Marquette University does not discriminate in any manner contrary to law or justice on the basis of race, color, gender, age, sexual orientation, religion, disability, veteran's status or national origin in its educational programs or activities, including employment and admissions. At the same time, Marquette cherishes its right and duty to seek and retain personnel who will make a positive contribution to its religious character, goals, and mission in order to enhance the Jesuit, Catholic tradition. Federal laws (Titles VI, VII and IX; the Age Discrimination Act in Employment of 1967 as amended, the Rehabilitation Act of 1973 as amended, the Veteran's Readjustment Assistance Act of 1974, and the Americans With Disabilities Act of 1990) prohibit such discrimination.

Employee inquiries concerning the application of Section 503 of the Rehabilitation Act of 1973, Section 402 of the Vietnam Era Veteran's Readjustment Assistance Act of 1974 and Title I of the Americans with Disabilities Act of 1990 may be referred to the Office of Human Resources; Straz Tower; P.O. Box 1881; Milwaukee, WI 53201-1881; (414) 288-7305.

Student inquiries concerning Section 504 of the Rehabilitation Act of 1973 and Title III of the Americans with Disabilities Act of 1990 may be referred to the Office of Student Educational Services; Alumni Memorial Union; P.O. Box 1881; Milwaukee, WI 53201-1881; (414) 288-1645, V/T.

Student and employee inquiries concerning the application of Titles VI, VII, IX the Age Discrimination Acts of 1967 as amended, as well as Executive Order 11246 as amended may be referred to the Affirmative Action Officer; Straz Tower; P.O. Box 1881; Milwaukee, WI 53201-1881; (414) 288-3430.

The Marquette University Board of Trustees approved the Affirmative Action Program, formalizing the university's position toward human rights. This program reaffirms and specifies action programs to continue the pledge of promotion and equal opportunity for all qualified persons.

The university reserves the right to amend any of its academic programs, requirements for degrees, tuitions, fees, etc., at anytime, in its total discretion.

The 2008–2009 Graduate Bulletin is also available on Marquette University's Web site www.marquette.edu. While the university strives to maintain an accurate online bulletin, the printed bulletin is the university's official document. The provisions of this bulletin are subject to change at any time by Marquette University in its sole discretion.

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Produced by the Graduate School, the Graduate School of Management and the Office of Marketing and Communication

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**Table of Contents**

**THE UNIVERSITY** ................................................................. 1
  Introduction ..................................................................... 1
  Degrees Offered ............................................................... 4
  Policies of Marquette University ...................................... 9
  Academic Facilities and Resources .................................. 15
  Personal Resources and Facilities .................................. 18

**FINANCIAL INFORMATION** .................................................. 21
  Tuition, Fees and Housing ............................................. 21
  Financial Aid ................................................................. 24

**THE GRADUATE SCHOOL** .................................................... 35
  Introduction .................................................................... 35
  Application Procedures ................................................... 37
  Master’s Degree Program .................................................. 41
  Doctoral Degree Program .................................................. 44
  Policies of the Graduate School ...................................... 47
  Programs and Courses of the Graduate School ................. 61

**THE GRADUATE SCHOOL OF MANAGEMENT** ......................... 161
  Introduction ................................................................... 161
  Application Procedures ..................................................... 162
  Policies of the Graduate School of Management ............... 166
  Programs and Courses of the Graduate School of Management ................. 177

**UNIVERSITY DIRECTORY** ..................................................... 193

**INDEX** ............................................................................. 213

**MARQUETTE UNIVERSITY CAMPUS MAP** ......................... 218
INTRODUCTION

GRADUATE BULLETIN

The Graduate Bulletin contains information regarding the academic calendar, admissions, degree requirements, fees, regulations, and course offerings. Prospective and current graduate students are responsible for all information contained in this bulletin that is pertinent to graduate study and their specific field. Academic policy and course changes will apply to all students as of the date they become effective, regardless of whether they were in effect at the time the student initially enrolled at Marquette. Graduate students may follow the program requirements of the bulletin that is in effect at the time they submit their application, or any other bulletin used during their enrollment. However, students must abide by only one bulletin's rules. If any exceptions to this policy are required due to length of time between submitting an application and beginning the program, the student will be notified in writing of the applicable bulletin to follow. In order to properly audit a student's academic record for graduation, the student must notify the graduate school in writing if any bulletin other than the one in effect at the time of application is to be used. Furthermore, the policy applies primarily to master's degree students; doctoral students are bound by the specifics of their approved Doctoral Program Planning Form.

Graduate School and Graduate School of Management students must assume full responsibility for knowledge of the rules and regulations of their school and the special requirements of their individual degree programs. It is the responsibility of each graduate student to verify and meet the deadlines listed in the Academic Calendar (e.g., for submitting financial aid forms, submitting theses or dissertations). The Academic Calendar for 2008–2009 is located on the inside front and back covers of this bulletin.

CHANGES TO THE GRADUATE BULLETIN

Marquette University reserves the right to make changes of any nature in its programs, calendar, or academic schedule whenever in its sole judgment it is deemed necessary or desirable. Certain provisions in the bulletin may be in the process of amendment or change. Accordingly, the bulletin is not intended to be relied upon as a statement of the university’s contractual undertakings. The decision of Marquette University as to the interpretation and method of implementation of its rules, regulations, program requirements, schedules, and calendars shall be conclusive and final.

The information in this bulletin and other university bulletins, publications, or announcements may change without notice. Current information is available from the Graduate School or the Graduate School of Management.

ACCREDITATION

An educational institution is only as strong as the level of excellence which it demands of itself as well as of its faculty and students. Marquette University is accredited by the Higher Learning Commission, a commission of the North Central Association of Colleges and Schools.
Marquette University has set consistently high standards for itself which have resulted in accreditation and approval of its academic programs from these additional organizations and associations.


