facing the industry. Students will explore the various aspects of sport management, including marketing, finance, facilities management, event management, and legal issues including psychological and ethical dimensions of sport management.

BUID 301 Emerging Tech in Business (2 credits)
This half-semester, interdisciplinary course is designed to help non-technical students develop basic literacy in emerging technologies such as augmented and virtual reality, blockchain, internet of things (IoT), and more. The focus will be on when and how to use technologies both within the business itself and in the products and services they sell. Students will conduct a horizon assessment, looking into the current and forecasted usage for a

specific technology in a specific context of their choice (e.g. virtual reality used in training, IoT in commercial real estate, or blockchain for smart purchase contracts). Other topics include design fiction as a tool to imagine and assess future use cases for technology and deploying emerging technologies for the common good. This 2-cr. course fulfills a business elective requirement. Prerequisites: Sophomore standing.

BUID 302 Digital Transformation Apps (2 credits)
Digital Transformation Applications allows students to gain hands-on experience by completing a project for a real-world client. As the signature learning experience for the Business in a Digital World certificate, this course integrates and applies the knowledge gained in BUID 301 Emerging Technology in Business and other related coursework. Working in teams, students assess a business challenge related to digital transformation, evaluate alternatives, and craft a recommendation which they will present to their client. Prerequisite: BUID 301.

BUID 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BUID 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BUSN 100 BUSN for the Common Good (2 credits)
This course opens a welcoming door to students who want to know more about business and the opportunities and career paths it offers. The course builds awareness of the need for preparation and for building essential skills in order to be an effective contributor, and to be resilient in the face of ongoing change in any organization and in dynamic markets. Finally, it invites students to begin planning a business or organizational career that will allow them to use their gifts, to contribute, and to lead a good and satisfying life.

BUSN 200 Busn Learning Through Service (0 credits)
This experiential course offers students the opportunity to strengthen their development as effective and principled business leaders. During the course, students develop their own learning objectives and partner with their selected nonprofit to pursue those objectives, while making meaningful impact in the community and fostering a long-term commitment to service. Students complete 40 hours of volunteer service at a nonprofit organization, a series of reflective assignments, and a final creative project. BUSN 200 is required of all undergraduate students in the Opus College of Business—both majors and minors. Students are encouraged to complete BUSN 200 during their second year. Students can complete BUSN 200 while studying abroad or while away from campus during J-term or summer. Registration in a BUSN 200 Orientation section is also required. This course is graded S/R.

BUSN 202 MS Excel Business Applications (0 credits)
The course will introduce students to the use of Microsoft Excel for business applications. Students will develop skills in using Microsoft Excel to solve business problems. This course will be online, with students using the MyEducator Excel Educator software platform. Students will submit Excel exercises to demonstrate their learning. Students enrolled in this course will pay a technology fee, and will then be granted lifetime access to the Excel Educator site. Students who feel they have mastered the content of this course may apply for a waiver of this course through an examination. Students can attempt a waiver through examination for this course only once, and there is a fee for the examination. This course is graded pass/fail. Students must achieve at least a passing percentage on each exercise, and an overall passing percentage to complete this course.

BUSN 243 Individual Study (2 or 4 credits)

BUSN 297 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BUSN 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BUSN 305 Internship (0 credit)
This zero-credit elective business course supports undergraduate student engagement in relevant internship and curricular practical training opportunities. Prerequisite: Declared business majors only.

BUSN 389 Research (2 or 4 credits)

BUSN 393 Individual Study (2 or 4 credits)

BUSN 476 Experiential Learning (1 to 4 credits)

BUSN 495 Individual Study (2 or 4 credits)

Business Analytics Courses

BUAN 201 Data for Business (2 credits)
This course is intended for aspiring business data analysts who will be working on business analytics projects and interacting with data analytics specialists (e.g., model producers and enablers). This course will introduce students to a selected business analytics software solution, providing basic skills required of business data analysts. This course covers the core analytic techniques of data preparation, data exploration and data visualization, in the context of working with business data. Prerequisites: DASC 120

BUAN 401 Business Analytics Projects (4 credits)
This project-based course provides an opportunity for students to manage a business analytics project and implement the breadth of skills developed throughout the Business Analytics co-concentration. The goal is to provide you an opportunity to manage a beginning-to-end project including all aspects of client and project management, business problem analysis, data management and analysis, and presentation of the results. Small teams of students will work together to manage the project and develop the project deliverables. This course has higher than normal expectations of work outside of class due to the nature of business analytics projects and the expectation of high levels of professional quality. Prerequisites: DASC 120; BUAN 201; DASC 240 or ECON 311 or ECON 315; MKTG 245; BETH 315 / BLAW 315; OPMT 320; and ACCT 320, or MKTG 345, or FINC 475, or OPMT 350.

BUAN 476 Experiential Learning (1 to 4 credits)

BUAN 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BUAN 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

Accounting

Program Overview

Opus College of Business
Department of Accounting
Grimm (chair), Asdemir, Blazovich, Chui, DeVinck, Fluharty, Gao, Ishaug, Kalla, Matson, Mortenson, White, Yu

As a pre-licensure program, the University of St. Thomas accounting program meets the current education requirements set by the Minnesota Board of Accountancy to take the Certified Public Accountant (CPA) Examination in Minnesota. Initial CPA certification in Minnesota requires the applicant to have completed 150 total semester hours of college or university education; passed the CPA Examination; passed an ethics examination; and completed relevant work experience. (Most other states have similar requirements.) The University of St. Thomas offers different options by which students can meet the 150-hour education requirement, including additional undergraduate coursework and/or graduate certificate or degree programs in relevant fields of study. Questions should be directed to the accounting department chair or an accounting faculty member.

Major in Accounting

Business Core Courses (22 credits)

- BUSN 100: Business for the Common Good (2 credits)
- ENTR 100: Introduction to Entrepreneurship & Innovation (2 credits)
- ACCT 100: Principles of Accounting I (4 credits)
- BUSN 200: Business Learning Through Service (0 credit)
- ACCT 200: Principles of Accounting II (2 credits)
- OPMT 200: Operations & Supply Chain Management (2 credits)
- FINC 310: Core Financial Management (2 credits)
- MKTG 200: Introduction to Marketing (2 credits)
- MGMT 200: Working Skillfully in Organizations (2 credits)
- BLAW 300: Law for Business Leaders I (2 credits)
- BETH 300: Ethical Principles in Business (2 credits)

Note: Students should make every effort to complete all the common business core courses above by the end of their second year of studies as to not impede degree progress. Transfer students must complete any missing business major core/allied coursework ASAP.

Plus four credits from the following:

- MATH 101 Finite Mathematics (4 credits)
- MATH 109 Calculus with Review II (4 credits)

- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Note: The math requirement must be completed by the end of the sophomore year.

Business Elective Courses

- Eight credits from undergraduate courses with designations ACCT / BETH / BLAW / BUAN / BUID / ENTR / FINC / IBUS / MGMT / MKTG / OPMT / REAL. These credits may not fulfill any required concentration credits unless you have more than one business concentration. These credits may be taken in courses within the department of the students' business concentration. Transfer credits with these designations must be at the 300 level or above.

Concentration Courses

- ACCT 311 Intermediate Accounting I (4 credits)
- ACCT 312 Intermediate Accounting II (4 credits)
- ACCT 314 Tax Accounting (4 credits)
- ACCT 316 Auditing (4 credits)
- ACCT 317 Cost Accounting (4 credits)
- ACCT 409 Accounting Information Systems (4 credits)
- ACCT 410 Advanced Accounting (4 credits)
- BLAW 311 Advanced Business Law for Accounting (2 credits)

Allied requirements

- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- CISC 200 Introduction to Computer Technology and Business Applications (4 credits)
- DASC 120 Introduction to Computational Statistics (4 credits)

Note: DASC 120 (or equivalent) should be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete this course by the end of their first semester, junior year.

Minor in Accounting

An accounting minor provides complementary knowledge and valuable skills for finance, operations management, real estate, actuarial science, economics, pre-law, and nursing students.

Required Courses (10 credits)

- ACCT 100 - Principles of Accounting I (4 cr)
- ACCT 200 - Principles of Accounting II (2 cr)
- ACCT 311 - Intermediate Accounting I (4 cr)

Plus 8 credits from the following elective courses:

- ACCT 312 – Intermediate Accounting II (4 cr)*
- ACCT 314 – Tax Accounting (4 cr)
- ACCT 316 – Auditing (4 cr)
- ACCT 317 – Cost Accounting (4 cr)
- ACCT 409 – Accounting Information Systems (4 cr)*
- ACCT 410 – Advanced Accounting (4 cr)*

*Courses may have additional prerequisites not covered by minor requirements

Students pursuing a major in Accounting are not eligible for the Accounting minor.

Accounting Undergraduate Courses

ACCT 100 Principles of Accounting I (4 credits)
The course introduces students to the discipline of accounting through an introduction to financial accounting. Financial accounting is an integral function of every business. Financial accounting data provide insights about the firm's financial condition, operating results, cash flows and capital structure to facilitate decision making. This course introduces the primary financial statements, fundamental financial accounting terminology and calculations, as well as the interpretation and analysis of financial statements. Ethical aspects of accounting are included. 4 credits. Note: Students who receive credit for ACCT 210 may not receive credit for ACCT 100.

ACCT 200 Principles of Accounting II (2 credits)
Managerial accounting is used internally by businesses for cost management, planning and controlling, and strategic decision-making. Managerial accounting emphasizes the relevance and timeliness of data. The managerial accounting topics covered in this course include application of cost within corporate environment, break-even analysis, budgeting and differential analysis. 2 credits Prerequisites: ACCT 100 or ACCT 210 Note: Students who receive credit for ACCT 200 may not receive credit for ACCT 215.

ACCT 243 Individual Study (2 or 4 credits)

ACCT 269 Research (2 or 4 credits)

ACCT 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ACCT 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ACCT 311 Intermediate Accounting I (4 credits)
The theory of accounting is studied as it relates to the external financial reporting requirements of profit-oriented businesses. Major subjects include review of the basic financial statements, valuation of most assets, and revenue recognition. Prerequisites: ACCT 100 or ACCT 210 and sophomore standing

ACCT 312 Intermediate Accounting II (4 credits)
A continuation of ACCT 311. A study is made of the remaining balance sheet accounts with special emphasis on the capital structure of corporations. In addition, complex accounting matters such as tax allocation, pension applications, lease capitalization and current value accounting concepts are reviewed. Prerequisites: ACCT 311; FINC 310 (may be taken concurrently) or FINC 321 (may be taken concurrently); and CISC 200 (may be taken concurrently).

ACCT 314 Tax Accounting (4 credits)
This course is designed to give students an in-depth introduction to the tax system. The primary focus is federal income taxation for business. Secondary focus areas include individual, international, and state taxation, as well as the operation of flow-through legal entities and various tax accounting methods. This course helps students develop skills in the areas of on-line tax research, technical writing, preparation of tax returns including the use of commercially available tax return software, and tax accounting. Foundational elements include ethical and policy considerations in the tax field. Prerequisites: ACCT 100 or ACCT 210 and junior standing

ACCT 315 Individual Income Tax (4 credits)
A study of the fundamentals of federal income tax law as it applies to individuals. Topics include: filing status, dependents, gross income, itemized deductions, tax credits, cost recovery, property transactions, and the alternative minimum tax. Prerequisite: Junior standing

ACCT 316 Auditing (4 credits)
This course emphasizes the independent auditor's role and function. Topics include auditing standards, ethics, legal responsibilities, evidence, internal control evaluation, transaction cycles, statistics and financial fraud. The basis for the auditor's report is emphasized. Prerequisites: ACCT 311

ACCT 317 Cost Accounting (4 credits)
A rigorous study is made of the elements of product costs, including job, process, standard, and variable costing systems and procedures. A managerial emphasis is added through inclusion of cost-volume-profit relationships, budgeting techniques, and other selected topics. Prerequisites: ACCT 200 or ACCT 215 and sophomore standing.

ACCT 389 Research (2 or 4 credits)

ACCT 393 Individual Study (2 or 4 credits)

ACCT 409 Accounting Information Systems (4 credits)
This course is designed to provide students with knowledge of concepts and practices of accounting information systems and the ability to work effectively with computer specialists and management in organizations. Major topics include accounting systems fundamentals, cybersecurity, enterprise risk management and internal controls, business data and process management, enterprise systems, data analytics, and emerging technologies. Prerequisites: CISC 200 and ACCT 311

ACCT 410 Advanced Accounting (4 credits)
The special accounting considerations of consolidated financial statements are considered in depth. Additional topics include foreign operations, partnerships, governments, and nonprofit organizations. Prerequisites: ACCT 312 and senior standing

ACCT 414 Advanced Tax (2 credits)
Explores advanced tax topics within both individual and business taxation. Studies include individual tax planning, pass-through entities, tax-exempt organizations, and international taxation. Students will learn how data analytic skills are deployed within the tax professional industry. Prerequisites: ACCT 314

ACCT 416 Advanced Auditing (2 credits)
This course emphasizes specialized topics in auditing. These topics include auditing and assurance services other than the financial statement audits and the internal control audits. Prerequisite: ACCT 316

ACCT 420 Accounting Analytics (4 credits)
This course covers an accountant's perspective of

business analytics for corporate decision-making support. The course emphasizes analytics applications for accounting-related use cases. Students build upon foundational business statistics knowledge, usage skills for typical business application solutions (e.g., Excel, relational databases, workflow automation), and a repeatable data problem-solving approach. Course topics include: accounting analytics overview, problem framing and scope setting, data identification and management, descriptive analytics, storytelling with data visualization, and written and/or oral communication of accounting analytics results. Prerequisites: CISC 200; DASC 120 or STAT 220 or DASC 112 or STAT 201; and one of the following: ACCT 311 or OPMT 200 or OPMT 300.

ACCT 476 Experiential Learning (1 to 4 credits)

ACCT 478 Intern/Experiential Learning (0 credits)
This zero-credit course is for practical training for undergraduate students.

ACCT 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ACCT 491 Research (2 or 4 credits)

ACCT 495 Individual Study (2 or 4 credits)

Business Administration

Program Overview

The Business Administration (Bachelor of Arts) program consists of the same strong foundational core business courses required for all our business majors, providing students a broad understanding of business fundamentals without emphasizing a particular function. Our most efficient business major, students are provided with a generalist business degree - but with maximum flexibility and more credits available for other areas study. It is a good option for students seeking to combine business with a second major outside of business, and/or one or more minors in other fields.

Major in Business Administration

Business Core Courses

- BUSN 100: Business for the Common Good (2 credits)
- ENTR 100: Introduction to Entrepreneurship & Innovation (2 credits)
- ACCT 100: Principles of Accounting I (4 credits)
- BUSN 200: Business Learning Through Service (0 credit)
- ACCT 200: Principles of Accounting II (2 credits)
- OPMT 200: Operations & Supply Chain Management (2 credits)
- FINC 310: Core Financial Management (2 credits)
- MKTG 200: Introduction to Marketing (2 credits)
- MGMT 200: Working Skillfully in Organizations (2 credits)
- BLAW 300: Law for Business Leaders I (2 credits)
- BETH 300: Ethical Principles in Business (2 credits)

Note: The required core business courses (BUSN 100, ENTR 100, ACCT 100, ACCT 200, BUSN 200, FINC 310, OPMT 200, MKTG 200, MGMT 200, BETH 300, BLAW 300) must be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete these courses by the end of their first semester, junior year.

Elective Courses in Business Core:

Ten credits from undergraduate courses with designations ACCT / BETH / BLAW / BUAN / BUID / ENTR / FINC / IBUS / MGMT / MKTG / OPMT / REAL. These credits may not fulfill any required concentration credits unless you have more than one business concentration. These credits may be taken in courses within the department of the student's business concentration. Transfer credits with these designations must be at the 300 level or above.

Concentration courses:

- MGMT 385 Inclusive Leadership (2 credits)
- MGMT 391 Elements of Global Business (2 credits)
- MGMT 480 Strategic Management (4 credits)
- BUSN 202 Microsoft Excel Business Applications (0 credits)
- or CISC 200 Introductory Computer Technology and Business Applications (4 credits)

Allied Requirements

- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- DASC 120 Introduction to Computational Statistics (4 credits)

Note: DASC 120 (or equivalent) should be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete this course by the end of their first semester, junior year.

Plus four credits from the following:

- MATH 101 Finite Mathematics (4 credits)
- MATH 109 Calculus with Review II (4 credits)
- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Note: The math requirement must be completed by the end of the sophomore year.

Plus four credits from the following:

- COMM 100 Public Speaking (4 credits)
- COMM 105 Communication in Workplace (4 credits)
- COMM 328 Communication of Race, Class and Gender (4 credits)
- COMM 370 Intercultural Communication (4 credits)
- ENGL 211 or above (4 credits)

Minor in Business Administration

Required courses:

- BUSN 100 BUSN for the Common Good (2 credits)
- BUSN 200 Busn Learning Through Service (0 credits)
- ACCT 100 Principles of Accounting I (4 credits)

Plus 12 credits from the following courses:

- ACCT 200 Principles of Accounting II (2 credits)
- BETH 300 Ethical Principles in Business (2 credits)
- BLAW 300 Law for Business Leaders I (2 credits)
- ENTR 100 Entrepreneurship & Innovation (2 credits)
- FINC 310 Core Financial Management (2 credits)
- MGMT 200 Working Skillfully in Orgs (2 credits)
- MKTG 200 Intro to Marketing (2 credits)
- OPMT 300 Operations & Supply Chain MGMT (2 credits)

Plus one course (of at least 2 credits) with designation:

- ACCT; BETH; BLAW; ECON; ENTR; FINC; MGMT; MKTG; OPMT; or REAL (at the 200 level or above) not already taken.
- [Note: this includes any business core class from the prior list not already taken.]

Note: Students must complete a minimum of 14 credits within the following General Business Administration subject areas at St. Thomas: ACCT, BETH, BLAW, BUSN, ENTR, FINC, MGMT, MKTG, OPMT. Study Abroad and ACTC courses do not count as 'taken at St. Thomas' with the exception of the London Business Semester program. Coursework transferred to St. Thomas must be equivalent to St. Thomas coursework. Also, students receiving either a B.A. in Business Administration (with any business concentration or concentrations) or a B.S. in Real Estate (or both) cannot also receive a minor in General Business Administration.

Business Analytics

Program Overview

Opus College of Business & College of Arts and Science, Interdisciplinary Program

Specifically the minor will offer courses from ACCT (Accounting), CISC (computer science), ECON (Economics), MKTG (Marketing), OPMT (Operations and Supply Chain Management), and Statistics (Statistics).

This minor allows students to pursue an interest in Business Analytics while completing their normal field of study. The minor is 5 courses or 20 credits in length.

Minor in Business Analytics

20 credits

- DASC 120 (or DASC 111 and 112) Introduction to Computational Statistics (4 credits) Note: Minimum grade of "C-" or better [or "S" in SDR grading] in either DASC 120 or DASC 112 is also required.
- OPMT 320 Decision Analysis (4 credits)
- OPMT 470 Applied Analytics and Data Visualization (4 credits)

Plus 4 credits from the following:

- CISC 200 Introduction to Computer Technology and Business Applications (4 credits)

- CISC 131 Introduction to Programming and Problem Solving (4 credits)

Plus 4 credits selected from the following:

- STAT 333 Predictive Modeling (4 credits)
- DASC 240 Applied Regression Analysis (4 credits)
- ECON 311 Forecasting (4 credits)
- ECON 315 Introduction to Econometrics (4 credits)
- MKTG 345 Marketing Analytics (4 credits)
- ACCT 320 Accounting Analytics (4 credits)

Business Communication

Program Overview

There is an increasingly widespread desire within the business community for improved communication, from face-to-face and mass communication, with both internal and external audiences. The concentration in business communication is designed to provide students a firm understanding of business fundamentals, plus background knowledge and for professional skills necessary to contribute to both corporate and marketing communication.

In addition to the general core courses required of all business majors, students who elect this concentration take additional courses that focus on fundamentals and facets of business communication, selected with the guidance of their adviser. These courses can allow for specific interest in corporate or marketing communication, or provide a broad preparation for both. Allied and required courses in this concentration have been selected to provide supporting skills in writing, presentation, and managing information and data for reporting in professional roles.

Electives will provide deeper dives into the strategies and tactics necessary to support the mission of any organization in roles requiring professional communicators with business acumen to contribute to marketing communication and general corporate reputation management.

Major in Business Communication

Business Core Courses:

- BUSN 100: Business for the Common Good (2 credits)
- ENTR 100: Introduction to Entrepreneurship & Innovation (2 credits)
- ACCT 100: Principles of Accounting I (4 credits)
- BUSN 200: Business Learning Through Service (0 credit)
- ACCT 200: Principles of Accounting II (2 credits)
- OPMT 200: Operations & Supply Chain Management (2 credits)
- FINC 310: Core Financial Management (2 credits)
- MKTG 200: Introduction to Marketing (2 credits)
- MGMT 200: Working Skillfully in Organizations (2 credits)
- BLAW 300: Law for Business Leaders I (2 credits)
- BETH 300: Ethical Principles in Business (2 credits)

Note: The MATH requirement, DASC 120, and the business core courses are ideally completed by the end of the second year of study as to not impede degree progress. Transfer students must complete the core/allied coursework ASAP. All students considering a major in business should inform their advisor early in their college career.
Transfer credits with these designations must be at the 300 level or above.

Elective Courses in Business Core:

- 8 additional credits in the Opus College of Business. These credits may be taken in courses within the department of the student's business major. Transfer credits with these designations must be at the 300 level or above.

Allied Courses:

- COMM 370 Intercultural Communication (4 credits)
- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- DASC 120 Intro to Computational Statistics (4 credits)
- MATH 101 Finite Mathematics (4 credits)

Plus 4 credits from the following:

- MATH 109 Calculus with Review II (4 credits)
- MATH 111 Calculus for Business and Social Science (4 credits)

- MATH 113 Calculus I (4 credits)

Major Courses:

- MKTG 201 Application in Marketing (2 credits)
- MKTG 320 Integrated Marketing Communications (4 credits)
- BCOM 435 Management Priorities and the Business Communicator
- JOUR/DIMA/STCM 111 Intro to Mass Media (4 credits)
- BUSN 202 MS Excel Business Applications (0 credits) or CISC 200 Intro to Comp. Tech. & Business Applications (4 credits)
- STCM 344 Writing for Strategic Communication (4 credits - prerequisite: STCM 234/MKTG 320)

Electives:

4 credits to be chosen from the following (STCM/DIMA):

- STCM 234 Principles of Strategic Comm (4 credits)
- DIMA 232 Visual Media Theory & Practice (4 credits)
- DIMA 258 Writing and Designing for the Web (4 credits)

4 credits to be chosen from the following (Business):

- MGMT 367 Leading & Managing Change (2 credits)
- MKTG 235 Persuasion in Business (2 credits)
- MKTG 280 Digital Marketing Fundamentals (2 credits)
- MKTG 315 Event Management (4 credits)
- MKTG 340 Marketing Research (4 credits)
- MKTG 370 Consumer Behavior (4 credits)
- MKTG 380 Digital Marketing (4 credits)
- MKTG 390 Marketing Strategy (4 credits)
- BLAW 313 Essentials of Intellectual Property Law (2 credits)
- MKTG topics courses, as approved (2-4 credits)

Business Communication Undergraduate Courses

BCOM 435 Mgmt Priorities and BCOM (4 credits) This course is designed to develop greater insight into the relationship between communicators and management and leadership. By understanding the mindset of senior leaders and managers through a series of texts, case histories, articles, and classroom discussion, students will develop an understanding of the many variables and considerations linking communication strategy to organizational in decision making. In addition to understanding the mindset and priorities of senior leadership and management, students will learn and review a variety of communications strategies and tactics that can be employed to best meet the unique needs of a situation and thereby effectively contribute to communication necessary to organizational success, as seen by senior level leadership. Prerequisite: Senior standing, MKTG 201 & 320, plus one JOUR/DIMA/STCM 2XX or higher.

BCOM 476 Experiential Learning (1 to 4 credits)

BCOM 478 Intern/Experiential Learning (0 credits) This zero-credit course is for practical training for undergraduate students.

Business in a Digital World

Program Overview

Technology is transforming all aspects of industry and society. The Business in a Digital World Certificate is intended to complement your primary major by developing foundational knowledge in technologies such as artificial intelligence (AI), blockchain, and virtual reality. Students will gain additional job-ready skills by completing a digital transformation project for a real-world client. Developed with input from business leaders, this 12-credit certificate will help you stand out as a digital savvy job candidate.

The certificate is available to St. Thomas undergraduates from any major with no prior technical knowledge required.

Certificate in Business in a Digital World

Required Courses (4 Credits)

- BUID 301 - Emerging Technology in Business (2 Credits)
- BUID 302 - Digital Transformation Applications (2 Credits)

Elective Courses (8 Credits; 4 credits must be taken outside of Opus College of Business):

- BUAN 201 - Data for Business (2 credits)
- ENTR 325 - Digital Transformation & Innovation in Healthcare (2 credits)
- BLAW 315 - Law & Ethics of Data (2 credits)
- OPMT 375 - Digital Supply Chain Management (2 credits)
- ENTR 320 - Tech Prototyping (4 credits)
- MKTG 345 - Marketing Analytics (4 credits)
- MKTG 380 - Digital Marketing (4 credits)
- BETH 390 - Tech, Society & the Human Person (4 credits)
- ACCT 320 - Accounting Analytics (4 credits)
- OPMT 320 – Decision Analysis (4 credits)
- FINC 475 - Financial Modeling & Analytics (4 credits)
- ENGR 230 - Digital Design (4 credits)
- PHIL 255 - Technology & Ethics (4 credits)
- DIMA 240 - Digital Imagery and Sound (4 credits)
- DIMA 358 -Writing/Design for the Web (4 credits)
- ENGL 294 - Writing for Video Games (4 credits)
- MUSC 363 - Emerging Models in Music Industry (4 credits)
- CISC 419 - Accounting Information Systems (4 credits)

Business of Healthcare

Program Overview

Opus College of Business & College of Arts and Science, Interdisciplinary Program

Health care is a big business in the U.S., offering a variety of careers in for-profit, non-profit, and government organizations. This interdisciplinary minor intends to provide students who may want to seek a career in health care with a basic understanding of the different "players" in the industry, the dilemmas and challenges that professionals and patients encounter, and the ethical and moral considerations of this unique sector.

Minor in Business of Healthcare

Required course:

- MGMT 350: Introduction to U.S. Health Care (4 credits)

Plus four credits from:

- BLAW 323: Health Care Law & Ethics (4 credits)
- ENTR 225: Innovation in Healthcare (2 credits)
- ENTR 325: Digital Transformation & Innovation in Healthcare (2 credits)
- MGMT 352: Health Care Risk Management (4 credits)

Plus four credits from:

- ECON 324: Health Economics (4 credits)
- PHIL 254: Biomedical Ethics (4 credits)
- PHIL 342: History and Philosophy of Medicine (4 credits)
- THEO 225: Faith & Ethics: Bioethics (4 credits)
- THEO 229: Professions: Faith & Health Care (4 credits)
  OR THEO 229: Professions: Faith & Medicine (4 credits)
  OR THEO 300: Signature Work: Faith & Medicine (4 credits) [credit may only be given for one of these courses]

Plus 4 additional credits of:

- Any of the above courses not previously taken.

Entrepreneurship

Program Overview

Opus College of Business
Department of Entrepreneurship
Ebben (chair), Deeds, Dunham, Frid, Johnson, McVea, Nabiyeva, Noh

The study of entrepreneurship prepares students for a variety of career and life experiences. Being an entrepreneur may mean starting your own business, or it may mean driving growth and innovation in an existing business. The key is learning to think like an entrepreneur. You will learn to identify and analyze new opportunities, to think creatively, and to be action oriented in order to seize opportunities that create real value. These skills are important in all types of organizations, from small start-ups to large corporate settings.

Students completing a concentration in entrepreneurship will have the skills to start a business venture, to contribute to an existing organization, and to be business leaders in their local communities.

Major in Entrepreneurship

Business Core Courses

- BUSN 100: Business for the Common Good (2 credits)
- ENTR 100: Introduction to Entrepreneurship & Innovation (2 credits)
- ACCT 100: Principles of Accounting I (4 credits)
- BUSN 200: Business Learning Through Service (0 credit)
- ACCT 200: Principles of Accounting II (2 credits)
- OPMT 200 : Operations & Supply Chain Management (2 credits)
- FINC 310: Core Financial Management (2 credits)
- MKTG 200: Introduction to Marketing (2 credits)
- MGMT 200: Working Skillfully in Organizations (2 credits)
- BLAW 300: Law for Business Leaders I(2 credits)
- BETH 300: Ethical Principles in Business (2 credits)

Note: The required core business courses (BUSN 100, ENTR 100, ACCT 100, ACCT 200, BUSN 200, FINC 310, OPMT 200, MKTG 200, MGMT 200, BETH 300, BLAW 300) must be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete these courses by the end of their first semester, junior year.

Elective Courses in Business Core:

- Eight credits from undergraduate courses with designations ACCT / BETH / BLAW / BUAN / BUID / ENTR / FINC / IBUS / MGMT / MKTG / OPMT / REAL. These credits may not fulfill any required concentration credits unless you have more than one business concentration. These credits may be taken in courses within the department of the student's business concentration. Transfer credits with these designations must be at the 300 level or above.

Required Courses:

- ENTR 200 Foundations of Entrepreneurship (4 credits)
- ENTR 250 Fundamentals of Innovation (4 credits)
- ENTR 370 Entrepreneurial Financial Resource Management (4 credits)
- BUSN 202 MS Excel Business Applications (0 credits)
- or CISC 200 Intro to Computer Technology & Business Applications (4 credits)

Plus 12 credits from the following *(At least 4 credits must come from courses with an *)*:

- ENTR 225 Innovation in Healthcare (2 credits)
- ENTR 325 Digital Transformation in Healthcare (2 credits)
- ENTR 340 Social Entrepreneurship (4 credits)
- ENTR 349 Family Business Management (4 credits)
- ENTR 355 Entrepreneurial Strategy (2 credits)
- ENTR 380 Entrepreneurship in Practice (4 credits)
- *ENTR 385 Venture Capital and Early-Stage Deal Analysis (4 credits)
- *ENTR 450 Entrepreneurship: Management and Strategy (4 credits)
- ENTR 488 Topics (2 credits)
- ENTR 490 Topics (4 credits)
- BLAW 321 Law for ENTR and Innovators (4 credits)

Allied requirements:

- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- DASC 120 Introduction to Computational Statistics (4 credits)

Note: DASC 120 (or equivalent) should be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete this course by the end of their first semester, junior year.

Plus four credits from the following:

- MATH 101 Finite Mathematics (4 credits)
- MATH 109 Calculus with Review II (4 credits)
- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Note: The math requirement must be completed by the end of the sophomore year.

Plus four credits from the following:

- COMM 100 Public Speaking (4 credits)
- COMM 105 Communication in Workplace (4 credits)
- COMM 370 Intercultural Communication (4 credits)
- ENGL 211 or above (4 credits)

Minor in Entrepreneurship

Required courses:

- ENTR 100 Entrepreneurship & Innovation (2 cr)
- ENTR 200 Foundations of Entrepreneurship (4 cr)
- ENTR 250 Fundamentals of Innovation (4 cr)

Plus 8 elective credits from the following (at least 4 credits must be from ENTR):

- ENTR 225 Healthcare Innovation (2 cr)
- ENTR 325 Digital Transformation in Healthcare (2 cr)
- ENTR 340 Social Entrepreneurship (4 cr)
- ENTR 349 Family Business (4 cr)
- ENTR 355 Entrepreneurial Strategy (2 cr)
- ENTR 370 Financial Resource Mgt for Entrepreneurs (4 cr)
- ENTR 380 Entrepreneurship in Practice (4 cr)
- ENTR 385 VC and Early-Stage Deal Analysis (4 cr)
- ENTR 450 Entrepreneurship Management and Strategy (4 cr)
- ENTR 488 Topics (2 cr)
- ENTR 490 Topics (4 cr)
- SOWK 430 Leadership, Advocacy & Fundraising (4 cr)
- MUSC 363 Emerging Models in the Music Industry (4 cr)
- MUSC 480 Music Business Seminar (4 cr)
- DIMA 240 Digital Imagery and Sound (4 cr)
- ENGL 294 Writing Video Games (4 cr)
- BLAW 321 Law for ENTR and Innovators (4 cr)

Entrepreneurship Undergraduate Courses

ENTR 100 Entrepreneurship & Innovation (2 credits)
Entrepreneurship is a way of thinking and acting in the world that creates positive impact through the development of new and better solutions to customer and societal problems. Entrepreneurs see the world differently, noticing problems that others have overlooked and using passion, creativity and business skills to craft new and better solutions that address those problems effectively and sustainably. In doing so, entrepreneurs create value for others and advance the common good, whether in a startup enterprise, or an established company, or in a social-impact enterprise. In this course, business students of all disciplines will get an introduction to the entrepreneurial process, gaining knowledge and experience in core practices of entrepreneurial discovery and creation. The course is experiential – students will learn by doing, whether through in-class exercises, an exploratory field study, or case study analysis and discussion. Students will learn how this process advances the common good and will identify how it can be deployed within multiple fields of study. Note: Students who receive credit for ENTR 100 may not receive credit for ENTR 200 or ENTR 260.

ENTR 200 Foundations of Entrepreneur (4 credits)
ENTR200 is a national award-winning course and is the first course in the Entrepreneurship Concentration sequence. Known across campus as the "Lemonade Stand" class, this course requires students to start a new business and reach revenue, and in this process begin the journey to becoming world-class problem solvers. This course is a combination of applied and theoretical dimensions of Entrepreneurship. In addition to starting a new business, students are exposed to theoretical concepts, including Opportunity Identification, Business Modeling, Industry Analysis, and New Venture Growth. This is a very dynamic course, mixing lecture, discussion, case study, guest speakers and introduction to the Hotwash Process. The course culminates in a competition with UST alumni judging the students' quality of work and accomplishments. Prerequisite: sophomore standing, not open to seniors. Note: Students who receive credit for ENTR 200 may not receive credit for ENTR 100.

ENTR 220 Entrepreneurial Thinking (4 credits)
This course is designed as an introduction to the entrepreneurial mindset, and to the creative problem solving tools and critical thinking skills necessary to successfully pursue innovation and entrepreneurial success. The course is designed for non-business majors and, as such, will cover a broad range of topics. Students will explore the issues that surround opportunity recognition, opportunity evaluation, creative problem solving, cash flow, and growth management of an entrepreneurial venture. The course will be primarily case-based. This means

that nearly all learning will take place through active participation in case analysis and class discussions. This style of learning has a number of advantages; it involves the study of dozens of real entrepreneurial ventures and problems, it emphasizes practical learning as well as theoretical concepts, it allows the student to develop their personal approach to the subject, and it builds skills as well as knowledge. Note: Students who receive credit for ENTR 220 may not receive credit for ENTR 100 or ENTR 200.

ENTR 225 Innovation in Healthcare (2 credits)
Innovation is central to the unique challenges facing the US healthcare industry. Entrepreneurial thinking and action have become increasingly important to healthcare organizations as they seek to build sustainable competitive advantage in rapidly changing and increasingly competitive global markets. This course is designed to help students understand what it takes to work in emerging healthcare environments, to identify and evaluate new opportunities, and to transform innovations into profitable businesses. Students will develop the skills and knowledge necessary for applying the innovation process within the unique regulatory, financial and business model context of healthcare.

ENTR 243 Individual Study (2 or 4 credits)

ENTR 250 Fundamentals of Innovation (4 credits)
This course builds on the learning begun in ENTR 100, 200 or ENTR 260, by providing additional tools and skills necessary for entrepreneurs and innovators to bring new business concepts successfully to market. Drawing upon a range of applied methodologies, including Design Thinking and Lean Startup, the course provides students with the tools to uncover new market needs, develop novel solutions, craft innovative and effective business models, and determine viable go-to-market strategies. The course is experiential, emphasizing case study analysis and discussion, in-class exercises and an exploratory field study. (Students who have completed ENTR 350 cannot take this this course for credit.) Prerequisite: ENTR 100, 200 or 260, and Sophomore standing.

ENTR 269 Research (2 or 4 credits)

ENTR 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ENTR 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ENTR 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ENTR 320 Technology Prototyping (4 credits)
This hands-on class will provide a fast-paced introduction to a variety of technologies. Students will be introduced to computer programming, 3D design, and electrical circuits. Through a variety of projects, lectures, and assignments, students will learn the basics of creating working prototypes of their ideas in both hardware and software. No prerequisites. Course counts as an elective in the Entrepreneurship minor and major.

ENTR 325 Digital Transform Healthcare (2 credits)
This course examines the challenges and opportunities created by the digital transformation currently underway in the US Health Care Market. The course will focus on the innovation, entrepreneurship and the new business models in the emerging environment of digital health. Students will learn how to frame some of the fundamental strategic changes which are happening in the fast-changing structure of health care industry as a result of the forces of digitization. Students will also be exposed to some of the latest trends in Digital Health start-ups, new digital health business models, in understanding the latest proposals for merger and acquisition and changes to the structure of the health care market.

ENTR 330 Environmental Sustainability (4 credits)
An elective course designed to introduce students to the role of environmental sustainability in product development. This course will look at ways that a wide variety of companies have adopted environmentally sustainable practices, and we will practice using methods such as life cycle analysis and whole system thinking. Students will learn and use an array of design thinking techniques. All students will be expected to complete a final project in which they work in a team to write a proposal for a business based on sustainable principles. Prerequisite: ENTR 100 or ENTR 200 or ENTR 260 or ENGR 150 or Instructor Permission.

ENTR 340 Social Entrepreneurship (4 credits)
This course introduces students to the field of social entrepreneurship, the practice of identifying, designing, starting and growing successful mission-driven ventures. These include both "non-profit" and for-profit enterprises designed to respond to a specific social need, as well as more traditional

ventures working to incorporate 'socially-responsible' practices into their business models. The course provides an overview of the processes, challenges, and demands associated with creating ventures that seek to integrate financial and social/environmental benchmarks of success. The course is designed to appeal to business majors who want to learn more about the social sector, and non-business majors with interests in social causes, who want to learn more about business. Prerequisite: junior standing.

ENTR 348 Franchising Management (4 credits)
This course examines franchising from the perspective of both the franchisor and the franchisee. Buying a franchise is a path to business ownership, and the franchisee-focused topics include evaluation of franchising opportunities, legal issues for the franchisee, and an appreciation of what it takes to be a successful franchisee. Franchising is also a business growth model, and the course covers creation of a franchise contract, franchisee support strategies, and the ongoing management of a franchise system.

ENTR 349 Family Business Ownership (4 credits)
Students will learn how to identify, develop and organize family resources for business ownership and for other family initiatives such as philanthropy and community service. Family resources include family aptitudes, knowledge, experience, skills, identity and culture. Methods for organizing family initiatives include defining family mission, values, and goals; establishing guidelines/policies, and developing governance and decision-making structures, including boards of directors or advisors. Prerequisite: Junior standing

ENTR 350 Entrepreneurial Research (4 credits)
ENTR 350 builds on the learning begun in ENTR 200 or ENTR 260, by providing additional tools and skills necessary for entrepreneurs and innovators to bring new business concepts successfully to market. Drawing upon a range of applied methodologies, including Design Thinking and Lean Startup, the course provides students with the tools to uncover new market needs, develop novel solutions, craft innovative and effective business models, and determine viable go-to-market strategies. The course is highly experimental, emphasizing case study analysis and discussion, in-class exercises and an exploratory field study. Prerequisite: ENTR 200 or ENTR 260

ENTR 355 Entrepreneurial Strategy (2 credits)
This course focuses on the concepts and tools entrepreneurs use to develop a winning strategy. Students will learn concrete analytical tools and techniques for building a strategy in an entrepreneurial environment. The emphasize is on the importance of taking into account the complex, uncertain, and idiosyncratic nature of entrepreneurial contexts in startups, small businesses, internal corporate initiatives, and social enterprises. The course uses a series of case studies to help students develop their entrepreneurial judgement as well as develop their knowledge of entrepreneurial strategy. Prerequisites: ENTR 100, 200 or ENTR 260, and Junior standing.

ENTR 360 Creativity & Change (4 credits)
This course will acquaint students with theories and strategies for exercising the creative process. Leadership and change will also be examined to help the student understand how to effectively introduce and implement new and creative ideas. Prerequisites: ENTR 100 or ENTR 200 or ENTR 260; and Junior standing

ENTR 370 Entr/Financial Resource Mgt (4 credits)
This course is focused on financial analysis and strategy in new and growing firms. Course topics are introduced and reinforced through case study analysis, discussion, in-class activities, speakers, hot washes, and the development of a financial plan that students present to investors at the end of the semester. Students can expect to take away critical and highly-marketable skill sets around building and interpreting financial projections, valuing privately-held firms, structuring debt and equity deals, creating value through deal terms, and managing by the numbers. Prerequisites: ENTR 100 or ENTR 200; ACCT 100 or ACCT 210; and junior standing.

ENTR 371 Silicon Valley & Entr Thinking (4 credits)
Students will travel to Silicon Valley, California to meet with entrepreneurs, venture capitalists and intrapraneurs in fast growing companies in order to better understand the technological developments, managerial approaches and market forces shaping technology entrepreneurship. Students will learn how to shape opportunities in the tech start up market space, build their skills in assessing the voice of the customer, gain greater understanding of the economics of tech start up business models, and directly experience how tech start ups raise funds. The course is designed to expand student thinking beyond local entrepreneurship and to address global perspectives by bringing students directly to the world wide hub of technology entrepreneurship.

ENTR 380 Entrepreneurship in Pract (4 credits)
Students will integrate experiences from placements in entrepreneurial companies with required readings, class discussion, and class assignments related to their placement experience. Students will complete 100 hours of work in the placement. They will perform appropriate, significant and relevant

tasks directly under the supervision of either the lead entrepreneur or a key member of the entrepreneurial team. In addition, students will meet regularly during the semester in a classroom setting to share their experiences and learn from classmates in other placements. Finally, the instructor will also hold regular one-on-one sessions with students to provide overall supervision for the placement experience and to assure that the student is integrating classroom learning with the placement experience. Prerequisites: ENTR 100 or ENTR 200 or ENTR 260; and Junior standing

ENTR 385 Venture Capital & Early-Stage (4 credits)
This limited-enrollment course provides students with in-depth experience analyzing venture capital opportunities in early stage, growth, and acquisition contexts. Coursework centers around a series of due diligence projects designed with start-up investors in the business community, and students present their investment recommendations to these investors at the culmination of each project. Intertwined with these projects will be topics such as product-market fit, customer discovery, financial modeling, deal structure, key metrics, raising search funds, and more. Students can expect to build a valuable skillset around identifying and pitching both critical success factors and potential risks in a deal, and they will exit the class with a portfolio of projects for resume building. As today's Entrepreneurship majors have access to a wide range of career choices, including opportunities in Innovation, Corporate Venturing, Venture Capital and Private Equity, this course will assist students in developing technical knowledge, critical thinking and experience with the key project areas they are likely to encounter. Prerequisites: ENTR 100; Instructor permission required.

ENTR 389 Research (2 or 4 credits)

ENTR 393 Individual Study (2 or 4 credits)

ENTR 449 Family Business Innov. & Entre (4 credits)
Develop governance processes that establish innovation and entrepreneurship in the family business. Owners will participate in defining desired family outcomes that align with family mission and goals; identifying and assessing entrepreneurial opportunities to achieve those outcomes; reviewing entrepreneurial opportunities in light of business and family resources and capabilities, and desired social and economic impact; and developing decision processes to assess entrepreneurial opportunities. Family members involved in the business are expected to either audit this course or to actively participate in course projects. Prerequisites: ACCT 100 or ACCT 210; ENTR 349; FINC 300 or FINC 310 or FINC 321; BETH 300 or BETH 301; and senior standing.

ENTR 450 Entr:Management/Strategy (4 credits)
This is the Entrepreneurship Concentration capstone course. This course builds upon previous coursework, drawing together critical concepts including opportunity identification, business modeling, financial modeling, and market/industry research skills. Through lecture, case discussion, and extensive use of the Hotwash Process, students polish their critical thinking and creative problem solving skills. The primary deliverable is a Fundable Business Plan. Prerequisites: ENTR 100 or 200 or 260; and ENTR 250 or 350; and ENTR 370; and BUSN 202 or CISC 200 and 80 completed credits.

ENTR 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ENTR 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ENTR 491 Research (2 or 4 credits)

ENTR 495 Individual Study (2 or 4 credits)

Finance

Program Overview

Opus College of Business
Department of Finance
Samarakoon (chair), Babula, Barabanov, Baxamusa, Combs, Daugherty, Gerend, Jaiswal-Dale, Le, Reagan, Samarakoon, Spry, Vang, Zhang

Finance plays a pivotal role in business decisions across all areas of business. A strong foundation in finance is highly valued by employers and provides excellent career options and flexibility upon graduation. The Opus finance major prepares students for careers in all areas of finance. Students gain in-depth knowledge and develop important analytical skills in the areas of corporate finance, investments and portfolio management, financial institutions and banking, and global finance. The finance degree program requires students to acquire training in the interrelated areas of accounting, economics and information technology as well.

