

## Business Administration-Marketing – Catholic Studies

### MKTG 320 Promotion Management (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, then integrated into case analysis.

Prerequisite: 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 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 300, MATH 101 or 109 or 111 or 113, QMCS 220

### MKTG 345 Marketing Analysis (4 credits)

In this course students learn to assemble, analyze and present information that is pertinent to marketing decisions. The focus in this course is on company strategies, competitive intelligence, and secondary sources. The course covers acquisition of pertinent secondary data from libraries, government, and commercial sources, the analysis of this data and its reduction and refinement to produce presentations that are helpful in marketing decision-making.

Prerequisites: MKTG 300, MATH 101 or 109 or 111 or 113, QMCS 220

### MKTG 350 Marketing Channels and Distribution Systems (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.

Prerequisites: MKTG 300 and QMCS 220

### MKTG 360 Retailing (4 credits)

In this course students learn the principles and practices of retailing, non-store retailing services and direct marketing from a management perspective. Topics include roles-in-channel, demographics, consumer behavior, trends, strategy formulation, ownership and formats, trade area and location, buying and sourcing, store design and visual merchandising, operations management promotion, service delivery, controls, non-store retailing, human resource issues, database management, and international retailing.

Prerequisite: MKTG 300.

### MKTG 370 Buyer 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 300

### 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 or 345, one of MKTG 310, 320, 330, 350, 360, 370, and senior standing

## Catholic Studies (CATH)

College of Arts and Sciences

Department of Catholic Studies

R Kennedy (chair), Briel, Joncas, Keating, Naughton, Reichardt, Ruddy, Thompson, Wojda; Boyle (THEO), A Kennedy (THEO), Lemmons (PHIL)

The Department of Catholic Studies allows students to encounter the broad and diverse expressions of Catholic culture. While grounded in Catholic philosophy and theology, the curriculum engages students with the imaginative and sacramental expressions of Catholic life in literature, the arts, social systems and personal experience. The interdisciplinary dimension gives students insight into Catholicism's dynamic interaction with and interpenetration of cultures, traditions, and intellectual life throughout history. By examining the role it 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 are united by a profound respect for Catholicism, and are committed to a high degree of interaction among themselves as well as with students. Students thus 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. 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 36 credits: 16 credits in required core courses, 12 credits in required distribution area electives, and 8 credits in approved electives (4 credits in approved electives for double majors). No more than 12 credits, cross-listed or otherwise, in any one discipline outside of Catholic Studies may be applied toward the requirements for a major without permission of the chairs of both departments.

The minor consists of 20 credits: 8 credits in required core courses, 8 credits in required distribution area electives, and 4 credits in approved electives.

### **Major in Catholic Studies**

*Sixteen credits in core requirements:*

- CATH 101 The Search for Happiness (4 credits)
- CATH 201 Paths and Practices of Catholic Spirituality (4 credits)
- CATH 301 The Catholic Vision (4 credits)
- CATH 401 The Church and Culture: Social Dimensions of Catholicism (4 credits)

*Plus:*

- Twelve credits in approved electives chosen from the following three categories:
- One philosophically-based course
- One historically-based course
- One aesthetically-based course

*Plus:*

- Eight additional credits in approved electives (four additional credits for double majors)

### **Minor in Catholic Studies**

Eight credits chosen from the core requirements above

*Plus:*

- Eight credits in approved electives chosen from the following three categories:
- One philosophically-based course
- One historically-based course
- One aesthetically-based course

*Plus:*

- Four additional credits chosen from among any of the approved electives.

Approved electives include (but may not be limited to) the following courses. Please consult the office of the department chair for an up-to-date list of approved courses.