These accreditations assure a student that Marquette is recognized and approved by select national and regional educational associations, societies and councils. In addition, a student has the security of knowing that credits earned at Marquette have transfer value to comparable institutions of learning, just as an incoming transfer student learns by checking this list that Marquette can be expected to honor most credits earned at a similarly accredited college or university.

HISTORY

Marquette University was founded in 1881 by members of the Society of Jesus, a Catholic religious order established in 1540 by St. Ignatius Loyola. The university is named after Father Jacques Marquette (1637-1675), a French, Jesuit missionary and explorer in North America.

The origins of Marquette University date from 1848 when the Most Rev. John Martin Henni, first bishop of Milwaukee, obtained $16,000 from Guillaume DeBoey, a Belgian, Catholic businessman, to establish a Jesuit college. Bishop Henni petitioned the Jesuits to open a school, Marquette College, in Milwaukee. Because the Jesuits lacked personnel to undertake the project for decades, Marquette College did not open until 1881.

Marquette remained a small liberal arts college for men at North 10th and West State Streets until 1907. That year its leaders obtained a university charter from the state of Wisconsin and moved operations to a building just east of Gesu Church, at North 12th Street and West Wisconsin Avenue. That building, Johnston Hall, is the oldest building on the Marquette campus.

Between 1907 and 1913, Marquette expanded to include divisions of medicine, dentistry, nursing, pharmacy, law, business, engineering, music and journalism. In 1909, Marquette became the first Jesuit university in the world to officially admit women students. Influenced by the need for certified parochial school teachers, women were admitted to the university's first summer school session that year.

Following World War II, enrollment at Marquette increased dramatically, as it did at other American colleges and universities. Demand for graduate and professional education grew.

In the 1960s and '70s, Marquette introduced doctoral programs in various fields, including religious studies, biology, history and chemistry.

Since 1990, Marquette has added degree programs for working adults, which offer courses on campus as well as at satellite locations in southeastern Wisconsin; a part-time law program; an executive master in business administration program; and programs in physician assistant studies and exercise science.

Today Marquette University has a campus of approximately 90 acres and 60 buildings located in downtown Milwaukee. It consists of 12 colleges and schools:

- Arts and Sciences
- Business Administration
- Communication
- Dentistry
- Education
- Engineering
- Graduate
- Health Sciences
- Law
- Management (Graduate)
- Nursing
- Professional Studies

MISSION STATEMENT — MARQUETTE UNIVERSITY

Marquette University is a Catholic, Jesuit university dedicated to serving God by serving our students and contributing to the advancement of knowledge. Our mission, therefore, is the search for truth, the discovery and sharing of knowledge, the fostering of personal and professional excellence, the promotion of a life of faith, and the development of leadership expressed in service to others.
Excellence
Our students, whether traditional or non-traditional, undergraduate, graduate or professional, come to Marquette University to share our commitment to the pursuit of excellence in all things as a life-long endeavor. They come to join a community whose members — faculty, staff, students, trustees, alumni and friends alike — believe that education must encompass the whole person: spiritual and moral as well as intellectual, the heart as well as the mind. And they come seeking the educational, professional and cultural advantages of a university located in the heart of the city. We, in turn, take seriously our responsibility to foster and support excellence in teaching and research, to keep a Marquette education accessible to a diverse population of students, and to offer personal attention and care to each member of the Marquette community.

Faith
As a Catholic university, we are committed to the unfettered pursuit of truth under the mutually illuminating powers of human intelligence and Christian faith. Our Catholic identity is expressed in our choices of curricula, our sponsorship of programs and activities devoted to the cultivation of our religious character, our ecumenical outlook, and our support of Catholic beliefs and values. Precisely because Catholicism at its best seeks to be inclusive, we are open to all who share our mission and seek the truth about God and the world, and we are firmly committed to academic freedom as the necessary precondition for that search. We welcome and benefit enormously from the diversity of seekers within our ranks, even as we freely choose and celebrate our own Catholic identity.

Leadership
As a Jesuit university, Marquette embodies the intellectual and religious traditions of the Society of Jesus. Through an academically rigorous, values-centered curriculum, our students receive a firm grounding in the liberal arts, preparation for work in a world of increasing complexity and diversity, and formation for life as ethical and informed leaders in their religious, cultural, professional and civic communities. They work with and learn from faculty who are true teacher-scholars, whose research not only advances the sum of human knowledge, but also informs their teaching, and whose commitment to students is fundamental to their intellectual and professional lives.

Service
Through both our academic and co-curricular programs, Marquette strives to develop men and women who will dedicate their lives to the service of others, actively entering into the struggle for a more just society. We expect all members of the Marquette community, whatever their faith traditions, to give concrete expression to their beliefs by giving of themselves in service to those in need.

All this we pursue for the greater glory of God and the common benefit of the human community.

STATEMENT ON HUMAN DIGNITY AND DIVERSITY
As a Catholic, Jesuit university, Marquette recognizes and cherishes the dignity of each individual regardless of age, culture, faith, ethnicity, race, gender, sexual orientation, language, disability or social class. Precisely because Catholicism at its best seeks to be inclusive, we are open to all who share our mission and seek the truth about God and the world. Through our admissions and employment policies and practices, our curricular and co-curricular offerings, and our welcoming and caring campus environment, Marquette seeks to become a more diverse and inclusive academic community dedicated to the promotion of justice.

Our commitment to a diverse university community helps us to achieve excellence by promoting a culture of learning, appreciation and understanding. Each member of the Marquette community is charged to treat everyone with care and respect, and to value and treasure differences. This call to action is integral to the tradition which we share.