Finance graduates find career opportunities across the many interrelated areas of corporate finance, accounting, investments, security analysis, asset management, financial planning, commercial and investment banking, private equity and venture capital, real estate, insurance, and risk management. Typical job titles of finance graduates include financial analyst, security analyst, equity analyst, research analyst, budget analyst, financial advisor, financial planner, financial consultant, loan officer, account specialist, treasury assistant, portfolio assistant, and financial manager, among others.

Major in Financial Management

Business Core Courses:

- BUSN 100: Business for the Common Good (2 credits)
- ENTR 100: Introduction to Entrepreneurship & Innovation (2 credits)
- ACCT 100: Principles of Accounting I (4 credits)
- BUSN 200: Business Learning Through Service (0 credit)
- ACCT 200: Principles of Accounting II (2 credits)
- OPMT 200: Operations & Supply Chain Management (2 credits)
- FINC 310: Core Financial Management (2 credits)
- MKTG 200: Introduction to Marketing (2 credits)
- MGMT 200: Working Skillfully in Organizations (2 credits)
- BLAW 300: Law for Business Leaders I (2 credits)
- BETH 300: Ethical Principles in Business (2 credits)

Note: The required core business courses (BUSN 100, ENTR 100, ACCT 100, ACCT 200, BUSN 200, FINC 310, OPMT 200, MKTG 200, MGMT 200, BETH 300, BLAW 300) must be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete these courses by the end of their first semester, junior year.

Elective Courses in Business Core:

- Eight credits from undergraduate courses with designations ACCT / BETH / BLAW / ENTR / FINC / MGMT /MKTG / OPMT / REAL. These credits may be taken in courses within the department of the student's business concentration. Transfer credits with these designations must be at the 300 level or above.

Concentration Courses:

- FINC 311 Advanced Financial Management (2 credits)
- ACCT 311 Intermediate Accounting I (4 credits)
- FINC 324 Corporate Finance (4 credits)
- FINC 325 Investments (4 credits)

Plus 12 credits from the following:

- FINC 350 Finance on Wall Street (4 credits)
- FINC 351 Emerging Financial Markets – China (4 credits)
- FINC 410 Derivatives (4 credits)
- FINC 430 Financial Intermediaries (4 credits)
- FINC 440 Security Analysis and Portfolio Management (4 credits)
- FINC 442 Fixed Income Securities (4 credits)
- FINC 450 International Financial Management (4 credits)
- FINC 480 Strategic Finance (4 credits)
- REAL 380 Real Estate Finance and Investment (formerly REAL 460) (4 credits)
- FINC 490 Topics (4 credits)
- FINC 445 Investment Management I (4 credits)
- FINC 446 Investment Management II (4 credits)

Allied requirements:

- CISC 200 Introduction to Computer Technology and Business Applications (4 credits)
- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- DASC 120 Introduction to Computational Statistics (4 credits)

Plus four credits from the following:

- MATH 109 Calculus with Review II (4 credits)
- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Note: The math requirement must be completed by the end of the sophomore year.

Plus four credits from the following:

- ECON 311 Forecasting (4 credits)

- ECON 315 Introduction to Econometrics and Causal Inference (4 credits)

Minor in Finance

The minor in Finance enables non-finance majors to develop their knowledge and skills in finance and thereby increase their employment and career prospects.

Required courses (8 credits)

- FINC 310 Core Financial Management (2 cr)
  [Prerequisites: ACCT 100, DASC 120 (or equivalent) or MATH 313 or STAT 314, ECON 251 or ECON 252, Sophomore standing]
- FINC 311 Advanced Financial Management (2 cr)
  [Prerequisite: FINC 310]

Choose one course from below: [Prerequisite for both: FINC 311]

- FINC 324 Corporate Finance (4 cr)
  - Prerequisites: FINC 311
- FINC 325 Investments (4 cr)
  - Prerequisites: FINC 311

Plus 10 finance minor elective credits from the following

- FINC 201 Personal Financial Planning (2 cr) or FINC 401 Financial Advising (2 cr)
- FINC 314 Introduction to Financial Technology (4 cr)
- FINC 315 Cryptocurrency and Blockchain (2 cr)
- FINC 316 Artificial Intelligence and Machine Learning in Finance (2 cr)
- FINC 324 Corporate Finance (4 cr) or FINC 325 Investments (4 cr)
- FINC 350 Finance on Wall Street (4 cr)
- FINC 351 Emerging Financial Markets (4 cr)
- FINC 410 Derivatives (4 cr)
- FINC 430 Financial Intermediaries (4 cr)
- FINC 440 Security Analysis and Portfolio Management (4 cr)
- FINC 442 Fixed Income Securities (4 cr)
- FINC 450 International Financial Management (4 cr)
- FINC 475 Financial Modeling and Analytics (4 cr)
- FINC 480 Strategic Finance (4 cr)
- FINC 490 Topics (4 cr)
- REAL 200 Real Estate Principles (4 cr)
- REAL 380 Real Estate Finance and Investment (4 cr)
- ACCT 311 Intermediate Accounting I (4 cr)
- ACCT 312 Intermediate Accounting II (4 cr)
- ENTR 370 Entrepreneurial Financial Resource Management (4 cr)
- ENTR 385 Venture Capital and Early Stage Deal Analysis (4 cr)
- ECON 341 International Monetary Systems (4 cr)
- ECON 335 Money, Financial Markets and Economy (4 cr)
- ACSC 264 Theory of Interest (4 cr)

Courses may have additional prerequisites not covered by minor requirements.

Students pursuing a major in Financial Management are not eligible for the Finance minor.

Certificates in Finance

Certificate in Financial Planning & Wealth Management

Financial planning and wealth management is the process of identifying and setting financial goals and developing a plan to achieve them. This involves establishing investment objectives and goals, determining the investment time horizon and appropriate level of risk tolerance, creating an investment portfolio, and monitoring its performance and reporting. This also involves providing investment advice and recommendations. The key areas of study in investment planning include Principles of Financial Planning, Insurance Planning, Investment Planning, Tax Planning, Retirement Savings and Income Planning, Estate Planning, and Financial Plan Development.

Curriculum:

Financial Planning & Wealth Management Total Credits: 12

Required courses (6 - 8 cr):

Choose one:
- FINC 300 Finance for non-business majors (4 cr)
- FINC 310 Core Financial management (2 cr)

Choose one:
- FINC 304 Principles of Investments(2 cr)
- FINC 325 Investments(4 cr)

Choose one:
- FINC 201* Personal Financial Planning (2 cr)
- FINC 401* Financial Advising (2 cr)

Select 4-6 credits of elective courses below to reach 12 total credits for the certificate:

- REAL 200* Real Estate Principles (4 cr)
- FINC 301* Life Insurance (2 cr)
- FINC 302* Property and Casualty Insurance (2 cr)
- FINC 303* Employee Benefits (2 cr)
- ECON 251** Principles of Macroeconomics (4 cr)

**These courses are NOT eligible to apply as Financial Management major elective credits, but can apply as business elective credits for business majors*

***ECON 251 is NOT an elective option for business majors*

Certificate in Financial Technology

Financial Technology encompasses the use of new technology to deliver products and services in the financial services industries such as banking, investments, trading, insurance, accounting, and risk management. FinTech companies use innovative technology to streamline, automate, and deliver more convenient, secure, and affordable services to consumers and businesses than conventional financial institutions.

Curriculum

Financial Technology Total: 12 Credits

Required courses (8 credits):

- FINC 314 Introduction to Financial Technology (4 cr)*
- FINC 315 Cryptocurrency and Blockchain (2 cr)*
- FINC 316 Artificial Intelligence and Machine Learning in Finance (2 cr)*

Choose 4 credits from the following:

- FINC 475 Financial Modeling and Analytics (4 cr)
- ECON 311 Forecasting (4 cr)
- ECON 315 Introduction to Econometrics and Causal Inference (4 cr)
- CISC 130 Intro. to Programming & Problem Solving in the Sciences (4 cr)
- CISC 131 Introduction to Programming and Problem Solving (4 cr)
- CISC 200 Introductory Computer Technology & Business Applications (4 cr)

Finance Undergraduate Courses

FINC 199 LD Finance Elective (4 credits)

FINC 201 Personal Financial Planning (2 credits)
This course teaches essential money management skills. The five major topics covered include: 1) Managing student loans/debt, 2) Understanding job offers and career compensation (benefits), 3) Planning and Budgeting, 4) Building an investment portfolio (401(k)'s and IRA's) and 5) Finance and the Common Good. Also, understanding how your core values play a role in how you manage your finances. The class will utilize planning and investing tools to help simulate real life financial challenges and issues. 2 credits

FINC 220 Risk Management & Insurance (4 credits)
This course introduces students to the subjects of insurance--theory and practice--and corporate risk management. In addressing these subjects, students will receive exposure to risk theory, insurance pricing, contract analysis, insurance company operations, reinsurance, regulation and the concepts and principles of business risk management. Offered fall semester. Prerequisite: Sophomore standing

FINC 243 Individual Study (2 or 4 credits)

FINC 269 Research (2 or 4 credits)

FINC 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

FINC 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

FINC 299 LD Finance (4 credits)

FINC 300 Finance for Non-Bus Majors (4 credits)
Introduction to the concepts of finance in analyzing decisions. Topics include how to determine the economic value of a company's investment projects, the value of financial securities, the cost of funds used to purchase assets, and the overall management of the firm's assets and liabilities. This course may not be used to meet any requirement for a business major. Not open to business majors.

FINC 301 Life Insurance (2 credits)
Life Insurance is a fundamental topic in the field of Risk Management & Insurance. Perhaps slightly misleading to the newcomer, the term "Life Insurance" actually spans a range of insurance policies that pertain to, yes, mortality, but also to morbidity and longevity. The purpose of this course is to explore the range of life insurance, including

disability coverages, healthcare coverage, annuities and other savings and longevity coverages. In the course of exploring these various policies, students will have exposure to the inner workings of life insurance companies, life insurance pricing, life insurance law and regulation, and the various uses and purposes of these coverages. Additionally, owing to its critical role in life contingencies in the US, social insurance is introduced and reviewed. 2 credits.

FINC 302 Property & Casualty Insurance (2 credits)
Property and Casualty Insurance (P&C, sometimes referred to as Property & Liability) is one of the two dominant segments in the field of insurance study and practice. It includes an ever-widening range of insurance coverages—from a basic homeowners insurance policy to the most exotic policies insuring space satellites and nanotechnology risks. The purpose of this course is to focus on the structure and function of the P&C industry and its various component 'lines of insurance.' Students will be challenged to analyze various contracts, to understanding pricing, underwriting, and claims management practices, and to consider current roles and challenges in both the economy and wider society. The latest innovations in the design and delivery of P&C insurance also receives attention.

FINC 303 Employee Benefits (2 credits)
This course introduces and details the subject of Employee Benefits. In the United States a wide-range of insurance and insurance-related coverages are provided through employers. As such, anyone studying insurance is well-served to understand the many key differences that arise in the provision of insurance to groups of employees. Indeed, a central feature of this course is the investigation of the Group Insurance concept, where underwriting focuses not on the individual but on the group as a whole. Government regulation of employee benefit programs, while having some common features with insurance regulation generally, has a number of additional features—especially at the national government level. Additionally, the course will focus on the specifics of group life and disability insurance, group health insurance, group long term care, savings and investment programs, and—to complete the picture—some treatment of a wide-range of newer programs—wellness, group legal, childcare, and more. This course will serve as a particularly meaningful introduction to individuals that might aspire to work in the Human Resources area of an organization, in addition to students interested in working for insurance companies that specialize in group insurance.

FINC 304 Principles of Investments (2 credits)
This course provides students with a basic understanding of the basic principles of investments. Topics include asset classes and financial instruments, securities markets, mutual funds, risk and returns and portfolio theory, bond prices and yields, macroeconomic and industry analysis, and equity valuation. We will examine current developments in financial markets. 2 credits
Prerequisites: FINC 300 or FINC 310 Note: Students who receive credit for FINC 304 may not receive credit for FINC 325

FINC 310 Core Financial Management (2 credits)
This course provides an introduction to the major concepts of financial management. The main topics covered include an introduction to financial management, time value of money, capital budgeting, cash flows and multinational financial management. Students learn to use calculators and spreadsheets in solving finance problems. Relevant ethical issues of financial management are discussed. Prerequisites: ACCT 100; DASC 120 or STAT 220 or DASC 112 or STAT 201 or STAT 313 or STAT 314; ECON 251 or ECON 252; Sophomore standing.

FINC 311 Advanced Financial Management (2 credits)
This course builds upon the major concepts of financial management delivered in the FINC 310 Core class. The topics covered include an overview of financial markets and institutions, valuation of bonds and stocks, risk & return, cost of capital and cash flow estimation. Students learn to use calculators and spreadsheets in solving finance problems. Relevant ethical issues of financial management are discussed. Prerequisites: FINC 310

FINC 314 Intro to Financial Technology (4 credits)
Financial technology (FinTech) introduces emerging technologies that are revolutionizing the financial services industry. The course covers digital banking, mobile payments, algorithmic and electronic trading, robo-advising and wealth management, crowdfunding and peer-to-peer lending, blockchain and cryptocurrencies, insurance technology, and retail investment. The course will also discuss FinTech innovations from various perspectives including economics, strategy, and ethics as well as market structure, participants, and regulations.
Prerequisites: None

FINC 315 Cryptocurrency and Blockchain (2 credits)
This course is designed to provide students with fundamental knowledge of blockchain technology, its applications in finance, and cryptocurrencies. Students will learn how blockchain enables fast, secure, and transparent transactions and the key

mechanisms behind smart contracts and consensus algorithms. This course also covers the development and trading of cryptocurrencies including their users, returns and risks, security, and how they differ from traditional fiat currencies. The course will also examine the legal and regulatory framework and the uses of cryptocurrencies from the perspective of economics and strategy. Prerequisites: None

FINC 316 AI & ML in Finance (2 credits)
Artificial Intelligence and Machine Learning in Finance - This course provides knowledge of the mechanisms of artificial intelligence (AI) and machine learning (ML) relevant to the financial services industry. The topics covered include AI usage in algorithmic trading, financial advising (chatbots), credit decisions, asset management, and risk management. The course will also discuss AI-related cases relating to the financial industry from various perspectives such as economics, strategy, and ethics. We will also use Python to implement various machine-learning techniques such as decision trees, K-means, and neural networks. Prerequisites: DASC 120

FINC 321 Financial Management (4 credits)
An examination of the elements of the finance function of the organization as well as the financial analysis of decisions. Topics include working capital management, acquisition of capital, capital budgeting, cost of capital, theories of valuation, and present value. Prerequisites: ACCT 100 or ACCT 210; DASC 120 or MATH 313 or STAT 314; ECON 251 and ECON 252; and Sophomore standing Note: Students who receive credit for FINC 321 may not receive credit for FINC 310 or FINC 311.

FINC 324 Corporate Finance (4 credits)
Scope and objectives of financial management in the corporate setting at an advanced level. The course will explore working capital management, risk, valuation, capital structure theory, capital budgeting and other current topics in finance. It will utilize computer-based financial modeling and forecasting. Prerequisites: FINC 311

FINC 325 Investments (4 credits)
The focus of this course is to provide an overview of investment concepts and an exposure to a broad range of investment alternatives. The principle concern of the course is to develop skills necessary to make prudent investment decisions. Prerequisites: FINC 311

FINC 350 Finance on Wall Street (4 credits)
This course will provide students with an overview of many of the important areas of the financial services industry in addition to building students' financial skills through lecture, case studies and real time situational analysis. Students will have extensive exposure to practicing professionals who will engage in discussion with students in all the below listed areas. Topic areas covered will include leadership, risk management, capital markets, investment banking, mergers and acquisitions, portfolio management and construction, private equity, and hedge funds. Prerequisites: FINC 324 or FINC 325.

FINC 351 Emerging Financial Markets (4 credits)
The course gives students the opportunity to gain knowledge, skills, and experiences concerning emerging economies and financial markets. The main contents include understanding and analyzing economic, financial, and political systems and policies of emerging market economies, financial globalization and international diversification, market structures and investment instruments, monetary policies, exchange rate regimes, risks and returns, analysis and valuation of investments, and current issues and developments in emerging economies and markets. Students will also complete a comprehensive country analysis project. This course may be offered occasionally as a short-term study abroad course. Prerequisites: FINC 310.

FINC 389 Research (2 OR 4 credits)

FINC 393 Individual Study (2 OR 4 credits)

FINC 399 UD Finance (4 credits)

FINC 401 Financial Advising (2 credits)
This course serves as, partly, a Capstone course for one of the tracks in the Risk Management & Insurance Certificate. This course specifically presents an overarching context for students that are interested in careers in investment management, life insurance, and personal financial planning. The demand for professionals who can provide comprehensive advice on wealth and risk management to individuals has never been higher. Individuals, who are able to master the complexities of insurance, investments, tax implications, and lifetime wealth and risk management will find many opportunities open to them. In this course, surveying the financial planning field is the main intention. Coverage exists for better understanding insurance in a personal planning context is presented, as are pension and investment basics. Additional attention is given to career preparation in financial planning, which can help students understand both further professional development opportunities (Certified Financial Planner, CFP, for example) and licensing requirements. 2 credits. Prerequisites: FINC 310

FINC 402 Adv Topics in Risk Mgmt & Insu (2 credits)
This course serves as, partly, a Capstone course for one of the tracks in the Risk Management & Insurance Certificate, but also presents some flexibility for focusing on timely and relevant topics in the field. As such, there is an expectation that some topics will change over time to reflect current issues of importance. Nevertheless, the general thematic structure of this course is to examine risk management and insurance 'in action.' On the risk management side of the course this will mean examining risk management program operations and will entail some case study activity. Such topics could include problems in managing work-related injury; managing risks in global firms; and alternative risk financing. On the insurance side of the course, the intention is to consider insurance industry challenges and problems. Such topics could include the effects of climate change on the insurance contract; insuring driverless vehicles; and an examination of the reinsurance sector. 2 credits. Prerequisites: ACSC 220, FINC 301, FINC 302, and FINC 303

FINC 410 Derivatives (4 credits)
This is a mathematically-oriented course which gives an introduction to the theory of derivative contracts such as futures and options. Issues of valuation, arbitrage pricing, trading strategies, and hedging strategies will be covered. The course will include elements of stochastic calculus and other mathematical techniques needed for understanding the derivative pricing. Among the applications to be explored are uncertainty in commodity prices, stock prices, exchange rates and interest rates. Prerequisites: FINC 325; ECON 251 and ECON 252.

FINC 430 Financial Intermediaries (4 credits)
Concepts, practices and organization for financial management of various financial intermediaries. Asset-liabilities management, duration, swaps, hedges and other concepts will be covered. Banks will be the primary area for study, but the course also will look at other institutions including insurance, funds and thrifts. The course will be based on text, lectures, guest speakers, computer modeling, a bank simulation and examination. Prerequisites: FINC 324 or FINC 325; ECON 251 and ECON 252; And 80 completed credits.

FINC 440 Sec Analy & Portfolio Mgmt (4 credits)
This course will cover knowledge and develop skills necessary to carry out prudent and in-depth analysis of investments and create investment portfolio. The major topics covered include portfolio theory, macroeconomic analysis, industry analysis, financial statement analysis, company analysis, valuation models, creating investment policy statement, asset allocation, professional money management and portfolio strategies, and portfolio performance evaluation. The course also includes discussions of most recent developments in the investments industry. Students will apply course concepts to the analysis of actual companies and present their analysis and recommendations to investment professionals. Prerequisites: FINC 325, ECON 251, ECON 252 and 80 completed credits. Note: Students who receive credit for FINC 440 may not receive credit for FINC 445 or FINC 446

FINC 442 Fixed Income Securities (4 credits)
This mathematically-oriented course provides extensive coverage of a wide range of fixed income securities, investment strategies and the interest rate environment. General determinants of value on standard instruments and analysis of the newer instruments including zeroes, mortgages derivatives, interest rate swaps, and structured notes will be covered. Necessary mathematical concepts covered in this course will include stochastic calculus and differential calculus. Prerequisites: FINC 325, ECON 251 and ECON 252

FINC 445 Investment Management I (4 credits)
The focus of this course is gaining practical, hands-on investment management. This course is designed to cover the fundamental techniques of investments and portfolio management with significant attention to developing financial modeling skills. We will address different valuation techniques including comparable valuations and transaction analysis. In addition, we will cover macro-economic analysis, investment policy statements, industry analysis and specific company analysis to develop the skills needed to manage the portfolio. 4 credits. FINC 325; ACCT 200 or 215; 80 completed credits; and Permission of the Instructor. Note: Students who receive credit for FINC 445 may not receive credit for FINC 440.

FINC 446 Investment Management II (4 credits)
The focus of this course is gaining practical, hands-on investment management by managing a portion of the UST endowment. This course is a continuation of FINC 445, Investment Management I. This semester we will focus on portfolio diversification strategies, performance attribution, alternative investments, quantitative analysis, micro and macro-economic tools, derivatives, and fixed income securities. Students will continue to apply the theories in stock analysis, selection and investment recommendations, and make stock presentations. 4 credits. Prerequisites: Prerequisites: FINC 325; FINC 445; ACCT 200 or 215; and permission of instructor. Note: Students

who receive credit for FINC 446 may not receive credit for FINC 440.

FINC 450 Int'l Financial Management (4 credits)
The management of foreign and multinational financial operations. On the basis of international finance theory, students will learn foreign exchange risk management, foreign investment analysis, the financing of foreign operations, comparative accounting, international banking and international tax management. Prerequisites: FINC 324; ECON 251 and ECON 252; and 80 completed credits.

FINC 475 Financial Modeling & Analytics (4 credits)
This course will use advanced data and computer-based techniques to perform financial analysis. The first part of the course develops advanced modeling skills for company valuation, building on skills learned in FINC 324. In the second part of the course, students will learn and apply statistical software to analyze a stock's risk and returns and perform some portfolio analysis. Prerequisites: FINC 324 and FINC 325; ECON 251 and ECON 252

FINC 476 Experiential Learning (1 TO 4 credits)

FINC 480 Strategic Finance (4 credits)
Building on the finance theory learned in prior courses, this course focuses on financial strategies for a broad range of finance issues faced by corporations including capital budgeting, capital raising, optimal capital structure, dividend policy, and corporate restructuring and mergers and acquisitions. This is an applied, case-based course the students will be engaged in extensive case analysis, discussion, and presentations to develop and refine analytical skills. Prerequisites: FINC 324; ECON 251 and ECON 252; and 80 completed credits.

FINC 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

FINC 495 Individual Study (2 OR 4 credits)

Human Resource Management

Program Overview

It is often said that people are an organization's greatest resource. People who work in human resource management provide specialized methods, techniques and professional judgment geared toward fair and effective employee selection, rewards, training, placement, management and development. By making effective use of employees' skills, and helping employees find satisfaction in their jobs and working conditions, both the employees and employers benefit from enhanced productivity.

People who work in human resource management have a wide range of responsibilities within a company. These include forecasting the organization's employee needs such as hiring, developing appraisal, compensation and professional development systems; establishing and maintaining effective labor relations; analyzing and improving the working environment; and interpreting employment regulations. Typical job titles found in human resource departments include benefits analyst, training services coordinator, HR administrator, employment and placement manager, job analyst, labor relations specialist, affirmative action manager, recruiter, and personnel development specialist.

Major in Human Resources Management

Business Core Courses

- BUSN 100: Business for the Common Good (2 credits)
- ENTR 100: Introduction to Entrepreneurship & Innovation (2 credits)
- ACCT 100: Principles of Accounting I (4 credits)
- BUSN 200: Business Learning Through Service (0 credit)
- ACCT 200: Principles of Accounting II (2 credits)
- OPMT 200: Operations & Supply Chain Management (2 credits)
- FINC 310: Core Financial Management (2 credits)
- MKTG 200: Introduction to Marketing (2 credits)
- MGMT 200: Working Skillfully in Organizations (2 credits)
- BLAW 300: Law for Business Leaders I (2 credits)
- BETH 300: Ethical Principles in Business (2 credits)

Note: The required core business courses (BUSN 100, ENTR 100, ACCT 100, ACCT 200, BUSN 200, FINC 310, OPMT 200, MKTG 200, MGMT 200, BETH 300, BLAW 300) must be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete these

courses by the end of their first semester, junior year.

Elective Courses in Business Core:

- Eight credits from undergraduate courses with designations ACCT / BETH / BLAW / BUAN / BUID / ENTR / FINC / IBUS / MGMT / MKTG / OPMT / REAL. These credits may not fulfill any required concentration credits unless you have more than one business concentration. These credits may be taken in courses within the department of the student's business concentration. Transfer credits with these designations must be at the 300 level or above.

Concentration Courses:

- MGMT 362 Attracting, Acquiring, and Rewarding Talent (4 credits)
- MGMT 364 Employee and Labor Relations (4 credits)
- MGMT 360 Employee and Organization Development (4 credits)
- MGMT 385 Inclusive Leadership (2 credits)
- MGMT 395 Strategic Thinking (2 credits)
- BLAW 314 Employment Law (2 credits)
- MGMT 460 Human Resource Strategy (4 credits)
- BUSN 202 Microsoft Excel Applications for Business (0 credits)
  or CISC 200 Introduction to Computer Technology & Business Applications (4 credits

Allied Requirements:

- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- DASC 120 Introduction to Computational Statistics (4 credits)

Note: DASC 120 (or equivalent) should be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete this course by the end of their first semester, junior year.

Plus four credits from the following:

- MATH 101 Finite Mathematics (4 credits)
- MATH 109 Calculus with Review II (4 credits)
- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Note: The math requirement must be completed by the end of the sophomore year.

Plus four credits from the following:

- COMM 100 Public Speaking (4 credits)
- COMM 105 Communication in the Workplace (4 credits)
- COMM 328 Communication of Race, Class and Gender (4 credits)
- COMM 370 Intercultural Communication (4 credits)
- ENGL 211 or above (4 credits)

Minor in Human Resources Management

Required courses:

- MGMT 200 Working Skillfully in Orgs (2 cr)
- MGMT 362 Attract and Reward Talent (4 cr)
- MGMT 385 Inclusive Leadership (2 cr)

Choose 8 credits from the following courses*:*

- MGMT 360 Organization & Employee Development (4 cr)
- MGMT 364 Employee and Labor Relations (4 cr)
- MGMT 395 Strategic Thinking (2 cr)
- BLAW 314 Employment Law (2 cr)

**Students with a major in Human Resource Management or General Business cannot also receive a minor in Human Resource Management.*

International Business

Program Overview

International Business is an interdisciplinary major concentration dedicated to gaining an understanding of business in a global context. Gaining this understanding requires not only study in business, but also in the disciplines such as communication, economics and foreign language. An important component of this concentration is a full semester studying abroad, providing immersion in a different culture, language and business environment. All study abroad courses must be approved by the undergraduate business program; some courses taken at a foreign university may substitute for St. Thomas requirements.

Major in International Business

Business Core Courses

- BUSN 100: Business for the Common Good (2 credits)

- ENTR 100: Introduction to Entrepreneurship & Innovation (2 credits)
- ACCT 100: Principles of Accounting I (4 credits)
- BUSN 200: Business Learning Through Service (0 credit)
- ACCT 200: Principles of Accounting II (2 credits)
- OPMT 200: Operations & Supply Chain Management (2 credits)
- FINC 310: Core Financial Management (2 credits)
- MKTG 200: Introduction to Marketing (2 credits)
- MGMT 200: Working Skillfully in Organizations (2 credits)
- BLAW 300: Law for Business Leaders I (2 credits)
- BETH 300: Ethical Principles in Business (2 credits)

Note: The required core business courses (BUSN 100, ENTR 100, ACCT 100, ACCT 200, BUSN 200, FINC 310, OPMT 200, MKTG 200, MGMT 200, BETH 300, BLAW 300) must be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete these courses by the end of their first semester, junior year.

Elective Courses in Business Core:

- Ten credits from undergraduate courses with designations ACCT / BETH / BLAW / BUAN / BUID / ENTR / FINC / IBUS / MGMT / MKTG / OPMT / REAL. These credits may not fulfill any required concentration credits unless you have more than one business concentration. These credits may be taken in courses within the department of the student's business concentration. Transfer credits with these designations must be at the 300 level or above.

Concentration Courses:

- MGMT 391 Elements of Global Business (2 credits)
- MGMT 430 Global Strategy and Management (4 credits)
- BLAW 322 Law for International Business (4 credits)
- BUSN 202 Microsoft Excel Business Applications (0 credits)
  Or CISC 200 Introductory Computer Technology and Business Applications (4 credits).

Plus: Two courses (minimum of six credits) in transnational business courses taken abroad with pre-approval of the student's business faculty adviser.

These courses will transfer to St. Thomas as two of the following:

- IBUS 450 Transnational Business Issues in Management, Marketing, or Business Law (4 credits)
- IBUS 460 Transnational Business Issues in Finance or Accounting (4 credits)
- IBUS 470 Transnational Issues in International Business (4 credits)

Allied requirements:

- COMM 370 Intercultural Communication (4 credits)
- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- DASC 120 Introduction to Computational Statistics (4 credits)

Note: DASC 120 (or equivalent) should be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete this course by the end of their first semester, junior year.

Plus four credits from the following:

- MATH 101 Finite Mathematics (4 credits)
- MATH 109 Calculus with Review II (4 credits)
- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Note: The math requirement must be completed by the end of the sophomore year.

Plus four credits from the following:

- ECON 346 Country and Area Studies in Economics (4 credits)
- GEOG 113 Globalization and World Regions (4 credits)
- POLS 104 American Government in Comparative Perspective (4 credits)
- POLS 225 World Politics (4 credits)
- POLS 321 Comparative Foreign Policy (4 credits)
- Foreign language at the 212 level or above
- International or cross-cultural course(s) with prior approval of business faculty adviser

Law and Compliance

Program Overview

Opus College of Business
Department of Ethics and Business Law (BLAW)

Marsnik (chair), Garrison, Michaelson, Monge, Nagpal, Schlag, Skirry, Supina, Swink, Thompson

Ethics and law play an increasingly prominent role in the workplace and in the global marketplace. Legal rules and regulations have proliferated at all levels of the organization, and successful managers must understand how to integrate legal considerations into their business planning and operations. Business leaders also need to be able to recognize the ethical dimensions of decisions and choose well in difficult situations. Our ethics and business law courses acquaint students with the tools of ethical decision-making and with the foundations of the legal environment of business, both domestic and international to enhance ethical thinking and problem solving.

Major in Law and Compliance

The Department of Ethics and Business Law offers a law and compliance major for undergraduate business majors. Students in this major explore the legal system and the ways in which legal rules and processes affect business decisions. Students also engage in legal reasoning, advocacy and the legal analysis of commercial transactions.
The major is structured to ensure that students receive both a solid grounding needed for the B.A. in business administration and an additional focus on the legal environment for business.

Business Core Courses:

- BUSN 100: Business for the Common Good (2 credits)
- ENTR 100: Introduction to Entrepreneurship & Innovation (2 credits)
- ACCT 100: Principles of Accounting I (4 credits)
- BUSN 200: Business Learning Through Service (0 credit)
- ACCT 200: Principles of Accounting II (2 credits)
- OPMT 200: Operations & Supply Chain Management (2 credits)
- FINC 310: Core Financial Management (2 credits)
- MKTG 200: Introduction to Marketing (2 credits)
- MGMT 200: Working Skillfully in Organizations (2 credits)
- BLAW 300: Law for Business Leaders I (2 credits)
- BETH 300: Ethical Principles in Business (2 credits)

Note: The required core business courses (BUSN 100, ENTR 100, ACCT 100, ACCT 200, BUSN 200, FINC 310, OPMT 200, MKTG 200, MGMT 200, BETH 300, BLAW 300) must be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete these courses by the end of their first semester, junior year.

Elective Courses in Business Core:

- Ten credits from undergraduate courses with designations ACCT / BETH / BLAW / BUAN / BUID / ENTR / FINC / IBUS / MGMT / MKTG / OPMT / REAL. These credits may not fulfill any required concentration credits unless you have more than one business concentration. These credits may be taken in courses within the department of the student's business concentration. Transfer credits with these designations must be at the 300 level or above.

Concentration Course:

- BETH 320 Role of Business in Society (4 credits)
- BLAW 320 Compliance in Business Organizations (4 credits)
- BLAW 401 Legal Research, Advocacy, and Dispute Resolution (4 credits)
- BUSN 202 Microsoft Excel Applications for Business (0 credits)
- or CISC 200 Introduction to Computer Technology & Business Applications (4 credits)

Plus twelve credits from the following:

- BETH 330 Leading with Meaning (2 credits)
- BETH 340 Integrative Approaches to Business Problems (2 credits)
- BETH 390 Tech, Society & Human Person (4 credits)
- BLAW 304 Real Estate Law (4 credits)
- BLAW 310 Law for Business Leaders II (2 credits)
- BLAW 311 Advanced Business Law for Accounting (2 credits)
- BLAW 313 Essentials of Intellectual Property Law (2 credits)
- BLAW 314 Employment Law (2 credits)

- BLAW 315 Law and Ethics of Data (2 credits)
- BLAW 321 Law for Entrepreneurs and Innovators (4 credits)
- BLAW 322 Law for International Business (4 credits)
- BLAW 323 Health Care Law and Ethics (4 credits)
- BLAW 324 Sports Law (4 credits)
- BLAW 351 Environmental Law (4 credits)
- BLAW 352 Gender Issues and the Law (4 credits)

Allied requirements

- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- DASC 120 Introduction to Computational Statistics (4 credits)

Note: DASC 120 (or equivalent) should be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete this course by the end of their first semester, junior year.

Plus four credits from the following:

- MATH 101 Finite Mathematics (4 credits)
- MATH 109 Calculus with Review II (4 credits)
- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Note: The math requirement must be completed by the end of the sophomore year.

Plus four credits from the following:

- COMM 100 Public Speaking (4 credits)
- COMM 105 Communication in the Workplace (4 credits)
- COMM 370 Intercultural Communication (4 credits)
- ENGL 211 or above (4 credits)

Minor in Law and Compliance

Compliance plays a prominent role in the workplace and global marketplace. Many business careers, including Finance, Human Resource Management, Accounting and Operations, have substantial compliance components. This minor is designed to provide majors from any discipline with an essential understanding of compliance in various business contexts.

Curriculum:

Required courses (12 cr):

- BLAW 300: Law for Business Leaders (2 cr)
- BETH 300: Ethical Principles in Business (2 cr)
- BLAW 320: Compliance in Business organizations (4 cr)
- BETH 320: Role of Business in Society (4 cr)

Plus 4 credits from the following elective courses:

- BLAW 304 Real Estate Law (4 cr)
- BLAW 310 Law for Business Leaders II (2 cr)
- BLAW 311 Advanced Business Law for Accounting (2 cr)
- BLAW 313 Essentials of Intellectual Property Law (2 cr)
- BLAW 314 Employment Law (2 cr)
- BLAW 315 Law and Ethics of Data (2 cr)
- BLAW 321 Law for Entrepreneurs and Innovators (4 cr)
- BLAW 322 Law for International Business (4 cr)
- BLAW 323 Health Care Law and Ethics (4 cr)
- BLAW 324 Sports Law (4 cr)
- BLAW 351 Environmental Law (4 cr)
- BLAW 352 Gender Issues and the Law (4 cr)
- BLAW 401 Law & Comp: Skills & Strategy (4 cr)
- BETH 340 Integrative Approaches to Business Problems (2 cr)

Students pursuing a major in Law and Compliance are not eligible for the Law and Compliance minor.

Business Ethics Undergraduate Courses

BETH 243 Individual Study (2 or 4 credits)

BETH 269 Research (2 or 4 credits)

BETH 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BETH 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BETH 300 Ethical Principles in Business (2 credits)
This course plays a critical role in the principle-based education of St. Thomas business students.

Through analysis of case studies, readings and other experiential exercises, students will develop an understanding of the contribution of business to the common good, professional business conduct and judgment grounded in ethical principles. Prerequisites: Sophomore standing.

BETH 315 Law & Ethics of Data (2 credits)
As businesses seek to capitalize on the value of consumers' and employees' personal data, the risk increases that such data could be exploited from loss or misuse. Are there any constraints on the use of this data by businesses? This course will apply legal and ethical lenses to collecting, using, retaining and securing personal data. The course also examines liability for information security risks. The course seeks to develop multi-disciplinary awareness and analytical thinking, while grappling with technological, strategic, managerial and ethical issues related to data, privacy and information security. Prerequisites: BETH 300 and BLAW 300, or permission of the instructor.

BETH 320, The Role of Business in Soc, (4 credits)
This course helps business students examine the role of business in society. Modern society is dependent upon private enterprise to supply the world's demand, but industrialization and other technological advancements have contributed to a risky global landscape. The four modules of the course – Markets, Organizations, Communities, and the World – explore, respectively, the intersection of that risk landscape with the free market, ethical leadership in organizations, business organizations in communities, and sustainable capitalism in the world. This course expands on the individual contributions to ethical business practices by exploring the role of organizational managers and stakeholders addressing business in society challenges. The course will integrate additional content from literature and the arts as part of the learning process. Prerequisites: BETH 300 or BETH 301, and BLAW 300, 301, 302 or 303 and Sophomore standing

BETH 330 Leading with Meaning (2 credits)
College is often a time for students to both learn skills to earn a livelihood and ask big questions about one's purposeful vocation in life. This seminar will explore alignment and conflict between these two important goals. On one hand, participants will examine personal fit within a market economy. On the other hand, they will examine the work they may feel called by their heart, faith, and/or society to do. In doing so, participants will read about, watch, and meet professionals who are grappling with similar tensions between money, which they need to live, and meaning, which they need to flourish. The seminar provides students with the opportunity to examine "common good" endeavors in the for-profit and/or non-profit sectors. In the process, students will inquire about the possibility of developing themselves as principled leaders and finding meaningful work that also sustains them, their families, and the common good. While much of the course content involves philosophical reflection, much of the course outcomes are practically oriented toward personal and professional development. Prerequisites: Junior standing.

BETH 340 Integrative Aprch to Bus Prob (2 credits)
In this experiential course, students will develop their critical thinking, research, collaboration, and communication skills by identifying and solving a current business problem. This class challenges students by presenting a current business problem from any area of business. Students conduct interdisciplinary research, analyze the legal, business, and ethical dimensions of the problem, and propose a solution that best incorporates and satisfies all three perspectives. Prerequisites: BLAW 300 (may be taken concurrently) and BETH 300

BETH 389 Research (2 OR 4 credits)

BETH 390 Tech, Society & Human Person (4 credits)
This course explores whether or not traditional concepts associated with the human person, business, and law are capable of addressing changes introduced by technology and its rapid evolution. In particular, students will be asked to consider whether concepts associated with property, privacy, rights, justice, and the good can accommodate technological innovations such as automation, decision-making by algorithms, big data, and the "de-skilling" of work. What might this mean for "meaningful work" in the future? What might it mean for education and culture? Will technology create an electronic Panopticon, substituting a world governed by big data and a lack of privacy for Weber's "iron cage?" In the process, students should ask whether or not technological innovation is outpacing the ability of traditional concepts in business, the law, and philosophy to properly address deeper questions associated with promoting the human good.

BETH 393 Individual Study (2 OR 4 credits)

BETH 476 Experiential Learning (1 TO 4 credits)

BETH 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BETH 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

Business Law Undergraduate Courses

BLAW 243 Individual Study (2 OR 4 credits)

BLAW 269 Research (2 OR 4 credits)

BLAW 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BLAW 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BLAW 300 Law for Business Leaders I (2 credits)
The course examines how the law impacts daily management decisions and business strategies and provide managers with tools to use principles of law to minimize risk, create value, attain core business objectives, and to resolve legal issues before they become problems. The course uses exercises, simulations and business cases designed to provide hands-on skill development and practical application of key legal concepts. It introduces students to essential areas of business law including contracts, intellectual property, employment law, and resolution of business disputes. Students then learn to apply business law skills to manage legal risks. Prerequisites: Sophomore standing Note: Students who receive credit for BLAW 300 may not receive credit for BLAW 301 or 302.

BLAW 304 Real Estate Law (1 TO 4 credits)
Principles of law regarding real property with emphasis on contractual relationships, purchase and sales transactions; title and transfer of ownership, mortgages, zoning and land use, development, commercial and residential leasing, and professional liability. Prerequisites: Junior standing,

BLAW 310 Law for Business Leaders II (2 credits)
Building on the foundation of BLAW 300, this course develops students' legal analytical skills in the context of business leadership. Students will engage in skillful application of the law to commercial contexts in a variety of areas. These include contracts, sales of goods and the Uniform Commercial Code; risks arising from warranty and product liability; legal regulation of online environments through tort, intellectual property, and privacy laws. The focus of this course is to develop rigorous legal analytical skills essential to ensuring legal compliance in a business environment of complex laws and regulations. Prerequisites: BLAW 300 (may be taken concurrently). Note: Students who receive credit for BLAW 310 may not receive credit for BLAW 301, or 302.

BLAW 311 Adv. Bus Law for Accounting (2 credits)
This course extends the coverage of business law rules and principles of particular relevance to the accounting profession. Subjects include the Uniform Commercial Code, and the legal structure governing the formation and operation of business organizations. Prerequisites: BLAW 300 and Junior Standing,

BLAW 313 Essentials of IP Law (2 credits)
This course focuses on essential intellectual property law concepts and their importance in protecting creativity, innovation, and goodwill. This course explores and compares the nature of U.S. and international law, including trademark, patent, copyright and trade secrets and how businesses can strategically use those assets. This course is designed to provide business students interested in innovation, marketing, and communication with the skills necessary to identify, manage, and protect intellectual assets. Prerequisites: BLAW 300 (may be taken concurrently), or BLAW 301, 302, 303. Note: Students who receive credit for BLAW 313 may not receive credit for BLAW 354

BLAW 314 Employment Law (2 credits)
This course will examine in-depth employment law from the perspective of human resources and entrepreneurship. From the stages of hiring (employment at will, covenants not to compete, classification of workers and employment contracts – including handbooks) to interviewing, federal and state employment discrimination laws, sexual harassment in the era of #MeToo, on to FMLA, FLSA, speech in the workplace (including social media) and wrongful termination. Emerging employment law issues will also be included. The course provides hands-on skill development and practical application of key legal concepts. Prerequisites: BLAW 300, 301, 302 or 303. Note: Students who receive credit for BLAW 314 may not receive credit for BLAW 353

BLAW 315 Law & Ethics of Data (2 credits)
As businesses seek to capitalize on the value of consumers' and employees' personal data, the risk increases that such data could be exploited from loss or misuse. Are there any constraints on the use of this data by businesses? This course will apply

legal and ethical lenses to collecting, using, retaining and securing personal data. The course also examines liability for information security risks. The course seeks to develop multi-disciplinary awareness and analytical thinking, while grappling with technological, strategic, managerial and ethical issues related to data, privacy and information security. Prerequisites: BETH 300 and BLAW 300, or permission of the instructor.

BLAW 320 Compliance in Business Orgs (4 credits)
This course will examine the compliance function from a legal, ethical, functional and organizational perspective. It will consider the compliance function in contemporary business settings and industries, such as finance, health care, insurance, and retail. Practices of key regulatory agencies such as the Federal Trade Commission, Securities and Exchange Commission will be discussed along with contemporary regulatory statutes such as the FTC Act, Dodd-Frank, Sarbanes-Oxley, etc. The course will also examine key compliance processes and the means to ensure that compliance efforts are effective. Topics include audits and other internal governance approaches for discovering compliance problems in a timely fashion; investigations; reporting; mitigation; regulatory responses; and remediation. Prerequisites: BLAW 300, 301, 302, 303 or 304 and BETH 300 or BETH 301 and 80 completed credits.

BLAW 321 Law for ENTR and Innovators (4 credits)
This course explores the law/s applicable to advertising, entrepreneurship, contracts, business organization and intellectual property. The focus of this class are the concrete steps involved in the formation, branding and operating of a Minnesota general partnership business entity as well as the design, creation, and implementation of both the business entity and the product such a business sells (goods, service, events). Prerequisites: BLAW 300, 301, 302, 303 or 304, and ENTR 100 (may be taken concurrently) or instructor permission. Note: Students who receive credit for BLAW 321 may not receive credit for BLAW 354

BLAW 322 Law for International Business (4 credits)
This course examines the legal and regulatory environment associated with conducting business across national borders. The goal of this course is to provide a foundation and framework for understanding the national, multilateral and international legal issues confronted by the multinational enterprise (MNE). Legal topics will be explored in the context of their impact on managerial decision making and business strategy and include: international trade, mechanisms for effectively resolving international business disputes, legal issues impacting market entry and expansion strategies (trade, intellectual property licensing, and foreign direct investment), regulation of the market place, managing global supply chains, and compliance. Prerequisites: BLAW 300, 301, 302 or 304, or junior standing and instructor permission. Note: Students who receive credit for BLAW 322 may not receive credit for BLAW 303.