*Philosophically Based courses:*

- CATH 240 Faith and Doubt (4 credits)
- CATH 250 Christian Mysteries from a Philosophical Viewpoint (4 credits)
- CATH 234 Love, Sex and Friendship (4 credits)
- CATH 272 Evolution and Creation (4 credits)
- CATH 297/397 Topics in Catholic Studies (4 credits each)

*Literary or Aesthetics Based courses:*

- CATH 222 The Catholic Literary Tradition (4 credits)
- CATH 334 Literature from a Christian Perspective (4 credits)
- CATH 356 Music and the Bible (4 credits)
- CATH 357 Sacred Music of the Catholic Heritage (4 credits)
- CATH 297/397 Topics in Catholic Studies (4 credits each)
- ARTH 280 Sacred Architecture and Space (4 credits)
- ARTH 320 Art and Culture of Colonial Mexico (4 credits)
- ARTH 330 Churches and Mosques in the First Millennium (4 credits)
- ARTH 335 Cathedrals, Monasteries, and Caliphates (4 credits)
- ARTH 340 Southern Renaissance Art and Society (4 credits)
- ARTH 342 Renaissance and Reformation in Northern Europe (4 credits)
- ARTH 345 Baroque and Rococo Art (4 credits)
- ARTH 347 Golden Age of Spain (4 credits)

## Catholic Studies

### *Historically Based courses*

- CATH 312 Catholic Social Thought (4 credits)  
CATH 297/397 Topics in Catholic Studies (4 credits each)  
HIST 306 The World of Late Antiquity: A.D. 284-641 (4 credits)  
HIST 307 The Church in the Roman Empire to A.D. 395 (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)  
HIST 312 Early Modern Europe: 1450-1750 (4 credits)  
HIST 366 The History of the Catholic Church in the United States (4 credits)

### *Other Approved Electives:*

- CATH 306 Christian Faith and Management Professions (4 credits)  
CATH 308 Woman and Man (4 credits)  
CATH 346 Christian Faith and the Education Profession (4 credits)  
CATH 364 Science and Christian Theology (4 credits)  
CATH 366 Psychology and Moral Theology (4 credits)  
CATH 378 Christian Faith and the Legal Profession (4 credits)  
CATH 379 Christian Faith and the Medical Profession (4 credits)  
CATH 297/397 Topics in Catholic Studies (4 credits each)  
THEO 310 Christian Worship (4 credits)

### **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 beings in relation to divine beings, the supernatural end to human life, the human being 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 Paths, Expressions and Practices in Catholic Spirituality (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 222 The Catholic Literary Tradition: Medieval to Modern (4 credits) (equivalent to ENGL 222)**

This course surveys literary works with theological or spiritual themes that have contributed to the vitality of Catholic culture. The purpose of the course is to help students realize that Catholic culture has fostered a variety of literary expressions and has produced works that speak compellingly of human experience and sacramental life.

Prerequisites: ENGL 111 and 112 or 190

### **CATH 234 Love, Sex and Friendship (4 credits) (equivalent to PHIL 234)**

A philosophical examination of the nature of human love. Possible topics include reciprocity and permanence, fidelity, romantic love, human sexuality, kinds of friendship. Special attention will be given to the thought of John Paul II.

Prerequisite: PHIL 115

### **CATH 240 Faith and Doubt (4 credits) (equivalent to PHIL 240)**

Philosophical arguments for and against the possibility of divine revelation. Special attention will be given to the claim that the faith of the Catholic Church is revealed. Possible topics include tests of alleged revelations and miracles, evil as a barrier to belief in revelatory claims, the compatibility of science and religion, the role of reason and faith in religious commitment, and personal decision-making in a state of doubt about evidence.

Prerequisite: PHIL 115

### **CATH 250 Christian Mysteries from a Philosophical Viewpoint (4 credits) (equivalent to PHIL 250)**

A consideration of philosophical problems associated with Catholicism. Possible topics include divine providence, creation, the soul, freedom of the will, faith, the Eucharist, the Incarnation, and the variety of religious beliefs.

Prerequisite: PHIL 115

### **CATH 272 Evolution and Creation (4 credits) (equivalent to PHIL 272)**

A philosophical examination of the relation between the doctrine of creation and theories in the evolutionary sciences. The course will consider arguments concerning evolution and creation from a variety of disciplines (including philosophy, theology, and natural science). The course will also examine historical and philosophical aspects of the rela-

tion between science and religion on the origins of the material world and the human race.  
Prerequisite: PHIL 115

**CATH 295, 296 Topics (2 credits)**

**CATH 297, 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 at [www.stthomas.edu/registrar/onlineschedule/](http://www.stthomas.edu/registrar/onlineschedule/).

**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: Junior standing and CATH 101 and CATH 201

**CATH 306 Christian Faith and the Management Professions (4 credits) (equivalent to THEO 306)**

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.