VISION STATEMENT
Our vision is to provide a Catholic, Jesuit education that is genuinely transformational, so that our students graduate not simply better educated but better people, and to do so with such excellence that when asked to name the three or four best Catholic universities in America, people will include Marquette as a matter of course.
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<th>PROGRAM</th>
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<th>SPECIALIZATIONS</th>
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* No formal specialization offered. Some programs allow students to focus their courses or electives in a specific area of interest. Contact the program department for more information.
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<td>Secondary Education (SEED)</td>
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<td>Superintendent (SUPR)</td>
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<td>Educational Psychology (EDPS)</td>
<td>M.A.</td>
<td>*</td>
<td>Counseling and Educational Psychology</td>
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<td>Electrical and Computer</td>
<td>M.S., Ph.D.</td>
<td>*</td>
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<td>Engineering (EECE)</td>
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<td>Digital Signal Processing (DISP)</td>
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<td>Electric Machines, Drives, and Controls (EMDC)</td>
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<td>Microwaves and Antennas (MIAN)</td>
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<td>Sensors and Smart Sensor Systems (SSSS)</td>
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<td>Engineering Management (ENMA)</td>
<td>M.S.E.M.</td>
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<td>Engineering Innovation (ENIN)</td>
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<td>New Product and Process Development (NPPD)</td>
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<td>British and American Literature (BRAM)</td>
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<td>Administration (EXBU)</td>
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<td>Management Information Systems (MISY)</td>
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<td>Marketing (MARK)</td>
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<td>Total Quality Management (TQMA)</td>
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<td>Foreign Languages and</td>
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<td>Spanish (SPAN)</td>
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<td>Healthcare Technologies</td>
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<td>*</td>
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<td>Management (HCTM)</td>
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<td>History (HIST)</td>
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<td>European History (EURO)</td>
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<td>Ph.D.</td>
<td>United States History (USHI)</td>
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<td>Global Studies (GLST)</td>
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<td>European History (EURO)</td>
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</tbody>
</table>

* No formal specialization offered. Some programs allow students to focus their courses or electives in a specific area of interest. Contact the program department for more information.
<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>DEGREE</th>
<th>SPECIALIZATIONS</th>
<th>PROGRAM ADMINISTERED BY:</th>
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<tr>
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<td>M.S.H.R.</td>
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<td>Graduate School of Management</td>
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<td>Graduate School</td>
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<td>International Affairs (INAF)</td>
<td>M.A.</td>
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<td>Political Science</td>
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<td>Political Science</td>
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<tr>
<td>Law Enforcement Leadership and Management (LELM)</td>
<td>Certificate</td>
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<td>Professional Studies</td>
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<td>Professional Studies</td>
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<td>Leadership Studies (LEDR)</td>
<td>M.L.S.</td>
<td>Criminal Justice Administration (CJAD) Dispute Resolution (DIRS) Engineering</td>
<td>Professional Studies</td>
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<td>Health Care Administration (HECA) Non-profit Sector (NPSE) Public Service (PBS)</td>
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<td>Certificate</td>
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<tr>
<td></td>
<td>Ph.D.</td>
<td>Algebra (ALGE) Biommathematics (BMTH) Logic and Foundations (LOFO) Statistics</td>
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<td>Mechanical Engineering</td>
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<td>Nursing (INURS)</td>
<td>M.S.N.</td>
<td>Advanced Practice Nursing: Acute Care (ACCA) Adults (ADUL) Nurse-Midwifery</td>
<td>Nursing</td>
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<td>(MIDW) Older Adults (GERO) Pediatrics Primary Care (PEDI) Pediatrics Acute Care</td>
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<td>(PEDA) Clinical Nurse Leader (CLNL) Health Care Systems Leadership (HCSL)</td>
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<td></td>
<td>Post-master's</td>
<td>Certificate</td>
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<td>Adult Nurse Practitioner (ADNP) Gerontologic Nurse Practitioner (GENP) Health</td>
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<td>Care Systems Leadership (HCSL) Nurse-Midwifery (NUMI) Pediatrics Primary Care</td>
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<td>(PEDI) Pediatrics Acute Care (PEDA)</td>
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<td>D.N.P.</td>
<td>Advanced Practice Nursing: Acute Care (ACCA) Adults (ADUL) Nurse-Midwifery</td>
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<td>(MIDW) (available fall 2009) Older Adults (GERO) Pediatrics Primary Care (PEDI)</td>
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<td>Ph.D.</td>
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<td>Philosophy (PHIL)</td>
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<td>History of Philosophy (HIPHI) Social and Applied Philosophy (SOAP)</td>
<td>Philosophy</td>
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<td></td>
<td>Ph.D.</td>
<td>Ancient Philosophy (ANPH) British Empiricism/Analytical Philosophy (BREM)</td>
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<td>Christian Philosophy (CHRHI) Early Modern European Philosophy (MOPH) Ethics</td>
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<td>(ETHI) German Philosophy (GEPH) Medieval Philosophy (MEPH) Phenomenology-</td>
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<td>Existentialism (PHEN) Philosophy of Religion (PHRE)</td>
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<td>Physical Therapy (PHTH)</td>
<td>D.P.T.</td>
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<td>Health Sciences</td>
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<td>Marquette University Undergraduate Bulletin</td>
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<td>Physician Assistant Studies (PHAS)</td>
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<td>Health Sciences</td>
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<td>Marquette University Undergraduate Bulletin</td>
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<td>Political Science (POSC)</td>
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<tr>
<td>Political Science (POSC) (See Clinical Psychology, Counseling, Counseling Psychology, and Educational Psychology)</td>
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</tbody>
</table>

* No formal specialization offered. Some programs allow students to focus their courses or electives in a specific area of interest. Contact the program department for more information.
Public Service (PUBS)
M.A.P.S.
Criminal Justice Administration (CJAD)
Dispute Resolution (DIRS)
Health Care Administration (HECA)
Leadership Studies (LEDR)
Non-profit Sector (NPSE)

Religious Studies (REST)
Ph.D.
Theology
Biblical Theology (BITH)
Historical Theology (HITH)
Systematic Theology (SYTH)
Theological Ethics (THET)
Theology and Society (THSO)

Speech-Language Pathology (SPLA)
M.S.
Certificate
Bilingual English-Spanish (BIES)

Theology (THEO)
M.A.
Biblical Theology (BITH)
Historical Theology (HITH)
Systematic Theology (SYTH)

M.A.C.D.