BLAW 323 Health Care Law & Ethics (4 credits)
This course will examine the legal frameworks that provide regulatory, liability, and ethical foundations for the provision and delivery of health care. We will study contracts in health care, torts and medical malpractice, and institutional liability, along with topics such as privacy, intellectual property, anti-fraud programs, and bioethics. Prerequisites: Junior standing,

BLAW 324 Sports Law (4 credits)
This class introduces how legal principles apply to sports business and often the entertainment industry at various levels. Specifically, we will examine employment and labor law, antitrust issues, agency and contract relationships, intellectual property and licensing, facilities development and management, and emerging topics based on current events. Prerequisite: Junior Standing

BLAW 351 Environmental Law (4 credits)
Environmental law will survey relevant federal and state statutes and case law to examine how well they serve to maintain and improve the quality of the air, water, soil and life, and strike an appropriate balance between the present consumption of resources and their maintenance for future generations. The course also will explore emerging environmental trends and the formulation of environmental policy. Prerequisite: Junior standing

BLAW 352 Gender Issues and the Law (4 credits)
This course explores the principle that men and women stand as equals before the law. It examines the ways in which courts and legislatures have interpreted the principle of equal opportunity to resolve gender issues in the workplace, as well as in other aspects of society that affect access to the workplace, including education, marriage, and the family. It also provides an historical overview of the law of equal opportunity and will touch upon modern notions of feminist legal theory. This course fulfills the Human Diversity requirement in the core curriculum. Prerequisite: Junior standing

BLAW 389 Research (2 OR 4 credits)

BLAW 393 Individual Study (2 OR 4 credits)

BLAW 401 Law & Comp: Skills & Strat (4 credits)
This is the Law & Compliance Major capstone course. The course examines approaches to compliance from an integrative perspective that draws on business and compliance courses. The course follows a problem-solving approach emphasizing critical thinking and oral, written, and legal skills appropriate to compliance, legal, and business professionals. Topics include the basics of persuasive speaking and negotiation, state and federal legal research, and writing of legal and compliance memoranda. Prerequisite: Junior standing; BLAW 300, BETH 300, and BUSN 202 or CISC 200; or Junior standing and consent of instructor.

BLAW 476 Experiential Learning (1 TO 4 credits)

BLAW 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BLAW 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

BLAW 491 Research (2 TO 4 credits)

BLAW 495 Individual Study (2 OR 4 credits)

BLAW 496, Individual Study (2 credits)

BLAW 497 Individual Study (4 credits)

BLAW 498 Individual Study (4 credits)

Leadership and Management

Program Overview

The Leadership & Management program equips students with leadership principles and the knowledge, skills, and conceptual critical thinking required to be high performing contributors in diverse and global organizations. By learning the science and art of "getting things done" in complicated and changing organizations, students develop philosophies and skills for leading people, processes, and projects across all aspects of an organization.

This program prepares graduates to leverage influence without a formal position of power/title, initiate a course of action, and proactively lead with new ideas and solutions. Leadership skills and strategic thinking will prepare students for career advancement and transfer to a myriad of roles both in professional settings and in the community.

Major in Leadership and Management

Business Core Courses:

- BUSN 100: Business for the Common Good (2 credits)
- ENTR 100: Introduction to Entrepreneurship & Innovation (2 credits)
- ACCT 100: Principles of Accounting I (4 credits)
- BUSN 200: Business Learning Through Service (0 credit)
- ACCT 200: Principles of Accounting II (2 credits)
- OPMT 200: Operations & Supply Chain Management (2 credits)
- FINC 310: Core Financial Management (2 credits)
- MKTG 200: Introduction to Marketing (2 credits)
- MGMT 200: Working Skillfully in Organizations (2 credits)
- BLAW 300: Law for Business Leaders I (2 credits)
- BETH 300: Ethical Principles in Business (2 credits)

Note: The required core business courses (BUSN 100, ENTR 100, ACCT 100, ACCT 200, BUSN 200, FINC 310, OPMT 200, MKTG 200, MGMT 200, BETH 300, BLAW 300) must be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete these courses by the end of their first semester, junior year.

Elective Courses in Business Core:

- Eight credits from undergraduate courses with designations ACCT / BETH / BLAW / BUAN / BUID / ENTR / FINC / IBUS / MGMT / MKTG / OPMT / REAL. These credits may not fulfill any required concentration credits unless you have more than one business concentration. These credits may be taken in courses within the department of the student's business concentration. Transfer credits with these designations must be at the 300 level or above.

Concentration Courses:

- MGMT 367 Leading and Managing Change (2 credits)

- MGMT 382 Management and Leadership (4 credits)
- MGMT 383 Effective Teams (2 credits)
- MGMT 384 Project Management (4 credits)
- MGMT 385 Inclusive Leadership (2 credits)
- MGMT 391 Elements of Global Business (2 credits)
- MGMT 394 Negotiating with Positive Influence (4 credits)
- MGMT 395 Strategic Thinking (2 credits)
- MGMT 482 Leadership Capstone (4 credits)
- BUSN 202 MS Excel Business Applications (0 credits)
- or CISC 200 Intro to Computer Technology & Business Applications (4 credits)

Allied Requirements

- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- DASC 120 Introduction to Computational Statistics (4 credits)

Note: DASC 120 (or equivalent) should be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete this course by the end of their first semester, junior year.

Plus four credits from the following:

- MATH 101 Finite Mathematics (4 credits)
- MATH 109 Calculus with Review II (4 credits)
- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Note: The math requirement must be completed by the end of the sophomore year.

Plus four credits from the following:

- COMM 100 Public Speaking (4 credits)
- COMM 105 Communication in the Workplace (4 credits)
- COMM 328 Communication of Race, Class and Gender (4 credits)
- COMM 370 Intercultural Communication (4 credits)
- ENGL 211 or above (4 credits)

Minor in Leadership and Management

Curriculum:

Required courses:

- MGMT 200 Working Skillfully in Orgs (2 cr)
- MGMT 382 Management and Leadership (4 cr)
- MGMT 385 Inclusive Leadership (2 cr)

Choose 8 credits from the following courses:

- MGMT 367 Leading and Managing Change (2 cr)
- MGMT 383 Effective Teams (2 cr)
- MGMT 384 Project Management (4 cr)
- MGMT 391 Elements of Global Business (2 cr)
- MGMT 394 Negotiating with Positive Influence (4 cr)
- MGMT 395 Strategic Thinking (2 cr)

*Students with a major in Leadership and Management or General Business cannot also receive a minor in Leadership and Management

Management

Program Overview

Opus College of Business
Department of Management

Henderson (chair), Diehn, Galloway, Han, Hart, Lenway, Maloney, Owens, J. Pattit, Sheppeck, Slack, Welsh, Young

Students completing a program from the Department of Management will develop a systems thinking perspective as they view organizations; will develop a competitive perspective as they work with organizations; will become problem-solvers; will value diversity in all its forms; and will study managerial skills.

Concentrations in Management:

- Human Resource Management
- Leadership and Management

Management Undergraduate Courses

MGMT 200 Working Skillfully in Orgs (2 credits)
This course focuses on the knowledge and skills students need to successfully start their careers. This includes understanding that: organizations differ including having unique cultures which is important to consider when choosing an organization to work for; they are leaders and as leaders they need to take initiative and influence others; and, other individuals are different from them and adaptation to those differences is important. Skills developed include initiative, influence, decision making, and

behavioral adaptation to be more a more effective team member and leader. Prerequisites: Sophomore standing.

MGMT 243 Individual Study (2 or 4 credits)

MGMT 269 Research (2 or 4 credits)

MGMT 295 Topics (2 credits)
he subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

MGMT 296 Topics (2 credits)
he subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

MGMT 305 Mgmt & Organizational Behavior (4 credits)
This course is designed to introduce students to the complexities of working within organizations, regardless of whether it is a for-profit, non-profit, or governmental organization. Certain complexities are common across organizations, irrespective of their goals or size. Understanding these complexities is critical to becoming an effective member of any organization, and this course will develop students' understanding and expertise in leading and managing themselves and others within organizations. Prerequisite: Sophomore standing. Note: Students who receive credit for MGMT 305 may not receive credit for MGMT 200

MGMT 350 Intro to U.S. Health Care (4 credits)
This course provides students with a clear and comprehensive understanding of U.S. health care through the lens of various key stakeholders (e.g., consumers, providers, payers, policymakers, and third parties) and how they interrelate. They will gain an appreciation for the economic, political, and social environments in which they operate. Students will also learn about current issues, motivations, and incentives that influence the health care industry. The course is designed to give students a common base of understanding that will serve as a foundation for future coursework and considerations for a career in health care. A broad spectrum of healthcare organizations and settings will be included with emphasis on practical relevance and interaction with local healthcare organizations.

MGMT 352 Health Care Risk Management (4 credits)
This course will introduce students to the complexity of risk faced within the health care system. They will understand the nature of risk faced by government, health care institutions, and individuals. They will see how risk is often the unintended consequence of government policy and organizational strategy. They will also review how health care and government organizations are redesigning themselves in order to take a more directed role in managing risk.

MGMT 360 Organization & Empl Devel. (4 credits)
This course focuses on the theories, concepts, research and practice of organization change and development, performance management, and employee training and development that impact organizational employee behavior. Topics include an overview of human resource management, organization entry and socialization, employee performance management, career choices, employee motivation, job design, organization structure, culture, group dynamics, team- work, power and influence, organization restructuring, change management, and employee training and development. Prerequisites: MGMT 200 or MGMT 305 and Junior standing. Note: Students who receive credit for MGMT 360 may not receive credit for MGMT 365.

MGMT 362 Attract and Reward Talent (4 credits)
This course focuses on the theories, concepts, research and practice of staffing and compensation/reward programs that impact organizational employee behavior. Topics include labor markets, human resource planning, including recruiting, hiring and layoffs, job analysis, staffing and selection, human resource information systems, compensation strategy, policies and practices and benefits programs. Prerequisites: MGMT 200 or MGMT 305 and Sophomore standing.

MGMT 364 Employee and Labor Relations (4 credits)
This course is designed to prepare students to be successful human resource generalists, general managers or entrepreneurs. These careers require both HR knowledge and interpersonal skills. Thus, this course focuses on the concepts, research and practice of employee and labor relations and related organization processes that impact employee behavior. Topics include leadership, worker representation, conflict resolution and negotiation, performance management, employee counseling and discipline, and health and safety. Prerequisites: MGMT 200 or MGMT 305 and Sophomore standing

MGMT 365 Organization Development (2 credits)
This course focuses on the theories, concepts, research, and practice of effective organization development (OD) and change. The course prepares students to carry out the steps managers and human resource professionals take to diagnose and analyze organizational and employee development opportunities, including entry and

contracting, data gathering, analysis, and providing comprehensive feedback. This course will develop students' understanding of conducting ethical OD practice linked to real-world business challenges. Prerequisites: MGMT 200 or MGMT 305 and Junior standing. Note: Students who receive credit for MGMT 365 may not receive credit for MGMT 360

MGMT 367 Leading and Managing Change (2 credits)
This course focuses on the knowledge and skills needed to design, implement, and manage change at the organizational, group, and employee levels. Topics include understanding reactions to and resistance to change, distinguishing between types and levels of change, designing change initiatives and how to lead and sustain change successfully. Prerequisites: MGMT 200 or MGMT 305 and Junior standing.

MGMT 382 Management & Leadership (4 credits)
This course explores the concepts and skills involved in managing people and exercising effective leadership from the individual, interpersonal, and organization level perspectives, with an emphasis on personal leader development and building management skills. The course covers important leadership theories and explores the complexities in managing people, how organizational conditions affect competent leadership, and the work of leadership in managing people within organizations. Topics include self-awareness, managing stress, building relationships, gaining power and influence, and motivating others. This course examines the complexity of business leadership through understanding key theories and their application. Prerequisites: MGMT 200 or MGMT 305 and Sophomore standing

MGMT 383 Effective Teams (2 credits)
Businesses use teams to get work done at all levels of the organization. This course examines when teams are the right choice (and when they are not), how to be an effective team member and leader, and how to diagnose and solve common team problems. Prerequisites: MGMT 200 or MGMT 305 and Sophomore standing. Note: Students who receive credit for MGMT 383 may not receive credit for MGMT 388

MGMT 384 Project Management (4 credits)
This course presents the concepts, techniques, and behavioral skills needed for managing projects effectively. The course introduces students to a project's life cycle (from project definition and goals to completion of the project) and the behavioral dynamics that need to be managed to achieve success. Project leaders need to fulfill multiple roles on a project including managing the timeline, meeting project specifications, resource budgeting and creating a sustainable project culture. Prerequisites: MGMT 200 or MGMT 305; and OPMT 300 or OPMT 310; and Junior standing.

MGMT 385 Inclusive Leadership (2 credits)
Leaders, both with and without formal management titles, need to appreciate the diverse people internal and external to their organizations and society at large. It is critical that leaders step up to design and deliver effective programs of inclusion in their organizations. Culturally competent leaders think critically about these programs and practice inclusion at individual, interpersonal, team, organization, and community levels. This requires foundational knowledge, skills, and attitudes applied in diverse domestic and global contexts. This course introduces a range of perspectives to explore topics including, but not limited to, human diversity; inclusive cultures; social identity and perception; power and privilege; and models and paradigms for interpersonal and organizational inclusion. Prerequisites: MGMT 200 or MGMT 305 and Junior standing. Note: Students who receive credit for MGMT 385 may not receive credit for MGMT 388

MGMT 386 Advanced Org Behavior (4 credits)
This course is designed to increase your effectiveness as a manager and team member by utilizing frameworks for understanding organizations and the behavior of people and groups within an organization. This course will focus on critical activities related to managerial and team effectiveness including managing interdependence, making decisions motivating performance, negotiating differences, and working within an organization's structural, political, cultural and global environment. Prerequisites: MGMT 305 and Junior standing

MGMT 388 Leading Diverse Teams (4 credits)
Today's workforce is increasingly diverse and multicultural, and performance towards organizational goals is often highly team oriented. Given the unique dynamics and challenges of team effectiveness in today's face-to-face, virtual, and hybrid workplaces, this course focuses on the acquisition and practice of needed skills for inclusive team membership and leadership. Learning will occur through experience, reflection, and sense-making of topics including, but not limited to, social identity and perception, power and privilege, group cohesion and development, accomplishing team tasks, and applying models and paradigms to foster intra- and interpersonal psychological safety, cultural competence, equity, and belonging. Prerequisites: MGMT 200. Note: Students who

receive credit for MGMT 388 may not receive credit for MGMT 383 or MGMT 385.

MGMT 389 Research (2 or 4 credits)

MGMT 391 Elements of Global Business (2 credits)
This course explores the opportunities and challenges associated with globalization, and provides the foundation for understanding how differences across countries affect businesses and their own careers. Prerequisites: BUSN 100 or permission from the instructor, and Sophomore standing

MGMT 393 Individual Study (2 or 4 credits)

MGMT 394 Negotiating with Positive Infl (4 credits)
Negotiating decisions, deals, contracts and progressive change is an important skill valued by organizations. In addition, individuals need to harness their personal power to influence others with integrity. This course equips students with knowledge, strategies, tactics, and practical skills to negotiate effectively and manage conflict with peers, superiors, subordinates, and external parties across various contexts. Effective negotiation, influence and conflict management positions professionals at all stages of their career to achieve organizational goals, improve outcomes and contribute to the common good. Prerequisites: MGMT 200 or MGMT 305 and Junior standing.

MGMT 395 Strategic Thinking (2 credits)
This course introduces students to the concepts, tools and principles of strategic management that effectively position businesses to gain a competitive market and industry advantage. Students will develop a strategic mindset as they learn about how businesses: capture value within an industry space, compete through providing superior value and align organizational assets and resources to execute firm strategies. Prerequisites: MGMT 200 or MGMT 305 and Junior standing. Note: Students who receive credit for MGMT 395 may not receive credit for MGMT 480

MGMT 430 Global Strategy & Management (4 credits)
Companies face an increasing variety of choices about where to locate different value-creating activities. This course explores the opportunities and challenges associated with conducting business in a global context. The goal of this course is to provide the foundations for understanding the external global environment facing a multinational enterprise (MNE), and the internal challenges of managing an MNE. Specifically, this course examines the following topics: the forces behind globalization, the different cultural, political, legal and economic environments in which global businesses operate, the tradeoffs between global and local strategies, the alternatives available for coordinating activity in an MNE, and the unique challenges involved with managing people in a globally dispersed organization. Prerequisites: MGMT 305 and MKTG 300 or MGMT 200 and MGMT 391; BETH 300 or BETH 301; plus two courses (minimum of six credits) from the following: IBUS 450, IBUS 460, or IBUS 470; and BUSN 202 or CISC 200; and Senior standing

MGMT 460 Human Resource Strategy (4 credits)
This course focuses on the theories, concepts, research, and practice of human capital management that impacts employee behavior. Topics include systems theory, globalization, leading a contemporary human resource function, human resource careers, human capital strategy, human resource best practices, human resource analytics, and ROI analysis. Offered spring semester. Prerequisites: MGMT 360 or (MGMT 365 and MGMT 367); MGMT 362; BLAW 301, 302, 303 or BLAW 314; BETH 300 or 301; and BUSN 202 or CISC 200; and Senior Standing.

MGMT 480 Strategic Management (4 credits)
This course examines organizational issues from an integrative perspective. It draws on concepts from the entire business curriculum to view the organization as a whole. The focus of the course is to have you view the organization from the perspective of the president, rather than that of a manager of a particular function (e.g., VP of marketing). It examines the development of core competence and a sustainable competitive advantage as part of an organization's strategic planning process. Prerequisite: OPMT 300 or OPMT 310; FINC 310 or FINC 321; MGMT 200 or MGMT 305; MKTG 200 or MKTG 300; BETH 300 or BETH 301; and CISC 200 or BUSN 202; and senior standing. Note: Students who receive credit for MGMT 480 may not receive credit for MGMT 395.

MGMT 482 Leadership Capstone (4 credits)
This capstone course integrates and applies leadership knowledge, skills, character, and competencies. The course provides opportunities to think more systematically about leadership and organizations, its application, and the personal competencies needed for leadership success. The course is designed as an experiential, collaborative team exercise of leadership in a project-based setting. Students will learn about organizational leadership and management as well as develop their capacity for leading through principled initiative and influence. Prerequisites: MGMT 382; BETH 300 or BETH 301; Senior Standing

MGMT 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

MGMT 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

MGMT 491 Research (2 or 4 credits)

MGMT 495 Individual Study (2 or 4 credits)

Marketing Management

Program Overview

Opus College of Business
Department of Marketing
Sackett (chair), Abendroth, Alexander, Al-Khatib, Bharadwaj, Chernetsky, Giovanelli, Ketron, Lanier, Malshe, Pena, Porter, Sailors, Vuolo

Career options in marketing include marketing research and planning, advertising and public relations, business logistics and physical distribution, retailing, product management and new product development, and sales management.

Students completing the concentration in marketing will be able to critically evaluate the global marketing environment, identify opportunities and problems and be able to understand and apply appropriate concepts and terminology.

Major in Marketing Management

Business Core Courses

- BUSN 100: Business for the Common Good (2 credits)
- ENTR 100: Introduction to Entrepreneurship & Innovation (2 credits)
- ACCT 100: Principles of Accounting I (4 credits)
- BUSN 200: Business Learning Through Service (0 credit)
- ACCT 200: Principles of Accounting II (2 credits)
- OPMT 200: Operations & Supply Chain Management (2 credits)
- FINC 310: Core Financial Management (2 credits)
- MKTG 200: Introduction to Marketing (2 credits)
- MGMT 200: Working Skillfully in Organizations (2 credits)
- BLAW 300: Law for Business Leaders I (2 credits)
- BETH 300: Ethical Principles in Business (2 credits)

Note: The required core business courses (BUSN 100, ENTR 100, ACCT 100, ACCT 200, BUSN 200, FINC 310, OPMT 200, MKTG 200, MGMT 200, BETH 300, BLAW 300) must be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete these courses by the end of their first semester, junior year.

Elective Courses in Business Core:

- Eight credits from undergraduate courses with designations ACCT / BETH / BLAW / BUAN / BUID / ENTR / FINC / IBUS / MGMT / MKTG / OPMT / REAL. These credits may not fulfill any required concentration credits unless you have more than one business concentration. These credits may be taken in courses within the department of the student's business concentration. Transfer credits with these designations must be at the 300 level or above.

Concentration Courses:

- MKTG 201: Application in Marketing (2 credits)
- MKTG 340 Marketing Research (4 credits)
- MKTG 370 Consumer Behavior (4 credits)
- MKTG 430 Marketing Management (4 credits)
- BUSN 202 MS Excel Business Applications (0 credits)
- or CISC 200 Intro to Computer Technology & Business Applications (4 credits)

Plus twelve credits from the following:

- MKTG 235 Persuasion in Business (2 credits)
- MKTG 245 Storytelling w/ Business Data (2 credits)
- MKTG 255 Multicultural and Inclusive Marketing (2 credits)
- MKTG 280 Digital Marketing Fundamentals (2 credits)
- MKTG 310 Professional Selling (4 credits)
- MKTG 315 Event Management (4 credits)
- MKTG 320 Integrated Marketing Communications (4 credits)
- MKTG 330 International Marketing (4 credits)

- MKTG 345 Marketing Analytics (4 credits)
- MKTG 350 Marketing Channels and Distribution (4 credits)
- MKTG 360 Omnichannel Retailing (4 credits)
- MKTG 375 Product Innovation and Marketing (4 credits)
- MKTG 380 Digital Marketing Applications (4 credits)
- MKTG 385 Sport Marketing (4 credits)
- MKTG 390 Marketing Strategy (4 credits)
- MKTG 490 Topics (4 credits)
- MKTG 488 Topics (2 credits)

Allied Requirements:

- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- DASC 120 Introduction to Computational Statistics (4 credits)
- BUSN 202 Microsoft Excell Business Applications (0 credits)
- or CISC 200 Introductory Computer Technology and Business Applications (4 credits)

Note: DASC 120 (or equivalent) should be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete this course by the end of their first semester, junior year.

Plus four credits from the following:

- MATH 101 Finite Mathematics (4 credits)
- MATH 109 Calculus with Review II (4 credits)
- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Note: The math requirement must be completed by the end of the sophomore year.

Plus four credits from the following:

- COMM 100 Public Speaking (4 credits)
- COMM 105 Communication in the Workplace (4 credits)
- COMM 328 Communication to Race and Gender (4 credits)
- COMM 370 Intercultural Communication (4 credits)
- ENGL 318 Business Writing (4 credits)

Minor in Marketing

A marketing minor is a broad and versatile complement to many majors across the university, including not just other business majors abut also those in the humanities, social sciences, arts, and STEM fields. While marketing jobs are currently increasing in demand both locally and nationally, a marketing minor offers desirable skills and expertise in many non-marketing jobs as well.

Curriculum:

Required courses (10 cr):

- BUSN 100: Business for the Common Good (2cr)
- MKTG 200: Intro to Marketing (2cr)
- MKTG 201: Application in Marketing (2cr)
- MKTG 370: Consumer Behavior (4cr)

Plus at least 10 credits from the following elective courses:

- MKTG 235: Persuasion in Business (2cr)
- MKTG 245: Storytelling with Business Data* (2cr)
- MKTG 255: Multicultural and Inclusive Marketing (2cr)
- MKTG 280: Digital Marketing Fundamentals (2cr)
- MKTG 310: Professional Selling (4cr)
- MKTG 315: Event Management (4cr)
- MKTG 320: Integrated Marketing Communications (4cr)
- MKTG 330: International Marketing (4cr)
- MKTG 340: Marketing Research* (4cr)
- MKTG 345: Marketing Analytics* (4cr)
- MKTG 360: Omnichannel Retailing (4cr)
- MKTG 375: Product Innovation and Marketing (4cr)
- MKTG 380: Digital Marketing Applications (4cr)
- MKTG 385: Sport Marketing (4cr)
- MKTG 390: Marketing Strategy* (4cr)
- MKTG 488: Topics (2cr)
- MKTG 490: Topics (4cr)

**Course has additional prerequisites not covered by minor requirements*

Students pursuing a major in Marketing Management or Business Communication or a co-major in Strategic and Business Communication are not eligible for the Marketing minor.

Marketing Undergraduate Courses

MKTG 200 Intro to Marketing (2 credits)
Introduction to Marketing is designed to help undergraduate students gain a broad, foundational understanding of the basic components of modern marketing. The course will overview the formulation of a marketing strategy (segmentation, targeting, and positioning) and its implementation through the marketing mix (product, price, place, and promotion), tied to a thorough analysis of the marketplace (company, competitors, customers, etc.). Ethical issues in marketing will be discussed throughout coverage of these topics. After completing the course, students are expected to have gained a general understanding of the complexity of marketing and the role it plays in fulfilling business objectives. Students will leave with a foundation for building additional knowledge and skills related to marketing practice and its interplay with other business functions. Prerequisite: BUSN 100 (may be taken concurrently), and Sophomore Standing Note: Students who receive credit for MKTG 200 may not receive credit for MKTG 300.

MKTG 201 Application in Marketing (2 credits)
Application in Marketing is a 2-credit course designed to build on the foundations provided in Marketing 200 (Introduction to Marketing) by adding branding, consumer behavior, marketing research, and international marketing as concepts that cut across the basic components of marketing analysis, strategy, and implementation. This course emphasizes an application-oriented approach through case-studies, connections with the local marketplace, and problem solving via active-learning classroom activities. Prerequisite: MKTG 200. Note: Students who receive credit for MKTG 201 may not receive credit for MKTG 300.

MKTG 235 Persuasion in Business (2 credits)
This course addresses how persuasion and social influence techniques can be applied in business and organizational settings. Students will learn strategies and tactics to exert more influence with customers, coworkers, clients, and managers, and to do so in an ethical manner. Content will also involve protecting oneself from unwanted influence. Activities and assignments will involve a variety of organizational contexts including job searches, teamwork, leadership, marketing, and sales, plus applications to everyday life. Prerequisites: MKTG 200. Course restrictions: Cannot receive course credit for both MKTG 235 and COMM 366

MKTG 243 Individual Study (2 or 4 credits)

MKTG 245 Storytelling w/ Business Data (2 credits)
The course introduces students to principles that effectively link business data reporting to influencing business outcomes. Business culture demands concise and meaningful communications that can both inform and influence various decision makers and stakeholders. This course teaches students how to effectively communicate insights drawn from business data through the principles of data visualization and narrative design. In this course, students will learn how to identify critical organizational needs, create compelling business narratives using the three key elements of storytelling, and convert data analytic insights into business actions. Prerequisites: MKTG 200 or 300; CISC 200 or BUSN 202; DASC 120 or STAT 220 or DASC 112 or STAT 201

MKTG 255 Multicultural & Inclusive Mktg (2 credits)
The purpose of this course will be to help students appreciate the presence and understand the nuisances and similarities of various subcultures within the United States. From targeting and segmenting customers to developing partnerships, the class will discuss how these may impact American marketing practices and trends. Realizing that a subculture is any group that shares a set of attitudes, values and goals, this course will consider not only ethnic subcultures but religious, sexual orientation & gender identity, ability, and generational subcultures. Students will be exposed to concepts such as cultural capital, intercultural penetration, intersectionality, historical context and other concepts of culture and identity as they learn how individuals and organizations can effectively and responsibly engage with multiple diverse stakeholders. Prerequisites: MKTG 200

MKTG 269 Research (2 or 4 credits)

MKTG 280 Digital Marketing Fundamentals (2 credits)
In the current business landscape, companies rely heavily on digital marketing due to the unparalleled potential and versatility it offers. This 2-credit course provides a base-level understanding of the six key digital marketing channels (websites and apps, media advertising, search, email, social media, and basic AI tools), demonstrating how the channels can be leveraged to deliver targeted messages to the appropriate audience at the optimal moment, thereby achieving desired business outcomes. Prerequisites: Sophomore standing.

MKTG 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

MKTG 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

MKTG 300 Principles of Marketing (4 credits)
This course uses a managerial point of view. It focuses on understanding the needs and desires of customers in order to develop effective strategies for business. Students are taught to consider organizational, social, competitive, techno- logical, economic, behavioral, and legal forces in crafting effective marketing programs. Prerequisite: Junior standing Note: Students who receive credit for MKTG 300 may not receive credit for MKTG 200.

MKTG 310 Professional Selling (4 credits)
In this course students learn how individuals interact with each other in a competitive environment. The course covers one-on-one selling techniques, persuasive communication, oral and verbal presentation skills useful for one-to-one presentations and when groups present to groups. The student will learn skills useful in both the industrial and consumer areas. Prerequisite: MKTG 200 or MKTG 300

MKTG 315, Event Management (4 credits)
The purpose of this course is to introduce students to the tools and processes required to successfully conceptualize, research, design, produce and market a live event. Topics will include the feasibility and sustainability of the event process, industry trends, strategic planning, creating engaging event spaces, marketing, human resource management and budgeting for events. Prerequisites: Sophomore standing; MKTG 200 or permission from instructor

MKTG 320 Integrated MKTG Communications (4 credits)
This course is designed to develop an appreciation for the promotion mix (personal selling, advertising, public relations, sales promotion) by exploring how and why these elements are used by organizations to reach their goals and objectives. Concept fundamentals are explored and then integrated into case analysis. Prerequisite: MKTG 200 or MKTG 300

MKTG 330 International Marketing (4 credits)
In this course students consider basic concepts, principles and theories of international marketing, as well as the essential and complex problems encountered in the international marketplace. The emphasis is on problem solving and decision-making within the international marketing environment. Prerequisite: MKTG 200 or MKTG 300

MKTG 340 Marketing Research (4 credits)
In this course, students learn to develop surveys, observation, experiments, and other tools for learning about customer characteristics and requirements. They learn about analytical techniques, data sources, research planning and costs. Prerequisites: MKTG 201 or MKTG 300; MATH 101 or 109 or 111 or 113; DASC 120 or STAT 220 or DASC 112 or STAT 201

MKTG 345 Marketing Analytics, (4 credits)
Marketing analytics is designed to teach students the skills needed for assembling, analyzing and converting data into meaningful information that is pertinent to the marketing decision making process. The focus of this course will be on how marketing analytics provides relevant insights for decisions related to marketing strategy, the marketing mix, and marketing management. Students will learn how to turn customer data into information that is usable within a firm's decision-making process to better meet customer needs. Ethical considerations of marketing analytics will also be explored. Prerequisites: MKTG 200 or MKTG 300; CISC 200 or BUSN 202; DASC 120 or STAT 220

MKTG 350 Mktg Channels/Distr Sys (4 credits)
Students examine relevant theories, concepts, and practices related to the flow of goods and services in and between organizations from the point of view of the total distribution system. The goal of the course is to help business students think about and learn to create and integrate marketing and logistics strategy. Prerequisite: MKTG 200 or MKTG 300

MKTG 360 Omnichannel Retailing (4 credits)
Omnichannel retailing integrates the different methods of shopping available to consumers (storefront, eCommerce, etc.). This course is designed to provide an understanding of these methods and the benefits and challenges associated with each. A primary focus of the course is on omnichannel/multichannel strategies and today's consumer shopping experience. Students will develop an understanding of retailing by learning how to integrate branding, pricing, use of technological advances, traditional & digital promotion, distribution, and fulfillment strategies. Additional topics include shopping behavior, retailing trends, non-store retailing, service delivery, and international retailing. Prerequisite: MKTG 200 or MKTG 300

MKTG 370 Consumer Behavior (4 credits)
In this course, students examine how consumers and organizations go about making purchase decisions. Major theoretical contributions and empirical research findings from marketing and the behavioral sciences are reviewed and attention is given to

applying this information to practical business and marketing situations. Prerequisite MKTG 201 or MKTG 300

MKTG 375 Product Innovation and Mktg (4 credits)
This course takes a strategic perspective on managing the product element of the firm's marketing mix - the most integral element. Students will delve into segmenting markets based on needs and assessing innovation strategy, viability, new product design, product differentiation, product portfolio and lifecycle management, line and brand extension strategy amongst other product and service tactics. Prerequisites: MKTG 200 or MKTG 300

MKTG 380 Digital Marketing Applications (4 credits)
Digital Marketing Applications is a 4-credit course designed to build on the foundations provided in MKTG 280 Digital Marketing Fundamentals. This course emphasizes a hands-on/application-oriented approach where students gain deeper exposure into the five digital marketing channels (websites/apps, media advertising, search, email and social media), learn how AI can be leveraged to improve marketing effectiveness and efficiency, earn industry recognized certifications, create their own website, and work in teams to develop a digital marketing strategy for a real business. Prerequisites: MKTG 200 and MKTG 280

MKTG 385 Sport Marketing (4 credits)
The purpose of this course is to provide an overview of sport marketing by examining its two core components: 1) marketing of sport and 2) marketing through sport. Students will learn about the unique aspects of sport marketing and how marketing sport differs from marketing other (more traditional) products in terms of product, price, promotion, and place (or distribution). Prerequisites: MKTG 200 or MKTG 300

MKTG 389 Research (2 or 4 credits)

MKTG 390 Marketing Strategy (4 credits)
This course focuses on developing and implementing strategic marketing decisions. Active-learning methods teach students how to make informed decisions regarding targeting, positioning, product design, pricing, advertising/promotion, and distribution. Students will test their knowledge through simulated scenarios and/or group projects in which they can see both the strategic and financial impact of their decisions. Students will also learn how to revise their strategies in order to improve a firm's marketing performance over time. Teaching methods may include large-group lectures, small-group briefings, team-based activities, and independent work. Lectures provide foundational knowledge and tools, while small-group briefings allow the professor to offer personalized guidance to students and teams. Simulations and/or projects allow students to apply what they have learned in a competitive, dynamic environment. Prerequisites: MKTG 200

MGMT 393 Individual Study (2 or 4 credits)

MKTG 430 Marketing Management (4 credits)
Small Business Institute clients present student teams with business problems that require solutions. Student teams diagnose the client's problem and craft and present a solution to the client. Time is divided between reviewing and integrating the students' marketing background, facilitating the student contact with the client, and providing consulting to the client. Prerequisites: MKTG 340; MKTG 370 (May be taken concurrently); one additional Marketing elective; BETH 300 or 301; BUSN 202 or CISC 200; and Senior standing

MKTG 476 Experiential Learning (1 to 4 credits)

MKTG 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

MKTG 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

MKTG 495 Individual Study (2 or 4 credits)

Operations and Supply Chain Management

Program Overview

Opus College of Business
Department of Operations and Supply Chain Management
Goldschmidt (chair), Barlow, Bordoloi, Kumar, Mallick, Martens, Olson, W. Raffield, Sanders-Jones, Sullwold, Vorotyntseva, Yang

Operations and supply chain management is directly involved in the creation and delivery of an organization's goods and/or services. Operations management is not specific to any one industry, nor is it restricted to manufacturing enterprises. In fact, all organizations in the private and public sector systems--including airlines, hospitals, hotels, restaurants, insurance companies, and government

agencies need to manage their operations vigilantly. Operations managers work with their organizations to find faster, better, and more economical ways to server their customers. The operations management field offers a wide array of career paths from supply chain or service design analysis to manufacturing or service general management.

Major in Operations and Supply Chain Management

Business Core Courses

- BUSN 100: Business for the Common Good (2 credits)
- ENTR 100: Introduction to Entrepreneurship & Innovation (2 credits)
- ACCT 100: Principles of Accounting I (4 credits)
- BUSN 200: Business Learning Through Service (0 credit)
- ACCT 200: Principles of Accounting II (2 credits)
- OPMT 200: Operations & Supply Chain Management (2 credits)
- FINC 310: Core Financial Management (2 credits)
- MKTG 200: Introduction to Marketing (2 credits)
- MGMT 200: Working Skillfully in Organizations (2 credits)
- BLAW 300: Law for Business Leaders I (2 credits)
- BETH 300: Ethical Principles in Business (2 credits)

Note: The required core business courses (BUSN 100, ENTR 100, ACCT 100, ACCT 200, BUSN 200, FINC 310, OPMT 200, MKTG 200, MGMT 200, BETH 300, BLAW 300) must be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete these courses by the end of their first semester, junior year.

Elective Courses in Business Core:

- Eight credits from undergraduate courses with designations ACCT / BETH / BLAW / BUAN / BUID / ENTR / FINC / IBUS / MGMT / MKTG / OPMT / REAL. These credits may not fulfill any required concentration credits unless you have more than one business concentration. These credits may be taken in courses within the department of the student's business concentration. Transfer credits with these designations must be at the 300 level or above.

Concentration Courses:

- OPMT 320 Decision Analysis (4 credits)
- OPMT 330 Quality Management (4 credits)
- OPMT 340 Process Analysis & Improvement (4 credits)
- OPMT 350 Supply Chain Management (4 credits)
- OPMT 375 Digital Supply Chain Management (2 credits)
- OPMT 480 Operations Strategy with Integrative Project (4 credits)
- Plus four credits from the following:
    - OPMT 360 Sports & Entertainment Service Ops Mgmt (4 credits)
    - OPMT 470 Applied Analytics and Data Visualization (4 credits)
    - ECON 311 Forecasting (4 credits)

Allied requirements:

- CISC 200 Intro to Computer Technology and Business Applications (4 credits)
  or CISC 131 Intro to Programming and Problem Solving (4 credits)
- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- DASC 120 Introduction to Computational Statistics (4 credits)

Note: CISC 200 and DASC 120 (or equivalent) should be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete this course by the end of their first semester, junior year.

Plus four credits from the following:

- MATH 101 Finite Mathematics (4 credits)
- MATH 109 Calculus with Review II (4 credits)
- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Note: The math requirement must be completed by the end of the sophomore year.

Plus four credits from the following:

- COMM 100 Public Speaking (4 credits)
- COMM 105 Communication in the Workplace (4 credits)
- COMM 370 Intercultural Communication (4 credits)
- ENGL 211 or above (4 credits)

Minor in Operations and Supply Chain Management

Supply chain management is inherently interdisciplinary. By offering a minor in OSCM, students from diverse majors can gain a comprehensive understanding of how supply chains function. As industries become increasingly globalized and interconnected, businesses seek individuals who can navigate and optimize complex supply networks. A minor in OSCM not only enhances the employability of business majors but also provides a distinct advantage to graduates in non-business fields who will inevitably interact with supply chains in their respective professions.

Curriculum:

Required Courses (10 credits):

- OPMT 200 Operations. & Supply Chain Mgmt. (2 credits)
- OPMT 320 Decision Analysis (4 credits)
    - Prerequisites: DASC 120, MATH 101 or higher, CISC 131 or CISC 200
- OPMT 350 Supply Chain Management (4 credits)
    - Prerequisites: OPMT 200, DASC 120 or STAT 201, MATH 101 or higher

Plus eight credits from the following electives (at least four credits from OPMT):

- OPMT 330 Quality Management (4 credits)
- OPMT 340 Process Analysis & Improvement (4 credits)
- OPMT 360 Sports, Entertainment and Service Operations Management (4 credits)
- OPMT 375 Digital Supply Chain Management (2 credits)
- ECON 311* Forecasting (4 credits)
- MGMT 384 Project Management (4 credits)
- MGMT 394 Negotiating with Positive Influence (4 credits)
- BLAW 322 Law for International Business (4 credits)
- ACCT 420* Accounting Analytics (4 credits)
- MKTG 345* Marketing Analytics (4 credits)
- MKTG 375 Product Innovation and Marketing (4 credits)

Elective courses may have additional prerequisites not covered by the required courses in the minor.

*These elective courses can apply as an elective in either the Business Analytics minor or the Operations & Supply Chain Management minor, but not both.

Students pursuing a major in Operations and Supply Chain Management are not eligible for the Operations and Supply Chain Management minor.

Operations & Supply Chain Management Undergraduate Courses

OPMT 200 Operations & Supply Chain MGMT (2 credits)
Operations and Supply Chain Management (OSCM) focuses on all activities essential for the creation and distribution of goods and services. This course introduces the fundamental concepts and techniques utilized in the management of both manufacturing and service operations. Topics include the management of process, technology, production, six-sigma quality, inventory, supply chain, workforce, business process improvement and lean management in operating systems. After completing this course, students will have a better appreciation for the strategic power of the operations and supply chain management function and greater knowledge of how effective operations and supply chain management can enable an organization to attain a sustainable competitive advantage. Sophomore standing. Note: Students who receive credit for OPMT 200 may not receive credit for OPMT 310 nor OPMT 300.

OPMT 243 Individual Study (2 OR 4 credits)

OPMT 269 Research (2 OR 4 credits)

OPMT 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

OPMT 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

OPMT 310 Operations Management (4 credits)
Operations management focuses on planning, coordination and control of activities involved in the transformation of resources into goods and services. This course will examine the concepts and techniques utilized in the management of manufacturing and service operations. The course will focus on the strategic use of the tactical tools of operations management. Topics covered include

the management of process, technology, production, six-sigma quality, inventory, supply chain, workforce, business process improvement and lean management in operating systems. After completing this course, students will have a great appreciation for the strategic power of the operations function and greater knowledge of how effective operations management can enable an organization to attain a sustainable competitive advantage. Prerequisites: DASC 120 and MATH 101 or higher; Sophomore standing Note: Students who receive credit for OPMT 310 may not receive credit for OPMT 300.

OPMT 320 Decision Analysis (4 credits)
This course is focused on developing the quantitative, analytical skills needed to gain insight into the resolution of practical business problems. Students will learn how to analyze and solve management problems using spreadsheet-based methods. Specific methods for clarifying objectives, developing alternatives, addressing trade-offs, and conducting a defensible quantitative analysis will be presented. Topics include spreadsheet modeling, linear programming, decision analysis, forecasting, and simulation. Students will also be introduced to building decision support models using Excel's Power Pivot/Query, PowerBI, and Solver optimization tools. Prerequisites: DASC 120 or STAT 220 or DASC 112 or STAT 201; MATH 101 or higher; CISC 131 or CISC 200.

OPMT 330 Quality Management (4 credits)
This course introduces the principles and practices of quality management. The course focuses on the application of quality philosophies and quality tools in both manufacturing and service organizations. The course will provide practice in using the tools and techniques of quality such as Statistical Process Control (SPC) and Quality Function Deployment (QFD). Modern approaches to quality management such as the Baldrige criteria, ISO certification, and Six-Sigma programs will be included, as well as the philosophies of quality pioneers such as Deming and Juran. Prerequisite: OPMT 200 or OPMT 300; DASC 120 or DASC 112 and MATH 101 or higher

OPMT 340 Process Analysis & Improvement (4 credits)
This course focuses on three primary areas: analyzing processes, developing strategies needed to create a lean agile organization, and introducing the tools needed to implement those strategies. Students will learn to analyze and measure processes, recognize the main tools of lean systems, and then how to apply those tools in both classroom and real-life situations to reduce waste and maximize the capacity of the production system. Both service and manufacturing production systems will be studied. By the end of the course, students will be able to analyze and measure an existing production system, understand what strategies to follow that will create a lean, agile organization, determine which lean tools are needed to transform the system and how to implement those tools, and how to measure and sustain the improvement. Prerequisites: OPMT 200 or OPMT 300; DASC 120 or STAT 220 or DASC 112 or STAT 201; and MATH 101 or higher.

OPMT 350 Supply Chain Management (4 credits)
This course will develop a basic understanding of supply chain management both within and beyond organizational boundaries. It will provide the conceptual and analytical framework for the materials management function of business including purchasing, inventory management (MRP), capacity planning, scheduling, and manufacturing planning and control systems; as well as a broader supply chain view. Prerequisite: OPMT 200 or OPMT 300; DASC 120 or STAT 220 or DASC 112 or STAT 201; and MATH 101 or higher.

OPMT 360 SportsEntertainServiceOpmt (4 credits)
The service sector is the fastest growing sector of the economy. This course is designed to explore the dimensions of service operations management with special emphasis on sports and entertainment management. With the growth of emerging technologies, sports teams and entertainment firms are increasingly incorporating business analytics techniques to make informed decisions. Utilizing analytics to measure success and operational efficiency, students will have the opportunity to analyze case studies, and employ data analytics tools, thereby fostering critical thinking, problem-solving abilities, and a data-driven approach to sports and entertainment management. This course aims at applying tools learned in business disciplines such as strategy, marketing, finance, technology and organizational issues in optimizing operations in sports and entertainment.
Prerequisite: OPMT 200

OPMT 375 Digital Supply Chain Manage (2 credits)
The rapid development of digital computer and communication technology has transformed every aspect of business management and led to the emergence of electronic commerce and the digital supply chain. This course provides an overview of the digital supply chain and introduce students to the state-of-the art in technology applications used by leading corporations worldwide for managing them. The context of this course is a variety of technologies (i.e., hardware and software systems) by which a firm connects, coordinates, and

collaborates with its supply chain trading partners and customers for planning, procurement, production and distribution of both physical and digital goods and services. Prerequisites: OPMT 350

OPMT 389 Research (2 OR 4 credits)

OPMT 393 Individual Study (2 OR 4 credits)

OPMT 470 Apl Analytics & Data Visual (4 credits) The course provides students an opportunity to demonstrate their ability to transform data into insights that guide decision making. In this course, you will learn to identify, evaluate, and capture business analytic opportunities that create value. This course covers the entire lifecycle from problem identification, methodology selection, model building and analysis, to model implementation. The course will utilize industry problems to demonstrate flexibility of analytics and identify the common issue from working with large data sets to project management. Prerequisites: OPMT 320 and one of the following: DASC 240, STAT 333, ECON 315, ECON 311, MKTG 345 or ACCT 420.

