

Interdisciplinary Programs

Plus one of:

COMM 103	Public Speaking
COMM 104	Communication in the Workplace
ENGL	200 or above
JOUR 215	Journalistic Writing in the Workplace
JOUR 311	Persuasion in Writing

Suggested Electives:

BLAW 365	Business Law
ECON 251	Principles of Macroeconomics
ECON 351	Macroeconomic Theory
ECON 352	Microeconomic Theory
ECON 355	Game Theory
FINC 324	Advanced Financial Management
FINC	400-level Investment Courses
MBIS 701	Insurance Seminar
MKTG 300	Principles of Marketing
QMCS 280	Object-Oriented Design and Programming
QMCS 450	Database Design

264 Theory of Interest (MATH 264)

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.

Prerequisite: MATH 114.

351 Foundations of Actuarial Mathematics

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.

Prerequisite: 264 and MATH 313.

352 Actuarial Contingencies

Extension of the analysis of 351 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, nonforfeiture benefits and dividends.

Prerequisite: 351

Biochemistry

DeJong (BIOL), Hartshorn (CHEM), chairs; Advisory committee: Chaplin (BIOL), Glorvigen (CHEM), Olson (CHEM), Verhoeven (BIOL)

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 and chemistry coursework in their freshman year. The biochemistry committee will coordinate advising, though any faculty member of either department may serve as an adviser. 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.

Students choosing this major may not take a second major or a minor in either Biology or Chemistry.

Major in Biochemistry (B.S.)

BIOL 201	Diversity and Adaptation
BIOL 202	Genetics and Population Biology
BIOL 204	Cellular and Molecular Biology
CHEM 111	General Chemistry I

CHEM 112	General Chemistry II
CHEM 201	Organic Chemistry I
CHEM 202	Organic Chemistry II
CHEM 440	Biochemistry I
CHEM 442	Biochemistry II

Plus one of:

CHEM 331	Chemical Thermodynamics and Reaction Dynamics
CHEM 332	Quantum Chemistry and Molecular Spectroscopy

Plus:

Twelve additional credits numbered BIOL 295 or higher.

Note: Four credits must be at the 400-level, excluding Research. Four credits may be in Research at the 300-level.

Four additional credits in CHEM, selected in consultation with the adviser.

Allied requirements

MATH 113	Calculus I (or equivalent)
MATH 114	Calculus II
PHYS 111	Introduction to Classical Physics I
PHYS 112	Introduction to Classical Physics II

Catholic Studies (CATH)

Briel (THEO), director, Hayden-Lemmons (PHIL), Joncas (THEO), A. Kennedy (THEO), R. Kennedy (MGMT), Menssen (PHIL), Reichardt (ENGL), T. Sullivan (PHIL), Thompson (THEO), Wallace (CATH)

The interdisciplinary program in Catholic Studies is designed to allow students to encounter the broad and diverse expressions of Catholic culture. While grounded in Catholic philosophy and theology, the program engages students with the imaginative and sacramental expressions of Catholic life in literature, the arts, social systems and personal experience. The program's interdisciplinary dimension gives students insight into the Church's dynamic interaction with and interpenetration of cultures, traditions, and intellectual life throughout history. By examining the role the church has played in various cultures, students are challenged to take seriously Catholicism's transforming power in every aspect of intellectual, spiritual, and social life.

Faculty who teach in the program are drawn from across the university and are united by a profound respect for Catholicism. They are committed to a high degree of interaction among themselves as well as with students. Students who choose to participate in the program thus enter into a community at once faithful and intellectual.

The program will appeal to students of any faith tradition who seek to deepen their knowledge of Catholicism's rich and living heritage. Its interpersonal approach and opportunities for sustained reflection on important issues invite students to a more profound and mature experience of faith.

Students graduating with a major in Catholic Studies will have a knowledge of the living Catholic tradition, and will be conversant with resources from the Catholic intellectual tradition that will permit them to explore critically the history and contemporary significance of Catholicism. They will be familiar with major Catholic figures from a variety of cultural and historical settings, and will be able to demonstrate a knowledge of the complex and broad history of the Catholic intellectual tradition.

The major consists of 32 credits: 20 credits in core courses and 12 credits in electives (two electives for double majors). The minor consists of 16 credits: 12 credits in core courses and four elective credits. Many courses are cross-listed with another department. Students majoring or minoring in other disciplines are invited to take an occasional course in the program at any time.

Major in Catholic Studies

240	Faith and Doubt
301	The Catholic Vision
312	Catholic Social Thought
334	Literature from a Christian Perspective
397	Topics

Plus:

Twelve credits in electives chosen from three of the following four categories:

CATH 222	The Catholic Literary Tradition: Medieval to Modern
THEO 310	Christian Worship

An historically based course from the interdisciplinary program in Catholic Studies or a course approved by the director

An aesthetics course from the interdisciplinary program in Catholic Studies or a course approved by the director