Transfusion Medicine (TRME)
M.S.T.M.
Business Administration (BUAD)
Graduate School
Education (EDUC)
Science (SCIE)

Legend of Abbreviations:
M.A. Master of Arts
M.A.C.D. Master of Arts in Christian Doctrine
M.A.P.S. Master of Arts in Public Service
M.A.T. Master of Arts in Teaching
M.B.A. Master of Business Administration
M.D.R. Master in Dispute Resolution
M.Ed. Master of Education
M.L.S. Master in Leadership Studies
M.P.A.S. Master of Physician Assistant Studies
M.S. Master of Science
M.S.A. Master of Science in Accounting
M.S.A.E. Master of Science in Applied Economics
M.S.E.M. Master of Science in Engineering Management
M.S.H.R. Master of Science in Human Resources
M.S.N. Master of Science in Nursing
M.S.T.M. Master of Science in Transfusion Medicine
Ph.D. Doctor of Philosophy

Definitions
Certificate — An acknowledgement of a group of courses taken at the graduate level. Certificates are awarded in certain programs after completion of at least 12 credits. Students must have a bachelor’s degree to be considered for admission.

Master’s Degree — Degree conferred on students completing at least 30 credits. A thesis, professional project or essay may also be required. Students must have a bachelor’s degree to be considered for admission.

Post-master’s/Specialist Certificate — An acknowledgement of a group of classes taken at the graduate level. Post-master’s/specialist certificates are awarded after the student has completed a specified number of credits, depending on the program. Students must have a master’s degree to be considered for admission.

Doctoral Degree — The highest degree conferred by Marquette University. Credit requirements may vary by academic program. General guidelines can be found under Doctoral Degree Requirements, and program specific requirements can be found in the Graduate Programs section of this bulletin organized by academic discipline.

Joint Programs Offered
Specializations for the joint degree programs are the same as the specializations listed in the DEGREES OFFERED section.

Programs found alphabetically throughout this bulletin unless noted, in italics, below.

Program Information

Business Administration (BUAD)
M.B.A. and J.D.
Graduate School of Management / Law

Communication (COMM)
M.A.
Communication / Political Science

Dispute Resolution (DIRS)
Certificate
Professional Studies / Law

International Affairs (INAF)
M.A. and M.B.A.
Political Science / Graduate School of Management

Nursing (NURS)
M.S.N. and M.B.A.
Nursing / Graduate School of Management

Philosophy (PHIL)
M.A. and J.D.
Philosophy / Law

Political Science (POSC)
M.A. and M.A.
Political Science / Communication

M.A.

M.A. and M.B.A.
Political Science / Graduate School of Management

M.A. and J.D.
Political Science / Law

M.A.

M.B.A.
Political Science / Communication

M.B.A.
Political Science / Graduate School of Management

M.B.A.
Political Science / Law

M.B.A.

M.B.A.
Political Science / Communication

M.B.A.
Political Science / Graduate School of Management

M.B.A.
Political Science / Law

M.B.A.

M.B.A.
Political Science / Communication

M.B.A.
Political Science / Graduate School of Management

M.B.A.
Political Science / Law

M.B.A.

M.B.A.
Political Science / Communication

M.B.A.
Political Science / Graduate School of Management

M.B.A.
Political Science / Law

M.B.A.

M.B.A.
Political Science / Communication

M.B.A.
Political Science / Graduate School of Management

M.B.A.
Political Science / Law

M.B.A.

M.B.A.
Political Science / Communication

M.B.A.
Political Science / Graduate School of Management

M.B.A.
Political Science / Law

M.B.A.

M.B.A.
Political Science / Communication

M.B.A.
Political Science / Graduate School of Management

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Political Science / Law

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Political Science / Communication

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Political Science / Law

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Political Science / Communication

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Political Science / Law

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Political Science / Communication

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Political Science / Graduate School of Management

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Political Science / Law

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Political Science / Communication

M.B.A.
Political Science / Graduate School of Management

M.B.A.
Political Science / Law

M.B.A.

M.B.A.
Political Science / Communication

M.B.A.
Political Science / Graduate School of Management

M.B.A.
Political Science / Law

M.B.A.