OPMT 476 Experiential Learning (1 TO 4 credits)

OPMT 480 Op Strategy w/Integ Strategy (4 credits) This course is the capstone course for majors in operations management. This integrative course in Operations Strategy has a strong managerial focus on the operating decisions that can impact a firm's profitability in various manufacturing and service sectors. It serves as an integrator for the courses that had preceded it by giving students the opportunity to incorporate and refine the knowledge and skills developed in previous coursework. This course utilizes real-life cases and projects to understand managerial issues in operations and to develop a strategic perspective in the decision making process. Prerequisites: Senior standing; OPMT 320, OPMT 330, OPMT 340 and OPMT 350; and concurrent or prior enrollment in OPMT 375. NOTE: For students in prior catalogs the prerequisites are: Senior standing; BETH 301, OPMT 320 and 350, and concurrent or prior enrollment in OPMT 330

OPMT 488 Topics (2 credits)

OPMT 490 Topics (4 credits)

Real Estate Studies

Program Overview

The Bachelor of Science degree in the multidisciplinary field called real estate finds an ideal foundation in a liberal arts education. It provides a quality real estate program with a core in the general functional and operational areas of business. The program is designed to develop students as better citizens able to make responsible decisions benefiting society. Employers prefer to hire students who are knowledgeable of their discipline and operate within a moral and ethical framework of values. Graduates of the program can find employment as mortgage loan officers, appraisers, commercial/investment brokers and property managers.

Major in Real Estate Studies (B.S.)

Business Core Courses

- BUSN 100 Business for the Common Good (2 credits)
- ENTR 100 Introduction to Entrepreneurship & Innovation (2 credits)
- ACCT 100 Principles of Accounting I (4 credits)
- BUSN 200 Business Learning Through Service (0 credit)
- ACCT 200 Principles of Accounting II (2 credits)
- OPMT 200 Operations & Supply Chain Management (2 credits)
- FINC 310 Core Financial Management (2 credits)
- MKTG 200 Introduction to Marketing (2 credits)
- MGMT 200 Working Skillfully in Organizations (2 credits)
- BLAW 304 Real Estate Law (4 credits)
- BETH 300 Ethical Principles in Business (2 credits)

Note: Except for BLAW 304, the required core business courses (BUSN 100, ENTR 100, ACCT 100, ACCT 200, BUSN 200, FINC 310, OPMT 300, MKTG 200, MGMT 200, BETH 300) must be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete these courses by the end of their first semester, junior year.

Elective Courses in Business Core:

- Ten credits from undergraduate courses with designations ACCT / BETH / BLAW / BUAN / BUID / ENTR / FINC / IBUS / MGMT / MKTG / OPMT / REAL. These credits may not fulfill any required concentration credits unless you have more than one business concentration. These credits may be taken in courses within the department of the student's business concentration. Transfer credits with these designations must be at the 300 level or above.

Concentration Courses

- FINC 311 Advanced Financial Management (2 credits)
- REAL 200 Real Estate Principles (4 credits)
- REAL 370 Real Estate Market Analysis (4 credits)
- REAL 380 Real Estate Finance and Investments (formerly REAL 460) (4 credits)
- REAL 470 Real Estate Development (4 credits)
- Plus four credits from the following REAL electives:
    - REAL 360 Real Estate Property Management (4 credits)
    - REAL 461 Real Estate Appraisal (4 credits)

Allied requirements

- CISC 200 Introduction to Computer Technology and Business Applications (4 credits)
- ECON 251 Principles of Macro-Economics (4 credits)
- ECON 252 Principles of Micro-Economics (4 credits)
- DASC 120 Introduction to Computational Statistics(4 credits)

Note: DASC 120 (or equivalent) should be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete this course by the end of their first semester, junior year.

Plus four credits from the following:

- MATH 101 Finite Mathematics (4 credits)
- MATH 109 Calculus with Review II (4 credits)
- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Note: The math requirement must be completed by the end of the sophomore year.

Plus four credits from the following:

- COMM 370 Intercultural Communications (4 credits)
- ECON 311 Forecasting (4 credits)
- ECON 315 Introduction to Econometrics and Causal Inference (4 credits)
- ECON 333 Regional and Urban Economics (4 credits)
- GEOG 113 Globalization and World Regions (4 credits)
- GEOG 330 Geography for Business and Planning (4 credits)
- ENGR 362 Construction Engineering Economic Analysis (4 credits)

Minor in Real Estate Studies

(16 credits)

Required Courses (8 credits):

- REAL 200 Real Estate Principles (4 credits)
- REAL 370 Real Estate Market Analysis (4 credits)*

Plus four credits from the following:

- REAL 380 Real Estate Finance & Investments (4 credits)*
- REAL 360 Property Management (4 credits)*
- REAL 461 Real Estate Appraisal (4 credits)*
- REAL 470 Real Estate Development (4 credits)*
- BLAW 304 Real Estate Law (4 credits)

Plus four credits from the following:

- FINC 311 Advanced Financial Management (2 credits)* and FINC 304 Principles of Investments (2 credits)*
- FINC 325 Investments (4 credits)*
- FINC 430 Financial Intermediaries (4 credits)*
- MKTG 310 Professional Selling (4 credits)*
- MKTG 380 Digital Marketing (4 credits)*
- ECON 311 Forecasting (4 credits)*
- ECON 333 Regional & Urban Economics (4 credits)*
- ECON 335 Money, Financial Markets, Economy (4 credits)*
- ECON 351 Macroeconomic Theory (4 credits)*
- ENGR 362 Construction/Engineering Economic Analysis (4 credits)*
- GEOG 111 Human Geography (4 credits)
- GEOG 113 Globalization and World Regions (4 credits)
- GEOG 321 Geographic Info Systems (4 credits)

Note: Students receiving a B.S. in Real Estate Studies cannot receive a minor in Real Estate Studies.

*Note: Prerequisites are required.

Real Estate Studies Undergraduate Courses

REAL 200 Real Estate Principles (4 credits)
Explores the theories and practices of real estate with emphasis on the "why" and "how" of buying, financing, owning and selling real estate. Real estate brokerage, property management, mortgage finance, appraisal, investment and development are examined within a legal, economic and social context. Open to non-majors. Prerequisites: None

REAL 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

REAL 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

REAL 360 Real Estate Property Mgmt (4 credits)
Owner, management and tenant relations within context budgeting, marketing and management planning is examined. Management for multi-family, office, retail and industrial property differentiated. Entrepreneurial roles of managers for finding tenants and conducting lease negotiations is explored. Prerequisites: REAL 200; DASC 120 or STAT 220 or DASC 112 or STAT 201 (may be taken concurrently); MATH 101 or 109 or 111 or 113 (may be taken concurrently); and Sophomore standing.

REAL 370 Real Estate Market Analysis (4 credits)
This course provides students with the skills and knowledge necessary to evaluate the productive attributes of parcels of real estate as they relate to the demand for a particular use and the supply of competitive properties within a specified market. Focus is placed on the role of market analysis in real estate decision making and valuation. Students will learn the process of evaluative property analysis through the study of property productivity; demand for and supply of property; comparative analyses; and forecasting. Topics include the urban growth process; market conditions; market analysis; data collection; financing; governmental and legal considerations; and environmental issues. Prerequisites: REAL 200; DASC 120 or STAT 220 or DASC 112 or STAT 201 (may be taken concurrently); MATH 101 or 109 or 111 or 113 (may be taken concurrently); and Sophomore standing.

REAL 380 Real Estate Finc/Investment (4 credits)
Examines mortgage, lease, contract and construction financing with related underwriting standards and analytical techniques. Integrates the role of banks, pension funds, insurance companies with government, secondary mortgage markets, and purpose, function and operation of the U.S. financial and federal reserve systems. Acquisition and disposition analysis of income producing real property including tax liability and strategy. Market, feasibility and income analysis integrated with profitability and rate of return measures pertaining to investments with optimal financing. Prerequisites: REAL 200; FINC 311 or FINC 321; CISC 200; MATH 101 or 109 or 111 or 113, and Sophomore standing.

REAL 461 Real Estate Appraisal (4 credits)
Valuation of residential and commercial real estate using the cost, market and income approaches to value. Professional ethics and standards of professional appraisal practice explored. Professional quality narrative appraisal with comparable sales, depreciated cost and discounted cash flow analysis required. Prerequisites: REAL 200; FINC 311 or FINC 321; CISC 200; MATH 101 or 109 or 111 or 113; and Sophomore standing.

REAL 470 Real Estate Development (4 credits)
Capstone course integrating all functional areas of real estate for production of housing, commercial and industrial real estate. Use of market research, feasibility studies and market analysis in contract negotiation for project construction, marketing and management. Prerequisites: REAL 380, BLAW 304, Sophomore standing, and 80 completed credits.

Risk Management and Insurance

Program Overview

College of Arts and Sciences and Opus College of Business, Interdisciplinary Program

The Risk Management and Insurance Certificate provides students with foundational knowledge in the broad industry of risk management and insurance (RM&I). This industry covers a wide range of areas, including life insurance, health insurance, property and casualty insurance, worker's compensation, risk mitigation and prevention, enterprise risk management and more. At its core, the industry is focused on ensuring the common good through the mitigation of risk and the collective pooling of risk (i.e., insurance) in order to protect participants against unfortunate and unforeseen events.

The certificate program introduces students to a variety of areas in this field with a 4-credit introductory course followed by four additional required courses out of five available 2-credit offerings in Property and Casualty (P&C) Insurance (including workers' compensation), Employee Benefits, Life Insurance, Financial Advising, and an advanced topics course in Risk Management.

Certificate in Risk Management and Insurance

Required Courses (10 credits)

- ACSC 220 Risk Management and Insurance (4 credits)
- FINC 301 Life Insurance (2credits)
- FINC 302 Property and Casualty Insurance (2 credits)
- FINC 303 Employee Benefits (2 credits)

Select one of the following two courses:

- FINC 401 Financial Advising (2 credits)
- FINC 402 Advanced Topics in Risk Management and Insurance (2 credits)

For additional information and questions, please contact Mike Axtell at axte2004@stthomas.edu

Sports Management

Program Overview

This interdisciplinary minor is intended to provide an introduction to career opportunities, sport organizations and industries, and the relevant skills and knowledge for roles in professional sports clubs, amateur athletic associations, and recreation administration.

Minor in Sports Management

Required course (4 credits)

- BUID 220 Introduction to Sports Management (4 cr)

Choose 8 credits from the following courses:

- BLAW 324 Sports Law (4 cr)
- MGMT 383 Effective Teams (2 cr)
- MGMT 385 Inclusive Leadership (2 cr)
- MKTG 245 Storytelling with Data (2 cr)
- MKTG 310 Professional Selling (4 cr)
- MKTG 315 Event Management (4 cr)
- MKTG 385 Sport Marketing (4 cr)
- OPMT 320 Decision Analysis (4 cr)
- OPMT 360 Sports, Entertainment and Service Operations Mgmt (4 cr)

Choose 4 credits from the following courses:

- COMM 244 Sport Communication (2 cr)
- ECON 327 Sports Economics (4 cr)
- ENGL 202 Sports and Social Justice (4 cr)
- ENGL 341 Women, Sport and the Body (4 cr)
- EXSC 130 Foundations of Exercise Science (2 cr)
- JOUR 215 Sports Reporting (4 cr)
- JOUR 355 Sports Broadcasting (4 cr)
- PHIL 218 Philosophy of Sport (4 cr)
- PHIL 219 Philosophy of Sport (2 cr)
- PSYC 306 Sports and Performance Psychology (4 cr)

Strategic and Business Communication

The Co-Major of Strategic and Business Communication offers a highly focused and streamlined curriculum for students interested in careers of strategic business communication, an integrated industry of marketing, public relations, advertising and digital communication, in businesses and non-profit organizations. Students with the co-major will develop both a solid and well-rounded foundation of business acumen and specialized and professional skills in strategic communication.

Students of the Co-major in Strategic and Business Communication will take the following courses (total 82-88 credits)

Co-Major in Strategic and Business Communication

Strategic Communication Major Core Courses (30-32 credits)

- STCM 111 Introduction to Journalism and Mass Media (4 credits)
- STCM 234 Principles of Strategic Communication (4 credits)
- STCM 244 Research, Measurement, and Evaluation (4 credits)
- STCM 344 Writing for Strategic Communication (4 credits)
- STCM 346 Digital Content and Strategy in Strategic Communication (4 credits)
- STCM 380 Ethics in Strategic Communication (4 credits)

- STCM 480 Capstone: Strategic Communication Campaigns (4 credits)

Business Communication Courses (32-36 credits):

- ACCT 100 Principles of Accounting I (4 credits)
- ACCT 200 Principles of Accounting II (2 credits)
- BETH 300 Ethical Principles in Business (2 credits)
- BLAW 300 Law for Business Leaders I (2 credits)
- BUSN 100 Business for the Common Good (2 credits)
- BUSN 200 Business Learning through Service (0 credits)
- ENTR 100 Introduction to Entrepreneurship & Innovation (2 credits)
- FINC 310 Core Financial Management (2 credits)
- MGMT 200 Working Skillfully in Organizations (2 credits)
- MKTG 200 Introduction to Marketing (2 credits)
- MKTG 201 Application in Marketing (2 credits)
- MKTG 320 Integrated Marketing Communications (4 credits)
- OPMT 200 Operations & Supply Chain Management (2 credits)
- BUSN 202 MS Excel Business Applications (0 credits)
- or CISC 200 Intro to Computer Technology & Business Applications (4 credits)

Plus four additional credits from the following courses (4 credits):

- BLAW 313 Essentials of Intellectual Property Law (2 credits)
- MGMT 367 Leading and Managing Change (2 credits)
- MKTG 340 Marketing Research (4 credits)
- MKTG 370 Consumer Behavior (4 credits)
- MKTG 380 Digital Marketing (4 credits)
- MKTG 390 Marketing Strategy (4 credits)

Allied Courses: (20 credits):

Twelve credits from the following (12 credits). Note: DASC 120 (or equivalent) should be completed by the end of the sophomore year. Transfer students who have not had an equivalent course must complete this course by the end of their first semester, junior year.

- ECON 251 Principles of Macroeconomics (4 credits)
- ECON 252 Principles of Microeconomics (4 credits)
- DASC 120 Introduction to Computational Statistics (4 credits)

Plus four credits from the following (4 credits):

Note: The math requirement must be completed by the end of the sophomore year.

- MATH 101 Finite Mathematics (4 credits)
- MATH 109 Calculus with Review II (4 credits)
- MATH 111 Calculus for Business and Social Science (4 credits)
- MATH 113 Calculus I (4 credits)

Plus four credits from the following (4 credits):

- STCM 250 Science, Media, and Social Impact (4 credits)
- STCM 260 Corporate Communication (4 credits)
- STCM 360 Brand Reputation and Crisis Management (4 credits)t
- STCM 476 Experiential Learning (2 or 4 credits)
- COMM 100 Public Speaking (4 credits)
- COMM 105 Communication in the Workplace (4 credits)
- COMM 212 Communication Criticism (4 credits)
- COMM 220 Interpersonal Communication (4 credits)
- COMM 244 Sport Communication (2 credits)
- COMM 246 Building Communication Skills Through Improvisation (2 credits)
- COMM 274 Small Group Communication (4 credits)
- COMM 320 Organizational Communication (4 credits)
- COMM 366 Persuasion & Social Influence (4 credits)
- COMM 370 Intercultural Communication (4 credits)
- DIMA/JOUR 232 Visual Media in Theory and Practice (4 credits)
- DIMA/JOUR 240 Digital Imagery and Sound (4 credits)
- DIMA 358 Writing and Designing for the Web (4 credits)

SCHOOL OF EDUCATION

Teacher Education

Program Overview

Minneapolis Opus Hall (MOH) 207, (651) 962-4980

Debbie Monson, PH.D. (Chair), Liz Fogarty, Ph.D., Lucy Payne, Ph.D., Chelda Smith, Ph.D., Muffet Trout Ph.D.

Note: The University of St. Thomas School of Education programs are in alignment with Minnesota state licensure regulations. Changes in state regulations could affect the programs described below. Please maintain contact with the Department of Teacher Education for the most current information.

The University of St. Thomas School of Education offers a full range of undergraduate and graduate programs for persons who wish to teach in elementary, middle, and secondary school settings. Candidates who become educators through the Department are part of a proud tradition that goes back over three-quarters of a century, completing programs that embrace the liberal arts, emphasize ethical practice, and prepare creative, reflective educators dedicated to the success of all learners. Current programs are offered within the School of Education's mission:

Inspired by Catholic intellectual tradition, the University of St. Thomas School of Education educates practitioners to be morally responsible leaders who think critically, act wisely and work skillfully to advance the common good.

Programs are designed to meet or exceed Minnesota State Board of Teaching licensure requirements.

Because of the number of required courses and the options available, it is suggested that students considering an education degree contact a department adviser as early as possible in their college career. Ongoing state licensure rule changes make careful planning particularly important. Current Teacher Education students can view specific policies on department Canvas site.

Admission to the Program

Students apply for admission to the program while enrolled in EDUC 210. Criteria for admission to the education program include:

- Cumulative GPA of at least 2.75 for all credits earned at UST

Retention in the Program

Students accepted into the program must:

- Maintain a 2.75 GPA
- Earn a grade of C or better in all education courses
- Earn a grade of C- or better for all content area and allied content courses required for licensure
- Demonstrate ability to consistently exhibit all professional dispositions
- Show evidence of satisfactory field experiences
- Successfully complete program Assessments at Transition Points

The department reserves the right to dismiss candidates from the licensure programs based on violations of the professional dispositions standards or unsatisfactory progress toward meeting state-mandated licensure standards.

Block 4 and Clinical Practice (Student Teaching)

In order to take Block 4 courses and participate in Clinical Practice, a candidate needs the following: senior status; successful completion of Assessments at Transition Points; satisfactory completion of all education courses in Blocks 1, 2, and 3 and licensure-related content courses; and satisfactory demonstration of all Minnesota Standards of Effective Practice. World Languages candidates must arrange to pass the Oral Proficiency Interview (based on ACTFL Guidelines). For information regarding this, contact the Field and Clinical Placement Manager in the School of Education.

With Departmental approval, candidates may be able to complete half of their Clinical Practice in an international setting.

Program Completion

Following completion of all program requirements, a candidate may apply for Minnesota state licensure. Many other states offer reciprocal entry licenses for candidates completing our program requirements. Since all states' requirements are unique, any candidate planning to teach in another state is strongly advised to check with that state in advance to satisfy those requirements.

Education Majors

- Elementary Education (B.S.)
- Middle/Secondary Level & K-12 Education

- Special Education (B.S.)

Education Minors

Some students who cannot complete the entire Teacher Education licensure program in four years may decide to complete the coursework to meet the requirements of the content major and come back to complete their licensure requirements on the graduate level. Declaring a minor in Teacher Education would designate this on their transcript and also be beneficial for them as they seek employment. All courses must be a 2.75 GPA or higher. This minor is also available to any undergraduate student who completes the required courses with the approval of the Chair of Teacher Education. While the minor alone does not complete the requirements for teaching licensure, the remaining courses, field experience, and clinical practice may be completed at the graduate level through the Department of Teacher Education.

Teacher Education Minor

Undergraduate majors who wish to become a licensed special education teacher must complete a Teacher Education minor. The courses in the Teacher Education minor cover the Minnesota Standards of Effective Practices standards. Note: EDUC 210 part of SPUG Major and EDUC Minor)

- EDUC 210 Education Issues and Policies (4 credits)
- EDUC 329 Diversity and Cultural Competence (4 credits)
- EDUC 330 Psychology for Teaching & Learning (4 credits)
- EDUC 332 Field Experience II (0 credits)
- EDUC 350 Language Development, Literacy & Literature or EDUC 355 Reading for the 5-12 Teacher or (4 credits)

One elective (4 credits) selected from the following list or another course pre-approved by the department chair:

- COMM 220, Interpersonal Communication or COMM 370 Intercultural Communication
- EDUC 327 Engineering in the P-12 Classroom
- EDUC 370 Language Development, Literacy & Literature II
- PSYC 200, 202 or 203 Developmental Psychology Courses
- SOCI 110 Social Problems
- SPUG 250 Fundamentals of Special Education: Exceptionality, Diversity, Equity and Inclusion

Note: **As systems update you may see discrepancies in course titles. Please refer to course prefix and number when registering.*

Special Education Exceptionalities Minor

See **Special Education**

ESL Education Minor

*Please note, this minor is no longer accepting new students.

The number of people in the United States whose first language is not English is increasing rapidly. Those who are seeking teaching licensure, whether at the elementary, middle/secondary or K-12 level, may choose a minor in ESL Education to provide a base of knowledge in how to work with students who are learning English.

This minor may also be useful for those pursuing other people/service related majors, such as social work, psychology, English, communications, etc., since these fields may also require work with people whose first language may not be English.

Courses required in this minor:

- EDUC 358 Additional Language Acquisition for Diverse Learners (4 credits)
- EDUC 361 Language and Culture for Academic Development (4 credits)
- EDUC 363 Introduction to Linguistics for Teachers of Diverse Learners (4 credits)
- EDUC 364 Literacy and Oral Language Development for Diverse Learners (4 credits)
- EDUC 368 Testing and Assessment for Diverse Learners (2 credits)
- EDUC 378 Grammar Instruction for Diverse Learners (4 credits)

Education Undergraduate Courses

EDUC 110 Intro to Music Education (1 credit)
An orientation to the profession of music education. Overview of historical, philosophical, sociological and psychological foundations of music education and related music professions. Exploration of the relationships of these foundations to individual and group instructional settings, vocational issues, and concerns of musicians working as performers, teachers, administrators and business owners. Field observations in a variety of instructional settings. Offered fall semesters.

EDUC 176 Diction for Singers (2 credits)
An introduction to pronunciation in multiple languages, utilizing the International Phonetic

Alphabet (IPA). Special emphasis on the problems encountered by the singer. Offered fall of even years.

EDUC 177 French Diction for Singers (1 credit)
An introduction to French pronunciation, utilizing the International Phonetic Alphabet. A guide to the use of the dictionary in the language. Special emphasis on the problems encountered by the singer. Offered fall of even years.

EDUC 207 EarlyElem Music Methods PreK-2 (2 credits)
Contemporary music pedagogy for children in pre-Kindergarten through Grade 2. Examination of goals, objectives, diverse music repertoire, spiral curriculum content and skill development, strategies, materials, and methods. Study of learning styles, developmental stages, and culturally sensitive materials. Designing lessons and classroom environments for effective music teaching and learning. Techniques for classroom management and discipline. National and state standards for music education relative to Grades pre K-2 music curricula. Emphasis on artistic teaching. Instrument lab meets one hour per week: soprano recorder and lap dulcimer. Offered spring of odd numbered years.

EDUC 210 Education: Issues and Policies (4 credits)
This course is a critical analysis of education as a career choice, as a tool of society, and as a crucial path to a positive future in a rapidly changing world. Education's impact is examined from personal, historic, philosophic, social, and policy perspectives; schools are studied as complex organizations within an increasingly assessment and technology-driven context and global environment. The course includes a research-based exploration of critical issues in education and a guided, reflective, in-school field experience (30 hours).

EDUC 218 Teach Tech for Brass Inst (2 credits)
This course will acquaint the prospective music teacher with the basic knowledge and skills of performance pedagogy of brass instruments which include proper embouchure, tone production, intonation, breathing, articulation, posture, and fingering patterns. Students will become familiar with the construction and operation of these instruments and be able to make minor repairs. The students will gain knowledge of representative beginning through grade 12 solo and ensemble repertoire from diverse periods and become acquainted with instructional materials for beginning, intermediate, and advance levels of students. Students will learn how to select instruments, mouthpieces, and other equipment appropriate for elementary and secondary instrumental pupils. Offered fall of odd years.

EDUC 220 Teach Tech for Percussion (2 credits)
This course will acquaint the prospective instrumental music teacher with the basic knowledge and skills of performance pedagogy of percussion instruments which include proper technique, tone production, intonation, articulation, posture, and patterns. Students will become familiar with the construction and operation of these instruments and be able to make minor repairs. The students will gain knowledge of representative beginning through grade 12 solo and ensemble repertoire from diverse periods and become acquainted with instructional materials for beginning, intermediate, and advance levels of students. Students will learn how to select instruments and other equipment appropriate for elementary and secondary instrumental pupils. Offered fall of even years.

EDUC 221 Teach Techniques for Woodwind (2 credits)
This course will acquaint the prospective instrumental music teacher with the basic knowledge and skills of performance pedagogy of woodwind instruments that include proper embouchure, tone production, intonation, breathing, articulation, posture, and fingering patterns. Students will become familiar with the construction and operation of these instruments and be able to make minor repairs. The students will gain knowledge of representative beginning through grade 12 solo and ensemble repertoire from diverse periods and become acquainted with instructional materials for beginning, intermediate, and advance levels of students. Students will learn how to select instruments, mouthpieces, and other equipment appropriate for elementary and secondary instrumental pupils. Offered spring of even years.

EDUC 307 Interm Elem Music Methods(3-5) (0 to 2 credits)
Contemporary music pedagogy for children in grades 3-5. Examination of goals, objectives, diverse music repertoire, spiral curriculum content and skill development, strategies, materials, and methods. Study of learning styles, developmental stages, and culturally sensitive materials. Designing lessons and classroom environments for effective music teaching and learning. Techniques for classroom management and discipline. National and state standards for music education relative to grades 3-5 music curricula. Emphasis on artistic teaching. Instrument lab meets one hour per week: autoharp;

pitched and unpitched percussion. Offered fall of odd numbered years. Prerequisite: EDUC 207

EDUC 308 Pedagogy&Lit for Music Perf I (2 credits)
This class will survey methods and materials for performance studies. Discussions will include principles of technique, learning theories, musicianship, and performance based upon a wide and diverse body of literature. Students should sign up for section numbers that correspond with primary area of performance. Section 1: Voice; Section 2: Keyboard; Section 3: Guitar; Section 4: Winds/Percussion/Brass.

EDUC 309 Pedagogy&Lit for Music Perf II (2 credits)
A continuation of Pedagogy and Literature for Music Performers I, this class will survey methods and materials for performance studies. Discussions will include principles of technique, learning theories, musicianship, and performance based upon a wide and diverse body of literature. Students should sign up for section numbers that correspond with primary area of performance. Section 1: Voice; Section 2: Keyboard; Section 3: Guitar; Section 4: Winds/Percussion/Brass. Prerequisites: EDUC 308/MUSC 308

EDUC 314 Secondary Music Methods (6-12) (0 to 3 credits)
Contemporary music pedagogy for children in grades 6-12. Examination of goals, objectives, diverse music repertoire, spiral curriculum content and skill development, strategies, materials, and methods. Study of learning styles, developmental stages, and culturally sensitive materials. Designing lessons and classroom environments for effective music teaching and learning. Techniques for classroom management and discipline. National and state standards for music education relative to grades 6-8 music curricula. Emphasis on artistic teaching. Instrument lab meets one hour per week: guitar, small ensembles, beginning arranging. Offered spring of even numbered years.

EDUC 316 C&I (5-12) Comm Arts & Lit (4 credits)
This course is designed to prepare teachers who will effectively engage learners with the curriculum of Communication Arts and Literature. Emphasis is on application of developmentally appropriate practice and differentiated instruction for a range of learners in grades 5 through 12, including curriculum content and sources; national and state standards; performance based assessment strategies; data literacy and data-driven instructional decisions; connections with community resources; lesson and unit planning; and technology integration. By Special Permission Only. Prerequisites: EDUC 330, 332; successful completion of Assessment II and admission to advanced candidacy; Concurrent registration: EDUC 336 Field Exp III: (5-12) Communications Arts & Literature.

EDUC 317 C&I: (5-12) Math (4 credits)
This course is designed to prepare teachers who will effectively engage learners with the curriculum of a specific licensure area. Emphasis is on application of developmentally appropriate practice and differentiated instruction for a range of learners in grades 5 through 12, including curriculum content and sources; performance based assessment strategies; connections with community resources; national and state standards; data literacy and data-driven instruction decisions; lesson and unit planning; and curriculum and technology integration. The course includes a clinical experience. By Special Permission Only. Prerequisites: EDUC 330, 332; successful completion of Assessment II and admission to advanced candidacy; concurrent registration: EDUC 341 Field Experience III: 5-12 Mathematics.

EDUC 318 C&I:(5-12) Science (4 credits)
This course is designed to prepare teachers who will effectively engage learners with the curriculum of a specific licensure area. Emphasis is on application of developmentally appropriate practice and differentiated instruction for a range of learners in grades 5 through 12, including curriculum content and sources; performance based assessment strategies; connections with community resources; national and state standards; data literacy and data-driven instructional decisions; lesson and unit planning; and technology integration. By Special Permission Only. Prerequisites: EDUC 330, 332; successful completion of Assessment II and admission to advanced candidacy; concurrent registration: EDUC 344 Field Experience III: 5-12 Science.

EDUC 319 C&I: (5-12) Social Studies (4 credits)
This course is designed to prepare teachers who will effectively engage learners with the curriculum of a specific licensure area. Emphasis is on application of developmentally appropriate practice and differentiated instruction for a range of learners in grades 5 through 12, including curriculum content and sources; performance based assessment strategies; connections with community resources; national and state standards; data literacy and data driven instructional decisions; lesson and unit planning; and technology integration. By Special Permission Only. Prerequisites: EDUC 330, 332; successful completion of Assessment II and admission to advanced candidacy; concurrent registration: EDUC 346 Field Experience III: 5-12 Social Studies.

EDUC 324 Teach. Techniques for Strings (2 credits)
Teaching Techniques for the String Family: The teaching-techniques courses are designed to acquaint the prospective instrumental teacher with the fundamental principles underlying the correct playing of wind, percussion and string instruments. Basic concepts important in teaching others to play these instruments are stressed. The uses and merits of a variety of method books are discussed as they pertain to lesson and unit planning. Solo and ensemble literature also are covered. Students will learn how to select instruments, mouthpieces and other equipment appropriate for elementary and secondary instrumental pupils. Offered spring of odd years.

EDUC 327 Engineering in P-12 Clrm (4 credits)
This course will focus on an overview of current P-12 engineering education programs; exploration of pedagogy; and content; links to national and State Academic Standards; and a survey of assessment mechanisms that evaluate impact of classroom initiatives. A variety of delivery modes will be used to introduce students to methods and to educators who have successfully introduced engineering into a wide variety of classes across several disciplines. Engineering resources for teachers will be presented and discussed. A final project is required, in which students create a unit or module focused on a hands-on engineering activity for P-12 students in their licensure area.

EDUC 329 Diversity & Cultural Comp (4 credits)
This course is designed to equip students with the knowledge, practices, and dispositions to humanize those who are historically underserved. The course engages students with issues such as race, intersectionality, class, gender, exceptionality, oppression, and discrimination while examining the crucial role of educators in influencing positive, systematic change for social justice.

EDUC 330 Psychology of Tchg & Lrng (4 credits)
This course integrates principles of learning with evidence-based strategies for effective instruction. Prospective K-12 teachers explore the scientific knowledge base that underlies good teaching and build a repertoire of practices to support individual learner success within positive classroom environments. Participants analyze and personalize standards-based instruction, differentiation strategies, performance-enhancing assessment, and technology-assisted teaching and learning. Prerequisite: EDUC 210 or permission of chair. Concurrent registration: EDUC 332 Field Experience II: Learning and Teaching.

EDUC 332 Field Exp II: Learning&Teach (0 credits)
The University of St. Thomas Teacher Education program utilizes a progression of structured, in-school field experiences to expand the vision and professionalism of program candidates. Field experiences are designed to complement university classroom learning by providing opportunities for candidates to practice the knowledge, skills and dispositions of effective educators across the grade ranges for which they will be licensed and with diverse student populations. The second formal field experience is a supervised 30-hour guided, reflective, in-school field experience that focuses on questions involving the exploration of learning and teaching: Who are the learners and how do they learn? In what ways are they diverse? What general approaches can I use to meet each learner's needs? How can I maximize this opportunity to help me develop as a professional? Prerequisite: EDUC 210 and concurrent registration with EDUC 330

EDUC 336 FldExpIII:(5-12)Comm Arts & li (0 credits)
The University of St. Thomas Teacher Education program utilizes a progression of structured, in-school field experiences to expand the vision and professionalism of program candidates. Field experiences are designed to complement university classroom learning by providing opportunities for candidates to practice the knowledge, skills and dispositions of effective educators across the grade ranges for which they will be licensed and with diverse student populations. The third field experience is a supervised, reflective, in-school opportunity that focuses on questions involving the role of curriculum and instruction: What determines my curriculum choices? Why am I teaching what I'm teaching? What strategies can I use to differentiate instruction for diverse learners? How do I assess student learning? How can I maximize this opportunity to help me develop as a Professional? By Special Permission Only. Prerequisites: EDUC 330, 332 and concurrent registration with EDUC 316

EDUC 337 FldExpIII:(K-6)Elementary (0 credits)
The University of St. Thomas Teacher Education program utilizes a progression of structured, in-school field experiences to expand the vision and professionalism of program candidates. Field experiences are designed to complement university classroom learning by providing opportunities for candidates to practice the knowledge, skills and dispositions of effective educators across the grade ranges for which they will be licensed and with diverse student populations. The third field experience is a supervised, reflective, in-school opportunity that focuses on questions involving the role of curriculum and instruction: What determines my curriculum choices? Why am I teaching what I'm teaching? What strategies can I use to differentiate instruction for diverse learners? How do I assess

student learning? How can I maximize this opportunity to help me develop as a professional? By Special Permission Only. Prerequisite: EDUC 330, 332 and concurrent registration with EDUC 370

EDUC 339 Fld Exp III: (5-12) Health (0 credits)
The University of St. Thomas Teacher program utilizes a progression of structured, in-school field experiences to expand the vision and professionalism of program candidates. Field experiences are designed to complement university classroom learning by providing opportunities for candidates to practice the knowledge, skills and dispositions of effective educators across the grade ranges for which they will be licensed and with diverse student populations. The third field experience is a supervised, reflective, in-school opportunity that focuses on questions involving the role of curriculum and instruction: What determines my curriculum choices? Why am I teaching what I'm teaching? What strategies can I use to differentiate instruction for diverse learners? How do I assess student learning? How can I maximize this opportunity to help me develop as a professional? Prerequisite: EDUC 330, 332 and concurrent registration with HLTH 351

EDUC 341 Fld Exp III: (5-12) Math (0 credits)
The University of St. Thomas Teacher Education program utilizes a progression of structured, in-school field experiences to expand the vision and professionalism of program candidates. Field experiences are designed to complement university classroom learning by providing opportunities for candidates to practice the knowledge, skills and disposition of effective educators across the grade ranges for which they will be licensed and with diverse student populations. The third field experience is a supervised, reflective, in-school opportunity that focuses on questions involving the role of curriculum and instruction: What determines my curriculum choices? Why am I teaching what I'm teaching? What strategies can I use to differentiate instruction for diverse learners? How do I assess student learning? How can I maximize this opportunity to help me develop as a professional? By Special Permission Only. Prerequisites: EDUC 330, 332 and concurrent registration with EDUC 317

EDUC 342 Fld Exp III: (K-12) Music (0 credits)
The University of St. Thomas Teacher Education program utilizes a progression of structured, in-school field experiences to expand the vision and professionalism of program candidates. Field experiences are designed to complement university classroom learning by providing opportunities for candidates to practice the knowledge, skills and dispositions of effective educators across the grade ranges for which they will be licensed and with diverse student populations. The third field experience is a supervised, reflective, in-school opportunity that focuses on questions involving the role of curriculum and instruction: What determines my curriculum choices? Why am I teaching what I'm teaching? What strategies can I use to differentiate instruction for diverse learners? How do I assess student learning? How can I maximize this opportunity to help me develop as a professional? Prerequisite: EDUC 330, 332

EDUC 343 FldExpIII:(K-12) Physical Ed (0 credits)
The University of St. Thomas Teacher Education program utilizes a progression of structured, in-school field experiences to expand the vision and professionalism of program candidates. Field experiences are designed to complement university classroom learning by providing opportunities for candidates to practice the knowledge, skills and dispositions of effective educators across the grade ranges for which they will be licensed and with diverse student populations. The third field experience is a supervised, reflective, in-school opportunity that focuses on questions involving the role of curriculum and instruction: What determines my curriculum choices? Why am I teaching what I'm teaching? What strategies can I use to differentiate instruction for diverse learners? How do I assess student learning? How can I maximize this opportunity to help develop as a professional? Prerequisite: EDUC 330, 332 and concurrent registration with PHED 404 or HLTH 351

EDUC 344 Fld Exp III: (5-12) Science (0 credits)
The University of St. Thomas Teacher Education program utilizes a progression of structured, in-school field experiences to expand the vision and professionalism of program candidates. Field experiences are designed to complement university classroom learning by providing opportunities for candidates to practice the knowledge, skills and dispositions of effective educators across the grade ranges for which they will be licensed and with diverse student populations. The third experience is a supervised, reflective, in-school opportunity that focuses on questions involving the role of curriculum and instruction: What determines my curriculum choices? Why am I teaching what I'm teaching? What strategies can I use to differentiate instruction for diverse learners? How do I assess student learning? How can I maximize this opportunity to help me develop as a professional? By Special Permission Only. Prerequisites: EDUC 330, 332 and concurrent registration with EDUC 318

EDUC 345 Adolescent Literature (2 credits)
Survey of contemporary literature for adolescent;

exploration of ways in which this literature meets the reading interests and needs of adolescents; emphasis on developing familiarity with literature read by adolescents; methods and programs to stimulate reading interests and practices. Prerequisite: EDUC 210

EDUC 346 FldExpIII:(5-12)Social Studies (0 credits) The University of St. Thomas Teacher Education program utilizes a progression of structured, in-school field experiences to expand the vision and professionalism of program candidates. Field experiences are designed to complement university classroom learning by providing opportunities for candidates to practice the knowledge, skills and dispositions of effective educators across the grade ranges for which they will be licensed and with diverse student populations. The third field experience is a supervised, reflective, in-school opportunity that focuses on questions involving the role of curriculum and instruction: What determines my curriculum choices? Why am I teaching what I'm teaching? What strategies can I use to differentiate instruction for diverse learners? How do I assess student learning? How can I maximize this opportunity to help me develop as a professional? By Special permission Only. Prerequisites: EDUC 330, 332 and concurrent registration with EDUC 319

EDUC 347 FldExpIII:(K-12)World Lang (0 credits) The University of St. Thomas Teacher Education program utilizes a progression of structured, in-school field experiences to expand the vision and professionalism of program candidates. Field experiences are designed to complement university classroom learning by providing opportunities for candidates to practice knowledge, skills and dispositions of effective educators across the grade ranges for which they will be licensed and with diverse student populations. The third field experience is a supervised, reflective, in-school opportunity that focuses on questions involving the role of curriculum and instruction: What determines my curriculum choices? Why am I teaching what I'm teaching? What strategies can I use to differentiate instruction for diverse learners? How do I assess student learning? How can I maximize this opportunity to help me develop as a professional? By Special Permission Only. Prerequisites: EDUC 330, 332 and concurrent registration with EDUC 380

EDUC 350 Lang Dev, Literacy & Lit I (4 credits) This course is Part I of a two-course literacy sequence designed to introduce the pre-service teacher to the theory and practice of elementary curriculum and instruction in the areas of reading, language arts, and children's literature. Campus and elementary school experiences emphasize best practice in literary instruction for meeting the diverse needs of all students. The course presents developmentally appropriate practice for kindergarten, primary, and intermediate grades, the current knowledge base of research, and recommendations for professional development. As the introductory course in literacy, it focuses on language development, assessment and interpretation of relevant data regarding literacy processes, and serves as the knowledge base for understanding curricular development in and applications for literacy in the elementary classroom. Participants will research critical issues in the field of literacy development. Prerequisite: 210

EDUC 351 Planning and Assessment (2 credits) This course explores a scientific knowledge base that underlies good teaching practices. Prospective P-12 teachers will learn principles for planning instruction and assessing student learning and then integrate these principles into strategies for effective instruction. Prospective teachers will learn to apply the principles of planning for instruction and assessing student learning through reading, discussion, creating and school observations. Prerequisites: EDUC 330

EDUC 352 HLTH and PE for Educators (2 credits) Knowledge and practice of health and physical education concepts and connections in the elementary education classroom. Candidates learn how to safely implement movement and fitness activities at the three different developmental levels. Candidates also learn elementary level health promotion concepts including mental health, first aid, disease prevention, safety, substance use prevention, and healthy relationships. Learning experiences and short teaching demos during class are required. Prerequisites: Elementary Education majors only. Year 2 Education coursework.

EDUC 355 Reading for 5-12 Teacher (4 credits) This course is designed to equip prospective teachers with knowledge, skills and attitudes for assisting grades 5-12 students to effectively gain knowledge from content-area written media. Campus and school-site experiences emphasize best practice in literacy instruction for meeting the diverse needs of all students. Emphasis is on supporting students' academic achievement through research-based, differentiated strategies for teaching content through reading materials such as textbooks, written directions, newspapers, graphs/charts/maps, and manuals. Prerequisite: 210

EDUC 358 Addt'l Lang Acq for Div Lrners (4 credits) This course is an overview of additional language acquisition principles, theories, issues and implications for teaching diverse learners in K-12

settings. Special attention will be paid to differences between first, and second or additional language acquisition. Part of this course involves collecting data from language learning situations and critically examining it against theories and our personal assumptions.

EDUC 361 Lang & Culture for Acad Devel (4 credits)
This course examines the roles culture and society play in the acquisition of an additional language. Aspects of sociolinguistics and anthropology will be addressed as will the impact of social class and gender on student experiences with schooling. A primary focus will be on field observations and interactions with linguistically and culturally diverse learners in K-12 classrooms. The course will look specifically at some of the large immigrant and refugee populations in Minnesota, including newly arrived linguistic and cultural groups.

EDUC 362 Vocal Pedagogy for Singers (1 TO 2 credits)
Study of the physical structure of the vocal mechanism. Development of teaching techniques to promote life-long healthy singing, including appropriate vocal exercises and choral and solo repertoire; Special attention to unchanged child voice, adolescent changing voice, and adult singer. Offered fall semester of odd years.

EDUC 363 Intro-Ling for Div Lners Tchrs (4 credits)
This course examines an array of tools that inform language teaching. The course will include an overview of phonetics, IPA, phonology, morphology, syntax, semantics, historical- comparative linguistics and language universals. This course explores how teachers can use the above tools to structure instruction such that diverse learners will develop academic language proficiency in the areas of listening, speaking, reading and writing.

EDUC 364 Lit/Oral Lang Dev-Div Lrners (4 credits)
This course examines current theories, instructional methods and materials, and issues in teaching reading, writing and oral language development to diverse learners. The course will focus on the foundations for successful literacy instruction for linguistically and culturally diverse learners, including the importance of academic oral language practice and development. Relevant research will be investigated, and relationships between research and best practice will be discussed and applied.

EDUC 366 Phil & Org of Middle Schools (2 credits)
A comparison of the conceptual structure and methodology of various organizational units in American education, with special focus on the unique characteristics of the middle school and the middle school child. Required for Middle Level Endorsement.

EDUC 367 Interdis Plan for Middle Schls (2 credits)
A basic inquiry into instructional skills, techniques and methods of developing actual classroom experiences in literature, math, science, social studies, art, music, physical education, and language for all middle school children. Special emphasis will be placed on developing interdisciplinary units for middle level learners. Required for Middle Level Endorsement. Prerequisite: EDUC 366

EDUC 368 Testing & Eval for Div Lrners (2 credits)
This course looks at issues involved in the testing and assessment of diverse learners in a variety of educational settings. Instruments and procedures for assessing the language proficiency, as well as content knowledge and skills will be examined and discussed. Uses of test results, assessing the four language domains and issues of advocacy will be included.

EDUC 370 Lang Dev, Literacy & Lit II (4 credits)
This course is Part II of a two-course literacy sequence designed to introduce the pre-service teacher to the theory and practice of elementary curriculum and instruction in the areas of reading, language arts, and children's literature. Campus and elementary school experiences emphasize best practice in literacy instruction for meeting the diverse needs of all students. The course presents research-based best practices in teaching for kindergarten, primary, and intermediate grades. This second course in the literacy sequence extends the foundations in language, assessment and interpretation of relevant data regarding literacy processes, and explorations into children's literature to classroom applications in composing processes (writer's workshop), assessment and evaluation as it informs teaching, planning and reflection, and interdisciplinary instruction. Participants will research critical issues in the field of literacy development. By Special Permission Only. Prerequisites: EDUC 330, 332 and 350; successful completion of Assessment II and admission to advanced candidacy; concurrent registration with EDUC 337, 371, 372, 373; or permission of Chair

EDUC 371 Teaching Math & Technology (4 credits)
This course is designed to prepare teachers who will effectively engage learners with mathematics and technology. Emphasis is on application of developmentally appropriate practice and differentiated instruction for a range of learners in grades K through 6, including curriculum content and sources; national and state standards; performance-based assessment strategies; data literacy and data-driven instructional decisions;

connections with community resources; lesson and unit planning; and technology integration. The course includes field-based experiences. By Special Permission Only. Prerequisites: EDUC 330, 332 and MATH 100, 121; successful completion of Assessment II and admission to advanced candidacy; concurrent registration with EDUC 337, 370, 372, 373; or permission of chair

EDUC 372 Teaching Sci/Healthy Living (4 credits)
This course is designed to prepare teachers who will effectively engage learners with science and help them have the skills for lifelong healthy, active living. Emphasis is on application of developmentally appropriate practice and differentiated instruction for a range of learners grades K through 6, including curriculum content and sources; national and state standards; performance-based assessment strategies; data literacy and data-driven instructional decisions; connections with community resources; lesson and unit planning; and technology integration. The course includes field-based experiences. By Special Permission Only. Prerequisites: EDUC 330, 332; successful completion of Assessment II and admission to advanced candidacy; concurrent registration with EDUC 337, 370, 371, 373; and permission of Chair

EDUC 373 Teaching Soc Study/Fine Art (4 credits)
This course is designed to prepare teachers who will effectively engage learners with Social Studies and the Fine Arts. Emphasis is on application of developmentally appropriate practice and differentiated instruction for a range of learners in grades K through 6, including curriculum content and sources; national and state standards; performance-based assessment strategies; data literacy and data-driven instructional decisions; connections with community resources; lesson and unit planning; and technology integration. The course includes field-based experiences. By Special Permission Only. Prerequisites: EDUC 330, 332 successful completion of Assessment II and admissions to advanced candidacy; concurrent registration with EDUC 337, 370, 371, and 372, or permission of Chair.