Prerequisites: THEO 101 (or 102 and 103) and one 200-level THEO course

**CATH 308 Woman and Man (4 credits)**

This course examines the definition of “woman” and “man” from both the historical and the philosophical perspective. Readings and discussion center on the question of (1) whether there are important philosophical differences between women and men and (2) whether such differences are natural or socially constructed. The implications of various answers to those questions are then examined, with special attention given to the Catholic tradition’s reflections on the nature and ends of marriage, the character of priestly ordination, friendship between women and men, and human sexuality. This course fulfills the core curriculum requirement in Human Diversity.

Prerequisite: PHIL 115

**CATH 312 Catholic Social Thought (4 credits)**

Rooted in Scripture, Catholic thought on social questions has always constituted a challenge to communities to protect human dignity from the concrete threats of the day. As it matured, Catholic social thought developed both a theoretical framework as well as a set of principles and guidelines for structuring communities in ways that protect and advance human dignity. The purpose of this course will be to explore both dimensions of Catholic social thought in their historical origins and in their contemporary expressions. Although the course presupposes a theological context, the principal focus will be on the interdisciplinary contributions to and implications of Catholic social thought.

Prerequisites: THEO 101 (or 102 and 103) and PHIL 115

**CATH 334 Literature from a Christian Perspective (4 credits) (equivalent to ENGL 334)**

This course examines methods of reading and literary texts from a Christian perspective. The general question of the course is, “how does a reader engage works of imaginative literature from an intellectually serious Christian perspective?” The course studies works of criticism representing a variety of Christian viewpoints and applies them to literary texts that are explicitly Christian in themes as well as those which invite, or are enriched by, a Christian perspective.

Prerequisites: ENGL 111 and 112 or 190

**CATH 346 Christian Faith and the Education Profession (4 credits) (equivalent to THEO 346)**

This course explores education through its grounding in the Christian understanding of God and the human person. Theological topics relevant to education include: the nature of truth, the relationship between faith and reason, and freedom in moral and intellectual formation. We will also examine questions about faith-based education in a pluralistic context and the relevance of an interdisciplinary search for truth. In light of the growing trend toward academic specialization, this course aims to help students learn how various disciplines are integrated in the search for wisdom.

Prerequisites: THEO 101 (or 102 and 103) and one 200-level THEO course

**CATH 356 Music and the Bible (4 credits) (equivalent to THEO 356)**

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.

Prerequisites: THEO 101 (or 102 and 103) and one 200-level THEO course

## Catholic Studies

### CATH 357 Sacred Music of the Catholic Heritage (4 credits) (equivalent to THEO 357)

Music both expresses and shapes religious experience. This course explores the practice and theory of music-making in Catholic worship and devotion. Special emphasis will be given to the study of Gregorian chant as foundational for Roman Rite worship music, the historical development of other forms of Catholic church music, and contemporary issues of music, culture and spirituality.

Prerequisites: THEO 101 (or 102 and 103) and one 200-level THEO course

### CATH 364 Science and Christian Theology (4 credits) (equivalent to THEO 364)

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, resurrection, and afterlife – in the light of modern scientific evidence and theories.

Prerequisites: THEO 101 (or 102 and 103) and one 200-level THEO course, PHIL 115, some college-level background in science, preferably biology, physics, or chemistry

### CATH 366 Psychology and Moral Theology (4 credits) (equivalent to THEO 366)

Although the fields of psychology and moral theology are in some ways similar in that they each address questions of human nature and human growth, they are also quite distinct in their conceptions of the human person. This course will explore some of the relationships between psychology and moral theology, especially in matters of human well-being and personal well-being. Areas of disparity between the disciplines as well as points of commonality and fruitful exchange will be discussed.

Prerequisites: THEO 101 (or 102 and 103) and one 200-level THEO course

### CATH 378 Christian Faith and the Legal Profession (4 credits) (equivalent to THEO 378)

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, treatises, 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.

Prerequisites: THEO 101 (or 102 and 103) and one 200-level THEO course

### CATH 379 Christian Faith and the Medical Profession (4 credits) (equivalent to THEO 379)

What is a good doctor? 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 medical practice. Emphasis throughout will be on the Christian tradition of moral inquiry as a resource for responding to this question.