M.B.A.
Political Science / Communication

M.B.A.
Political Science / Graduate School of Management

M.B.A.
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<th>PROGRAM</th>
<th>DEGREES</th>
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<td>Accounting (ACCO) Business Administration</td>
<td>B.S. and M.S.A.</td>
<td>Graduate School of Management</td>
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<td>Biomedical Engineering (BIEN) Engineering</td>
<td>B.S.B.E. and M.S.</td>
<td>Biomedical Engineering</td>
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<tr>
<td>Civil Engineering (CIEN) Engineering</td>
<td>B.S.C.E. and M.S.</td>
<td>Civil and Environmental Engineering</td>
</tr>
<tr>
<td>Economics (ECON) Economics</td>
<td>B.A. and M.S.A.E.</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Electrical and Computer Engineering (EECE) Engineering</td>
<td>B.S.E.E. and M.S.</td>
<td>Electrical and Computer Engineering</td>
</tr>
<tr>
<td>Human Resources (HURE) Business Administration</td>
<td>B.S. and M.S.H.R.</td>
<td>Graduate School of Management</td>
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<tr>
<td>International Affairs (INAF) Political Science</td>
<td>B.A. and M.A.</td>
<td>Political Science</td>
</tr>
<tr>
<td>Mechanical Engineering (MEEN) Engineering</td>
<td>B.S.M.E. and M.S.</td>
<td>Mechanical Engineering</td>
</tr>
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<td>Nursing for Non-Nursing Graduates (NURS) Nursing</td>
<td>M.S.N.</td>
<td>Nursing</td>
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<td>Political Science (POSC) Political Science</td>
<td>B.A. and M.A.</td>
<td>Political Science</td>
</tr>
<tr>
<td>Speech-Language Pathology (SPLA) Speech-Language Pathology</td>
<td>B.S. and M.S.</td>
<td>Speech Pathology and Audiology</td>
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</table>

*Two majors exist within the undergraduate Electrical Engineering Program: electrical and electronic engineering, and electrical and computer engineering. Both programs lead to the degree of bachelor of science in electrical engineering (B.S.E.E.).

Legend of Abbreviations:

- B.A. Bachelor of Arts
- B.S. Bachelor of Science
- B.S.B.E. Bachelor of Science in Biomedical Engineering
- B.S.C.E. Bachelor of Science in Civil Engineering
- B.S.E.E. Bachelor of Science in Electrical Engineering
- B.S.M.E. Bachelor of Science in Mechanical Engineering
- J.D. Juris Doctor
- M.A. Master of Arts
- M.B.A. Master of Business Administration
- M.S. Master of Science
- M.S.A. Master of Science in Accounting
- M.S.A.E. Master of Science in Applied Economics
- M.S.H.R. Master of Science in Human Resources
- M.S.N. Master of Science in Nursing

Definitions

See DEGREES OFFERED section above for certificate and degree definitions.
POLICIES OF MARQUETTE UNIVERSITY

ACADEMIC HONESTY POLICY

PREAMBLE

Marquette University is committed to developing the whole person, spiritually, mentally, physically, socially, and ethically. As an institution of higher education, love of truth is at the center of the university’s enterprise, and academic honesty, in all its forms, is an explicit value of the university. The development and practice of academic honesty and integrity, both inside and outside the classroom, are expectations for all members of the university community. In order to cultivate academic honesty in its students, instructors take every opportunity to help students appreciate both the process and the principles of academic integrity.

Academic honesty can be best understood by academic ethical standards guiding faculty in their work. That is to say, an individual’s contributions, in terms of words and scholarly findings, belong to him or her alone. Furthermore, the integrity of that which one claims to be scholarly knowledge rests on the accurate demonstration of the assumptions and reasoning that produced it. These standards are used as the implicit basis for teaching and learning in the university.

In order for instructors to fairly assess the quality and quantity of a student’s learning as determined by work that students represent as their own, a relationship of trust between instructor and student is essential. Because violations of academic integrity most often involve, but are not limited to, efforts to deceive instructors, they represent a breach of the trust relationship between instructor and student, and undermine the core values of the university.

RESPONSIBILITY FOR ACADEMIC HONESTY

This policy applies to all undergraduate programs and to students and faculty in some programs under the auspices of the Graduate School. Graduate School generically refers to all graduate and professional schools and students, and terms such as associate vice provost or associate/assistant dean will refer to the appropriate official in the other colleges/schools. Graduate School students should appeal to the Graduate School while professional students should appeal to the appropriate person in their college or school, i.e., Graduate School of Management or College of Health Sciences. School of Dentistry and Law School students must follow the policies put forth by their respective schools.

ACADEMIC HONESTY consists of truth telling and truthful representations in all academic contexts. All members of the academic community have a responsibility to ensure that academic honesty is maintained. In what follows the wording “chair” refers to either a department chair or an equivalent official, “associate dean” refers to either an associate dean or an equivalent official, or in the case of the Graduate School it will refer to the assistant vice provost for graduate programs, the word “college” refers to a college, school, or other academic unit, and the words “assigned college” refers to the degree granting college or school (i.e. for graduate students the assigned college is the Graduate School).

Faculty have primary responsibility for:
1. Upholding and enforcing university wide principles of academic honesty and integrity and informing students of these principles including any qualifications that may be operative in the classes they are teaching.
2. Minimizing opportunities for academic dishonesty in their courses.
3. Confronting students suspected of academic dishonesty in a way that respects student privacy.
4. Affording students accused of academic dishonesty the right to appeal any resulting disputes to disinterested parties for hearing and resolution.
5. Assigning an appropriate grade to a student who engages in academic dishonesty.
6. Reporting all instances of academic dishonesty to the Associate Dean of the college offering the course.
7. Protecting the anonymity of any student reporting an incident of academic dishonesty to the extent permitted by due process required for the accused and other legal requirements.

Students have responsibility for:
1. Refraining from cheating and plagiarism.
2. Refusing to aid or abet any form of academic dishonesty.
3. Notifying professors and/or their advisor about observed incidents of academic misconduct. The anonymity of a student reporting an incident of academic dishonesty will be protected to the extent permitted by law.
DEFINITIONS OF ACADEMIC DISHONESTY

ACADEMIC DISHONESTY applies equally to electronic media and print, and involves text, images, and ideas. It includes but is not limited to the following examples:

CHEATIN G
1. Copying from others during an examination.
2. Communicating exam answers with other students during an examination.
3. Offering another person’s work as one’s own.
4. Taking an examination for another student or having someone take an examination for oneself.
5. Sharing answers for a take home examination or assignment unless specifically authorized by the instructor.
6. Tampering with an examination after it has been corrected, and then returning it for more credit.
7. Using unauthorized materials during an examination.
8. Allowing others to do the research and writing of an assigned paper (including use of the services of a commercial term paper company).