EDUC 378 Grammar Instr for Div Lrnrs (4 credits)
This course systematically examines the grammar of English specifically as it relates to the teaching of English to non-native speakers and bilingual learners. The class will examine English structures in depth, recognize basic linguistic features of English including morphology, syntax and semantics. The relationship of English grammar to other languages will be explored, as will the history and development of English.

EDUC 380 C&I: (K-12) World Languages (4 credits)
This course is designed to prepare teachers who will effectively engage learners with the curriculum of World Languages and Cultures. Emphasis is on application of developmentally appropriate practice and differentiated instruction for a range of learners in grades K through 12, including curriculum content and sources; national and state standards; performance-based assessment strategies; data literacy and data-driven instructional decisions; connections to community resources; lesson and unit planning; and technology in education. By Special Permission Only. Prerequisites: EDUC 330, 332; successful completion of Assessment II and admission to advanced candidacy: concurrent registration with EDUC 347 Field Exp III: (5-12) World Languages and Cultures

EDUC 387 Field Lab I (1 credit)
EDUC 387 and 388 is a sequenced Field Lab designed to structure and support the concepts and theories learned in concurrent Year 3 education courses. The paired placement model is intended to support teacher candidates' professional collaboration and reflective practice during their experiences in the elementary classroom. Teacher candidates will observe and implement instruction in elementary classrooms, with a focus on understanding the strengths and needs of a diverse student population and a commitment to equity and excellence for all learners. Prerequisites: Admission to Professional Studies. Concurrent registration EDUC 387 (fall) with EDUC 351, 431; EDUC 388 (spring) with EDUC 350, 352, 372, 373 and Elementary Education Majors only.

EDUC 388 Field Lab II (1 credit)
EDUC 387 and 388 is a sequenced Field Lab designed to structure and support the concepts and theories learned in concurrent Year 3 education courses. The paired placement model is intended to support teacher candidates' professional collaboration and reflective practice during their experiences in the elementary classroom. Teacher candidates will observe and implement instruction in elementary classrooms, with a focus on understanding the strengths and needs of a diverse student population and a commitment to equity and excellence for all learners. Prerequisites: Admission to Professional Studies. Concurrent registration EDUC 387 (fall) with EDUC 351, 431; EDUC 388 (spring) with EDUC 350, 352, 372, 373 and Elementary Education Majors only.

EDUC 393 Individual Study (2 OR 4 credits)

EDUC 408 Inclusive Practices (4 credits)
This course is designed to equip prospective teachers with the knowledge, instructional practices,

and dispositions to successfully manage diverse classrooms, using their understanding of multiple learning modalities and all types of diversity to promote all students' personal and academic achievement. The course engages candidates with inclusive practices for learner variations in the areas of: special education (SPED) and English as a second language (ESL), while examining the crucial role of educators in influencing positive, systemic change for social justice. Prerequisites: Successful completion of year 3 education course sequence and Elementary Education majors. Prerequisites: EDUC 350

EDUC 409 Residency in Teaching I (2 credits)
Residency in Teaching I is the first semester of a year-long residency placement in the elementary school. Teacher candidates will concurrently register for Year 4 education courses: EDUC 370 - Language Development, Literacy & Literature II, EDUC 371 - Teaching Elementary Mathematics, and EDUC 4xx - Inclusive Practices for Learning Variations. The early residency experience provides the opportunity for candidates to participate in the opening of the new academic year and to directly apply the knowledge and skills gained in the concurrent coursework. Extended periods of time in the field combined with reflective practice seminars build a cohesive link between on-campus coursework and the realities of the classroom. Residency in Teaching I is a part-time, full-semester commitment under the supervision of university and school-based professionals. Prerequisites: unconditional admission to the teacher education program and to the teaching residency; satisfactory completion of all education courses in Years 1, 2, and 3; plus satisfactory completion of all licensure-related content courses. Prerequisites: unconditional admission to the teacher education program and to the teaching residency; satisfactory completion of all education courses in Years 1, 2, and 3; plus satisfactory completion of all licensure-related content courses.

EDUC 410 Environments for Learning (2 credits)
This course, grounded in research-based interventions, is designed to assist in developing knowledge and skills to plan, implement and assess classroom environments, engagement, and interactions. The course will provide an overview of multi-tiered systems of support and focus on strategies to create positive and engaging classroom environments for all students. Students will examine the basic components of classroom culture and relationships, ways to teach classroom expectations and routines, and plan for responses to appropriate and challenging behavior.

EDUC 411 Residency in Teaching II (10 credits)
As the culminating experience of the teacher licensure program, Residency in Teaching II fulfills the official student teaching requirement and provides the opportunity for candidates to apply their knowledge and skills of teaching and learning in a classroom setting. This is the second semester of a year-long residency placement in the elementary school. Accompanying seminars assist candidates to reflect upon the experience and to increase their repertoire of strategies for dealing with topical, relevant issues. Residency in Teaching II is a full-time, full-semester commitment under the supervision of university and school-based professionals. Prerequisites: unconditional admission to the teacher education program and to the teaching residency; satisfactory completion of all education courses in Years 1, 2, 3, and Residency in Teaching I; plus satisfactory completion of all licensure-related content courses. Prerequisites: unconditional admission to the teacher education program and to the teaching residency; satisfactory completion of all education courses in Years 1, 2, and 3; plus satisfactory completion of all licensure-related content courses.

EDUC 418 Choral/Instrument Mus Methods (2 credits)
Contemporary music pedagogy for children in grades 9-12. Examination of goals, objectives, diverse music repertoire, spiral curriculum content and skill development, strategies, materials, and methods. Study of learning styles, developmental stages, and culturally sensitive materials. Designing lessons and classroom environments for effective music teaching and learning. Techniques for classroom management and discipline. National and state standards for music education relative to grades 9-12 music curricula. Emphasis on artistic teaching. Instrument lab meets one hour per week: advanced electronic applications, advanced arranging, non-traditional ensembles. Offered fall of even years.

EDUC 431 Learning Design with Tech (4 credits)
This course examines learning theories, philosophies and their implications on the use of technology, as well as the history and development of learning technologies. Additionally, students will examine current trends and future challenges in education technology. Students will learn a variety of learning technologies and advocate sound integration of technology into curriculum. Issues on the design, development, and implementation of technology will be discussed. Students will integrate learning technologies into their curriculum planning in the specific content areas that address student needs and meet with the technology or content

standards. As a capstone project, students will develop a portfolio to reflect upon the knowledge and skills acquired through their major. Prerequisites: EDUC 460 or 463, which can be taken concurrently, and 80 completed credits.

EDUC 432 Learn Design w Tech Internat'l (4 credits)
This course leverages an interdisciplinary approach that employs technology in the design of educational activities in an international context. The participants will develop competency in working with diverse and English Language learners through technology-enriched learning activities. The course topics include learning theories, culturally responsive teaching, effective learning design framework, and strategies to engage K-12 learners. Issues on the design, development, implementation, and assessment of technology integration in an international context will be discussed. Program participants will integrate learning technologies into their curriculum planning in the specific content areas that address student needs and meet with the technology or content standards. Through course readings, lectures, activities, and site visits, students will develop in-depth knowledge and firsthand international teaching experiences through interaction with students, teachers, and school administrators in international settings. This course will immerse students in the school environments to develop their own views on the opportunities and challenges of the educational systems with the aim to enrich their own teaching activities and learning environments in the United States. As a capstone project, students will develop a portfolio to reflect upon the knowledge and skills acquired through their major. Prerequisites: 80 completed credits

EDUC 460 ClinPrac: StuTching & Sem (10 credits)
s the culminating experience of the teacher licensure program, clinical practice (student teaching) provides the opportunity for candidates to apply their knowledge and skills of teaching and learning in a classroom setting. Accompanying seminars assist candidates to reflect upon the experience and to increase their repertoire of strategies for dealing with topical, relevant issues. Clinical practice, along with the accompanying seminars and the final components of EDUC 456, is a full-time, full-semester commitment under the supervision of university and school-based professionals. Prerequisites: Senior status; unconditional admission to the teacher education program; satisfactory completion of all education courses in Blocks 1, 2, and 3; satisfactory completion of all licensure-related content courses; plus admission to clinical practice.

EDUC 463 Stu Teach&Sem:Dual License (12 credits)
This clinical practice section is intended for candidates seeking licensure in multiple fields or grade ranges requiring additional credits and time in the classroom. As the culminating experience of the teacher licensure program, clinical practice provides the opportunity for students to apply their knowledge and skills of teaching and learning in a classroom setting. Accompanying seminars assist students to reflect upon the experience and to increase their repertoire of strategies for dealing with topical, relevant issues. Clinical practice is a full-time, full-semester commitment under the supervision of university and school-based professionals. Prerequisites: Satisfactory completion of all education courses in Blocks 1, 2, and 3, plus unconditional admission to the teacher education program, plus admission to clinical practice, senior status.

EDUC 464 Seminar Intl. Student Teaching (2 credits)
As a culminating experience of the teacher preparation program, student teaching provides the opportunity for candidates to apply their knowledge and skills of teaching and learning in a classroom setting. This seminar assists candidates to reflect upon the experience and to increase their repertoire of strategies for dealing with topical, relevant issues. This course is designed to meet the needs of an students visiting from other countries. Only student teachers may enroll as part of a signed partnership agreement. Prerequisites: Accepted into an international student teacher partnership program. Must meet Current St. Thomas English proficiency requirement.

EDUC 465 Intl. Student Teaching (4 credits)
As a culminating experience of the teacher preparation program, student teaching provides the opportunity for candidates to apply their knowledge and skills of teaching and learning in a classroom setting. The accompanying seminar assists the teacher candidate to reflect upon the experience and to increase their repertoire of strategies for dealing with topical, relevant issues. This is a full-time, full-semester commitment under the supervision of university and school-based professionals. This course is designed to meet the needs of an students visiting from other countries. Only student teachers may enroll as part of a signed partnership agreement. Prerequisites: Meet St. Thomas English Proficiency requirement. Accepted into an international student teacher partnership program.

EDUC 488 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses.

Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

EDUC 490 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

EDUC 495 Individual Study (1 TO 4 credits)

Elementary Education

Persons earning this major are licensed to teach Elementary, K-6.

Elementary Education Major (K-6):

- EDUC 210 Education: Issues and Policies (4 credits)
- EDUC 329 Diversity and Cultural Competence (4 credits)
- EDUC 330 Psychology for Teaching & Learning (4 credits)
- EDUC 350 Language Development, Literacy, & Literature I (4 credits)
- EDUC 370 Language Development, Literacy, & Literature II (4 credits)
- ECUD 371 Teaching Elementary Mathematics (4 credits)
- EDUC 372 Teaching Elementary Science (4 credits)
- EDUC 373 Teaching Elementary Social Studies (4 credits)
- EDUC 431 Technology for Instruction (4 credits)
  or EDUC 432 Learning Design with Technology in International Contexts (4 credits)
- EDUC 410 Creating Environments for Learning (2 credits)
- EDUC 408 Inclusive Practices for Learning Variations (4 credits)
- EDUC 409 Residency in Teaching I (2 credits)
- EDUC 411 Residency in Teaching II (4 credits)

Allied Courses Required for Elementary K-6 Licensure:

- MUSC 242 Children's Artistic Culture: Music, Movement, & Visual Art (4 credits)
- PHED 352 Health & Physical Education for the Elementary Educator (2 credits)
- MATH 121, 122, and 223 Structures of Elementary Mathematics I, II, III (12 credits)
- BIOL 101 General Biology (4 credits)
- PHYS 101 Physics for the Liberal Arts (4 credits)
- GEOL 111 Introduction to Physical Geology (4 credits)
- HIST 113 Early Am/Global Perspective OR HIST 114 Mod Us/Global Perspective (4 credits)

One of:

- GEOG 113 Globalization & World Regions (4 credits)
- PSYC 111 General Psychology (4 credits)
- SOCI 100 Intro to Sociology (4 credits)
- POLS 104 Government and Politics (4 credits)

Elementary Education Courses

See full course descriptions under Undergraduate Education Courses (above)

- EDUC 210 Education: Issues and Policies (4 credits)
- EDUC 329 Diversity & Cultural Comp (4 credits)
- EDUC 330 Psychology of Tchg & Lrng (4 credits)
- EDUC 350 Lang Dev, Literacy & Lit I (4 credits)
- EDUC 352 HLTH and PE for Educators (2 credits)
- EDUC 370 Lang Dev, Literacy & Lit II (4 credits)
- EDUC 371 Teaching Math & Technology (4 credits)
- EDUC 372 Teaching Sci/Healthy Living (4 credits)
- EDUC 408 Inclusive Practices (4 credits)
- EDUC 409 Residency in Teaching I (2 credits)
- EDUC 410 Environments for Learning (2 credits)
- EDUC 411 Residency in Teaching II (10 credits)
- EDUC 431 Learning Design with Tech (4 credits)
- EDUC 432 Learn Design w Tech Internat'l (4 credits)
- EDUC 464 Seminar Intl. Student Teaching (2 credits)
- EDUC 465 Intl. Student Teaching (4 credits)

Middle/Secondary Level and K-12 Education

Program Overview

Programs are designed to provide professional preparation for teaching in middle, and secondary, or K-12 settings. Licensure is available in the following areas:
Chemistry (9-12), Communication Arts and Literature (5-12), Life Science (9-12), Mathematics (5-12), Music: Instrumental and Classroom (K-12), Music: Vocal and Classroom (K-12), Physics (9-12), Social Studies (5-12), World Languages and Cultures (French, German, Spanish) (K-12).

NOTE: Students have the option of adding the General Science (5-8) licensure to 9-12 Chemistry, Earth and Space Science, Life Science, or Physics by taking the following courses:

- BIOL 101 General Biology (4 credits)

or

- BIOL 207 Genetics, Ecology, and Evolution (4 credits) and BIOL 208 Biological Communication and Energetics (4 credits) and BIOL 209 Biology of Sustainability (4 credits)

Plus

- PHYS 101 Physics for the Liberal Arts (4 credits) or
- PHYS 109 General Physics I (4 credits) and PHYS 110 General Physics II (4 credits) or
- PHYS 211 Introduction to Classical Physics I (4 credits) and PHYS 212 Introduction to Classical Physics II (4 credits)

Plus

- GEOL 111 Introductory Physical Geology or one of GEOL 110, 113, 114, 115 (4 credits each)
- PHYS 104 Astronomy (4 credits)

Core Secondary Education Requirements

Block 1

- EDUC 210 Education's Place in Society and Field Experience (4 credits)

Block 2

- EDUC 329 Diverse Learners and Families (4 credits)
- EDUC 330 Psychology for Teaching and Learning (4 credits)
- EDUC 332 Field Experience II: Learning & Teaching (0 credit)

Block 3

- EDUC 355 Reading for the 5-12 Teacher (4 credits)*

**Taken by all licensure areas except Music Education*

Block 4

- EDUC 431 Use of Technology for Instruction (4 credits)
- or EDUC 432 Learning Design with Technology in International Contexts (4 credits)
- EDUC 460 Clinical Practice: Student Teaching and Seminar (10 credits)**
- or EDUC 463 Student Teaching and Seminar, Dual Licensure (12 credits)**

**As determined by your specific program(s)

Major in Middle/Secondary and K-12

Core Secondary Education Requirements

Block 1

- EDUC 210 Education's Place in Society and Field Experience (4 credits)
- EDUC 211 Field Experience I: Exploration (0 credit)
- MTLE: Basic Skills or other Minnesota BOT approved licensure exams

Block 2

- EDUC 329 Diverse Learners and Families (4 credits)
- EDUC 330 Psychology for Teaching and Learning (4 credits)
- EDUC 332 Field Experience II: Learning & Teaching (0 credit)

Block 3

- EDUC 355 Reading for the 5-12 Teacher (4 credits)*

*Taken by all licensure areas except Music Education and ESL

Methods Courses as noted in individual licensure area requirements and corresponding Field Experience III:

- EDUC 336 Field Experience III: Communication Arts and Literature (0 credit)
- EDUC 339 Field Experience III: Health (0 credit)
- EDUC 341 Field Experience III: Mathematics (0 credit)
- EDUC 342 Field Experience III: Music (0 credit)
- EDUC 343 Field Experience III: Physical Education (0 credit)
- EDUC 344 Field Experience III: Science (0 credit)
- EDUC 346 Field Experience III: Social Studies (0 credit)
- EDUC 347 Field Experience III: World Languages (0 credit)

Block 4

- EDUC 431 Use of Technology for Instruction (4 credits)

  or

- EDUC 432 Learning Design with Technology in International Contexts (4 credits)

- EDUC 460 Clinical Practice: Student Teaching and Seminar (10 credits)**

  or

- EDUC 463 Student Teaching and Seminar, Dual Licensure (12 credits)**

**As determined by your specific program(s)

Co-Majors (see below for details)

- Co-Major in Chemistry (9-12)
- Co-Major in Communication Arts and Literature (5-12)
- Co-Major in Life Science (9-12)
- Co-Major in Mathematics (5-12)
- Co-Major in Music: Instrumental and Classroom (K-12)
- Co-Major in Music: Vocal and Classroom (K-12)
- Co-Major in Physics (9-12)
- Co-Major in Social Studies (5-12)
- Co-Major in World Languages and Cultures (French, German, Spanish) (K-12)

Chemistry (9-12) Co-Major

Co-major in Chemistry (9-12) and a Co-major in Middle/Secondary Education.

Note: A Co-major cannot be a stand-alone major.

Note: Chemistry 9-12 is typically combined with the General Science (5-8) licensure for completion of the full scope of 5-12 science licensure.

Blocks 1, 2, 3 and 4 as listed at the beginning of this section

Plus Block 3 curriculum and instruction special methods course and field experience III:

- EDUC 318 Curriculum and Instruction for Science (5-12) (4 credits)
- EDUC 344 Field Experience III: Science (0 credit)

Plus:

- CHEM 111 General Chemistry I (4 credits) and CHEM 112 General Chemistry II (4 credits)

  or

- CHEM 115 Accelerated General Chemistry (4 credits)

Plus:

- CHEM 201 Organic Chemistry I (4 credits)
- CHEM 202 Organic Chemistry II (4 credits)
- CHEM 300 Quantitative Analysis (4 credits)
- CHEM 331 Chemical Thermodynamics and Reaction Dynamics (4 credits)
- CHEM 481 Seminar (1 credit)
- CHEM 484 Seminar (1 credit)
- CHEM 491 Individual Research (2 or 4 credits)
- MATH 113 Calculus I (4 credits)
- MATH 114 Calculus II (4 credits)
- PHYS 211 Introduction to Classical Physics I (4 credits)
- PHYS 212 Introduction to Classical Physics II (4 credits)

Plus:

- Demonstrated competence on all required state standards

To complete a major in Chemistry (B.A.), additional courses are required. See Chemistry section in the catalog

Communication Arts & Literature (5-12) Co-Major

Co-major in Communication Arts and Literature (5-12) and a Co-major in Middle/Secondary Education

Note: A Co-major cannot be a stand-alone major. Students seeking licensure in this area who also want to complete an English major and a Communication and Journalism minor should consult the English Department section of the catalog and follow the Major in English with a Teacher Education Emphasis.

Secondary Education Requirements

Block 1:

- EDUC 210 Education: Issues and Policies (4 credits)

Block 2:

- EDUC 329 Diverse Learners and Families (4 credits)*
- EDUC 330 Psychology for Teaching and Learning (4 credits)
- EDUC 332 Field Experience II (0 credits)

Block 3:

- EDUC 316 C & I : 5-12 Communication Arts & Literature
- (4 credits)
- EDUC 336 Field Experience III (0 credits)
- EDUC 355 Reading for the 5-12 Teacher (4 credits)

Block 4:

- EDUC 460 Clinical Practice & Seminar (10 credits)*
- EDUC 431 Use of Technology Instruction (4 credits)

*course names may change

Plus:

- EDUC 345 Adolescent Literature (2 credits)
- COMM 212 Communication Criticism (4 credits)
- COMM 326 Communication in Popular Culture (4 credits)
- COMM 366 Persuasion and Social Influence (4 credits)
- ENGL 257 The Literary Imagination (4 credits)
- ENGL 300 Theory and Practice of Writing (4 credits)
- ENGL 305 Linguistics: English Language (4 credits)
- ENGL 327 Major Literary Genres (4 credits)
- ENGL 361 Shakespeare and the Early Modern Period (4 credits)

Select One:

- ENGL 121 Critical Thinking: Literature and Writing (4 credits)
- ENGL 190 Advanced Critical Thinking: Literature and Writing (4 credits)

Plus one course from each of the following categories:

- ENGL 211 British Authors I or ENGL 212 British Authors II
- ENGL 214 American Authors I or ENGL 215 American Authors II
- ENGL 220 The Classical Tradition or ENGL 221 The Modern Tradition
- ENGL 217 Multicultural Literature or ENGL 218 Literature by Women: Critical History

To complete a major in Communication Studies, additional courses are required. See Communication Studies section in the catalog.

Life Science (9-12) Co-Major

Co-Major in Life Science (9-12) with Co-Major in Middle/Secondary Education

Note: A Co-major cannot be a stand-alone major.

Note: Life Science (9-12) is typically combined with the General Science (5-8) licensure for completion of the full scope of 5-12 science licensure.

Blocks 1, 2, 3 and 4 as listed at the beginning of this section

Plus Block 3 curriculum and instruction special methods course and field experience III:

- EDUC 318 Curriculum and Instruction for Science (5-12) (4 credits)
- EDUC 344 Field Experience III: Science (0 credit)

Plus:

- BIOL 101 General Biology OR BIOL 207 Genetics, Ecology, and Evolution (4 credits)
- BIOL 208 Biological Communication and Energetics (4 credits)
- BIOL 209 Biology of Sustainability (4 credits)
- CHEM 111 General Chemistry I (4 credits) AND CHEM 112 General Chemistry II (4 credits) OR CHEM 115 Accelerated General Chemistry (4 credits)

Plus:

- Sixteen additional BIOL credits in courses numbered 200 or above, chosen in consultation with an advisor

To complete a major in Biology, additional courses are required. See Biology section in the catalog.

Mathematics (5-12) Co-Major

Major in Mathematics (5-12) and a Co-major in Middle/Secondary Education.

Note: A Co-major cannot be a stand-alone major.

Blocks 1, 2, 3 and 4 as listed at the beginning of this section

Plus Block 3 curriculum and instruction special methods course and field experience III:

- EDUC 317 Curriculum and Instruction for Mathematics (5-12) (4 credits)
- EDUC 341 Field Experience III: Mathematics (0 credit)

Plus:

- MATH 113 Calculus I (4 credits) or MATH 108 and MATH 109 or MATH 111 and MATH 112
- MATH 114 Calculus II (4 credits)
- MATH 200 Multi-Variable Calculus (4 credits)
- MATH 201 Bridge to Mathematical Proof (4 credits)
- MATH 230 Introduction to Applied Mathematics (4 credits)
- MATH 240 Linear Algebra (4 credits)
- MATH 301 Abstract Algebra I
- MATH 303 (4 credits) or (MATH 313 and STAT 314)
- MATH 325 Geometry (4 credits)
- MATH 450 Adv. Math: Exploration and Exposition (4 credits)

Allied requirements

- CISC 131 Introduction to Programming and Problem Solving (4 credits) or
  CISC 130 Introduction to Programming and Problem Solving in the Sciences (4 credits)

Music: Instrumental and Classroom (K-12) Co-Major

Co-major in Instrumental Music Education (K-12) and a Co-major in K-12 Music Education.

Note: A Co-major cannot be a stand-alone major.

Blocks 1, 2, 3 and 4 as listed at the beginning of this section

Plus Block 3 curriculum and instruction special methods courses and field experience III:

- EDUC 207 Early Elementary Music Methods (Pre K-2) (2 credits)
- EDUC 307 Intermediate Elementary Music Methods (Grades 3-5) (2 credits)
- EDUC 314 Secondary Music Methods (Grades 6-12) (3 credits)
- EDUC 342 Field Experience III: Music (0 credit)
- EDUC 418 Choral/Instrumental Music Methods (2 credits)

Plus the following Instrumental Concentrations:

- EDUC 218 Teaching Techniques for the Brass Family (2 credits)
- EDUC 220 Teaching Techniques for the Percussion Family (2 credits)
- EDUC 221 Teaching Techniques for the Woodwind Family (2 credits)
- EDUC 324 Teaching Techniques for the String Family (2 credits)
- EDUC 362 Vocal Pedagogy for Singers (1 credit)
- MUSC 354 Advanced Conducting and Materials: Instrumental Concentration (2 credits)

Plus:

- MUSC 001 Student Convocation Hour (0 credits) (6 semesters)
- MUSC 101 Piano Skills I (1 credit)
- MUSC 102 Piano Skills II (1 credit)
- MUSC 113 Musicianship & Theory I (4 credits)
- MUSC 117 Historical Survey of Music in Western Culture (2 credits)
- MUSC 201 Piano Skills III (1 credit)
- MUSC 202 Piano Skills IV (1 credit)
- MUSC 230 Music of the United States: Aural and Written Traditions (4 credits)

Students for whom piano or organ is the primary instrument will take the following courses in lieu of MUSC 101, 102, 201, and 202:

- MUSC 192 Technical Skills for Keyboard Majors (1 credit)
- MUSC 292 Functional Skills for Keyboard Majors I (1 credit)
- MUSC 293 Functional Skills Keyboard Majors II (1 credit)

- MUSC xxx Piano Elective (1 credit) to be chosen from the following: MUSP 121, 131 (organ majors only), 135 (piano majors only), 153, MUSN 171, 172, 182, or MUSW 501

Plus:

- MUSC 212 Musicianship and Theory II (4 credits)
- MUSC 213 Musicianship and Theory III (4 credits)
- MUSC 231 Introduction to Conducting I (1 credit)
- MUSC 233 Music of the World: Aural and Written Traditions (4 credits)
- MUSC 412 Music History and Literature of the Western European Concert Tradition, Classical to Current Era (4 credits)
- MUSN 181, 185 or 186 Ensemble (6 semesters) (0 credits each semester)*
- MUSP 3xx Performance studies (6 semesters) (2 credits each semester)
- Aural-Skills Proficiency I (0 credits)
- Piano Proficiency (0 credit)
- Aural-Skills Proficiency II (0 credits)
- Level I Recital (0 credit)
- Level II Recital (0 credit)

*Guidelines for choosing an ensemble:

- Students must spend 6 semesters in a large instrumental ensemble.
- Instrumental majors must spend at least 6 semesters in MUSN 181, 185 or MUSN 186.

Allied Requirements:

- PHYS 105 Musical Acoustics (4 credits)

Music: Vocal and Classroom (K-12) Co-Major

Co-major in Vocal Music Education (K-12) and a Co-major in K-12 Music Education.

Note: A Co-major cannot be a stand-alone major.

Blocks 1, 2, 3 and 4 as listed at the beginning of this section

Plus Block 3 curriculum and instruction special methods courses and field experience:

- EDUC 207 Early Elementary Music Methods (Pre K-2) (2 credits)
- EDUC 307 Intermediate Elementary Music Methods (Grades 3-5) (2 credits)
- EDUC 314 Secondary Music Methods (Grades 6-12) (3 credits)
- EDUC 342 Field Experience III: Music (0 credit)
- EDUC 418 Choral/Instrumental Music Methods (2 credits)

Plus the following for Vocal Concentrations:

- EDUC 176 Diction for Singers (2 credit)
- EDUC 324 Teaching Techniques for the String Family (2 credits)
- EDUC 362 Vocal Pedagogy for Singers (2 credits)
- MUSC 355 Advanced Conducting and Materials: Vocal Concentration (2 credits)

Plus:

- MUSC 001 Student Convocation Hour (0 credits) (6 semesters)
- MUSC 101 Piano Skills I (1 credit)
- MUSC 102 Piano Skills II (1 credit)
- MUSC 113 Musicianship and Theory I (4 credits)
- MUSC 117 Historical Survey of Music in Western Culture (2 credits)
- MUSC 201 Piano Skills III (1 credit)
- MUSC 202 Piano Skills IV (1 credit)
- MUSC 230 Music of the United States: Aural and Written Traditions (4 credits)

Students for whom piano or organ is the primary instrument will take the following courses in lieu of MUSC 101, 102, 201, and 202:

- MUSC 192 Technical Skills for Keyboard Majors (1 credit)
- MUSC 292 Functional Skills for Keyboard Majors I (1 credit)
- MUSC 293 Functional Skills Keyboard Majors II (1 credit)
- Piano Elective (1 credit) to be chosen from the following: MUSP 121, 131 (organ majors only), 135 (piano majors only), 153, MUSN 171, 172, 182, or MUSW 501

Plus:

- MUSC 212 Musicianship and Theory II (4 credits)
- MUSC 213 Musicianship and Theory III (4 credits)
- MUSC 231 Introduction to Conducting I (1 credit)
- MUSC 233 Music of the World: Aural and Written Traditions (4 credits)
- MUSC 412 Music History and Literature of the Western European Concert Tradition, Classical to Current Era (4 credits)

- MUSN 142 or 160 Ensemble (6 semesters) (0 credits each semester)*
- MUSP 3xx Performance studies (6 semesters) (1 credits each semester)
- Aural-Skills Proficiency I (0 credits)
- Piano Proficiency (0 credits)
- Aural-Skills Proficiency II (0 credits)
- Level I Recital (0 credits)
- Level II Recital (0 credits)

***Guidelines for choosing an ensemble:**

- Students must spend 6 semesters in a large choral ensemble.
- Voice majors must spend at least 4 semesters in MUSN 142 or MUSN 160.

Allied Requirements:

- PHYS 105 Musical Acoustics (4 credit hours)

Physics (9-12) Co-Major

Co-major in Physics (9-12) plus a Co-Major in Middle/Secondary Education

Note: A Co-major cannot be a stand-alone major.

Note: Students have the option of adding the General Science (5-8) licensure

Blocks 1, 2, 3 and 4 as listed at the beginning of this section

Plus Block 3 curriculum and instruction special methods course and field experience III:

- EDUC 318 Curriculum and Instruction for Science (5-12) (4 credits)
- EDUC 344 Field Experience III: Science (0 credit)

Plus:

- CISC 130 Introduction to Programming and Problem Solving in the Sciences (4 credits) or CISC 131 Introduction to Programming (4 credits)
- MATH 113 Calculus I (4 credits)
- MATH 114 Calculus II (4 credits)
- MATH 200 Multivariable Calculus (4 credits)
- MATH 210 Introduction to Differential Equations and Systems (4 credits)
- PHYS 211 Introduction to Classical Physics I (4 credits)
- PHYS 212 Introduction to Classical Physics II (4 credits)
- PHYS 215 Foundations of Modern Physics: From the Atom to the Big Bang (4 credits)
- PHYS 225 Applications of Modern Physics: From the Atom to the Diode (4 credits)

Plus 4 credits from the following:

- PHYS 323 Methods of Experimental Physics (4 credits)
- PHYS 325 Methods of Computational Physics (4 credits)
- ENGR 481 Engineering Design Clinic II

Plus:

- Eight additional Physics elective credits.

Plus:

- Eight additional Physics or Allied elective credits.

Plus:

- Demonstrated competence on all required state standards

Physics Elective Courses:

- One of PHYS 104 Astronomy (4 credits) or PHYS 105 Musical Acoustics (4 credits).
- Any PHYS course numbered 150 or above.

Allied Electives Courses:

- Biology courses at or above BIOL 207.
- Chemistry courses at or above CHEM 109.
- Engineering courses at or above ENGR 100.
- Geology courses at or above GEOL 111.
- Mathematics courses at or above MATH 300

The Physics co-majors requirements listed above fulfill the requirements for a major in Physics (B.A.). See Physics section in the catalog.

Social Studies (5-12) Co-Major

Co-Major in Social Studies (5-12) (Economics, Geography, History, Political Science, Psychology, or Sociology) with a Co-Major in Middle/Secondary Education

Note: A Co-major cannot be a stand-alone major.

Blocks 1, 2, 3 and 4 as listed at the beginning of this section

Plus Block 3 curriculum and instruction special methods course and field experience III:

- EDUC 319 Curriculum and Instruction for Social Studies (5-12) (4 credits)

- EDUC 346 Field Experience III: Social Studies (0 credit)

Plus:

- ENVR 151 Environmental Sustainability (4 credits)
- POLS 104 Government and Politics (4 credits)
- PSYC 111 General Psychology (4 credits)
- SOCI 100 Introduction to Sociology (4 credits)
- SOCI 301 General Anthropology (4 credits)

Plus four credits from the following:

- ECON 211 Current Economic Issues (4 credits)
- ECON 251 Principles of Macroeconomics (4 credits)

Plus four credits from the following:

- HIST 111 Origins of the Modern World to 1550 (4 credits)
- HIST 112 The Modern World Since 1550 (4 credits)
- HIST 115 The World Since 1900 (4 credits)

Plus four credits from the following:

- HIST 113 Early America in Global Perspective (4 credits)
- HIST 114 The Modern U.S. in Global Perspective (4 credits)

Plus four credits from the following:

- HIST 117 Latin America in Global Perspective (4 credits)
- HIST 118 The Middle East and North Africa in Global Perspective (4 credits)
- HIST 119 East Asian Civilizations in Global Perspective (4 credits)
- HIST 240 Foundations of Chinese Civilization (4 credits)
- HIST 241 The History of Modern China (4 credits)
- HIST 244 Modern East Asia (4 credits)
- HIST 253 Cities of the Middle East (4 credits)
- HIST 348 Japan: History through Literature (4 credits)
- HIST 349 History of the Ottoman Empire (1300 to 1922) (4 credits)

Plus four credits from the following:

- GEOG 111 Human Geography (4 credits)
- GEOG 113 World Geography (4 credits)

Plus:

Twenty-four additional credits in courses in one of the social science disciplines (economics, geography, history, political science, psychology, or sociology). Choice of these courses is subject to the approval of the department involved.

To complete a major in one of the Social Science disciplines, contact the chair of the department.

World Language and Cultures Education (K-12) Co-Major

Major in French (K-12), German (K-12), or Spanish (K-12) with a Co-Major in K-12 World Language and Cultures

Note: A Co-major cannot be a stand-alone major.

Note: Students wishing to be licensed to teach World Language and Cultures K-12 in the state of Minnesota must demonstrate advanced level speaking proficiency (as defined in the American Council on the Teaching of Foreign Languages [ACTFL] Proficiency Guideline) in both English and in the target language.

Blocks 1, 2, 3 and 4 as listed at the beginning of this section

Plus Block 3 curriculum and instruction special methods course and field experience III:

- EDUC 380 Curriculum and Methods for World Language and Cultures (K-12) (4 credits)
- EDUC 347 Field Experience III: World Language and Cultures (0 credit)

Plus:

World Languages candidates must arrange to pass the Oral Proficiency Interview (based on ACTFL Guidelines). For information regarding this, contact the Field and Clinical Placement Manager in the School of Education.

Plus a major in French, German, or Spanish:

French

World Language & Culture Requirements- French Candidates must earn a major in French and must successfully complete an Oral Proficiency Interview (ACTFL) prior to Clinical Practice.

28 credits numbered FREN 300 and above with a minimum of eight (8) credits in each of the following areas:

- Oral and Written Language
    - FREN 300 Advanced Oral & Written French I (4 credits)
    - FREN 371 French Conversation (4 credits)
- Culture and Civilization
    - FREN 311 French Civilization I (4 credits
    - FREN 312 French Civilization II (4 credits
    - FREN 3xx/4xx culture-focused topics courses (4 credits)
- Literature
    - FREN 301 French Poetry (4 credits)
    - FREN 309 Introduction to French Language (4 credits)
    - FREN 402 The French Novel (4 credits)

German

World Language & Culture Requirements- German Candidates must earn a major in German and fulfill all requirements for the German major. This double major can be completed in four years.

28 credits numbered GERM 300 and above + 4 credits in a neighboring field with a German cultural component. A minimum of 6 credits in German Literature. No more than 12 credits may be in the area of advanced language skills.

Sample Courses:

- GERM 301 German in the Community (4 credits)
- GERM 311 Conversation & Composition (4 credits)
- GERM 312 Germ Lit: Amidst Historic Upheaval (4 credits)
- GERM 315 Influential Ideas in Non-Fiction German (4 credits)
- GERM 320 Contemporary Germany & Current Events (4 credits)
- GERM 341 Highlights of German Literature (4 credits)
- GERM 350 Genre Studies in German Literature (4 credits)
- GERM 440 Introduction to Business German and German Business (4 credits)

Additional credits may be required, please consult the German program director.

Spanish

32 credits numbered SPAN 300 and above.

All students must take:

- SPAN 300 Advanced Spanish Grammar (4 credits)
- SPAN 301 Advanced Written Spanish & Culture (4 credits)
- SPAN 305 Spanish Oral Expression & Culture (4 credits)

Plus:

- SPAN 315 Hispanic Linguistics (4 credits)
- SPAN 331 Survey of Spanish Culture & Civilization - or - SPAN 332 Survey of Latin American Culture & Civilization (4 credits each)
- SPAN 335 Intro to Spanish Literature (4 credits)
- An elective 340 or higher or other elective as approved by the chair of Modern and Classical Languages.

Additional credits are required, please consult the "Major in Spanish" section of the catalog for more details on following the requirements for either the 'Cultural and Literary Studies' track or the 'Linguistics and Applied Language Studies' track.

Note: Course numbers do not necessarily appear in block sequence.

General Science Concentration

Students have the option of adding the General Science (5-8) licensure to 9-12 Chemistry, Life Science, or Physics by taking the following courses:

- BIOL 101 General Biology (4 credits)
  or
- BIOL 207 Genetics, Ecology,and Evolution (4 credits) and BIOL 208 Biological Communication and Energetics (4 credits) and BIOL 209 Biology of Sustainability (4 credits)

Plus:

- PHYS 101 Physics for the Liberal Arts (4 credits)
  or
- PHYS 109 General Physics I (4 credits) and PHYS 110 General Physics II (4 credits)
  or
- PHYS 211 Introduction to Classical Physics I (4 credits) and PHYS 212 Introduction to Classical Physics II (4 credits)

Plus:

- GEOL 111 Introductory Physical Geology or one of GEOL 110, 113, 114, 115 (4 credits each)

PHYS 104 Astronomy (4 credits)

Special Education

The Department of Special Education offers undergraduate and graduate programs for people who want to make a difference in the lives of individuals with disabilities.

Students who become special educators through the University of St Thomas are part of a proud tradition that goes back over three-quarters of a century. Students complete programs that embrace the liberal arts; emphasize socioculturally sustaining, evidence-based, high-leverage, and ethical practices; and prepare highly effective educators dedicated to the success of all learners.

Students learn to assess, evaluate, identify needs, design instruction, teach, and monitor progress for individuals with disabilities in a variety of areas, including academics, behavior, cognitive, communication, functional, and social-emotional skills. The major prepares students to promote excellence, lead, connect with communities, and inspire change so that individuals with disabilities have inclusive opportunities and receive a high-quality education.

Upon completing the major, students will be prepared to work with individuals with special needs in a variety of settings including but not limited to educational settings, clinical therapy settings, group homes, transition programs, and work sites supporting individuals with disabilities. There are abundant opportunities for employment in these areas.

Our graduate programming is focused on helping adults obtain a special education teaching license and the undergraduate major provides students with a foundation for working towards an optional special education teaching license. For students not pursuing the license option, it is highly recommended that they pursue a double-major to ensure they meet minimum credit requirements for a Bachelor of Science degree.

Due to the variety of options available, it is suggested that students considering an undergraduate major in special education contact a program advisor in the School of Education as early as possible in their college careers. Ongoing state licensure rule changes make careful planning particularly important for students choosing the optional license "add-on".

As an alternative to the major, students may choose to pursue a Special Education Exceptionalities Minor. This would be a good option for undergraduates who are Teacher Education majors, as well as those in related fields who want to expand their knowledge and their skills with regard to children/youth with disabilities and exceptionalities.

Admission to the Program

Students apply for admission to the major program while enrolled in EDUC 210. Criteria for admission to the education program include:

- Cumulative GPA of at least 2.75 for all credits earned at UST
- Positive recommendations based on a department committee review of a personal essay

Retention in the Program

Students accepted into the program must:

- Maintain a 2.75 GPA
- Earn a grade of C or better in all education courses
- Demonstrate ability to consistently exhibit all professional dispositions
- Successfully complete program Assessments at Transition Points
- For optional licensure path: Show evidence of satisfactory field experiences
- For optional licensure path: Licensure candidates will need to pass any state mandated assessments by the time of program completion to apply for licensure in the state of Minnesota. Licensure candidates will also need to take and pass the edTPA, if required by the state

The department reserves the right to dismiss candidates from the licensure programs based on violations of the professional dispositions standards.

Major in Special Education (B.S.)

8 courses @ 4 credits each = 32 credits

- **EDUC 210** Education: Issues and Policies (4 credits)
- **SPUG 250** Fundamentals of Special Education: Exceptionality, Diversity, Equity and Inclusion (cross-listed with SPED 750 / REDP 631; 4 credits)
- **SPUG 316** Fundamentals: Students with Mild to Moderate Needs (cross-listed with SPED 716 / REDP 621; 4 credits)
- **SPUG 414** Professional Practice: Collaboration, Co-teaching, and

Educational Technology (cross-listed with SPED 714 / REDP 624; 4 credits)
- SPUG 485 Applied Behavior Analysis: Behavior Interventions and Learning Environments (cross-listed with SPED 785 / REDP 625; 4 credits)
- SPUG 445 Educational Assessment, Evaluation, and Individualized Planning for Diverse Learners (cross-listed with SPED 645 / REDP 622 & 623; 4 credits)
- SPUG 417 Elementary Academic Interventions and Literacy (cross-listed with SPED 717 / REDP 627 & 628; 4 credits)
- SPUG 418 Secondary Academic Interventions and Transitions (cross-listed with SPED 718 / REDP 629 & 630; 4 credits)

Optional License Add On

Undergraduate majors who wish to become a licensed special education teacher must complete "optional" special education methods courses.

The Special Education Department offers one license option at the undergraduate level:

- Academic Behavior Strategist (ABS)

Undergraduate majors who pursue the license option must complete an additional special education methods course and a student teaching experience:

- SPUG 419 Methods: Social, Emotional & Behavioral (with embedded Field Experience III) (4 credits)
- SPUG 490: Student Teaching and Seminar: Special Education (8 credits)

The purpose of this course is to provide a practicum in an educational setting working with students with disabilities that addresses competencies required for special education licensure. This course provides documentation of competencies and practical experiences gleaned from coursework and 100 hours of fieldwork experiences. An initial teaching license requires a minimum 12-week student teaching experience.

Optional Teacher Education Minor

Undergraduate majors who wish to become a licensed special education teacher must complete a Teacher Education minor. The courses in the Teacher Education minor cover the Minnesota Standards of Effective Practices standards.

Note: EDUC 210 part of SPUG Major and EDUC Minor)

- EDUC 330 Psychology of Teaching and Learning + Field Experience II (4 credits)
- EDUC 329 Diversity & Equity in Education (4 credits)
- EDUC 350/TEGR 550 Language Development, Literacy & Literature I (4 credits)
- EDUC 370/TEGR 570 Language Development, Literacy & Literature II (4 credits)

Special Education Exceptionalities Minor

20 credits

The special education exceptionalities minor supports the development of knowledge, skills, and dispositions for those adult learners who will be facilitating the learning and development of preschoolers/children/youth with disabilities, or other areas of diversity. This minor is an option for undergraduates who are teacher education majors, and those in related fields who want to expand their knowledge and skills with children/youth with disabilities and exceptionalities.