Prerequisites: THEO 101 (or 102 and 103) and one 200-level THEO course

### CATH 397, 398 Topics (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.

### CATH 401 Church and Culture: Social Dimensions of Catholicism (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 material may include sources from philosophy, theology, history, economics, and political science.

Prerequisite: CATH 101 and Junior standing

### CATH 483, 484 Seminar (2 credits)

### CATH 485, 486 Seminar (4 credits)

See the description of these courses at the beginning of the "Curricula" section of this catalog.

### CATH 487, 488 Topics (2 credits)

### CATH 489, 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 at [www.stthomas.edu/registrar/onlineschedule/](http://www.stthomas.edu/registrar/onlineschedule/).

CATH 491, 492 Research (2 credits)

CATH 493, 494 Research (4 credits)

See the description of these courses at the beginning of the “Curricula” section of this catalog.

CATH 495, 496 Individual Study (2 credits)

CATH 497, 498 Individual Study (4 credits)

See the description of these courses at the beginning of the “Curricula” section of this catalog.

## Chemistry (CHEM)

College of Arts and Sciences

Department of Chemistry

Boyd (chair), Borgerding, Brom, Glorvigen, Hartshorn, Ippoliti, Mabbott, Marsh, Olson, Wammer; Cain, Krueger, Ojala, Ovechka

The Department of Chemistry offers two degree programs in the field of chemistry: a Bachelor of Science (B.S.) degree and a Bachelor of Arts (B.A.) degree. The department is accredited by the American Chemical Society (ACS) for the professional training of chemists, and the B.S. degree is certified by the American Chemical Society. The B.S. has either a chemistry or a biochemistry concentration option. This degree is recommended for students who plan to pursue graduate study in chemistry in preparation for college teaching or advanced research in academic, industrial or government laboratories.

The B.A. degree requires fewer chemistry courses and offers the possibility of completing a double major if students have a strong interest in another field. Both degrees offer some latitude in the selection of upper level courses, thus providing the student with flexibility to pursue an interest in a particular area of chemistry. Students graduating with either the B.S. or the B.A. may also qualify for departmental honors.

Students graduating with a major in chemistry will have the necessary knowledge to prepare them for a career in chemistry or for graduate school, and the confidence and skill to succeed. They will have the ability to read, comprehend, write, and speak with clarity and understanding in technical areas. They will constantly apply critical thinking to their readings in the technical literature. They will have developed good laboratory skills and be familiar with modern instrumentation and with the use of computers in technical fields. They will have developed the skills necessary to analyze their data and to draw conclusions from it.

Chemistry is an excellent major for students interested in biochemistry, food science, forensic science, medicine, medicinal chemistry, dentistry, pharmaceutical chemistry, pharmacology, pharmacy, patent law, polymer science, chemical engineering, environmental science, materials science and other interdisciplinary fields. The major is also suited to students with a complementary interest in other sciences, or in computers, education, economics or business.

Students interested in teacher licensure should consider the various combinations of science education in the Department of Teacher Education in this catalog.

The Departments of Chemistry and Biology jointly offer a B.S. degree in biochemistry. The curriculum for this degree may be found under “Interdisciplinary Programs” in this catalog.

All graduating senior majors are required to take an achievement test for purposes of assessment of the major and College accreditation.

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.

The department offers a number of courses for non-majors to fulfill the laboratory science component of the core curriculum.

### Graduation with Honors in Chemistry

Students graduating with a B.A. or B.S. degree in chemistry may also qualify for departmental honors. Students interested in this designation must consult with the department chair one year (or more) prior to their graduation date.

Requirements include:

1. a minimum cumulative GPA of 3.25 and a major field GPA of 3.50;
2. completion of four credits in research (CHEM 491-494); (participation in one summer of research in chemistry at St. Thomas may be applied in place of two credits; research must be completed at least one semester before graduation);
3. preparation of a written thesis in the format of the primary literature;
4. 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 (while off-campus examiners are typically chemists, committee members from other disciplines such as biochemistry and physics may be employed when appropriate).
5. presentation of research at an off-campus meeting such as the Minnesota Section ACS Undergraduate Research Symposium, Minnesota Academy of Sciences, NCUR, regional ACS meeting, or national ACS meeting.
6. All requirements must be completed by April 20 for spring commencement, or early enough to allow for notification of the registrar and academic dean when graduating in another term.