DISHONEST CONDUCT
1. Stealing or attempting to steal an examination or answer key from the instructor.
2. Changing or attempting to change academic records without proper sanction.
3. Submitting substantial portions of the same work for credit in more than one course without consulting all instructors involved.
4. Intentionally disrupting the educational process in any manner.
5. Allowing another student to copy off of one’s own work during a test.

PLAGIARISM
Plagiarism is intellectual theft. It means use of the intellectual creations of another without proper attribution. Plagiarism may take two main forms, which are clearly related: 1. To steal or pass off as one’s own the ideas or words, images, or other creative works of another and 2. To use a creative production without crediting the source, even if only minimal information is available to identify it for citation.

Credit must be given for every direct quotation, for paraphrasing or summarizing a work (in whole, or in part, in one’s own words), and for information that is not common knowledge.

COLLUSION
Any student who knowingly or intentionally helps another student perform any of the above acts of cheating, dishonest conduct, or plagiarism is subject to discipline for academic dishonesty.

RESEARCH MISCONDUCT
Marquette University has a duty to ensure the integrity of research and will respond to any allegation of research misconduct in a thorough, competent, timely, objective, and fair manner. Research misconduct is defined as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results. The research misconduct policy applies to faculty, students, and others who are employed by or affiliated with Marquette University. Students who are accused of misconduct related to grant-funded research shall be governed by the procedures of the research misconduct policy, found at www.marquette.edu/orsp/policies/upp.shtml. Students who are accused of misconduct related to research that is not grant-funded and is a part of a student’s academic program will be governed by the University Policy on Academic Honesty, found at www.marquette.edu/rc/academichonesty.shtml. Any uncertainty related to which policy will govern a given situation will be decided by the research integrity officer.

CONSEQUENCES OF ACADEMIC DISHONESTY
Regardless of how alleged acts of academic dishonesty are brought to light, faculty and instructors retain the responsibility and the authority to investigate all allegations, although, as outlined below, university administrators may lead these investigations. Because the consequences for academic dishonesty can be severe, the decision to penalize a student for such infractions must be the result of a thorough review. The procedures to be used for adjudicating suspected acts of academic dishonesty are determined by the nature of the misconduct and the seriousness of the offense.
PROCEDURES FOR INCIDENTS OF ACADEMIC DISHONESTY

Students found committing acts of academic dishonesty will be subject to the Marquette University procedures for incidents of academic dishonesty. In what follows the wording “chair” refers to either a department chair or an equivalent official, “associate dean” refers to either an associate dean or an equivalent official, or in the case of the Graduate School it shall refer to the assistant vice provost, the word “college” refers to a college, school, or other academic unit, and the words “assigned college” refers to the college granting the degree (i.e. for graduate students the assigned college is the Graduate School).

FIRST OFFENSES

Many, perhaps most, incidents of academic dishonesty involve accusations which are based on clear evidence and which are not contested by the accused student. In such cases, if the infraction is relatively minor and there is no indication that the accused student has previously been involved in such incidents, it is most appropriate that the matter be resolved between the student, the faculty member, and the chair of the department offering the course.

When a faculty member has evidence of a student’s academic dishonesty, the faculty member must initiate communication with the student within 15 calendar days of discovering evidence of academic dishonesty. The faculty member must then present the evidence to the student in a private meeting, always with a facilitator present (e.g., department chair or designee). This meeting should take place within 15 calendar days of the student being notified of the allegation or as soon thereafter as possible. If, after this meeting, it is decided that the student did participate in academic dishonesty the faculty member may follow up with one or more of the following actions:

1. Issue a reprimand to the student
2. Require repetition of the questionable work or examination
3. Reduce the grade on the questionable work or examination
   (faculty can reduce the grade down to and including an F or zero)
4. Recommend that the student be administratively withdrawn from the course
5. Recommend that the student be given a final grade of F for the course

The faculty must maintain careful documentation of the incident.

It is essential that any disciplinary action be reported in writing to the student in a letter from the faculty member. The faculty member is strongly encouraged to consult with his or her associate dean for questions about appropriate discipline and the form and content of the letter sent to the student. Reference to the “Marquette University Policies on Academic Honesty” should be included in the letter. The letter to the student must be sent out within 15 calendar days of the meeting and may be sent by e-mail with settings for “notify sender of receipt and of opening”. At the same time the letter is sent to the student, a copy must be sent to the department chair and associate dean of the college offering the course. In turn, within 5 working days, the associate dean of the college offering the course will communicate in writing details of the incident to the associate dean of the student's assigned college, to ensure that penalties assessed are commensurate with the offense and that repeated infractions can be detected and dealt with appropriately. The associate dean of each college is responsible for maintaining confidential records concerning academic dishonesty of students enrolled in that college. All letters reporting faculty imposed academic penalties for academic misconduct will be included in these files.

In most incidents the disciplinary response and procedure for incidents of academic dishonesty concludes at this step.