Courses required (12 credits):

- SPUG 414 Collaboration Skills for School Professionals (4 credits)
- SPUG 250 Survey of Exceptionality (4 credits)
- SPUG 485 Behavior Management (4 credits)

Choose two additional courses from the following (8 credits):

- SPUG 316: Fundamentals for Students with Mild to Moderate Needs (4 credits)
- SPUG 419 Social, Emotional, and Behavioral Interventions (4 credits)
- SPUG 421 Introduction to the Education of Twice Exceptional and Underserved GCT Learners (4 credits)
- SPUG 478: Fundamentals for Preschoolers (4 credits)

Student Teaching and Seminar

SPUG 490: Student Teaching and Seminar: Special Education (8 credits)

The purpose of this course is to provide a practicum in an educational setting working with students with disabilities that addresses competencies required for special education licensure. This course provides documentation of competencies and practical experiences gleaned from coursework and 100

hours of fieldwork experiences. An initial teaching license requires a minimum 12-week student teaching experience.

Special Education Undergraduate Courses

SPUG 250 Fundamentals Special Ed (4 credits)
The purpose of this course is to overview special education and specific exceptionalities and diversity. It will examine the theories, legal mandates, definitions, and terminology related to special education. This course provides information about characteristics of individuals with exceptionalities including but not limited to: gifted and talented, autism spectrum disorder, learning disabilities, emotional behavioral disorders, developmental disabilities, sensory disabilities, early childhood special education, other health disorders, and speech and language disorders.

SPUG 316 Fund: Stu w/Mild-Mod Needs (4 credits)
The purpose of this course is to provide an overview to the educational disabilities of autism spectrum disorder (ASD), developmental disabilities (DD) including developmental cognitive disabilities (DCD), emotional or behavioral disorders (EBD), specific learning disabilities (LD) and other health disorders (OHD). This course covers history, definitions, eligibility criteria, characteristics, etiology, and professional organizations and resources. This course provides fundamental information about individualized education program (IEP) development, use of assistive technology (AT), and contemporary issues in the field.

SPUG 402 Comm & Soc Interventions (4 credits))
The purpose of this course is to learn to assess, evaluate, identify needs, develop goals and objectives, design intervention plans, monitor effectiveness and adjust programming for individuals with communication and social skill needs. This course provides an overview of typical social and communication development, as compared and contrasted to the delayed and disordered social and communication development of individuals who experience challenges, and the impact of communication and social differences on learning and behavior.

SPUG 403 Methods Autism Spec Dis (4 credits)
The purpose of this course is to develop an understanding of ways that autism spectrum disorder may effect an individual's social communication skills, behaviors, thinking and perceiving, sensory processing, motor skills, vocational skills, academic skills, organizational skills, and other functional skills. This course provides the skills necessary to develop, implement, and evaluate the effectiveness of an Individual Education Plan (IEP) for an individual with ASD utilizing evidence-based practices and methodologies for teaching students with ASD.

SPUG 414 Collab, Co-teach & Technology (4 credits)
The purpose of this course is to develop professional practices including developing an ethic of collaboration and the knowledge and skills needed to effectively collaborate with faculty, administrators, students, para-educators, families, and community members; applying collaboration practices when co-teaching, consulting, developing interagency agreements, and supervising paraprofessionals; and utilizing current educational technology in the classroom to impact student learning. This course provides these professional practices in the context of program planning and implementation for students receiving special education services.

SPUG 417 Elem Acad Interv & Literacy (4 credits)
The purpose of this course is to provide a comprehensive overview of major models and instructional approaches related to (a) validated teaching practices and evidence-based instruction (b) teaching reading and writing to students with mild disabilities in inclusive elementary classrooms (c) teaching mathematics to students with mild disabilities in inclusive elementary classrooms. This course provides students the opportunity to critically examine and reflect on ways in which teachers can develop systematic instructional programs to support a diverse population of learners in an era of inclusion and standards utilizing research-based interventions.

SPUG 418 Sec Acad Interv and Transition (4 credits)
The purpose of this course is to address the knowledge and understanding of the academic, social and functional needs of students at the secondary level identified as having mild to moderate disabilities. This course provides current evidence-based practices for modifying and adapting content-area curricula with an emphasis on writing, math, and reading at the secondary level along with transition planning, assessment and the development of individualized education programs (IEP) for secondary-level students.

SPUG 419 Methods: Soc Emot Behav Interv (4 credits)
The purpose of this course is to examine the social, emotional, and behavioral development in students with mild to moderate disabilities and corresponding range of interventions utilizing a 3-tiered prevention model for supporting social, emotional, and behavioral competence. This course

provides knowledge and skill in designing, implementing and evaluating social, emotional, and positive behavioral interventions for universal, secondary, and individual positive behavioral support.

SPUG 440 Methods:EC Spec Education (4 credits)
The purpose of this course is to facilitate development of effective teaching skills for professionals in Early Childhood Special Education (ECSE), birth-6 with an emphasis on using evaluation and assessment information to plan developmentally appropriate individualized programs in the least restrictive environment (LRE) for children with a variety of disabling conditions. This course provides an emphasis on activity and play-based intervention and special methods for use with children with motor, sensory, health, communication, social-emotional and/or cognitive disabilities.

SPUG 444 Fund: Infants/Toddlers (4 credits)
The purpose of this course is to provide a foundation for working with infants and toddlers with disabilities and their families in natural environments in early intervention programs (birth-3). This course provides an emphasis on early childhood atypical and typical development, family-centered care, activity-based intervention in natural environments, curriculum for birth-3 programs, planning and conducting family-centered home visits, community services, and transitions to ECSE (ages 3-6) programs.

SPUG 445 Educational Assessment (4 credits)
The purpose of this course is to examine the technical adequacy and educational viability of assessment instruments in determining screening, evaluation, eligibility, student progress monitoring and data-based instructional planning and individualized education program (IEP) planning practices for students with educational disabilities. This course provides practice with a variety of measures, including standardized instruments in test administration, scoring and interpretation, and informal and observational assessment data collection and reporting.

SPUG 451 Positng & Hdlg & AAC Strat (4 credits)
The purpose of this course is to provide a detailed discussion of normal gross motor, fine motor, oral motor and sensory development, followed by examination of the implications of the development of abnormal movement, sensory dysfunction, and augmentative and alternative communication (AAC). This course provides current positioning and handling theories and techniques and feeding interventions along with an overview of sensory defensiveness and optimal arousal states critical to successful learner performance. Practicum experience with classmate partners and children with physical or sensory impairment includes transfer and lifting techniques and equipment usage. . This course includes an examination of the principles and procedures involved in AAC assessment as well as practical guidance on designing and implementing intervention strategies that meet AAC needs and improve the lives of individuals who have severe communication disorders.

SPUG 454 Methods: Dev Disabilities (4 credits)
The purpose of this course is to examine philosophies, perspectives, methods and materials for supporting the learning of students with developmental disabilities who have extensive or pervasive needs for support. This course provides learning characteristics, curricular approaches and models, systematic instructional strategies, adaptations, friendships and other natural support networks, self-determination, use of technology, planning for transition and potential services for adults.

SPUG 478 Fundamentals: Preschoolers (4 credits)
The purpose of this course is to provide a foundation for working with preschoolers and their families in early childhood and early childhood special education programs with an emphasis on typical and atypical early-childhood development, developmentally appropriate practice, and developing curriculum that is functional, appropriate, adaptable and fun. This course provides an opportunity to create curriculum units that enhance child development and are adapted for children with a variety of disabilities.

SPUG 485 ABA: Behavior Interv & Lrn Env (4 credits)
The purpose of this course, grounded in applied behavior analysis and research based interventions, is to explore positive behavior interventions and supports for promoting acceptable behavior in educational settings where individuals learn. This course provides skills to set up optimal learning environments to teach and support acceptable behaviors.

SPUG 490 Student Teach & Seminar SPED (8 credits)
The purpose of this course is to facilitate development of effective teaching skills for professionals in special education with an emphasis on using evaluation and assessment information to plan developmentally appropriate individualized programs in the least restrictive environment (LRE) for children with special needs. As the culminating experience of the teacher licensure program for those in the University of St. Thomas (UST) Special Education Licensure Program, clinical practice

provides the opportunity for students to apply their knowledge and skills of teaching and learning with students with disabilities. Clinical practice includes 100 hours of field experiences and 12 weeks of student teaching. The clinical practice occurs in an educational setting that provides an opportunity to work with students with disabilities according to state license criteria. Accompanying seminars support examination of applied use of evidence-based practices. Prerequisites: Special Education Major and Teacher of Education Minor completed

SCHOOL OF ENGINEERING

Program Overview

O'Shaughnessy Science Hall (OSS) 100, (651) 962-5750

https://engineering.stthomas.edu

Faculty:
Weinkauf (dean), Abraham, Acton, Bach, Besser, Capa Salinas, Forliti, Gagnon, Hennessey, Jalkio, Kabalan, Kang, Koerner, Lee, Lederle, Ling (Ali), Ling (Tiffany), Min, Moustafa, Mowry, Nelson-Cheeseman, Nepal, Orser, Salamy, Secord, Shepard, Welt, Wentz, You.

Faculty from other departments and adjunct faculty from industry teach specialized courses.

What is Engineering?

The value of an engineering education is a lifetime of opportunity. Engineering is the bridge between the ever-expanding technological frontier and today's societal needs. Engineers use design, science, mathematics, creativity, and business analysis to create solutions to improve almost every facet of human life. The production of food, energy, clean water, medicine, cars, transportation systems, building materials, robotic machines, computers, communications equipment, electronic devices, paper, plastics, and even clothing fibers is all driven by engineers. Engineering is central to the creation of new technologies such as medical devices, renewable energy, efficient engines, advanced materials, micro-machines, biotechnology, and nanotechnology. Engineers are also leaders in broader fields such as business, medicine, patent law and government.

About Engineering at the University of St. Thomas:

Our mission is to provide an applied, values-based learning experience that produces well rounded, innovative engineers and technology leaders who have the technical skills, passion, and courage to make a difference. Our civil, computer, mechanical, and electrical engineering programs are accredited by the Engineering Accreditation Commission of ABET, Inc.(www.abet.org)

Program outcomes and objectives are designed to provide the graduate with a rigorous engineering experience balanced with the perspective of a liberal arts foundation. The educational objectives of each engineering program describe what we expect our graduates to accomplish in their work after graduation, as follows:

1. Create with Engineering Skills: Use engineering skills and principles appropriate to the major to create systems, products, and services that meet needs of people and improve the quality of their lives, and use resources wisely.
2. Grow in a Learning Profession: Increase personal knowledge and skill through graduate or professional study, appropriate certifications, and work assignments.
3. Contribute through Citizenship: Contribute time, knowledge, and skills to the profession, community, and world.
4. Lead through One's Work: Serve as a team member or team leader, demonstrating ethical behavior, social sensitivity, and professional responsibility.

All said, the students stand at the center of our work. Our faculty are dedicated teachers and practitioners and work to foster a vibrant educational environment. We strongly believe that an Engineering education is about rolling up your sleeves, getting your hands dirty on projects, and wrapping your mind around ideas which have the potential to change our world. Graduates will demonstrate competence in a variety of skills that enhance their ability to solve problems in diverse ways to meet the needs of the global community. Graduates will also develop teamwork and effective communication skills while gaining a comprehensive understanding of the design process and engineering systems.

The School of Engineering curricula and programs are designed to foster an engaging engineering experience for our students. The year-long Senior Design Clinic pairs teams of students with members of industry in creating a prototype solution to a real

technical problem in the field. Our industry partners in the Twin Cities area sponsor numerous co-op and summer internships for our students. Beyond the theory developed in the lectures, the Civil, Electrical, Mechanical and Computer Engineering curricula are designed to continually develop the hands-on skills of our students. From the freshman to senior level laboratories, students continue to gain a working knowledge of the modern engineering tools necessary to solve advanced technical problems.

Additional Engineering Opportunities

Dual Degree Electrical Engineering and Physics

The dual degree program in electrical engineering and physics is designed for students interested in combining lab skills and theory with engineering principles and practice. Students in this dual program will have skills to prepare them for a wide variety of opportunities in industry or advanced graduate education.

Upon completing, students receive a B.A. in Physics and a Bachelor of Science in Electrical Engineering.

Students must complete the appropriate Engineering and Physics Major Requirements and the respective Engineering and Physics allied requirements.

See Physics

Dual Degree in Engineering and General Business Management

The dual degree program in engineering and general business management is designed for students with an interest in both engineering and business. The program combines the applied engineering concepts of engineering with knowledge of the financial, marketing and management disciplines of the business program. Students in this dual program will have skills to prepare them for a wide variety of opportunities in industry or advanced graduate education.

Upon completing, students receive a B.A. in Business Administration and a Bachelor of Science in Mechanical, Electrical, Computer, or Civil Engineering.

Students must complete the appropriate Engineering and Business Major Requirements and the respective Engineering and Business allied requirements. This dual degree requires approximately five years to complete.

See Business

Fast Track Master of Science in Mechanical (MSME) and Electrical Engineering (MSEE)

A fast track option to obtain a Master of Science in Mechanical (MSME) or Electrical (MSEE) Engineering is available for students earning a Bachelor of Science in Mechanical (BSME),Electrical (BSEE), or Computer (BSCPE) Engineering.

See Fast Track Master's:
https://engineering.stthomas.edu/ug-experience/degrees-programs/fast-track-masters/index.html

International Engineering Program (IEP), Dual Degree Program with Engineering and German

The dual degree program in engineering and German is designed for students pursuing an international career. It provides engineers with language skills, international experience, and intellectual competence. Students in this dual program will have skills to prepare them for a wide variety of opportunities in industry.

Upon completing, students receive a B.A. in German and a Bachelor of Science in Mechanical (BSME), Electrical (BSEE), Computer (BSCPE), or Civil Engineering (BSCE).

Students must complete the appropriate Engineering and German Major Requirements and the respective Engineering and German allied requirements. This dual degree requires approximately five years to complete.

Plans of study for dual degree programs are available online, through the German program director, or in the School of Engineering main Office.

For more information see: German: International Engineering Program (IEP)
or the German Engineering Dual Degree web page:
https://www.stthomas.edu/academics/undergraduate/german-engineering-dual-degree/

Majors in Engineering

Go to the major program pages for the following degrees:

- Civil Engineering (BSCE)
- Computer Engineering (BSCPE)

- Electrical Engineering (BSEE)
- Mechanical Engineering (BSME)

Minors in Engineering

Explore the available Engineering Minors:

- Minor in Biomedical Engineering
- Minor in Electrical Engineering
- Minor in Engineering Education
- Minor in Environmental Engineering
- Minor in General Engineering
- Minor in Mechanical Engineering
- Minor in Materials Science and Engineering

Engineering Undergraduate Courses

ENGR 100 Intro to Engineering Design (2 credits)
This course introduces students to the engineering disciplines and the design process through a semester-long design challenge. Students will gain improved self-awareness, empathy, and critical thinking skills; this will help them work as a team in a collaborative and inclusive environment to identify a need, interview clients, plan tasks and propose engineering solutions with consideration for the common good.

ENGR 123 Energy and the Environment (0 or 4 credits)
The course examines the core concepts of energy and power technologies. A hands-on laboratory will examine how refrigerators, swamp coolers, generators, turbines, car engines and solar panels work. The class covers how electricity from fossil fuels is generated and transported, and the status of the technology behind harnessing geothermal resources, solar power, fuel cells, wind power, and biomass energy. Students will be introduced to the 1st and 2nd laws of thermodynamics, trade-off charts and the design process. The cultural, social, and economic impacts of energy production are discussed as well as their effects on the environment. (This course is limited to non-majors or students with Freshman or Sophomore standing.)

ENGR 130 Fundamentals of ENGR for EDUC (0 or 4 credits)
This is a one-semester survey of engineering topics. Topics will span machine design, manufacturing, thermodynamics, electronics, computer programming, and chemical engineering. The course will have weekly lab sessions which will allow students to apply what they are learning from lectures in a hands-on setting. Emphasis will be placed on how the material is used by practitioners. Numerous examples will be given of how this material can be presented in a way that meets Minnesota education standards. Each topic unit will include a component dedicated to the historic and current relevance of the concepts and skills presented. Whenever appropriate, and feasible, guest lectures and field trips will be arranged. The goal of this course is to provide teachers with a short, hands-on introduction to a variety of engineering.

ENGR 150 Introduction to Engineering (0 or 1 credit)
This course introduces students to engineering fields, practicing engineers and hands-on engineering work. As they become acquainted with engineering occupations and experience their potential for creativity and fun, students will understand the value and applications of the required curriculum and be motivated and stimulated to pursue further engineering studies.

ENGR 160 Surveying (2 credits)
Introduction to differential leveling, coordinates systems, horizontal and vertical control networks, closure adjustments, area computations and earthwork volume computations.

ENGR 162 Intro to Engineering Graphics (1 credit)
This course covers graphical communication, computer-aided design for civil engineering applications, principles of projection and project design process for civil engineering applications.

ENGR 170 Mechanical Engineering Graphic (2 credits)
Through a combination of lectures, hands-on computer time, and design projects, students will learn to read, and create, engineering drawings and use computer-aided-design (CAD) terminology and technology. Topics covered will include the engineering design process, rapid prototyping, principles of projection, and introductory methods of representation and constructive geometry.

ENGR 171 Engineering Graphics & Design (0 to 4 credits)
Through a combination of lectures, hands-on computer lab time, and design projects, students will learn to read, and create engineering drawings and use computer-aided design (CAD) terminology and technology. Topics covered will include the engineering design process, rapid prototyping, principles of projection and introductory methods of representation and constructive geometry.

ENGR 172 CE Graphics & Methods (4 credits)
An introduction to civil engineering including familiarization with the various internal disciplines, reading and creating engineering drawings, and using computational methods to solve engineering problems. Through a combination of lectures (both instructor lead and guest appearances), hands-on computer lab time, and design projects, students will cover the project design process, principles of projection and graphical representation, and computational tools such as Microsoft Excel and Mathworks Matlab and how they can be used to assist problem-solving.

ENGR 175 Intro to Electrical & Comp Eng (2 credits)
A hands-on introduction to a variety of basic concepts in Electrical and Computer Engineering. The course includes lessons, labs, and projects that explore analog and digital electronics in both theory and practice. Students will develop proficiency in the basic tools and skills required for electrical and computer engineering projects and coursework, and gain insight into them as a potential major, minor, and/or career.

ENGR 220 Statics (0 to 4 credits)
Principles of statics including such topics as rigid bodies, equilibrium, equivalent systems of forces, 2D structures, distributed forces, centroids and centers of gravity, moments of inertia, friction, forces in beams & cables, and the principle of virtual work. Emphasis on applications with integrated labs/hands-on projects. Prerequisites: A minimum grade of C- in PHYS 211 and a processed Engineering (Electrical, Computer, Civil, Mechanical) or Physics major or minor declaration.

ENGR 221 Mechanics of Materials (0 to 4 credits)
Principles of deformable body mechanics including stress, strain, basic loading situations, transformations of stress and strain, beam theory, and energy methods. Emphasis on applications with integrated labs/hands-on projects. Prerequisite: A minimum grade of C- in ENGR 220

ENGR 222 General Dynamics (2 credits)
Principles of dynamics including such topics as kinematics of particles, Newton's Second Law, energy and momentum methods, plane motion of rigid bodies, forces and acceleration. Modern computing tools are used for analysis. (Prerequisite: C- or better in ENGR 220; C- or better or concurrent enrollment in MATH 210).

ENGR 230 Digital Design (0 to 4 credits)
Introduction to the design of digital logic. Topics include Boolean logic, design and optimization of combinational and sequential logic, Hardware Description Language (HDL), the use of field-programmable devices (FPGAs), logic hazards, electronic implementation of logic gates. Students will be expected to specify, design, simulate, construct, and test digital circuits and document all phases of the process.

ENGR 240 Circuit Analysis (0 to 4 credits)
Introduction to analog electrical circuits in the time and frequency domains. Circuit analysis techniques including nodal analysis and equivalence theorems will be covered and used to assess a variety of circuits in the time and frequency domains. Students will develop analysis and laboratory skills to analyze and test the operation of circuits composed of resistors, capacitors, inductors, and operational amplifiers. Prerequisites: Concurrent registration with or prior completion of PHYS 212 and a processed Engineering (Electrical, Computer, Civil, Mechanical) or Physics major or minor declaration. NOTE: Students who receive credit for ENGR 350 may not receive credit for ENGR 240.

ENGR 243 Individual Study (1 TO 4 credits)

ENGR 255 Fabrication Skills Lab (0 credits)
A hands-on lab providing instruction in fabrication skills used throughout the mechanical engineering curriculum. Training on safety and usage of manual mills, manual lathes, and a wide variety of woodshop equipment.

ENGR 269 Research (2 OR 4 credits)

ENGR 270 LabVIEW for Engineers (2 credits)
Through a combination of lecture, group discussion, hands on exercises, student presentations and a student project, students will learn to use LabVIEW for data acquisition, data analysis, instrument control and application development. This course that explores LabVIEW® as a programming tool. The student will learn the basics of programming including creating programs (VI's and sub-VI's), basic programming structures such as looping and branching, understand the basics of different data types and be able to perform data acquisition and data analysis (including file I/O). This course will prepare students to gather and analyze data for engineering applications.

ENGR 271 Roman Structures Engr. Society (2 TO 4 credits)
Modern Rome is a living tribute to the contributions made by the engineers of Ancient Rome and the Holy Roman Empire. Their legacies of art, architecture, public health innovations, design and construction techniques advanced the Roman rural society to an urban culture of well-defined principles and planning. The course will be conducted in Rome, Naples and Florence where many of these

examples still exist. On-site visits will be made in the above areas where discussions and observations can take place. Visits to two Italian universities for lectures will again be included; La Sapienza in Rome and Frederico II in Naples. Academic research will be presented by their instructors with discussion and comments from our students. We will evaluate examples in today's society and use ancient and modern Roman and Italy as our backdrop for these discussions.

ENGR 296 Topics (0 to 2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ENGR 297 Topics (2 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ENGR 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ENGR 305 Internship (0 credits)
This zero credit course is for co-curricular engineering practical training for undergraduate students in the School of Engineering.

ENGR 310 Intro to Biomed Engr (2 credits)
Students will learn the ways regulation impacts the design process of devices for human use. Topics covered include categories of devices and software, a discussion of regulatory implications for device design, the role of risk in the development of products, device verification and validation, submission for approval, and reimbursement. The course will follow development of a product from initial concept through risk assessments, requirement development, requirement verification, risk management report, and submission with a discussion of the impacts of clinical study design on submission method. As we walk through these aspects of product design, students will develop their product and document its performance as a medical device. Minimum grade of C- in ENGR 240 or ENGR 221

ENGR 311 Medical Device Manufacturing (2 credits)
Medical Device Manufacturing and Validation: This course will provide students with a broad knowledge of the Medical Device Manufacturing Industry and many of the processes and activities associated with it. Topics covered include categories of devices, the design process, FDA Regulations, quality control, design verification, clinical studies, transfer to production, manufacturing process validation, clean rooms, device sterilization, and related processes.

ENGR 312 Bioelectricity & Instrument (2 credits)
Bioelectricity studies how electrical signals propagate in solution and interact with excitable cells. This course will first investigate how ions in solution diffuse and move in the presence of an electric field to establish a resting cell membrane potential. The Hodgkin-Huxley electrical model of the membrane will be used to explain how action potential pulses are created and propagate in neurons. The cable equation and related length and time constants will allow students to answer questions related to the propagation velocity of neural signals. Students will link course concepts to active hands-on activities using conventional bioelectronics instrumentation. Instrumentation concepts include electrodes for measuring voltage in solution; low-noise amplification and analog-to-digital conversion; the electrocardiograph (ECG) and cardiac pacemaker; and the electroencephalograph (EEG). Prerequisites: C- in ENGR 240 or ENGR 350

ENGR 313 Medical Imaging (2 credits)
The goal of this course is to introduce important medical imaging modalities and discuss various image acquisition and processing techniques used in the medical field. Topics include underlying physics and mathematics for X-ray, ultra-sound imaging, computed tomography (CT), magnetic resonance imaging (MRI) and nuclear medicine imaging such as positron emission tomography (PET) are introduced. Students will also have opportunities to gain hands on experience processing medical images. Prerequisites: C- in ENGR 240 or ENGR 350

ENGR 314 Biomaterials in Engineering (0 to 4 credits)
This is an introductory course in the use of materials in the body, with some background in the science of the materials that are used as appropriate to the applications being discussed. This course will develop the necessary background to understand the properties of biomaterials, their applications and selection process for design and development of medical devices. The course will cover a variety of biomaterials, with an emphasis on structure-property relationships that enable their applications as medical devices. Biomaterial and body Interactions, biomaterial degradation, and their manufacturing and testing will also be discussed. This course will use a combination of lectures, case-

studies, guest lectures, student presentations, and tours. Prerequisite: C- or better in ENGR 221

ENGR 320 Machine Design & Synthesis (0 to 4 credits)
Focus is on advanced mechanics topics, failure theories (static and dynamic), and on an understanding of basic machine components. This course will develop the student's creative skills in conceptualizing machines to meet performance criteria by means of a design project. Machine designs will require the understanding and use of machine components such as springs, screws, bearings, basic 4-bar linkages, cams, and gears. Finally, a number of mini labs/workshops on topics that support the design project such as dynamic analysis software, machine component design, and design for manufacture are given. Prerequisite: A minimum grade of C- in (ENGR 170 or ENGR 171), ENGR 220 and ENGR 221, and satisfactory completion of ENGR 255 (or concurrent registration)

ENGR 322 Dynamics (0 to 4 credits)
Principles of dynamics including such topics as kinematics of particles, Newton's Second Law, energy and momentum methods, plane motion of rigid bodies, and forces and acceleration. Applied mathematics is used to solve resulting ordinary differential equations numerically with MATLAB. Emphasis on applications with integrated labs/projects. Prerequisites: Minimum of C- in CISC 130, ENGR 220, MATH 200, and MATH 210

ENGR 330 Microprocessor Architectures (4 credits)
Introduction to computer architecture and implementation of architectural features in terms of digital logic. Hardware components and relationships between hardware and software are covered. Tradeoffs between architectures and design approaches are be discussed. Prerequisite: A minimum grade of C- in both ENGR 230 and (CISC 130 or 131).

ENGR 331 Designing with Microprocessors (0 or 4 credits)
Topics include memory mapped I/O, timer applications (input capture, PWM), analog-to-digital, digital-to-analog conversion, interrupts, communication and bus protocols, clocking, low-power design and interface with sensors, actuators and other common microcontroller peripherals. This course has a major design project. Prerequisite: A minimum grade of C- in both ENGR 230 and (CISC 130 or 131).

ENGR 340 Signals and Systems (4 credits)
Analysis of continuous and discrete time systems using Fourier series, Fourier transform, and Z transforms. Frequency domain characteristics, filtering, modulation, effects of sampling and introduction to Artificial Intelligence are considered. Prerequisites: A minimum grade of C- in ENGR 240 and MATH 210

ENGR 342 Electromagnetic Fields/Wave (4 credits)
A continuation of PHYS 341. An introduction to the practical consequences of Maxwell's equations including propagation, reflection and absorption of electromagnetic waves. Applications include antennas, waveguides, transmission lines, and shielding from electromagnetic interference. Prerequisite: A minimum grade of C- in PHYS 341

ENGR 345 Electronics I (0 or 4 credits)
Analysis of electronic devices and circuits. Topics include Op Amps, Op Amp feedback, and OA applications, linear and non-linear transistor circuit models, single transistor amplifiers, and circuit design techniques. Applications include power electronics, amplifiers, active filters, and integrated frequency analysis/design. Prerequisites: A minimum grade of C- in ENGR 240 or 350

ENGR 346 Electronics II (4 credits)
Continuation of ENGR 345. Topics include network theorems applicable to feedback analysis, amplifier feedback analysis, amplifier frequency analysis, and select circuit topologies commonly found in op amps. Special topics covered include an introduction to switch mode power supplies and an introduction to electrical noise and noise sources. Prerequisite: A minimum grade of C- in ENGR 345

ENGR 350 Introduction to Electronics (0 to 4 credits)
This course provides scientists and engineers with a background in electrical circuits, electronics and electric machines. Topics include DC, AC and transient circuit analysis, AC 3-phase and power, frequency response and filters, operational amplifiers and active filter, and electric machines; magnetism, magnetic materials, magnetic circuits, DC and AC motors and generators. The course consists of lectures, demonstrations, discussions and an associated hands-on laboratory. Prerequisite: A minimum grade of C- in PHYS 112 or 212

ENGR 361 Engineering Materials (0 to 4 credits)
An introduction to materials and their properties. This course introduces students to the fundamentals of materials theory, properties and applications. Topics include properties and applications of metals, polymers, ceramics and composite materials. The course emphasizes characteristics of materials in manufacturing operations and service, including open-ended design issues. Offered in fall semester. Prerequisites: A minimum grade of C- in CHEM 109 (preferred), or CHEM 111 or CHEM 115

ENGR 362 Construc./Engr. Econ Analysis (0 or 4 credits)
Introduction to construction processes including construction planning, equipment, delivery methods, contract documents, procurement, construction methods, scheduling, critical path method, project management, estimating and safety. Construction of buildings, and transportation infrastructure including bridges, roads, rail and highways. Principles of engineering economy including cash flow analysis, cost, analysis and uncertainty. Prerequisites: MATH 113. ECON 251 recommended.

ENGR 363 Construction Materials (0 or 4 credits)
Introduction to construction materials commonly used in civil engineering projects, including aggregates, asphalt, concrete, fiber reinforced polymers, masonry, metals, and wood. For each material, topics will include material properties, specifications, laboratory procedures, and test equipment, with an emphasis on ASTM standards. Introduction to asphalt and concrete mix design. Prerequisites: A grade of C- or better in ENGR 221, DASC120, and either CHEM 109 or CHEM 111.

ENGR 364 Structural Analysis (4 credits)
Identification of loads and load paths through a structure. Analysis of internal loading, stress and deflection in trusses, beams and frames. Topics include shear and moment diagrams, influence lines, and determination of deflection through energy methods. Prerequisite: ENGR 221 and MATH 210 with C- or better.

ENGR 366 Soil Mechanics (0 to 4 credits)
Principles of soil mechanics and geotechnical engineering. Physical and mechanical properties of soils including, shear strength of soil, slope stability, soil stabilization, compaction, consolidation and stress analysis. Role of water in soils including permeability, drainage, and Atterberg limits. Theories related to and design of retaining structures. Design of retaining walls, footings, mat foundations and pile foundations. Engineering design will adhere to professional practice, current codes/standards, considerations for economics and safety. Prerequisites: A grade of C- or better in ENGR 221.

ENGR 368 Fluid Mechanics for CE (0 to 4 credits)
Introduction to the fundamentals of fluid mechanics in the context of civil engineering applications. Topics covered include hydrostatics and pressure variations in non-moving fluids, forces on submerged surfaces, conservation laws of flowing fluids (mass, momentum, and energy), potential flow and viscous flow, boundary layer theory, internal flow, external flow, open channel flow, drag and experimental uncertainty analysis. Hands-on engagement of lecture topics, practical hands-on skills, experimental design and measurement uncertainty analysis is integrated into course laboratory. Prerequisite: A grade of C- of better in MATH 210 and either CHEM 109 or CHEM 111.

ENGR 371 Manufacturing Prcs & Stat Cont (0 or 4 credits)
This course covers such basic principles as metal forming, metal cutting, plastic molding, and continuous processes. Students will learn statistical evaluation tools such as the meaning of population distributions, means, medians, regression analysis, and standard deviations. Statistical process control and acceptance testing in the context of modern manufacturing processes will be covered. Prerequisite: A minimum grade of C- in MATH 114 and ENGR 221 (or concurrent registration)

ENGR 381 Thermodynamics (0 to 4 credits)
A study of thermal and mechanical energy and their applications to technology. First law of thermodynamics (energy conservation); second law of thermodynamics (restrictions on energy transformations). Major topics include the analysis of closed and open (steady state and transient) systems, power cycles, thermophysical properties of substances humidity, dew point and other characteristics of non-reacting mixtures. Prerequisites: A minimum grade of C- in CHEM 115 or 109

ENGR 382 Heat Transfer (0 to 4 credits)
Introduction to the fundamentals of heat transfer in the context of engineering applications. The major topics to be covered include conduction, convection, and radiation. Students will solve steady and unsteady conduction heat transfer problems in both one-dimensional and multi-dimensional coordinate systems. Internal and external convection will be covered as well as heat exchangers and natural convection. Prerequisite: Grades of C- or higher in ENGR 381 and MATH 210

ENGR 383 Fluid Mechanics (0 to 4 credits)
Introduction to the fundamentals of fluid mechanics in the context of engineering applications. Topics covered include fluid properties, hydrostatics and pressure variations in non-moving fluids, buoyancy, conservation laws of flowing fluids (mass, momentum, and energy), dimensional analysis, boundary layers, internal flow, external flow, drag and lift. Experimental uncertainty analysis is integrated into the course lecture and lab. Also, the evaluation of turbomachinery and use of pump/blower curves is addressed. Prerequisite: Grade of C- or higher in ENGR 381 and MATH 200.

ENGR 384 Heat Transfer (0 to 4 credits)
Introduction to the fundamentals of heat transfer in the context of engineering applications. The major topics to be covered include conduction, convection, and radiation. Students will solve steady and unsteady conduction heat transfer problems in both one-dimensional and multi-dimensional coordinate systems. Internal and external convection will be covered as well as heat exchangers and natural convection. Prerequisite: Grades of C- or higher in ENGR 381, ENGR 383 and MATH 210.

ENGR 389 Research (2 OR 4 credits)

ENGR 393 Individual Study (1 TO 4 credits)

ENGR 410 Control Systs & Automation (0 to 4 credits)
An introduction to automation and single-input-single-output (SISO) control systems. Emphasis is placed on continuous-time control loop theory and the use of Laplace transforms to design and analyze control systems. Topics include system modeling, block diagram representation, stability, error analysis, and proportional-integral-derivative (PID) controller synthesis. Prerequisites: A minimum grade of C- in ENGR 240 or 350, MATH 210, CISC 130 or 131.

ENGR 411 Design for Additive Mfge (2 credits)
Additive manufacturing is creating a revolution in how parts are designed and created. This 2-Credit course covers metal and plastic additive manufacturing technologies and how they are changing the way design and manufacturing is happening in industry today. Topics include how the processes work, exploring generative design and topology optimization, business implications, and case studies of how companies are using additive manufacturing currently and in the future. Prerequisites: ENGR 220

ENGR 412 Composite Materials (2 credits)
This course is a practical introduction of composites, which are materials consisting of a mixture of different classes of materials such as polymers, metals, and ceramics where one component (the discontinuous phase) typically is embedded in the other (the matrix phase). Composites are literally everywhere; for example, fiber reinforced composites are used in a variety of applications including sports equipment, medical devices, and automotive and aerospace components. This course will investigate polymer-, ceramic-, and metal-matrix composites in order to dive into topics such as material selection, manufacturing processes, material property analysis, and design. While our focus will be on mechanical property improvements from composites, other properties such as electrical and thermal will be considered. Prerequisite: ENGR 361 (or concurrent registration).

ENGR 413 Introduction to Aerodynamics (2 credits)
This course builds on fundamental principles in thermodynamics and fluid mechanics with emphasis on their application to the understanding of lift and drag forces that develop on airfoils. Topics covered include conservation of mass, conservation of energy, boundary layers, inviscid flow theory, airspeed measurement, subsonic and transonic flows. Further, the course intends to expose students to the historical airfoil data and the limitations of thin airfoil theory as time allows. Prerequisites: A grade of C- or better in ENGR 381, MATH 200 and ENGR 383 (or concurrent registration).

ENGR 414 Applied Thermodynamics (2 credits)
Brief review of basic thermodynamics. Cycle analysis of internal combustion engines, gas turbines, and steam turbines. Cycles used for refrigeration. Properties of ideal gas mixtures. Combustion system analysis including stoichiometry, heat of combustion, and adiabatic flame temperature. Chemical equilibrium. Prerequisites: ENGR 381

ENGR 415 Smart Materials (2 credits)
This course introduces the theory and application of smart (aka intelligent or stimuli-responsive) materials. In particular, students will explore the energy conversions inherent to these special materials. With this lens, the properties, uses, and limitations of these materials are explored. Particular emphasis is placed on how smart material application performance and properties are intimately linked to material structure and processing. Both smart materials selection and design of new smart materials is explored. New developments are highlighted throughout to ensure an understanding of the expanding materials landscape. Prerequisite: ENGR 361 as pre or co-req (can be taken either before or concurrently)

ENGR 420 Advanced Computer Aided Mfg (4 credits)
Provides a basic understanding of computer-aided design and manufacturing (CAD/CAM) systems in modern manufacturing operations. Topics covered include solid modeling, computer simulation, and implementation of CAD/CAM systems.
Prerequisites: A minimum grade of C- in ENGR 171, ENGR 371 and junior standing

ENGR 431 Design of Embedded Systems (0 or 4 credits)
An introduction to the hardware and software co-design of complex embedded systems. Topics include software profiling, implementation of

coprocessors for hardware acceleration, advanced HDL, high-level synthesis, software drivers, communication protocols, and real-time digital signal processing. Prerequisite: A minimum grade of C- in ENGR 331

ENGR 432 Current Trends in Comp Syst (0 OR 4 credits)
An overview of the latest trends in the Embedded Computing Systems area. Course topic changes from year to year. The course deals with both the technical as well as societal aspects of the trend. Prerequisites: ENGR 331 with a grade of C- or better OR permission of instructor.

ENGR 457 Applied Soils & Earth Ret. Str (0 or 4 credits)
This course covers the practical aspects of geotechnical engineering. Students apply concepts learned in ENGR 365 to analyze retaining walls, slopes, and excavations while considering the construction process. This course goes into detail on earth fills, excavations, soil compaction and ground improvement, stability of natural slopes and embankments; earth-pressure theories; design of earth retaining structures. Prerequisite: C- or better in ENGR 365.

ENGR 458 Transportation Facilities (0 or 4 credits)
This course covers analysis, behavior, performance, and structural design of pavements for highways, airfields, and railroads; pavement construction, maintenance, and rehabilitation. Prerequisite: C- or better in ENGR 221.

ENGR 460 Engineering Econ & Managem (4 credits)
Fundamentals of Engineering Economics and associated analysis; basic analysis tools including cost of money, break even points, impact on financial accounting, life cycle cost, and risk management. Analysis of common Engineering Management issues such as product cost, capital equipment purchase, determining operating expenses, and managing R&D expenses. Case study review of a major Engineering project or proposal. Prerequisite: Junior Standing

ENGR 461 Timber Design (2 credits)
Analysis and design of timber structures; behavior of tension, compression, bending and combined force members and their connections. Theoretical, experimental, and practical bases for proportioning members and their connections. Design for lateral forces including diaphragm and braced wall construction. Cursory discussion of special topics including braced wall design and mass timber construction. Prerequisite: A minimum grade of C- in ENGR 221.

ENGR 462 Intro to Prestressed Concrete (2 credits)
Introduction to design of prestressed concrete structures, including prestressing theory, design for flexure and shear, and prestress losses. Prerequisite: C- or better in ENGR 365.

ENGR 464 Des. Steel and Concrete Struc. (0 or 4 credits)
Introduction to the design of steel structures; behavior of tension, compression, bending and combined force members and their connections; theoretical, experimental, and practical bases for proportioning members and their connections. Study of the strength, behavior, and design of reinforced concrete members subjected to axial forces, shear forces and moment forces. Prerequisite: A grade of C- or better in ENGR 363 and ENGR 364

ENGR 466 Transportation Engineering (4 credits)
Introduction to design of transportation systems. Principles of geometric roadway design, traffic modeling and forecasting, traffic signal operation and timing. Land use, social issues, and planning for multi- modal transportation systems. Alternative transportation modes including bike, pedestrian, and mass transit. Basics of pavement design. Prerequisite: DASC 120, ENGR 160, ENGR 221 and ENGR 222 with a C- or better

ENGR 467 Water Resources (4 credits)
Introduction to water resources engineering including analysis and design of hydraulic systems and hydrological assessment. Hydrological cycle, analysis and urban hydrology. Design elements of pipe and channel flow including groundwater flow, distribution systems, pumping systems, reservoirs and storm sewer collection systems. Prerequisites: ENGR 368 with C- or better.

ENGR 468 Environmental Engineering (0 or 4 credits)
Introduction to environmental engineering including assessment of the sources, measuring techniques, and treatment methods for pollution caused by human influence. Design of water and wastewater systems, air pollution mitigation and prevention, pollutant transportation. Prerequisite: CHEM 109 with C- or better.

ENGR 471 Steel Structures II (4 credits)
Advanced topics in the design of steel structures; behavior of members subject to combined forces, composite members, built up members, advanced connection design, and stability. Theoretical, experimental, and practical bases for proportioning members and their connections. Prerequisite: A minimum grade of C- in ENGR 464 or ENGR 365.

ENGR 472 Design of RC Structures II (4 credits)
Advanced topics in reinforced concrete design, including torsion, biaxial bending in columns, slender columns, two-way floor systems, strut and tie. Prerequisite: C- or better in ENGR 463.

ENGR 473 Water Treatment (0 or 2 credits)
This course is designed to introduce students to process design and water treatment, including concepts, simple models, and sizing/design. Topics will also include sustainable water sourcing and design of pumps and pipes. The course will be split between learning about water treatment processes and working on case studies relevant to local treatment plants. Prerequisite: CHEM 111 or CHEM 109.

ENGR 476 Experiential Learning (1 TO 4 credits)

ENGR 478 Experiential Learning (0 to 4 credits)

ENGR 480 Engineer Design Clinic I (0 or 4 credits)
Serves as the first capstone course. Student design teams, under the direction of a faculty coordinator, will develop engineering solutions to practical, open-ended design projects conceived to demonstrate the value of prior basic science and engineering courses. Ethical, social, economic and safety issues in engineering practice will be considered as well. Prerequisites: A minimum grade of C- in either (ENGR 320, 350, 371, and 381) or (ENGR 331, 346, and 410) or (CISC 231, ENGR 345, and concurrent-registration in-or prior completion of either ENGR 431 or ENGR 432) or (ENGR 362, and two of: ENGR 463, ENGR 466, ENGR 467, ENGR 468)

ENGR 481 Engineer Design Clinic II (0 or 4 credits)
A continuation of ENGR 480 involving the application of engineering principles to the solution of real problems in an actual industrial setting. Student design teams will work under the direction of faculty advisers and industry liaisons. Opportunity will be provided for objective formulation, analysis, synthesis and evaluation of alternative solutions. Prerequisite: ENGR 480

ENGR 488 Topics (0 to 2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ENGR 489 Topics (0 to 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ENGR 490 Topics (0 to 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

ENGR 491 Research (1 OR 4 credits)

ENGR 495 Individual Study (1 TO 4 credits)

ENGR 497 Individual Study (4 credits)

Biomedical Engineering.

Minor in Biomedical Engineering

The Biomedical Engineering Minor is designed for students with majors in mechanical, computer, and electrical engineering. This minor serves those who plan to go on to graduate school in the sciences and engineering, and those entering business and industry. It offers the opportunity to explore the field of biomedical engineering and provides an understanding of the physiological aspects and applications of this practice. Choice can be made to complete the minor with an Electrical Engineering/Computer Engineering or a Mechanical Engineering emphasis.

Students from the above-listed majors who have (or will have) completed courses prescribed for this minor as part of their major requirements shall consult with the Biomedical Engineering Minor program director for guidance on course selection to satisfy the requirements of 16 credits.

Required: 3 courses (8 credits)

- ENGR 310 Biomedical Engineering (2 credits)
  - Pre-reqs minimum grade of C- in either ENGR 240 or ENGR 350 or ENGR 221
- ENGR 311 Medical Device Manufacturing (2 credits)
  - No pre-req, but preference for 2nd or 3rd-year student
- BIOL 105 Human Biology class (4 credit) or EXSC 214 Physiology (4 credits)
  - No pre-req for either course

Required: Choose 4 credits of these courses:

- Mechanical Engineering emphasis (4 credits):
  - ENGR 314 Biomaterials in Engineering with Lab (4 credits) - Pre-req. Minimum grade of C- in ENGR 221

- Electrical Engineering/Computer Engineering emphasis (4 credits):
    - ENGR 312 Bioelectricity and instrumentation (2 credits) - Pre-reqs minimum grade of C- in either ENGR 240 or ENGR 350
    - ENGR 313 Medical Imaging (2 credits) - Pre-reqs minimum grade of C- in (ENGR 240 or ENGR 350) and MATH 210

And, 4 additional credits from the courses listed below:

- BIOL 354 Neurobiology (4 credits)
- BIOL 349 Comparative Anatomy and Physiology (4 credits)
- BIOL 364 Immunology
- ETLS 507 Intro to Systems Engineering + 1 credit independent study or 1 credit paper
- ETLS 675 Digital Signal Processing + 1 credit independent study or 1 credit paper
- ETLS 746 Power Electronics + 1 credit independent study or 1 credit paper
- EXSC 213 Anatomy (4 credit)
- EXSC 326 Kinesiology (4 credits)
- EXSC 426 Biomechanics
- NSCI 340 Computational neuroscience (4 credits)
- PHYS 347 Optics (4 credits)
- Or students may take all of ENGR 312, ENGR 313, and 314 and forgo the elective..

Note: students are encouraged to take PHIL 254 Biomedical Ethics as part of the "Theology and Philosophy" core requirement. The prerequisite is PHIL 110, and this fulfills the 2nd PHIL or THEO requirement.