STUDENT’S APPEAL

Students have the right of appeal of the allegations of academic dishonesty and the disciplinary actions of the instructor if the student believes the alleged incident of academic dishonesty and/or resultant academic discipline to be unfounded, biased, or capricious. In this case the student should submit a formal written appeal stating the grounds for appeal and available documentation to the associate dean of the college offering the course within 15 calendar days of the notification of the instructor’s decision. Upon receipt of the appeal the associate dean may convene a review of the student’s actions by a college panel. The associate dean and/or panel reviews the details of the student’s actions and may ask to speak to the student, the instructor, the chair of the department offering the course, associate deans, and others. The associate dean of the college offering the course will determine the appropriate disciplinary action and, within 15 calendar days of receipt of the appeal, will provide a written statement to all parties concerned.
DISCIPLINARY RECOMMENDATIONS BY FACULTY OF ADW OR F

If the faculty member recommends that the student be administratively withdrawn from the course and assigned a final grade of ADW or that a final grade of F be assigned, the associate dean of the student's assigned college (the assistant vice provost for graduate programs) will review the details of the incident and make the final decision within 5 working days of receipt of the request, and provide a written statement to all parties concerned.

Students have the right to appeal the decision of the associate dean to issue grades of ADW or F to the dean of the student's assigned college (the dean of the Graduate School in the case of graduate students). This appeal must be made with 15 calendar days of the notification of the grade change. The final decision to uphold or modify the action of the associate dean will be provided to the student and associate dean within 15 calendar days of receipt of the appeal. The decision of the dean is final.

REPEAT OR MORE SERIOUS OFFENSES

When the associate dean of the student's assigned college is aware of or determines that the student has engaged in multiple incidents of academic dishonesty or the incident in question is of a more serious nature he/she will convene a review of the student's actions by a college panel within 15 calendar days of learning of the most recent incident. In the case of the Graduate School, such a panel will be composed of a sub-committee of the University Board of Graduate Studies. More serious incidents may involve repeat offenses, cause injury or harm to others outside the academic community, or other actions deemed to warrant additional consideration. These incidents of academic dishonesty call for more serious disciplinary action up to and including campus wide sanctions of suspension or expulsion. Where incidents involve possible violations of the University Code of Conduct, in addition to the alleged academic dishonesty, consultation with the Office of Student Development is recommended.

Each college will have guidelines for the composition and selection of the College Panel to assure a review by experienced faculty and/or administrators not directly involved in the incident(s). The panel reviews all aspects of the student's record, the details of the student's behavior and may ask the student, instructor(s), and others to speak with the panel. Within 15 calendar days of being given the charge, the panel will forward its recommendations for appropriate and just disciplinary action to the associate dean (in the case of graduate students to the assistant vice provost for graduate programs) of the student's assigned college with a copy to the dean. All disciplinary decisions that involve a campus wide sanction, such as suspension or expulsion, will be made by the dean of the student's assigned college with all other actions being taken by the associate dean.

Within 15 calendar days of receiving the panel's recommendation, the associate dean or dean, as appropriate, makes the decision known to the student via written documentation that includes a description of the academic dishonesty, the process the decision went through, the resulting decision and appeal procedures. A copy of the decision is placed in the student's academic file with a copy provided to the Office of the Provost.

Students have the right of appeal of the allegation of academic dishonesty and the disciplinary actions of the associate dean or the dean of the student's assigned college. Such appeals must be made within 15 calendar days of receipt of the letter. Actions taken by the associate dean should be appealed to the dean of the student's assigned college. The final decision to uphold or modify the action of the associate dean will be provided to the student and associate dean within 15 calendar days of receipt of the appeal. The decision of the dean is final.

For actions of the dean involving campus-wide sanctions, such as suspension or expulsion, students have the right of appeal to the Office of the Provost. A formal written appeal stating the grounds for appeal and available documentation is to be submitted within 15 calendar days of the notification of the decision of the dean to the Office of the Provost. The provost or designee will conduct a review of the appeal materials, may seek additional information, and may consult with the student, faculty, chair(s), associate dean(s), deans, and others. The final decision to uphold or modify the action of the dean will be provided to the student and to the dean and associate dean of the student's assigned college within 15 calendar days of receipt of the appeal. A copy of the provost's decision will be placed in the student academic file. The decision of the provost is final.

OTHER CONSIDERATIONS

The associate dean may exclude students who have on file recorded acts of academic dishonesty, as defined by this policy, from consideration for academic honors at graduation. Exclusion
from consideration for honors is not for the purposes of this policy to be considered a campus wide sanction.

**MAINTENANCE OF DISCIPLINARY RECORDS**

Records relating to academic dishonesty will be maintained by the associate dean of the student's assigned college to promote consistency of penalties for academic dishonesty and to ensure appropriate action against repeat offenders. In order to ensure that minor and non-recurring infractions do not negatively impact a student's career beyond Marquette University, a student may petition to the associate dean of his or her academic college to have relevant academic disciplinary records expunged after the student graduates or leaves the university. The associate dean has sole authority to consider and to grant or deny such petitions. The university will release a student's disciplinary records to potential employers, governmental agencies, other educational institutions, or other organizations or individuals only if authorized to do so by the student in question or if compelled by law.

**PROFESSIONAL ETHICS AND STANDARDS**

These procedures do not supersede or take the place of procedures established for students who violate professional standards applicable to a particular program or college. Separate procedures and/or outcomes may be invoked when students are found in violation of professional standards or codes of ethics related to special programs, licensure, or certification as determined by the program's external or internal professional requirements. It is the student's responsibility to know and follow these standards/codes of ethics, which are part of the student's academic program. These special expectations and procedures, including the appeals process, will be provided to the student upon enrollment in the program, and are available in published form in the administrative offices overseeing these programs.

This policy evolved from a collaborative effort that included members of the Marquette University Committee on Academic Procedures, Marquette University Board of Undergraduate Studies, and the Marquette University Board of Graduate Studies. These groups would like to express their gratitude to the University of California–Irvine whose UCI Academic Senate Policy on Academic Honesty provided the framework for the resulting document.

**BACKGROUND CHECKS, DRUG TESTING**

Some degrees, majors and/or courses may require a student to submit to a criminal background check and/or drug testing. The results of those checks and/or tests may affect the student's eligibility to continue in that degree, major and/or course.