Civil Engineering

Major in Civil Engineering

The Bachelor of Science in Civil Engineering (BSCE) includes comprehensive coursework in the civil engineering discipline. Curriculum includes surveying, engineering graphics, statics, mechanics of materials, dynamics, fluid mechanics, materials, structural analysis, steel design, concrete design, soil mechanics, foundation design, transportation, construction and project management, engineering economics, environmental engineering, hydrology, hydraulics and engineering design. Civil Engineers design, build and maintain infrastructure, including transportation systems, structural systems, and water systems, and in doing so contribute to the common good. Since each civil engineering project is unique, this program focuses on problem solving and blends theory and research with practical engineering fundamentals.

The BSCE program is accredited by the Engineering Accreditation Commission (EAC) of ABET. Program outcomes and objectives as well as sample degree plans may be found at www.stthomas.edu/academics/undergraduate/civil-engineering-major. Students earning a BSCE degree will complete the University of St. Thomas Core Curriculum requirements and Civil Engineering major requirements and allied requirements listed below.

Civil Engineering Major Requirements

- ENGR 100 Introduction to Engineering Design (2 credits)
- ENGR 160 Surveying (2 credits)
- ENGR 162 Introduction to Engineering Graphics (1 credit)
- ENGR 220 Statics (4 credits)
- ENGR 221 Mechanics of Materials (4 credits)
- ENGR 362 Construction and Engineering Economic Analysis (4 credits)
- ENGR 363 Construction Materials (4 credits)
- ENGR 364 Structural Analysis (4 credits)
- ENGR 366 Soil Mechanics (4 credits)
- ENGR 368 Fluid Mechanics for Civil Engineering (4 credits)
- ENGR 464 Design of Steel and Concrete Structures (4 credits)
- ENGR 466 Transportation Engineering (4 credits)
- ENGR 467 Water Resources (4 credits)
- ENGR 468 Environmental Engineering (4 credits)
- ENGR 480 Engineering Design Clinic 1 (4 credits)
- ENGR 481 Engineering Design Clinic II (4 credits)
- ENGR Elective (4 credits)
    - ENGR 381 Thermodynamics (4 credits)
    - ENGR 457 Applied Soil Mechanics (4 credits)
    - ENGR 458 Transportation Facilities (4 credits)
    - ENGR 461 Timber Design (4 credits)
    - ENGR 462 Prestressed Concrete Design (4 credits)
    - ENGR 471 Design of Steel Structures II (4 credits)

- ENGR 472 Design of RC Structures II (4 credits)
- ENGR 473 Water Treatment (2 credits)
- ENGR 479 Wastewater Treatment (2 credits)

Civil Engineering Allied Requirements

- One of:
  - CHEM 109 General Chemistry for Engineers (4 credits)
  - CHEM 111 General Chemistry I (4 credits)
- GEOL 163 Applied Geology (4 credits)
- MATH 113 Calculus I (4 credits)
- MATH 114 Calculus II (4 credits)
- MATH 210 Introduction to Differential Equations and Systems (4 credits)
- PHYS 211 Classical Physics I (4 credits)
- DASC 120 Introduction to Computational Statistics (4 credits)
- One of:
  - MATH 200 Multivariable Calc (4 credits)
  - MATH 230 Intro to Applied Math (4 credits)
  - DASC 240 Applied Regression Analysis (4 credits)
  - CHEM 112 General Chemistry II (4 credits)
  - GEOL 211 Environmental Earth Materials (4 credits)
  - BIOL 101 General Biology (4 credits)
  - BIOL 209 Biology of Sustainability (4 credits)
  - PHYS 212 Physics II (4 credits)
  - GEOL 410 Hydrogeology (4 credits)

Computer Engineering

Major in Computer Engineering

Computer Engineering is an interdisciplinary field that integrates the principles and techniques of the electrical engineering and computer science disciplines. Computer engineers study the close interaction between the hardware and software in a computer system and explore ways to integrate computing systems in general. A computer engineer is a sought-after job profile today requiring holistic hardware and software understanding and hands-on skills in embedded processing.

The BSCPE program is accredited by the Engineering Accreditation Commission (EAC) of ABET. Program outcomes and objectives as well as sample degree plans may be found at: www.stthomas.edu/academics/undergraduate/computer-engineering-major-and-minor

In addition to satisfying the University of St. Thomas Core Curriculum requirements, students earning a BSCPE degree must also meet the Computer Engineering Major requirements and the Computer Engineering allied requirements listed below.

Computer Engineering Major Requirements

- ENGR 100 Introduction to Engineering Design (2 credits)
- ENGR 175 Introduction to Electrical & Computer Engineering (2 credits)
- ENGR 230 Digital Design (4 credits)
- ENGR 240 Circuit Analysis (4 credits)
- ENGR 330 Microprocessor Architectures (4 credits)
- OR CISC 340 Computer Architecture (4 credits)
- ENGR 331 Designing with Microprocessors (4 credits)
- ENGR 345 Electronics I (4 credits)
- ENGR 431 Design of Embedded Systems (4 credits)
- ENGR 432 Current Trends in Computing Systems (4 credits)
- ENGR 480 Engineering Design Clinic I (4 credits)
- ENGR 481 Engineering Design Clinic II (4 credits)

Computer Engineering Allied Requirements

- CISC 130 Introduction to Programming and Problem Solving in Sciences (4 credits)
- CISC 230 Object-Oriented Design and Programming (4 credits)
- CISC 231 Data Structures using Object-Oriented Design (4 credits)
- MATH 113 Calculus I (4 credits)
- MATH 114 Calculus II (4 credits)
- MATH 128 Introduction to Discrete Math (4 credits)
- MATH 210 Introduction to Differential Equations and Systems (4 credits)
- PHYS 211 Introduction to Classical Physics I (4 credits)
- PHYS 212 Introduction to Classical Physics II (4 credits)

Electives

Science/Math electives:

- A total of 8 credit from the following list:
- MATH 200 or higher
- PHYS 200 or higher
- CHEM 109 General Chem for ENGR (4 credits)
- CHEM 111 General Chemistry I (4 credits)
- CHEM 112 General Chemistry II (4 credits)
- CHEM 115 Accelerated General Chemistry (4 credits)
- DASC 120 Introduction to Computational Statistics (4 credits)
- DASC 240 Applied Regression Analysis (4 credits)
- Other Math or Science electives approved by the chair

Technical electives:

A total of two courses selected from the following list. You are encouraged to choose two courses from the same field (software or hardware) to increase your depth of knowledge.

- CISC 310 Operating Systems (4 credits)
- CISC 350 Information Security (4 credits)
- CISC 370 Computer Networking (4 credits)
- CISC 380 Algorithms (4 credits)
- CISC 410 Advanced Information Security (4 credits)
- CISC 440 Artificial Intelligence and Robotics (4 credits)
- CISC 450 Database Design I (4 credits)
- CISC 451 Database Design II (4 credits)
- ENGR 311 Medical Device Manufacturing (4 credits)
- ENGR 340 Signals and Systems (4 credits)
- ENGR 346 Electronics II (4 credits)
- ENGR 410 Control Systems (4 credits)
- ETLS 630 Sensors for the Internet of Things (IoT) and Autonomy (3 credits)
- ETLS 675 Digital Signal Processing (3 credits)
- ETLS 676 Real Time DSP (3 credits)
- ETLS 678 Wearable Systems, Data and IoT (3 credits)
- SEIS 610 Software Engineering (3 credits)
- Other ENGR, CISC, SEIS, or ETLS course approved by the chair

Electrical Engineering

Major in Electrical Engineering

The Bachelor of Science in Electrical Engineering (BSEE) curriculum includes courses in circuits and electronics, signal processing and control system design, digital electronics and microprocessors, and electromagnetic fields and waves with a focus on embedded system design. The Electrical Engineering program is academically rigorous, complemented with a full liberal arts experience of the University of St. Thomas Core Curriculum.

In addition to satisfying the University of St. Thomas Core Curriculum requirements, students earning a BSEE degree must also meet the Electrical Engineering Major requirements and the Electrical Engineering allied requirements listed below. The BSEE program is accredited by the Engineering Accreditation Commission (EAC) of ABET. Program outcomes and objectives as well as sample degree plans may be found at: www.stthomas.edu/academics/undergraduate/electrical-engineering-major

Electrical Engineering Major Requirements

- ENGR 100 Introduction to Engineering Design (2 credits)
- ENGR 175 Introduction to Electrical & Computer Engineering (2 credits)
- ENGR 230 Digital Design (4 credits)
- ENGR 240 Circuit Analysis (4 credits)
- ENGR 331 Designing with Microprocessors (4 credits)
- ENGR 340 Signals and Systems (4 credits)
- ENGR 342 Electromagnetic Fields and Waves (4 credits)
- ENGR 345 Electronics I (4 credits)
- ENGR 346 Electronics II (4 credits)
- ENGR 410 Control Systems and Automation (4 credits)
- ENGR 480 Engineering Design Clinic I (4 credits)
- ENGR 481 Engineering Design Clinic II (4 credits)

Plus

- Three technical elective courses as approved by the program (see tracks below)

Electrical Engineering Allied Requirements

- CISC 130 Introduction to Programming and Problem Solving in the Sciences (4 credits) or
- CISC 131 Introduction to Programming and Problem Solving (4 credits)

Note: CISC 130 is recommended for this major

- MATH 113 Calculus I (4 credits)

- MATH 114 Calculus II (4 credits)
- MATH 200 Multi-Variable Calculus (4 credits)
- MATH 210 Introduction to Differential Equations and Systems (4 credits)
- PHYS 211 Introduction to Classical Physics I (4 credits)
- PHYS 212 Introduction to Classical Physics II (4 credits)
- PHYS 225 Applications of Modern Physics (4 credits)
- PHYS 341 Electricity and Magnetism (4 credits)

Students must choose two courses from a track. The third course can come from any track or a technical course pre-approved by the chair.

Each track will be satisfied by completing two courses from those listed below.

Power Track

- ETLS 744 Power Systems and Smart Grids [required in track] (3 credits)
- ETLS 746 Power Electronics (3 credits)
- ETLS 747 Electrical Machines and Vehicles (3 credits)
- ETLS 748 Renewable Energy and the Future (3 credits)
- ETLS 750 Smart Distribution Systems (3 credits)

Signal Processing & Communications Track

- ETLS 620 Analog Communications (3 credits)
- ETLS 675 Digital Signal Processing (3 credits)
- ETLS 676 Real Time DSP (3 credits)
- ETLS 810 Advanced Control Systems (3 credits)

Embedded Systems Track

- ENGR 330 Microprocessor Architectures (4 credits)
- ENGR 431 Embedded Systems (4 credits)
- ENGR 432 Current Trends in Computing Systems (4 credits)

Physics Track

See also Dual Degree BSEE and Physics BA

- PHYS 215 Modern Physics (4 credits)
- PHYS 347 Optics (4 credits)
- OR four credits of physics electives as approved by the chair

One Additional Elective from any track or technical elective:

- ETLS 620 Analog Communications (3 credits)
- ETLS 621 Digital Communications (3 credits)
- ETLS 675 Digital Signal Processing (3 credits)
- ETLS 676 Real Time DSP (3 credits)
- ETLS 744 Power Systems and Smart Grids [required in track] (3 credits)
- ETLS 746 Power Electronics (3 credits)
- ETLS 747 Electrical Machines and Vehicles (3 credits)
- ETLS 748 Renewable Energy and the Future (3 credits)
- ETLS 750 Smart Distribution Systems (3 credits)
- ETLS 810 Advanced Control Systems (3 credits)
- ENGR 330 Microprocessor Architectures (4 credits)
- ENGR 311 Medical Devices Manufacturing (4 credits)
- ENGR 431 Embedded Systems (4 credits)
- ENGR 432 Current Trends in Computing Systems (4 credits)
- PHYS 215 Modern Physics (4 credits)
- PHYS 347 Optics (4 credits)

Minor in Electrical Engineering

The electrical engineering minor is designed for students with majors in the sciences, mathematics, mechanical engineering, quantitative methods, and business. This minor serves both those who plan to go on to graduate school in engineering and those entering business and industry. The engineering minor offers the opportunity to explore the field of engineering and provides an understanding of the technology of products and processes. It also strengthens pre-med and pre-law candidates who intend to pursue specialized areas such as biomechanics or patent law.

Students must complete sixteen credits from the following:

- ENGR 230 Digital Design (4 credits)
- ENGR 240 Circuit Analysis (4 credits) *
  OR ENGR 350 Introduction to Electronics (4 credits)
- ENGR 330 Microprocessor Architecture (4 credits)
- ENGR 331 Designing with Microprocessor (4 credits)
- ENGR 340 Signals and Systems (4 credits)

- ENGR 342 Electromagnetic Fields and Waves (4 credits)
- ENGR 345 Electronics I (4 credits)
- ENGR 346 Electronics II (4 credits)
- ENGR 410 Control Systems and Automation (4 credits)
- ENGR 431 Design of Embedded Systems (4 credits)
- ENGR 432 Current Trends in Computing (4 credits)

*Note- credit will not be given for both ENGR 240 and ENGR 350

Engineering Education

Minor in Engineering Education

The Engineering Education minor is designed for students who are majoring in Education. The minor is intended to give pre-service teachers a solid background in basic engineering concepts that can be applied to a P-12 classroom. Special effort is made throughout the program to tie engineering concepts to the Minnesota academic standards in science.

Students must complete the following courses:

- ENGR 130 Fundamentals of Engineering for Educators I (4 credit)
- ENGR 100 Introduction to Engineering Design (2 credits)
- EDUC 327 Engineering in the P-12 Classroom (4 credits)

Plus six additional credits of engineering (ENGR) courses; four of the six elective credits may be completed with one of the following PHYS courses:

- PHYS 104 Astronomy (4 credits)
- PHYS 105 Musical Acoustics (4 credits)
- PHYS 109 General Physics I (4 credits)
- PHYS 110 General Physics II (4 credits)
- PHYS 211 Classical Physics I (4 credits)
- PHYS 212 Classical Physics II (4 credits)

Environmental Engineering

The environmental engineering minor serves students who want additional support for an environmental engineering career or graduate school. Core courses cover environmental engineering applications, systems thinking, and environmental policy, with additional course options related to biology, geochemistry, thermodynamics, hydrogeology, and water treatment. This minor is intended for students from civil or mechanical engineering, environmental science, or earth sciences but is open to other students as well.

Required: 4 courses (12 credits)

- ENGR 468 Environmental Engineering (4 credits)
- ESCI 310 Environmental Problem Solving (4 credits)
- GEOL 231 Applied Environmental Policy (2 credits)
- One of two treatment design courses:
    - ENGR 473 Water Treatment (2 credits)
    - ENGR 479 Wastewater Treatment (2 credits)

Required: Choose 4 additional credits from courses:

- ENGR 467 Water Resources Engineering (4 credits)
- ENGR 381 Thermodynamics (4 credits) or other thermodynamics
- GEOL 310 Environmental Geochemistry (4 credits)
- GEOL 410 Hydrogeology (4 credits)
- ENGR 488 Air Quality (2 credits)
- The other treatment design courses:
    - ENGR 473 Water Treatment (2 credits)
    - ENGR 479 Wastewater Treatment (2 credits)

If you have a math/science elective within your major, it is recommended to take either:

BIOL 209 Biology of Sustainability (4 credits) or

CHEM 111/112 Chemistry I/II instead of CHEM 109 Chemistry for Engineers

NOTE 1: Students in this minor can double-count up to 6 credits for both their major and this minor.

NOTE 2: Only 6 credits may be below the 300 level (i.e. students can't take ENGR 123 and BIOL 209 as the extra two classes)

General Engineering

Minor in General Engineering

The general engineering minor provides a broad overview of topics in both electrical and mechanical engineering. It offers the opportunity to explore the field of engineering and provides an understanding of the technology of products and processes. It also

strengthens pre-med and pre-law candidates who intend to pursue specialized areas such as biomechanics or patent law. This minor is not available for students majoring in electrical or mechanical engineering.

Students must complete courses from the following list:

- ENGR 100 Introduction to Engineering Design (2 credits)

Plus, one of the following courses:

- ENGR 160 Surveying (2 credits)
- ENGR 170 Mechanical Engineering Graphics (2 credits)
- ENGR 175 introduction to Electrical & Computer Engineering (2 credits)

Plus

- 12 additional credits of engineering (ENGR) classes

Materials Science and Engineering

Minor in Materials Science and Engineering

24 credits

B. Nelson-Cheeseman, Program Director: OSS 319 ex. 2-5773

The Materials Science and Engineering (MSE) Minor is an interdisciplinary program that helps science and engineering students develop the knowledge and skills to properly select current materials for design and engineer future materials for advanced applications. As MSE is a broad interdisciplinary field, the program begins with a basic foundation and is then tailored by the student to overlap with their major field and highlight their materials area(s) of interest. Students learn about materials properties, structure, and processing through a variety of courses and a hands-on practicum. This minor serves those who plan to go on to graduate school in a materials-related field, as well as those entering industry who wish to gain expertise in the overlap between science and engineering.

Students wishing to enter this program should contact the program director.

All students must complete the following:

- PHYS 211 Classical Physics I (4 credits)
- PHYS 212 Classical Physics II (4 credits)
- Four (4) credits in thermodynamics. Choose one of
    - CHEM 331
    - ENGR 381
    - GEOL 340
    - PHYS 410
- ENGR 361 Engineering Materials (4 credits)
- IDSC 365 Materials Science and Engineering Practicum (0 credits)

Plus, eight (8) additional credits from approved materials-relevant course electives as listed here:

Key themes of MSE addressed by electives:

- Processing-Structure-Property-Performance/Applications Relations
- Crystal Structure and Bonding
- Thermodynamics and Phase Transformations
- Properties: Mechanical, Thermal, Electrical, Magnetic, Optical and Corrosive/Deteriorative
- Materials Characterization
- Materials Types: Metals, Ceramics, Polymers, Composites, Biomaterials, Nanomaterials, Smart Materials.

Approved elective courses:

- BIOL 328 Environmental Toxicology and Health (4 credits)
- BIOL 361 Medical Geology (4 credits)
- CHEM 220 Foundations in Inorganic Chemistry (4 credits)*
- CHEM 340 Organic Spectroscopy (2 credits)*
- CHEM 400 Advanced Inorganic Chemistry (2 credits)*
- CHEM 430 Polymer Chemistry (2 credits)*
- CHEM 487 Biomaterials (2 credits)*
- ENGR 221 Mechanics of Materials (4 credits)**
- ENGR 314 Biomaterials in Engineering (4 credits)
- ENGR 363 Civil Engineering Materials (4 credits)
- ENGR 371 Manufacturing Processes (4 credits)**
- ENGR 381 Thermodynamics (4 credits)**
- ENGR 412 Composite Materials (2 credits)
- ENGR 415 Smart Materials (2 credits)
- ENGR 488 Topics: Advanced Mechanical Behavior of Materials (2 credits)
- ETLS 723 Biomaterials in Medical Device Design (3 credits)

- ETLS 775 Polymers in Design (3 credits)
- ETLS 776 Materials Design and Development (3 credits)
- GEOL 211 Earth Materials (4 credits)
- GEOL 340 Fundamentals of Lithosphere I (Petrology) (4 credits)
- GEOL 360 Fundamentals of Lithosphere II (Structural Geology) (4 credits)
- PHYS 225 Applications of Modern Physics (4 credits)
- PHYS 347 Optics (4 credits)
- PHYS 410 Statistical Mechanics and Thermodynamics (4 credits)
- Or as approved by the program director

Chemistry majors may only have one elective count towards both the CHEM major and the MSE minor.

** These courses may not be used as an elective for Mechanical Engineering majors.

Between ENGR 361 and the eight (8) elective credits, four (4) credits must be outside the student's major field. Only four (4) elective credits may be from courses <300 level.

Mechanical Engineering

Major in Mechanical Engineering

The Bachelor of Science in Mechanical Engineering (BSME) is an applied-engineering program, blending theory and research with practical engineering fundamentals. The program is academically rigorous, complemented with a full Liberal Arts experience of the University of St. Thomas Core Curriculum. The mechanical engineering curriculum provides a foundation in theoretical and applied mechanics, materials, electrical-electronic fundamentals, computer aided design, automation systems, thermodynamics, heat transfer, fluid flow, manufacturing processes and practical design. The BSME program is accredited by the Engineering Accreditation Commission (EAC) of ABET. Program outcomes and objectives as well as sample degree plans may be found at: www.stthomas.edu/academics/undergraduate/mechanical-engineering-major.

In addition to satisfying the University of St. Thomas Core Curriculum requirements, students earning a BSME degree must also meet the Mechanical Engineering Major requirements and the Mechanical Engineering allied requirements listed below.

Mechanical Engineering Major Requirements

- ENGR 100 Introduction to Engineering Design (2 credits)
- ENGR 170 Mechanical Engineering Graphic (2 credits)
- ENGR 220 Statics (4 credits)
- ENGR 221 Mechanics of Materials (4 credits)
- ENGR 255 Fabrication Lab (0 credits)
- ENGR 320 Machine Design and Synthesis (4 credits)
- ENGR 322 Dynamics (4 credits)
- ENGR 350 Introduction to Electronics (4 credits)
- ENGR 361 Engineering Materials (4 credits)
- ENGR 371 Manufacturing Processes and Statistical Control (4 credits)
- ENGR 381 Thermodynamics (4 credits)
- ENGR 383 Fluid Mechanics (4 credits)
- ENGR 384 Heat Transfer (4 credits)
- ENGR 410 Control Systems and Automation (4 credits)
- ENGR 480 Engineering Design Clinic I (4 credits)
- ENGR 481 Engineering Design Clinic II (4 credits)

Plus

four additional ENGR credits above the 100 level

or

one course from the following:

- ENTR 330 Environmental Sustainability
- ETLS 506 Statistical Methods for Manufacturing Quality
- ETLS 507 Intro to Systems Engineering
- ETLS 520 Design and Manufacturing the Medical Device Industry
- ETLS 525 Engineering Economics
- ETLS 555 Advanced Product Design
- ETLS 591 Advanced Thermal Systems
- ETLS 640 Lean Six Sigma
- ETLS 560 Industrial Engineering I
- ETLS 561 Operations Research & Analysis
- ETLS 562 Specialty Engineering
- ETLS 563 Sustainment and Logistics
- ETLS 662 CAM and Machining Opt
- ETLS 664 Propulsion Systems and Comp Flow
- ETLS 699 Topics
- ETLS 701 Design of Experiments
- ETLS 723 Biomaterials in Design of Med Devices
- ETLS 744 Power Systems and Smart Grids

- ETLS 770 Automated Control of Mfg Processes
- ETLS 774 Introduction to Mechatronics
- ETLS 775 Polymers in Design
- ETLS 776 Materials Design and Development
- ETLS 777 Finite Element Analysis
- ETLS 779 FEA for Manufacturing
- ETLS 789 Simulation and Visualization of Dynamic Systems
- ETLS 810 Advanced Controls

Mechanical Engineering Allied Requirements

- CHEM 109 General Chemistry for Engineers (4 credits)
  (or CHEM 111 however, CHEM 109 is preferred for this major)
- CISC 130 Introduction to Programming and Problem Solving in the Sciences (4 credits) or CISC 131 Introduction to Programming and Problem Solving (4 credits)

  Note: CISC 130 is preferred for this major

- MATH 113 Calculus I (4 credits)
- MATH 114 Calculus II (4 credits)
- MATH 200 Multi-Variable Calculus (4 credits)
- MATH 210 Introduction to Differential Equations and Systems (4 credits)
- PHYS 211 Introduction to Classical Physics I (4 credits)
- PHYS 212 Introduction to Classical Physics II (4 credits)

Minor in Mechanical Engineering

The mechanical engineering minor is designed for students with majors in the sciences, mathematics, electrical engineering, quantitative methods, and business. This minor serves those who plan to go on to graduate school in engineering and those entering business and industry. The engineering minor offers the opportunity to explore the field of engineering and provides an understanding of the technology of products and processes. It also strengthens pre-med and pre-law candidates who intend to pursue specialized areas such as biomechanics or patent law.

Students must complete Sixteen credits from the following:

- ENGR 100 Introduction to Engineering Design (2 credits)
- ENGR 170 Mechanical Engineering Graphics (2 credits)
- ENGR 220 Statics (4 credits)
- ENGR 221 Mechanics of Materials (4 credits)
- ENGR 320 Machine Design and Synthesis (4 credits)
- ENGR 322 Dynamics (4 credits)
- ENGR 361 Engineering Materials (4 credits)
- ENGR 371 Manufacturing Processes and Statistical Control (4 credits)
- ENGR 381 Thermodynamics (4 credits)
- ENGR 383 Fluid Mechanics (4 credits)
- ENGR 384 Heat Transfer (4 credits)
- ENGR 410 Control Systems and Automation (4 credits)
- Other courses with approval of Mechanical Engineering Chair

Peace Engineering

Interdisciplinary Program Overview

School of Engineering
O'Shaughnessy Science Hall (OSS) 100, (651) 962-575
Weinkauf (dean), Abraham, Acton, Bach, Besser, Capa Salinas, Forliti, Gagnon, Hennessey, Jalkio, Kabalan, Kang, Koerner, Lee, Lederle, Ling (Ali), Ling (Tiffany), Min, Moustafa, Mowry, Nelson-Cheeseman, Nepal, Orser, Salamy, Secord, Shepard, Welt, Wentz, You.

School of Engineering Website:
https://engineering.stthomas.edu/index.html

College of Arts and Sciences, Interdisciplinary Program
O'Shaughnessy Education Center (OEC) 468, (651) 962-5420
Finnegan (JPST), Okoi (JPST) and Klein (JPST)(Program Director).

Justice and Peace Studies Program Website:
https://cas.stthomas.edu/departments/areas-of-study/justice-society-studies/index.html

Minor in Peace Engineering

The peace engineering minor may be combined with any undergraduate engineering degree (i.e. mechanical, computer, electrical, civil) by adding a Peace Engineering Minor through the Department of Justice and Peace Studies.

Complete the following:

- JPST 250 Introduction to Justice and Peace Studies (4 credits)
- THEO 421 Theology of Justice and Peace (4 credits)

- ENGR 480 & ENGR 481 Senior Design - with a peace engineering designated project (8 credits)
- JPST 473 Vocational Seminar (0-credits, in conjunction with ENGR 480 & ENGR 481 Senior Design).
- Significant Experience – see below for description.

Plus One of the following:

- JPST 355 Public Policy Analysis & Advocacy (4 credits)
- JPST 365 Leadership for Social Justice (4 credits)
- JPST 375 Conflict Analysis & Transformation (4 credits)

Significant Experience Requirement

Appropriate experience of poverty, injustice, social conflict, or marginalization. May be done for credit through JPST 475-478 Experiential Learning.

It may also be done on a non-credit basis (e.g., in the context of another course or through volunteer activities). Possibilities include VISION Trips and off-campus study through programs that expose students to poverty and oppression.

Examples of appropriate off-campus study programs include those run by: Augsburg's Center for Global Education (in Cuernevaca Mexico, conflict resolution in Northern Ireland); American University's Washington Semester (e.g., on homelessness); and UMAIE. VISION Trips during January term, spring break or summer sessions (to Guatemala, Appalachia, the border of Mexico, a Native American reservation, etc.), and VIA programs located in the Twin Cities (e.g., working at a shelter, tutoring immigrant students, etc.).

INTERDISCIPLINARY STUDIES (IDSC)

Cross-College Program

Tonia Bock, Associate Vice President for Accreditation, Assessment, and Curriculum

Interdisciplinary Studies Undergraduate Courses

FYEX 001 College Success Orientation (0 credits)

FYEX 100 Foundation for College Success (1 credit)
Foundations for college success is a first-year experience course designed to provide students with knowledge and skills that will help them succeed at St. Thomas. This one credit course covers a range of topics, including: campus engagement, well-being, academic success, financial literacy, career and vocation, sustainability, global and intercultural competence, and spirituality.

FYEX 120 First Year: Leading & Serving (0 OR 2 credits)
The purpose of this course is to integrate scholars into the life and culture of the University of St. Thomas and prepare them with the foundations for academic and professional success. The course will focus on leadership competencies such as written and oral communication, team building, career and professional development, financial literacy and information literacy. In addition, the course will introduce students to the key principles of Social Justice Leadership.

FYEX 150 Common Good Theme Path (0 credits)
The Common Good Learning Community Theme Path provides students the opportunity to explore our university charism, all for the common good, through courses in at least two disciplines, co-curricular activities related to the common good, and discussions. Successful completion of this path and two "Common Good Learning Community" themed courses will satisfy the First-Year Experience Learning Community requirement. Prerequisite: being currently enrolled in or having completed one of the Common Good Learning Community courses.

FYEX 200 Changmking for the Common Good (0 OR 2 credits)
This course introduces students to ways in which individuals all over the world address a range of environmental, social, political, and economic issues, and their attempts to create and sustain positive social impact. The course promotes critical thinking about existing changemaking initiatives, and students are introduced to important concepts that are central to the field of changemaking and social innovation. Students will learn from a variety of change agents who are working to address today's most pressing social challenges on global, national, local and personal levels. Through course materials and activities, students will gain the knowledge and skills necessary to be change agents in their own communities – all for the common good. This course is cross-listed with IDSC 200. Students cannot receive credit for both IDSC 200 and FYEX 200.

HONR 480 Honors Seminar (2 credits)
These interdisciplinary seminars are intended to

develop integrating insights through an analysis of topics chosen from different disciplines. Often they are taught by two faculty members or by a visiting lecturer who holds one of the endowed chairs at the university.

HONR 481 Honors Seminar (2 credits)
These interdisciplinary seminars are intended to develop integrating insights through an analysis of topics chosen from different disciplines. Often they are taught by two faculty members or by a visiting lecturer who holds one of the endowed chairs at the university.

IDSC 110 Foundations Science Success (1 credit)
Foundations for science success is for first-year students who plan to pursue a major in STEM fields. This course is designed to nurture students' identity as a scientist, use meta-cognitive strategies to grow in self-efficacy, and hone academic and career interests in STEM. To accomplish these outcomes, students will explore a variety of non-healthcare-based STEM careers, research, and internship opportunities. They will also develop in-depth academic plans and practice career development skills. Prerequisites: FYEX 100, and a freshman, or permission of instructor

IDSC 120 First Year: Leading & Serving (0 OR 2 credits)
The purpose of this course is to integrate scholars into the life and culture of the University of St. Thomas and prepare them with the foundations for academic and professional success. The course will focus on leadership competencies such as written and oral communication, team building, career and professional development, financial literacy and information literacy. In addition, the course will introduce students to the key principles of Social Justice Leadership.

IDSC 121 First Year: Leading & Serving (0 TO 2 credits)
The purpose of this course is to integrate scholars into the life and culture of the University of St. Thomas and prepare them with the foundations for academic and professional success. The course will focus on leadership competencies such as written and oral communication, team building, conflict management, career and professional development and digital literacy. In addition, the course will introduce students to the key principles of Catholic Social Teaching, Circle of Praxis, and Transformational Leadership. Students must complete this course in each semester fo their first year. Restricted to A.A. Liberal Arts student registration only.

IDSC 150 Natural Wrld-Mississippi Model (4 credits)
Minneapolis and St. Paul owe their existence and location to the Mississippi River. The "Mighty Mississippi" provides the focal point for an integrated exploration of the scientific disciplines of astronomy, biology, chemistry, geology, and physics. The past and present human impact on the water and land is also explored, including environmental and life style sustainability issues. Consisting of lectures, discussions, labs, and field trips, this course is designed for non-science majors and fulfills the core-area in natural science in the Natural Science and Mathematical and Quantitative Reasoning requirement in the core curriculum. This course also addresses the science content and skills required by the state of Minnesota for elementary and middle school teachers and models an inquiry-based pedagogy.

IDSC 180 Engl as a Second Lang I (4 credits)
Special and individual attention to speaking, writing, reading, listening and study skills. For students whose native language is not English. Offered in fall semester.

IDSC 181 Engl as a Second Lang II (4 credits)
Continuation of 180. Offered in spring semester. Prerequisite: 180 or permission of instructor

IDSC 198 Natural Science W/Lab (0 or 4 credits)

IDSC 200 Changmking for the Common Good (2 credits)
This course introduces students to ways in which individuals all over the world address a range of environmental, social, political, and economic issues, and their attempts to create and sustain positive social impact. The course promotes critical thinking about existing changemaking initiatives, and students are introduced to important concepts that are central to the field of changemaking and social innovation. Students will learn from a variety of change agents who are working to address today's most pressing social challenges on global, national, local and personal levels. Through course materials and activities, students will gain the knowledge and skills necessary to be change agents in their own communities – all for the common good. This course is cross-listed with FYEX 200. Students cannot receive credit for both IDSC 200 and FYEX 200.

IDSC 243 Individual Study (2 OR 4 credits)

IDSC 260 Enviro&Agric:Sustain food syst (4 credits)
Explore sustainability first-hand through the lens of the U.S. food system. This interdisciplinary, field-based program analyzes the environment, economic, political, social, and cultural issues that

define modern farming. A three-day farm stay is included in the program. Students will use critical frameworks to examine a variety of farms, farming communities, and research and food production facilities, and to understand the complex connections between the environment and agriculture.

IDSC 269 Research (2 OR 4 credits)

IDSC 284 Intro to Teach Religion (1 TO 2 credits)
The course includes a six-hour seminar including at least three basic skills related to the act of teaching as well as a year of teaching in a local parish religious education program once a week. The teaching placement is done through consultation with each student and cooperating teachers who have a sound understanding of the life and ministry of teacher education in the church. Specific seminar content will enable students to do the following: define the term learners; explain the relationship of objectives to overall goals of religious education; define the term "strategy" and develop workable plans for teaching within a typical church/school setting. Prerequisite: Acceptance into St. John Vianney Seminary

IDSC 287 German Cultural Heritage (4 credits)
An historic survey of German cultural development from the beginnings in antiquity through the present. Attention is given to significant events in the history of Germany, Austria, Switzerland and Liechtenstein and the development of historic events into the living German culture of today. Events and significant achievements in the areas of politics, music, literature, science, philosophy and theology are examined. The course is usually offered online with no classroom meetings.

IDSC 291 The Anatomy of Violence (4 credits)
The purpose of this course is to increase the knowledge and understanding of cultural, racial and interpersonal violence and develop a commitment to promoting a violence-free society. Emphasis is on exploration of the extent, causes and effects of violence and strategies for intervention on the micro and macro levels. Specific areas of study include domestic/partner abuse, child abuse/neglect, peer/date violence, elder abuse, sexual assault/sexual harassment, cultural violence, racism and other systemic oppression.

IDSC 294 Leadership Theory and Practice (2 credits)
Students in this course examine historical and contemporary leadership theories and learn to reflect on their leadership experiences through the lenses of those theories. This course will build a foundation for lifelong learning practices for leadership development. The course includes the study of leadership and the application of leadership theories, concepts, and skills. For Ciresi Walburn Leadership Fellows Only.

IDSC 295 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

IDSC 296 Topics (2 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

IDSC 297 Topics (2 OR 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

IDSC 298 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

IDSC 310 Washington Semester (16 credits)
The University of St. Thomas is affiliated with the American University's Washington Semester Program, Washington, D.C. Students selected to participate in the program have the option of studying one of the following: American Politics; Economic Policy; Education Policy and Special Education; Foreign Policy; International Business and Trade; International Environment and Development; Journalism; Justice; Peace and Conflict Resolution; Public Law; Transforming Communities; Visual and Performing Arts. The Washington Semester involves seminars, research and internships drawing on governmental and private organization resources in the Washington, D.C. area. Nominations to participate are made by the university, with final acceptance decided by American University.

IDSC 365 Materials Sci & Engr Practicum (0 credits)
Participants in the Interdisciplinary Minor in Materials Science and Engineering complete a Materials-based practicum. This practicum will give them real-world experience with issues relevant to Materials Science and Engineering. Students are encouraged to be proactive in selecting their practicum experience, as well as to explore and consider options in both industry and academic research. A variety of options and opportunities is available through the Career Center. Students are

also encouraged to discuss possibilities with Materials-related faculty.

IDSC 389 Research (2 OR 4 credits)

IDSC 393 Individual Study (2 OR 4 credits)

IDSC 395 Intro Pastoral Ministry (1 TO 2 credits)
This is a semester-long pastoral education program that provides for personal involvement and the practical exercise of pastoral ministry. Designed to implement the church's documents and the U.S. Bishops' Program for Priestly Formation, emphasis is placed on the future pastoral ministry of the student. Each student is placed in one of three broad areas of ministry: family crises; chemical dependency counseling; and death, dying and grief arenas. Training and ongoing supervision by qualified professionals is provided. Prerequisite: Acceptance into St. John Vianney Seminary

IDSC 455 Reading for Social Change (4 credits)

IDSC 456 Writing for Social Change (4 credits)

IDSC 457 Writing/Social Change: Seminar (4 credits)

IDSC 458 Internship (4 credits)

IDSC 462 ESTC: Adapt Ecosystem Mgmt (4 credits)
In Adaptive Ecosystem Management students gain a practical hands-on understanding of the basic ecological and physical processes that underlie environmental degradation. They develop a basic understanding of how to set up large and small scale ecological monitoring projects, and how to evaluate environmental decision making on appropriate time and spatial scales.

IDSC 463 ESTC: Soc Dim of Envr Change (4 credits)
In Social Dimensions of Environmental Change students explore how worldviews impact a society's underlying value system regarding the human relationship with the natural world. The course situates local environmental challenges in the context of global sustainability, and encourages students to reflect about the meaning of civic responsibility in local and global contexts.

IDSC 464 ESTC: Field Methods (4 credits)
In the Field Methods course students have an opportunity to work with scientists and community members to conduct research in a methodologically rigorous manner. Students design and carry out either a social science or natural science based field project.

IDSC 465 ESTC: Environmental Internship (4 credits)
In their internships students interact with one of the most active networks of citizens' organizations in the country. Practitioners in the Twin Cities work on a wide range of environmental issues, and Minnesota's environmental policies are among the most progressive in the nation. Internships get students directly involved in this dynamic work.

IDSC 466 City Arts:Reading Seminar (4 credits)
City Arts focuses on the arts, popular culture and social change. Seminar themes include arts, ideology and public opinion formation, the politics of arts philanthropy, and approaches to community building and organizing. Students also complete a small group study project on topics chosen by the students.

IDSC 467 City Arts:Field Seminar (4 credits)
Students meet with a wide variety of local artists, community organizers and arts advocates to dialogue on program themes. The group also attends plays, films and visual installations as a way to connect the theories studied with actual practice in the field.

IDSC 468 City Arts:Internship(HECUA) (4 credits)
Each student works in a half-time internship, with a wide variety of placements available, including arts organizations, artistic groups, and community organizations using the arts in programs and service.

IDSC 469 City Arts: Intern Seminar (4 credits)
Students reflect on their internship experience with other students in the program and connect their rea l-life experience with the learning taking place in the reading and field seminars.

IDSC 471 Must Seminar: Research (4 credits)
MUST focuses on issues of poverty and inequality and ways to address these critical issues. Students explore key institutions that impact urban poverty and inequality, namely the economy, education and welfare. The role of urban sprawl, segregation and racial, class and gender discrimination are also analyzed. Students examine an array of strategies to rebuild the city more equitably.

IDSC 472 Must Seminar: Field Studies (4 credits)
Students meet with a wide variety of community leaders, educators, urban planners, corporate executives and others as a way to connect the theories studied with actual practice in the field.

IDSC 473 Must: Urban Studies Intern (4 credits)
Each student works in a half-time internship, with a wide variety of placements available, including public, private and community non-profit organizations working on urban issues.

IDSC 474 Must: Urban Studies Seminar (4 credits)
Students reflect on their internship experience with other students in the program and connect their rea

l-life experience with the learning taking place in the reading and field seminars.

IDSC 476 Experiential Learning (1 TO 4 credits)

IDSC 481 Seminar in Intl Studies (4 credits)
This course meets the seminar requirement for the International Studies major. Students will engage in reading and discussion of scholarly work focused on a particular international theme (such as causes of genocide) and write an analytical research paper on an international and contemporary topic of their choosing. Prerequisite: completion of at least one 300-level POLS course or permission of instructor

IDSC 489 Topics (4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

IDSC 490 Topics (2 or 4 credits)
The subject matter of these courses will vary from year to year, but will not duplicate existing courses. Descriptions of these courses are available in the Searchable Class Schedule on Murphy Online

IDSC 491 Research (2 or 4 credits)

IDSC 495 Individual Study (2 or 4 credits)

Appendix 1

Equal Opportunity Statement and Notice of Nondiscrimination

Policy number: 102
Policy owner: AVP for Equity Compliance and Title IX Coordinator
Date of initial publication: March 11, 2022
Date of latest revision: September 9, 2025

The University of St. Thomas is committed to the principles of equal employment opportunity and equal educational opportunity. St. Thomas does not unlawfully discriminate on the basis of race, color, creed, religion, national origin, sex, sexual orientation, gender identity or expression, family status, disability, age, marital status, status with regard to public assistance, membership or activity in a local commission, genetic information, veteran status or any other characteristic protected by applicable law. The university's policy of nondiscrimination extends to all aspects of its operations, including but not limited to, employment, educational policies, admissions policies, scholarship and loan programs and all other educational programs and activities. The following person(s) have been designated to handle inquiries regarding St. Thomas's nondiscrimination policies:

Title IX Coordinator (for inquiries related to sex discrimination, including sexual harassment and sexual violence): Missy Majerus, Title IX/ADA/EO Compliance Coordinator, ASC 241 or AQU 213, 2115 Summit Avenue, St. Paul, MN 55105, (651) 962-6882, Title-IX@stthomas.edu

Rehabilitation Act Section 504/ADA Coordinator (for inquiries related to disability discrimination): Missy Majerus, Title IX/ADA/EO Compliance Coordinator, ASC 241 or AQU 213, 2115 Summit Avenue, St. Paul, MN 55105, (651) 962-6882, Title-IX@stthomas.edu

Discrimination Inquiries Generally: For questions about other types of discrimination, please see the reporting information in Appendix A of the University's Nondiscrimination and Anti-Harassment Policy, https://www.stthomas.edu/about/departments/general-counsel/policy-pdfs/nondiscrimination-and-anti-harassment-policy.pdf

For further information on non-discrimination, visit https://ocrcas.ed.gov/contactocr?field_state_value=663 for the address and phone number of the Department of Education office that serves your area, or call 1-800-421-3481.

4863-1072-5382, v. 1

Appendix 2

Undergraduate Student Academic Integrity Policy

Policy number: 201
Policy owner: Vice Provost for Academic Affairs

Date of initial publication: N/A
Date of latest revision: December 6, 2019

SECTION I. PURPOSE

This policy establishes expectations for undergraduate students related to academic honesty and integrity, which are essential for a strong, functioning academic community.

SECTION II. SCOPE AND APPLICABILITY

This policy governs all work submitted by undergraduate students related to a course, regardless of form and regardless of whether the course is credit-bearing. The expectations set forth in this policy apply to all St. Thomas undergraduate students, including non-degree-seeking students.

(The academic integrity policy for graduate students is available on OneStThomas.)

SECTION III. DEFINITIONS

When used in this policy, the following terms have the following meanings:

a. ***Academic dishonesty*** means any form of dishonest conduct related to academic coursework, including but not limited to cheating, fabrication, plagiarism, and similar actions that misrepresent a student's academic work as original when it is not, misrepresent data or sources contained in a student's academic work, or misrepresent that a student has done a level of academic work that the student has not completed.

b. ***Academic work*** means all forms of student work submitted as part of a course.

c. ***Cheating*** means intentionally using or attempting to use unauthorized materials, information or study aids in any academic work, including but not limited to copying or doing another student's academic work, allowing another student to copy or do your academic work, or communicating with another student about an examination without the faculty member's approval.

d. ***Fabrication*** means intentionally falsifying or presenting invented information, sources or citations in an academic work, as if they were real, without authorization.

e. ***Plagiarism*** means reproducing or presenting another person's words, statements, work or distinctive ideas as one's own, without acknowledgment, or submitting the same work of one's own for course credit in two different courses, without faculty permission. Plagiarism includes, but is not limited to, using a source without giving due credit to the author, using a quotation without properly identifying it as a quotation, or presenting an idea drawn from someone else's work without properly acknowledging that person's work.

SECTION IV. ACADEMIC DISHONESTY PROHIBITED

Students are prohibited from knowingly engaging in academic dishonesty or knowingly helping or attempting to help another to engage in academic dishonesty. Students are encouraged to report incidents of academic dishonesty to course instructors.

SECTION V. UNIVERSITY RESPONSE TO ACADEMIC DISHONESTY

When academic dishonesty occurs, the following procedures will be followed:

1. The instructor will impose a minimum sanction of failure for the work involved. The instructor also will notify the student and the appropriate academic dean (or designee) in writing of the nature of the offense and that the minimum sanction has been imposed. The instructor may recommend to the dean that further penalties should be imposed.

If further penalties are imposed, the dean will notify the student immediately and the student will have five working days to respond to the intention to impose additional penalties. The student has the right to respond to the charge

of academic dishonesty and may request in writing that the dean review the charge of academic dishonesty as fully as possible.

2. If the dean determines that no further sanctions will be applied, the instructor's sanction will stand, and the instructor's letter to the dean and student will be placed in the student's file. If no further charges of academic dishonesty involving the student occur during the student's tenure at St. Thomas, the materials will be removed from the file upon graduation.

3. If the student has been involved in a previous incident of academic dishonesty, that evidence will be considered in determining sanctions. If the previous incident(s) occurred in another school or college, the dean (or designee) will consult with the other dean(s) about the nature of the incident and previous sanctions imposed.

4. If the dean determines that further sanctions are warranted, the student will be informed in writing. Among the sanctions considered by the dean will be the following: failure for the course in which the incident occurred; suspension from the university for the following semester; expulsion from the university; community service; a written assignment in which the student explores the principles of honesty and trust; other appropriate action or sanctions listed under "Sanctions" in the *Student Conduct Code*. The materials relating to the incident, including the instructor's original letter to the student and dean and the dean's decision following the hearing, will become part of the student's file.

5. A student may appeal the dean's decision. To appeal, the student must send written notice to the executive vice president and provost ("Provost") within seven days of the date of the dean's letter notifying the student of the penalty. If the Provost receives no written request within the time specified, the penalty shall be imposed and the action shall be considered final. If a written request of appeal is received within the time specified, the Provost shall refer the grievance to the Grievance and Discipline Committee. The Grievance and Discipline Committee shall have the authority to investigate and conduct a hearing on the facts of the particular case that has been appealed. The Committee shall make a recommendation to the Provost related to the appeal and shall document their recommendation and reasoning in a written report. The Committee may recommend that the Provost:

a. Affirm the original decision and sanction.

b. Affirm the original decision and reduce or increase the original sanction.

c. Reverse the original decision.

d. Disallow the original decision and order reconsideration by the dean (or designee).

The Provost will make the final determination whether to affirm or reverse the original sanction, reduce or increase the original sanction, or disallow the original decision and order reconsideration by the dean (or designee). In making the determination, the Provost will give careful consideration to the recommendation of the Committee but will not be bound by it.

Appendix 3

Credit for Prior Learning Policy

Policy number: 212
Policy owner: Vice Provost for Academic Affairs

Date of initial publication: December 18, 2023
Date of latest revision: N/A

SECTION I. PURPOSE

The University of St. Thomas recognizes that learning occurs both within traditional educational settings and outside the classroom through life, work and military training and experience, and believes that college credit should be awarded for demonstrated college-level competencies and learning outcomes. This policy establishes the standards and guidelines to assist academic units at St. Thomas in awarding credit for prior learning for credit-bearing courses.

SECTION II. SCOPE AND APPLICABILITY

This policy applies to the awarding of credit for prior learning for credit-bearing courses that fulfill requirements for any undergraduate major, minor or certificate or for any graduate program or certificate at St. Thomas. This policy does not apply to a degree offered by the Dougherty Family College.

For information on transferring credit, including credit earned at another postsecondary educational institution, undergraduate students should review the Office of Undergraduate Admissions & Aid webpage on Credit Transfer and graduate students should review the Graduate Academic Policy on Transfer Courses and contact the appropriate graduate academic unit.

In the absence of a more stringent credit for prior learning policy at the academic unit level, this policy shall apply. Should an academic unit not have a credit for prior learning policy or should there be omissions or gaps in their policy, this policy shall govern.

SECTION III. DEFINITIONS

When used in this policy, the following terms have the following meanings:

a. ***Academic unit*** means a St. Thomas academic department or program.

b. ***Conventional letter grade*** means the grade A, either alone or followed by a minus, the grades B, C or D, either alone or followed by a plus or minus, and the grade F.

c. ***Credit for prior learning*** means academic credit that is awarded to students who successfully demonstrate college-level learning outcomes achieved through previous experiences other than coursework at postsecondary educational institutions. St. Thomas awards credit for prior learning through one of the methods of assessment described in Section V of this policy.

d. ***Credit-bearing course*** means a course that (i) is offered by St. Thomas for academic credit, (ii) is required as an accompaniment to a course offered by St. Thomas for academic credit (e.g., a laboratory section) or (iii) bears no academic credit but is required or counted by St. Thomas as part of a credit-bearing program, in each case regardless of the mode of course delivery.

e. ***Enrolled*** means a student has registered for at least one credit-bearing course at St. Thomas.

f. ***Registrar's Office*** means the university office responsible for maintaining the integrity of student records, including, but not limited to, course registration and withdrawal, academic grades and transcripts and personal information. This office also may be referred to at St. Thomas as the Office of Student Data and Registrar.

g. ***Student*** means an individual who has been admitted by St. Thomas to enroll in credit bearing courses with the intention of obtaining an undergraduate or graduate degree or certificate.

h. ***Transcript*** is the permanent record of a student's courses taken and grades received at St. Thomas.

SECTION IV. STANDARDS FOR IMPLEMENTATION

In recognition of the need to fairly and consistently evaluate learning acquired outside of the traditional educational setting, St. Thomas adopts the following standards for implementation:

1. Students eligible to receive credit for prior learning must be enrolled at St. Thomas to be awarded credit.

2. St. Thomas does not accept transfer credits for prior learning that were evaluated and approved by another institution. If a student wants St. Thomas to award credit for prior learning, they must complete one of the methods of assessment described in Section V of this policy.

3. A student shall not be awarded credit for prior learning for a course in which they have previously earned a conventional letter grade or for a course which they audited pursuant to St. Thomas policy. Conversely, a student who is awarded credit for prior learning for a course cannot subsequently enroll in the same course to earn a conventional letter grade. A student who enrolls in a course and then withdraws after the last day to drop a class without notation on record cannot subsequently request credit for prior learning for the course.

4. While general elective credit may be given for prior learning, it should be understood that in the interest of accurate recognition of learning as well as being welcoming to adult students, every effort should be made to give credit for specific courses in the academic unit's offerings that fulfill core, major, minor or certificate requirements. General elective credit should be awarded only when no other option is available.

5. Academic units are encouraged to consider having at least one course for which they will award credit for prior learning. The academic unit shall decide which courses are eligible and the method of assessment (described in Section V of this policy). The academic unit must follow the relevant procedures and standards listed in this policy to implement and maintain any method and tool for assessing prior learning. Academic units shall only award specific course credit for prior learning in disciplines in which they have faculty expertise. If the course eligible for credit for prior learning has a prerequisite course in another academic unit, the academic unit awarding credit shall consult with the other academic unit in the development of the method of assessment.

6. Academic units shall assign their own course title and number to the credit awarded and the neutral grade of S (satisfactory) shall be utilized to designate credit awarded for prior learning. Conventional letter grades shall not be used.

7. All credit awarded for prior learning shall be appropriately identified by source and method on the student's transcript by university-wide codes established by the Registrar's Office.

SECTION V. APPROVED METHODS AND TOOLS FOR ASSESSING PRIOR LEARNING

A. Methods Specific to Undergraduate Programs

Some undergraduate academic units allow students to obtain credit for specific courses if they can demonstrate that they have mastered the content of the courses. Students interested in seeking credit via the methods in this section should contact the chair of the appropriate academic unit. Consistent with the limits specified in the St. Thomas Admission Requirements and Limitations for Non-Degree-Seeking Undergraduate Students policy, a maximum of 24 credits can be awarded for prior learning.

1. Department Examination

The examining faculty member offers no special instruction to the student except to furnish the syllabus and learning outcomes of the course. If this is unavailable or of insufficient assistance to the student, the course should be taken as a regular semester offering or on an Individual Study basis. A student may attempt to earn credit by examination only once for a particular course. Grades for courses taken in this way are given on an S/R basis. Only courses for which credit is awarded will be posted on the transcript. If a non-refundable fee is charged for

administering the examination, this fee must be submitted to and approved by the vice provost for academic affairs via the Course or Lab Fee Approval Process.

If an undergraduate academic unit grants credit by examination, the academic unit must submit its unit-specific procedure through the curriculum review process. The academic unit's procedure must also be included in the undergraduate catalog.

2. Advanced Placement (AP) Examinations

Students who meet the conditions described by departments in the undergraduate catalog for an Advanced Placement (AP) Examination will receive four credits and an "S" grade (satisfactory). This examination must be taken prior to matriculation to a college or university.

3. International Baccalaureate (IB) Examinations

All exams, with the exception of foreign languages, must be taken at the higher level. Students who pass the higher level International Baccalaureate (IB) Examination(s) in subjects included in the St. Thomas curriculum with a score of 4 or higher will ordinarily receive four credits toward graduation. The specific courses for which credit would be awarded will be determined by the appropriate academic department. The undergraduate catalog includes a list of guidelines according to which credit may be obtained through the higher level IB exam in specific departments. Credit awarded will be assigned an "S" grade (satisfactory).

4. College-Level Examination Program (CLEP)

The College-Level Examination Program (CLEP) was conceived to serve post-secondary students who have acquired certain kinds of knowledge outside the usual formal educational channels. Students must take CLEP examinations before or during the first semester to receive credit for the CLEP examination from St. Thomas. The academic units that grant credit for CLEP examinations are listed in the undergraduate catalog.

5. Cambridge International A Level Examinations

The undergraduate catalog identifies the St. Thomas courses for which equivalent credits may be awarded when a student receives a grade of "C" or higher on specific A Level exams.

B. Methods Specific to Graduate Programs

1. Department Examination

If a graduate academic unit grants credit by examination, the academic unit must have a policy that notifies students of this fact. The policy should include the following components if applicable:

- A list of specific courses available for credit by examination.
- The minimum score required for course credit.
- The maximum number of credits accepted, not to exceed the limits specified below, which are consistent with Section V of the St. Thomas Admission Requirements and Limitations for Non-Degree-Seeking Graduate Students policy:
    - For academic degrees or licensure programs, no more than one-third of the total credits in the degree would apply from credit by examination.
    - For certificate programs, no more than one-half of the total credits in the program would apply from credit by examination.
- The registration procedure for examination.
- The non-refundable examination fee, if any, a student must pay for the examination. Any fee must be submitted to and approved by the vice provost for academic affairs via the Course or Lab Fee Approval Process.
- The form of report required from third party testers.

- A statement that credit will be posted in the term in which the official test report is received.

If a graduate academic unit grants credit by examination, the academic unit must submit its unitspecific policy and procedure through the curriculum review process. The academic unit's policy and procedure must also be included in the relevant academic catalog. Academic units that do not grant credit by examination must publish a statement to this effect in their governing documents.

C. Methods Applicable to Both Undergraduate and Graduate Programs

1. Military Experiential Credit

The United States Department of Veterans Affairs mandates that all transcripts be evaluated for prior credit within two semesters, including transcripts for military training, even if credit may not be granted. To request military transcripts, students should visit the appropriate website applicable to their service branch.

- Joint Services Transcript (JST) (Army, Coast Guard, Marine Corps, and Navy): https://jst.doded.mil/jst/
- Community College of the Air Force
- Air Force Institute of Technology: https://www.afit.edu/ENER/page.cfm
- Other Air University schools: https://www.airuniversity.af.edu/

Academic units may award credit for prior learning based on the recommendations of the American Council on Education (ACE) and experience description documented on an official military transcript. Military experiential credit may be awarded up to the maximums specified below:

- For undergraduate degrees, no more than 24 credits of the total credits required for the degree;
- For graduate degrees or licensure programs, no more than one-third of the total credits required for the degree or program; and
- For graduate certificate programs, no more than one-third of the total credits required for the program.

If military experiential credit is accepted to award credit for prior learning, the number of credits will be based on ACE recommendations. If an academic unit chooses to award credit for military experience, training or education, that unit must develop a procedure that ensure uniform standards for transcript review and awarding of credit. The academic unit must have a unit-specific process that describes the procedure, notifies students of this option and specifies the non-refundable fee (if any) a student must pay for a transcript assessment. Any fee must be submitted to and approved by the vice provost for academic affairs via the Course or Lab Fee Approval Process. Academic units must also submit their unit-specific procedure through the curriculum review process. The academic unit's procedure must be included in the relevant academic catalog.

2. Portfolio Assessment

Portfolio assessment is a method of documentation of college-level learning gained from experiences outside of university credit-bearing courses. The portfolio assessment process enables students to assemble and submit an organized collection of materials that demonstrate mastery of course learning outcomes that have been gained through the workplace, community work, self-study and personal experiences. A portfolio may be assessed to demonstrate meeting the learning outcomes of an individual course or a range of courses, depending on the procedure developed by the academic unit. Academic unit faculty or equivalent content experts assess the portfolio materials as evidence of learning to determine whether and how much credit will be awarded. Credit via portfolio assessment may be awarded up to the maximums specified below:

- For undergraduate degrees, no more than 16 credits of the total credits required for the degree;
- For graduate degrees or licensure programs, no more than one-third of the total credits required for the degree or program; and
- For graduate certificate programs, no more than one-third of the total credits required for the program.

To ensure uniform standards for assessment and awarding of credit, academic units opting to award credit via portfolio assessment must have a unit-specific process that describes the procedure, notifies students of this option and is readily available to students. The portfolio assessment procedure must:

- Specify the learning outcome(s) the portfolio should address;
- Include instructions that specify how students collect, select, reflect, format and submit their portfolio;
- Provide the rubric that will be used to assess the quality of the portfolio;
- Provide the scoring standards (that align with the rubric) about what constitutes a passing score to earn academic credit; and
- Specify the non-refundable fee (if any) a student must pay for a portfolio assessment. Any fee must be submitted to and approved by the vice provost for academic affairs via the Course or Lab Fee Approval Process.

Academic units must submit their portfolio assessment procedure through the curriculum review process. The academic unit's procedure must be included in the relevant academic catalog. The University Learning Assessment Committee shall review implementation of this policy at the conclusion of the 2026-2027 academic year to determine which departments or programs are making use of the policy and to recommend whether the policy should be continued, revised or discontinued.

Appendix 4

Undergraduate Attendance and Coursework Completion Policy

Policy number: 203
Policy owner: Vice Provost for Academic Affairs

Date of initial publication: July 22, 2020
Date of latest revision: August 23, 2024

SECTION I. PURPOSE

This policy establishes expectations for class attendance and coursework completion in undergraduate courses, defines authorized absences from class or the timely completion of coursework, and outlines the process for notification and communication of authorized absences.

SECTION II. SCOPE AND APPLICABILITY

This policy governs all undergraduate courses (regardless of form and regardless of whether the course is credit-bearing) and all St. Thomas undergraduate coursework requirements, including but not limited to final examinations. The expectations set forth in this policy apply to all St. Thomas students enrolled in undergraduate courses (including non-degree-seeking students), all instructors who teach undergraduate courses, and all administrators of academic units that offer undergraduate courses.

SECTION III. DEFINITIONS

When used in this policy, the following terms have the following meanings:

a. ***Academic unit*** means a St. Thomas school, college, academic department or academic program, center or institute.

b. ***Acute illness*** means a physical or mental health condition that is limited in duration but prevents a student from attending class on a short-term basis. Examples include the flu; strep throat; hospitalization; a mental health crisis; and significant distress associated with a traumatic event, including identity-based trauma.

c. ***Administrator*** means a school or college dean or associate dean; a department chair; the director or associate director of an academic program, center or institute; or the administrative leader of any other academic unit.

d. ***Disability*** means a physical or mental impairment that substantially limits one or more major life activities including, but not limited to caring for oneself, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating, and working.

e. ***Instructor*** means the person who is assigned to teach one or more credit-bearing courses.

f. ***Identity-based trauma*** means significant distress as a result of experiencing a social- identity-based stressful event and/or anticipating that one might be targeted because of one's social identity, including but not limited to race, color, creed, religion, national origin, sex, sexual orientation, gender identity or expression, family status, disability, age, marital status, status with regard to public assistance, membership or activity in a local commission, genetic information, or any other characteristics protected by applicable law. Students experiencing identity-based trauma may express symptoms as an acute illness and/or disability as defined by this policy.

g. ***Synchronous*** means a class session either online or in-person where all students are required to meet together with their instructor at the same time.

h. *Synchronous assessment* means any assessment that occurs during a synchronous class session (e.g., an exam, a grade for participation or attendance, or a graded in-class activity).

i. *Undergraduate course* means any course that has a three-digit course number below 500.

SECTION IV. AUTHORIZED ABSENCES AND INSTRUCTOR DISCRETION

The University of St. Thomas expects that students will plan their schedules to avoid conflicts and will participate fully in all course activities, but recognizes that legitimate circumstances may arise where students are unable to complete synchronous assessments on time. Under such circumstances, deemed "authorized" by this policy, the student will notify the instructor in accordance with this policy, and the instructor will work with the student to ensure that course objectives are met, as detailed below. Instructors may request documentation and limit the number of authorized absences, with a limit not fewer than the equivalent of two weeks' worth of class meetings. When requesting documentation to verify absences due to illness or medical appointments, instructors may not request students to identify the specific illness or medical condition that necessitated the absence or request other information regarding the illness or medical condition. Accommodation for disability constitutes an exception to this policy and is governed by the rules established in IV.C below.

The total number of authorized absences that will be permitted in a single course during the academic term will depend on the specific facts and circumstances, which may include, among other considerations, the percentage and significance of the class sessions and coursework missed. For example, missing more than two (2) week's class meetings for a four (4)-credit course in the fall or spring semester (i.e., an absence rate of approximately fourteen percent (14%) generally would be considered excessive barring extraordinary circumstances.

A. Authorized Absences Based on Expected Circumstances

The following circumstances constitute an authorized absence, provided students provide any requested documentation and notify the instructor in advance of the date of conflict with a class meeting or required course activity.

1. Medical appointments for non-elective procedures and Veteran's Administration medical appointments that cannot reasonably be scheduled at an alternate time
2. Personal appearances in connection with subpoenas and other court orders;
3. Jury duty;
4. Military service including, but not limited to, National Guard and Reserves;
5. Religious observances, whether or not they are formally acknowledged on the St. Thomas Academic Calendar, including travel related to the observance;
6. Participation in intercollegiate athletic events sponsored by the St. Thomas Athletics Department;
7. Participation in formal meetings of the Faculty Senate, Student Senate and Board of Trustees by students selected as representatives to those bodies; and
8. Activities sponsored by St. Thomas (e.g., research presentation at a refereed scholarly conference, music performances, club sport national tournaments, etc.).

B. Authorized Absences Based on Unexpected Circumstance

The following circumstances constitute an authorized absence, provided students provide any requested documentation and notify the instructor as soon as reasonably practicable.

1. Acute illness or injury of the student or the student's dependent or the student's parent/guardian;
2. Acute medical conditions related to pregnancy;
3. Bereavement leave in connection with the death of a family member, including travel related to bereavement leave.

C. Authorized Absences Based on Disabilities

Students with a disability who anticipate or experience challenges adhering to class attendance or coursework requirements for reasons related to their disability are expected to contact Disability Resources promptly after the student first identifies the need for an accommodation with respect to class attendance or coursework requirements. Disability Resources will work with the student and the instructor to determine whether the student is eligible for accommodations and to obtain appropriate supporting documentation. Accommodations will be determined on an individual, caseby-case basis depending on the particular facts and circumstances. Accommodations are not retroactive.

D. Other Absences

For any absence that is not authorized above, accommodations are at the discretion of the instructor.

SECTION V. STUDENT EXPECTATIONS FOR AUTHORIZED ABSENCES

Students are expected to participate fully in all course requirements and complete all required coursework on time for the courses in which they are enrolled. Students are responsible for planning their schedules to avoid conflicts with synchronous class sessions and course requirements. However, the University of St. Thomas recognizes that there are legitimate circumstances in which students may miss synchronous class sessions or are unable to complete synchronous assessments in a timely fashion. These circumstances include the authorized cases above (Sections IV.A., IV.B., and IV.C.) and all other cases authorized by the instructor (Section IV.D.). In such situations, the student is responsible for contacting the instructor, accessing all available course resources, understanding missed content and/or class participation, and completing any make-up or alternative work assigned by the instructor. Students will request accommodations as soon as practicable, and in advance of any expected conflict with a class meeting or required coursework. Authorized absences do not relieve students of their class responsibilities.

A. Notification of Authorized Absences Based on Disabilities

Students who have a disability accommodation in place will notify instructors of class absences and other needs in accordance with the accommodation plan. Instructors may not request students to provide the instructor with documentation that verifies a student's disability. Verification for disability-related absences and modified coursework requirements are handled through Disability Resources, which obtains and maintains all required documentation. Instructors with questions about disability accommodations are expected to contact Disability Resources.

B. Notification of Other Authorized Absences

Students who do not have a disability accommodation related to class absences or coursework deadlines, but encounter a circumstance outlined in Sections IV.A. or IV.B. will notify their instructor promptly upon becoming aware of the absence or need for accommodation. The student will include documentation as requested by the instructor, the date of the authorized absence(s) and the reason for the absence(s). It is the student's responsibility to request accommodations under this policy. An authorized absence does not automatically release the student from the timely completion of coursework. Students will request accommodations as soon as practicable, and in advance of any expected conflict with a class meeting or required coursework.

SECTION VI. INSTRUCTOR EXPECTATIONS FOR AUTHORIZED ABSENSES

Subject to the student notification and communication requirements of this policy, the instructor of a course will work with the student to satisfy the course objectives.

For absences deemed authorized by this policy, the instructor will either, at the instructor's discretion, exempt students from synchronous assessments, or offer full credit for make-up work, an alternate activity, or another arrangement to accommodate the student's absence. In cases where a student meets the goals of the equivalent experience, there will be no penalty to the student's grade for missing the synchronous assessment. Students are responsible for all content missed while absent. Instructors are not required to recreate the original learning environment.

Certain aspects of a course, such as laboratory sections, clinical experiences and field-based classes, provide a more challenging situation, and it may be difficult or impossible to make up essential coursework in these cases. At the beginning of an academic term, if an instructor believes a student will have too many authorized absences that cannot be accommodated, the instructor and Department/Program Chair will discuss the student's circumstances with the Dean (or Dean's designee) of the instructor's college or school in order to find a remedy.

SECTION VII. APPEALS

If a student believes the student has been wrongly denied accommodations for an absence as provided for by this policy, the student may pursue the complaint using the usual process for appeals of student grievances related to academic matters.

Appendix 5

Undergraduate Course, Term and Institutional Withdrawal Policy

Policy number: 207
Policy owner: Vice Provost for Academic Affairs

Date of initial publication: Not available
Date of latest revision: February 11, 2022

SECTION I. PURPOSE

This policy establishes the conditions and limitations under which students may withdraw from undergraduate courses (sometimes referred to as "dropping a course") at the University of St. Thomas. This policy also establishes the conditions and limitations under which undergraduate students may withdraw from all courses in the current term or completely withdraw from St. Thomas with the intention not to enroll in courses in future terms at St. Thomas.

SECTION II. SCOPE AND APPLICABILITY

The course withdrawal provisions in this policy apply to all students enrolled in undergraduate courses at St. Thomas, other than courses offered by the Dougherty Family College. The course withdrawal provisions of this policy apply regardless of the mode of delivery and regardless of whether the course is credit-bearing. The term withdrawal and institutional withdrawal provisions in this policy apply to all undergraduate students in baccalaureate degree-seeking programs at St. Thomas. The term withdrawal and institutional withdrawal provisions in this policy do not apply to students enrolled in the Dougherty Family College. Dougherty Family College students are instead subject to the Dougherty Family College Term and Institutional Withdrawal Policy (SEE APPENDIX 6).

Course, term and institutional withdrawals by students who are called to active military service or whose spouses are called into active military service, or by students who are veterans with a service-connected disability, are also subject to the Military Withdrawal Policy. For students covered by the Military Withdrawal Policy, the Military Withdrawal Policy (SEE APPENDIX 7) will supersede this policy if the provisions of the two policies differ.

SECTION III. DEFINITIONS

When used in this policy, the following terms have the following meanings:

a. ***Add/Drop form*** (officially titled, "Registration Change Form - Add/Drop" and available in the Registrar's Office) means the form students must complete and submit to the Registrar's Office to officially add or drop a course after the regularly scheduled registration period ends.

b. ***Murphy Online*** means the web-based, self-service user interface for Banner, the Enterprise Resource Planning (ERP) software product that St. Thomas uses to record and maintain electronic information for students, employees, alumni, and finances, including student course registration and financial aid information (or its successor system).

c. ***Registrar's Office*** means the university office responsible for maintaining the integrity of student records, including, but not limited to, course registration and withdrawal, academic grades and transcripts, and personal information. This office also may be referred to at St. Thomas as the Office of Student Data and Registrar.

d. ***Student*** means any individual enrolled in one or more courses.

e. ***Transcript*** is the permanent record of a student's courses and grades at St. Thomas.

f. ***Undergraduate course*** means any course that has a three-digit course number below 500 that is offered outside of the Dougherty Family College.

g. ***Undergraduate student*** means an individual enrolled in an undergraduate degree-seeking program at St. Thomas other than a program offered by the Dougherty Family College.

SECTION IV. WITHDRAWAL TYPES

There are three types of withdrawals for students at St. Thomas:

1. ***Course withdrawal*** refers to a student withdrawing from an enrolled undergraduate course in the current term. This is sometimes referred to as "dropping a course." (See Section V below.)

2. ***Term withdrawal*** refers to an undergraduate student withdrawing from all enrolled courses in the current term with the potential intention to enroll in courses in future terms at St. Thomas. (See Section VI below.)

3. ***Institutional withdrawal*** refers to an undergraduate student withdrawing from all enrolled courses in the current term with the intention not to enroll in courses in future terms at St. Thomas. ***Institutional withdrawal*** also refers to an undergraduate student completing all enrolled courses in the current term with the intention not to enroll in courses in future terms at St. Thomas. (See Section VII below.)

SECTION V. COURSE WITHDRAWAL ("DROPPING A COURSE")

Students must use Murphy Online or the Add/Drop form to withdraw from an undergraduate course. The official date of withdrawal from a course will be the date the withdrawal made using Murphy Online is effective or the date the Add/Drop form is received by the Registrar's Office during regular office hours.

A. Effect on Transcript

The official date of withdrawal from a course affects what appears on a student's transcript:

1. **Course Withdrawal Without Notation on Transcript.** Students who withdraw from a course before the "last day to drop a course without notation on record" will not have any record of that course on their transcript. Students must refer to the university's Academic Calendar to see which day is designated as the "last day to drop a course without notation on record" for each term.

2. **Course Withdrawal with Notation of "W" on Transcript.** Students who withdraw from a course between the "last day to drop a course without notation on record" and the "last day to withdraw from a course without a grade of F" will receive a notation of "W" for the course. A notation of W is an official grade and is posted on the student's transcript. The notation of W will not affect the grade point average. Students must refer to the university's Academic Calendar to see which days are designated as the "last day to drop a course without notation on record" and the "last day to withdraw from a course without a grade of F" for each term.

3. **Course Withdrawal with Grade of "F" on Transcript.** Students who withdraw from a course after the "last day to withdraw from a course without a grade of F" will receive a grade of "F" for the course. A grade of F is an official grade and is posted on the student's transcript. The grade of F will affect the grade point average. Students must refer to the university's Academic Calendar to see which day is designated as the "last day to withdraw from a course without a grade of F" for each term.

B. Effect on Tuition and Fees

Students are responsible for all tuition and fees associated with the course unless a refund is available under applicable policies. Refunds, if any, for a withdrawn course are specified on the Refund Schedule-Undergraduate Students published by the Business Office (https://www.stthomas.edu/about/departments/business-office/paying-your-bill/erefunds/refund-policies-and-schedule/). The final dates for various levels of refunds that may be available are specified on the Academic Calendar. The availability of a full refund, a partial refund or no refund will be determined based on the official date of withdrawal.

C. Effect on Financial Aid

A student's financial aid may be affected by course withdrawal. Students should contact the Financial Aid Office to determine any consequences to their financial aid related to withdrawing from a course.

D. Effect of Non-Attendance

Students who do not attend the first day of a course, or cease attending a course after the first day of the course, are not automatically withdrawn from the course by St. Thomas. The instructor does have the option of withdrawing a student from the course if the student does not attend the first day of the course. However, ***students must not assume they have been withdrawn from a course if they did not attend the first day of class or cease attending classes***. It is the student's responsibility to confirm an instructor-initiated course withdrawal on Murphy Online or at the Registrar's Office or take the necessary steps under this policy to withdraw from the course.

SECTION VI. TERM WITHDRAWAL

Undergraduate students who intend to withdraw from all courses in the current term, with the intention of enrolling in courses in future terms at St. Thomas, must withdraw from each individual course in accordance with Section V.A of this policy.

A. Effect on Transcript

The official date(s) of withdrawal will determine what appears on a student's transcript (see Section V.A.1 of this policy for more details). Pursuant to Section V.A.1.c, students who withdraw from a course after the "last day to withdraw from a course without a grade of F" will receive a grade of "F" for the course. Under certain exceptional circumstances, a student who initiates a term withdrawal between the "last day to withdraw from a course without a grade of F" and the last day of the term may still receive a notation of "W" for all courses on the transcript. ***Students must contact Academic Counseling to see if their circumstances qualify for this rare exception.*** Students must refer to the Academic Calendar to see which days for each term are designated as the "last day to withdraw from a course without a grade of F" and the last day of the term.

B. Effect on Tuition and Fees

Students are responsible for all tuition and fees associated with the courses from which they withdraw unless a refund is available under applicable policies. Refunds, if any, are specified on the Refund Schedule-Undergraduate Students published by the Business Office (https://www.stthomas.edu/about/departments/business-office/paying-your-bill/erefunds/refund-policies-and-schedule/). The final dates for various levels of refunds that may be available are specified on the Academic Calendar. The availability of a full refund, a partial refund, or no refund will be determined based on the official date of withdrawal, as determined in accordance with Section V.A of this policy.

C. Effect on Financial Aid

A student's financial aid may be affected by term withdrawal. Students should contact the Financial Aid Office to determine any consequences to their financial aid related to withdrawal from all courses for the term.

D. Plans to Return to St. Thomas

Students who plan to return to St. Thomas after any term withdrawal should review the procedures regarding readmission as a former student, as the student may be required to seek readmission before reenrolling in courses at St. Thomas.

SECTION VII. INSTITUTIONAL WITHDRAWAL

A. Withdrawal After Completing All Courses in Current Term

Undergraduate students who intend to complete all courses in the current term but intend not to enroll in courses in future terms at St. Thomas should contact Academic Counseling for assistance with the institutional withdrawal process.

B. Withdrawal Before Completing All Courses in Current Term

Undergraduate students who intend to withdraw from all courses in the current term, and intend not to enroll in courses in future terms at St. Thomas, must withdraw from all courses in accordance with Section V of this policy.

Students also should contact Academic Counseling to notify St. Thomas of the student's intention to complete the institutional withdrawal process. Academic Counseling can assist students with this process.

1. Effect on Transcript

The official date(s) of withdrawal will determine what appears on a student's transcript (see Section V.A.1 of this policy for more details). Pursuant to Section V.A.1.c, students who withdraw from a course after the "last day to withdraw from a course without a grade of F" will receive a grade of "F" for the course. Under certain exceptional circumstances, a student who initiates an institutional withdrawal between the "last day to withdraw from a course without a grade of F" and the last day of the term may still receive a notation of "W" for all courses on the transcript. ***Students must contact Academic Counseling to see if their circumstances qualify for this rare exception***. Students must refer to the Academic Calendar to see which days for each term are designated as the "last day to withdraw from a course without a grade of F" and the last day of the term.

2. Effect on Tuition and Fees

Students are responsible for all tuition and fees associated with the courses from which they withdraw unless a refund is available under applicable policies. Refunds, if any, are specified on the Refund Schedule-Undergraduate Students published by the Business Office (https://www.stthomas.edu/about/departments/business-office/paying-your-bill/erefunds/refund-policies-and-schedule/). The final dates for various levels of refunds that may be available are specified on the Academic Calendar. The availability of a full refund, a partial refund, or no refund will be determined based on the official date of withdrawal, as determined in accordance with Section V.A.

3. Effect on Financial Aid

A student's financial aid may be affected by institutional withdrawal. Students should contact the Financial Aid Office to determine any consequences to their financial aid related to institutional withdrawal.

Appendix 6

Dougherty Family College Term and Institutional Withdrawal Policy

Policy number: 208
Policy owner: Vice Provost for Academic Affairs

Date of initial publication: Not available
Date of latest revision: February 11, 2022

SECTION I. PURPOSE

This policy establishes the conditions and limitations under which students enrolled in the Dougherty Family College (DFC) may withdraw from all courses in the current term or completely withdraw from DFC with the intention not to enroll in courses in future terms.

SECTION II. SCOPE AND APPLICABILITY

This policy applies to all students enrolled in courses at DFC, regardless of the mode of delivery and regardless of whether the course is credit-bearing.

Withdrawals by students who are called to active military service or whose spouses are called into active military service, or by students who are veterans with a service-connected disability, are also subject to the Military Withdrawal Policy (See Appendix 7). For students covered by the Military Withdrawal Policy, the Military Withdrawal Policy will supersede this policy if the provisions of the two policies differ.

SECTION III. WITHDRAWAL TYPES

There are two types of withdrawals a DFC:

a. ***Term withdrawa***l refers to a student withdrawing from all enrolled courses in the current term with the intention to enroll in courses in future terms at DFC. (See Section V of this policy.)

b. ***Institutional withdrawal*** refers to a student withdrawing from all enrolled courses in the current term with the intention not to enroll in courses in future terms at DFC. ***Institutional withdrawal*** also refers to a student completing all enrolled courses in the current term with the intention not to enroll in courses in future terms at DFC. (See Section VI of this policy).

Due to the unique, cohort structure of DFC, students are not permitted to withdraw from individual DFC courses during a term. Students who wish to remain enrolled at DFC for the duration of any term must enroll in all courses designated for their cohort during the term

SECTION IV. COURSE WITHDRAWAL GENERALLY

A. Effect of Non-Attendance

Students are expected to attend the first class meetings of all courses for which they are registered. Thereafter, regular attendance is expected and required, and instructors will take attendance in all classes. Students who do not attend the first day of one or more courses, or cease attending one or more courses after the first day of the course, are not automatically withdrawn from the courses by DFC. While the instructor will inform the associate dean of academics if a student does not attend the first day of a course, this notice is different from a course withdrawal. In order to withdraw from all courses during the term, students must take the required steps for withdrawal under Section V.A or Section VI of this policy.

Under certain circumstances described in Section V.B of this policy, DFC may choose to withdraw a student from all courses. ***However, students must not assume they have been withdrawn from courses if they did not attend the first day of class or cease attending classes***. If a student does not take the steps required for withdrawal and

DFC does not withdraw the student from all courses under Section V.B, the student's lack of attendance in one or more courses may affect the student's grade for the course and their ability to continue enrollment in DFC in future terms. Non-attendance or minimal attendance of courses does not justify a tuition or fee refund for the courses.

B. Effect on Transcript

The official date of withdrawal from courses affects what appears on a student's transcript:

1. Course Withdrawal Without Notation on Transcript

Students who withdraw from courses before the "last day to drop a course without notation on record" will not have any record of the courses on their transcript, which is the permanent record of the student's courses and grades. Students must refer to the university's Academic Calendar to see which day is designated as the "last day to drop a course without notation on record" for each term.

2. Course Withdrawal with Notation on Transcript

Students who withdraw from courses between the "last day to drop a course without notation on record" and the "last day to withdraw from a course without a grade of F" will receive a notation of "W" for the courses. A notation of W is an official grade and is posted on the student's transcript. The notation of W will not affect the grade point average. Students must refer to the university's Academic Calendar to see which days are designated as the "last day to drop a course without notation on record" and the "last day to withdraw from a course without a grade of F" for each term.

3. Course Withdrawal with Grade of "F" on Transcript

Students who withdraw from courses after the "last day to withdraw from a course without a grade of F" will receive a grade of "F" for the courses. A grade of F is an official grade and is posted on the student's transcript. The grade of F will affect the grade point average. Students must refer to the university's Academic Calendar to see which day is designated as the "last day to withdraw from a course without a grade of F" for each term.

SECTION V. TERM WITHDRAWAL

A. Student-Initiated Withdrawal

Students who intend to withdraw from all courses in the current term, with the intention of enrolling in courses in future terms at DFC must immediately notify the associate dean of academics in writing of the student's decision. The associate dean of academics will ask the operations manager to withdraw the student from all enrolled courses. The official date of withdrawal from the term will be the date the associate dean of academics received written notice from the student of the decision to withdraw from all courses.

1. Effect on Transcript

The official date of withdrawal may affect what appears on a student's transcript (see Section IV.B of this policy). Pursuant to Section IV.B.3, students who withdraw from courses after the "last day to withdraw from a course without a grade of F" will receive a grade of "F" for all courses. Under certain exceptional circumstances, a student who initiates a term withdrawal between the "last day to withdraw from a course without a grade of F" and the last day of the term may still receive a notation of "W" for all courses on the transcript. Students must contact the associate dean of academics to see if their circumstances qualify for this rare exception. Students must refer to the Academic Calendar to see which days for each term are designated as the "last day to withdraw from a course without a grade of F" and the last day of the term.

2. Effect on Tuition and Fees

Students are responsible for all tuition and fees associated with their courses unless a refund is available under applicable policies. Refunds, if any, for withdrawn courses are specified on the Refund Schedule-Undergraduate Students published by the Business Office (https://www.stthomas.edu/about/departments/business-office/paying-your-bill/erefunds/refund-policies-and-schedule/). The final dates for various levels of refunds that may be

available are specified on the Academic Calendar. The availability of a full refund, a partial refund, or no refund will be determined based on the official date of withdrawal.

3. Effect on Financial Aid

A student's financial aid may be affected by a term withdrawal. Students should contact the Financial Aid counselor to determine any consequences to their financial aid related to withdrawal from all courses for the term.

4. Plans to Return to DFC

Students who plan to return to DFC after any term withdrawal should review the procedures regarding readmission as a former student, as the student may be required to seek readmission before reenrolling in courses at DFC.

B. Institution-Initiated Withdrawal

DFC may choose to initiate the withdrawal of a student from all courses in a term under certain circumstances. Specifically, DFC may choose to initiate a term withdrawal if it determines that a student, who is registered for the current term, is unlikely to maintain enrollment in good standing based on one or more factors which may include, but are not limited to: failure to complete the financial aid process, failure to complete the Summer Enrichment Program, or multiple absences from one or more classes within the first 10 days of a term. Before making its determination, designated DFC staff will seek to discuss with the student and confirm the student's interest and ability to continue enrollment in good standing. If, prior to the "last day to drop a course without notation on record" under the Academic Calendar, the dean determines that the student has not provided sufficient confirmation of the student's interest and ability to maintain enrollment in good standing throughout the term, DFC will initiate the withdrawal of the student from all courses. Such term withdrawal will take effect on or before the "last day to drop a course without notation on record" under the Academic Calendar. DFC will provide the student with prompt written notice of any such withdrawal initiated by DFC.

SECTION VI. INSTITUTIONAL WITHDRAWAL

A. Withdrawal After Completing All Courses in Current Term

Students who intend to complete all courses in the current term but intend not to enroll in courses in future terms at DFC should contact the associate dean of academics for assistance with the institutional withdrawal process.

B. Withdrawal Before Completing All Courses in Current Term

Students who intend to withdraw from all courses in the current term, and intend not to enroll in courses in future terms at DFC must immediately notify the associate dean of academics in writing of the student's decision. The associate dean of academics will ask the operations manager to withdraw the student from all enrolled courses. The official date of withdrawal from the term will be the date the associate dean of academics received written notice from the student of the decision to withdraw from all courses.

1. Effect on Transcript

The official date of withdrawal may affect what appears on a student's transcript (see Sections IV.B of this policy). Pursuant to Section IV.B.3, students who withdraw from courses after the "last day to withdraw from a course without a grade of F" will receive a grade of "F" for all courses. Under certain exceptional circumstances, a student who initiates an institutional withdrawal between the "last day to withdraw from a course without a grade of F" and the last day of the term may still receive a notation of "W" for all courses on the transcript. ***Students must contact the associate dean of academics to see if their circumstances qualify for this rare exception.*** Students must refer to the Academic Calendar to see which days for each term are designated as the "last day to withdraw from a course without a grade of F" and the last day of the term.

2. Effect on Tuition and Fees

Students are responsible for all tuition and fees associated with their courses unless a refund is available under applicable policies. Refunds, if any, for withdrawn courses are specified on the Refund Schedule-Undergraduate Students published by the Business Office (https://www.stthomas.edu/about/departments/business-office/paying-

your-bill/erefunds/refund-policies-and-schedule/). The final dates for various levels of refunds that may be available are specified on the Academic Calendar. The availability of a full refund, a partial refund, or no refund will be determined based on the official date of withdrawal.

3. Effect on Financial Aid

A student's financial aid may be affected by a term withdrawal. Students should contact the Financial Aid counselor to determine any consequences to their financial aid related to withdrawal from all courses for the term with no intent to reenroll.

Appendix 7

Military Withdrawal Policy

Policy number: 606
Policy owner: Director of Veteran Services

Date of initial publication: March 25, 2019
Date of latest revision: N/A

SECTION I. PURPOSE

St. Thomas supports veterans and those who serve our country through active military service. In accordance with Minnesota Statutes Section 195.502, this policy clarifies the options for students who are called into active military service or whose spouses are called into active military service and the options for veterans who have a service-connected disability certified by the Department of Veterans Affairs.

SECTION II. SCOPE AND APPLICABILITY

This policy applies to students who are called to active military service or whose spouses are called into active military service and to students who are veterans with a service-connected disability.

SECTION III. DEFINITIONS

When used in this policy, ***Covered Student*** means:

(1) a student who is ordered into active military service and who is reasonably prevented from attending or progressing in one or more courses due to the deployment.

(2) a student whose spouse is ordered into active military service and who is reasonably prevented from attending or progressing in one or more courses due to the need to care for a dependent child; or

(3) a student who is a veteran who has a service-connected disability as certified by the U.S. Department of Veterans Affairs and who is reasonably prevented from attending or progressing in one or more courses due to a service-connected medical condition or medical treatment.

SECTION IV. OPTIONS FOR COVERED STUDENTS

In compliance with applicable law and University policy, Covered Students have the following options:

A. Options With Respect to Courses

1. Withdrawal

Covered Students may withdraw from one or more courses. Tuition and fees previously paid will be credited to the student's account. Refunds, if any, are subject to the requirements of applicable state or federal financial aid program(s) and University policy. Covered Students who withdraw under this policy will not receive credit or a grade for the course, the student's GPA will not be impacted and the student will not receive an incomplete or any negative notation on the student's transcript. A "W" will appear on the transcript if the withdrawal occurs after the deadline for withdrawing from a course without notation.

A Covered Student who withdraws under this policy will be readmitted and reenrolled as a student at St. Thomas without redetermination of admission eligibility within two years following release from active military service, the spouse's release from active military service or completion of medical treatment or sufficient recovery from the related medical condition.

2. Incomplete

Covered Students may request to be given an incomplete and allowed to complete the course upon release from active service, upon completion of medical treatment, or upon sufficient medical recovery. The assigning of an incomplete is by mutual consent of the faculty member and the Covered Student. Covered Students must follow the University's standard practices regarding incomplete grades, which includes making arrangements with the instructor to take an incomplete and submitting an Incomplete Form to the Office of Student Data and Registrar.

3. Continue and Complete Course

Covered Students who are able to meet course requirements may continue and complete the course for full credit. Class sessions the Covered Student misses due to performance of active military service, due to care for a dependent child as a result of the Covered Student's spouse's call to active military service, or due to the Covered Student's service-connected medical treatment or medical condition will be counted as excused absences and will not be used to adversely impact the student's grade or standing in the class. Covered Students who select this option are expected to complete all course assignments. In some courses, it may not be possible to complete all course assignments (such as labs or experiential learning), if significant class time is missed. Students interested in this option should consult with their professor. A letter grade or a grade of pass must be awarded only if, in the opinion of the faculty member teaching the course, the student has completed sufficient work and has demonstrated sufficient progress toward meeting course requirements to justify the grade.

B. Options with Respect to Room, Board and Fees

Covered Students may request a refund of amounts paid for room, board and fees attributable to the time period during which the Covered Student or their spouse was serving in active military service or the Covered Student was receiving medical treatment or dealing with their medical condition if the Covered Student did not use the facilities or services for which the amounts were paid. Any refund of room, board and fees that was paid for through state or federal financial aid is subject to the requirements of the state or federal financial aid programs of origination.

SECTION V. PROCEDURES

A, Notification to University and Documentation

A Covered Student who wishes to exercise option(s) under this policy must provide advance oral or written notice to the school certifying official in the Office of Student Data and Registrar. If advance notice is precluded by military or medical necessity, the Covered Student must provide notice as soon as reasonably practicable.

The Covered Student must provide written verification of an order to active service by the Covered Student or their spouse to the school certifying official in the Office of Student Data and Registrar. Upon request from Disability Resources, a Covered Student must provide Disability Resources with the U.S. Department of Veterans Affairs certification of a service-connected disability and written verification of a medical condition or treatment that reasonably prevents the student's attendance or academic progress.

B. Financial Considerations

The Covered Student is responsible for coordinating with the Financial Aid Office, the Business Office, and the school certifying official in the Office of Student Data and Registrar to address any overpayment and other financial considerations with regard to federal, state, institutional or Veterans Affairs Funding.