**CONDUCT**

**PROFESSIONAL INTEGRITY**

To function properly and maintain high standards, academic and professional disciplines expect members to adhere to standards of conduct and professionalism. Marquette expects its graduate students, from the beginning of their work at Marquette, to demonstrate the utmost personal integrity and the highest standards of professionalism, including adherence to any commonly recognized codes of conduct or professional standards in the graduate student's discipline. In dealing with the public or campus community, in clinics, practica, internships, classrooms or elsewhere, graduate students must adhere to these standards. Violations of these standards may be grounds for dismissal or other penalties.

**PROFESSIONAL PERFORMANCE**

All students in professional, laboratory, or clinical settings must maintain fully professional behavior at all times. If, in the judgment of the academic unit, a student is not living up to the non-academic standards, and that deficiency is a first offense or an offense deemed to be less serious in nature, a warning letter may be issued by the department to the student. If, however, the unsatisfactory behavior is a repeat offense or is more serious in nature, a recommendation will be made to the dean of the Graduate School or the Graduate School of Management, as applicable, that the student be dropped from the graduate program.

**STUDENT CONDUCT CODE AND PROCEDURES**

Graduate students are responsible for complying with the regulations and/or procedures of the Graduate School or the Graduate School of Management, as applicable, as well as those set forth in the *At Marquette* student handbook. Violations of regulations found in the student handbook will be administered by the Office of Student Development. Copies of *At Marquette*
CONFIDENTIALITY OF PROPRIETARY INFORMATION

The university recognizes that the primary purpose of research and scholarship is to train future scholars and disseminate new knowledge for the benefit of humankind. However, commercially valuable inventions and discoveries also may result. Graduate students, during the course of their studies and work at the university, may receive access to confidential or proprietary information from the university, its faculty and employees, and/or private companies. A student, both while a student and thereafter, is expected to respect and maintain the confidentiality of such information. In certain unusual cases, a student may be asked to sign an additional confidentiality agreement. Unauthorized use or dissemination of another's confidential or proprietary information is subject to appropriate legal recourse and/or academic discipline, including termination from the program.

INTELLECTUAL PROPERTY

Students will acquaint themselves with the university's Intellectual Property Policy, found at www.marquette.edu/orsp/policies. Marquette University students are subject to the policy when, working for pay or for academic credit, they participate in faculty research programs.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

In compliance with the Family Educational Rights and Privacy Act, Marquette University notifies its students each term of their rights to inspect, amend, and prevent disclosure of their education records. In addition, Marquette's policy regarding education records is printed in the At Marquette student handbook and copies may be obtained from the Office of Student Development in the Alumni Memorial Union, or accessed online at www.marquette.edu/registrar/policies/ferpa.shtml.

GRADUATION

All students must apply for graduation by the deadline specified in the Academic Calendar. Application forms for Graduate School students are available online at www.grad.mue.edu/forms and at www.marquette.edu/gsm/forms for Graduate School of Management students. Graduation deadlines are scheduled well in advance of the date of Commencement to allow time for student academic audits and for printing diplomas, graduation invitations, and program booklets.

The awarding of a degree or certificate is contingent upon the student's successful completion of all program requirements prior to the date of graduation. A cumulative grade point average of 3.00 or above is also required to graduate. If a student fails to graduate at the time originally anticipated, he or she must reapply online for the next graduation before the appropriate deadline stated in the Academic Calendar.

Students who have completed all of their degree or certificate requirements prior to a specific graduation date, but who have missed the graduation application deadline, may request a letter from the Graduate School or the Graduate School of Management, as applicable, certifying the completion of their program. The student must still apply for graduation and the diploma will reflect the next graduation date.

CEREMONY

Commencement at Marquette is a symbolic ceremony provided for students, faculty and families in celebration of our students’ accomplishments. Following is the policy on when a student may participate in the spring or winter Commencement.

1. Students may participate in only one university Commencement per degree.
2. Spring Commencement:
   a. Students who are in good academic standing, have met the appropriate graduation application deadline and will complete their degree requirements, including the official recording of any transfer work, by the end of the spring term will participate in spring Commencement.
b. Master’s students, who are in good academic standing, have met the appropriate graduation application deadline and will complete their degree requirements, including the official recording of any transfer work, by the end of the summer term and are pre-registered for those final requirements may participate in spring Commencement. This paragraph does not apply to doctoral candidates since they are not eligible to participate in Commencement until they have completed all degree requirements.

3. Winter Commencement:
   a. Students who are in good academic standing, have met the appropriate graduation application deadline and will complete their degree requirements, including the official recording of any transfer work by the end of the fall term will participate in winter Commencement.
   b. Students who completed their degree requirements in August and did not participate in spring Commencement will participate in winter Commencement.

4. Ph.D. Candidates:
   To participate in spring or winter Commencement, doctoral candidates must have met the appropriate graduation application deadline, successfully defended their dissertation, received approval by their dissertation committee for any required revisions, submitted their dissertation to the Graduate School, and received approval of the dissertation format by the Graduate School before the published Academic Calendar deadline for the respective Commencement.

5. Students who participate in Commencement without completion of their degree requirements will have their names published in the Commencement program with a notation indicating the expected term of completion; however, these students will not have any graduation honors noted. This paragraph does not apply to doctoral candidates since they are not eligible to participate in Commencement until they have completed all degree requirements.

6. Degree conferral is certified by the official Marquette transcript noting the degree completion. Receipt of a diploma or the participation in Commencement does not constitute certification of degree conferral.

DIPLOMAS

Diplomas are typically distributed at the May Commencement ceremonies. Any special arrangements for the mailing of May diplomas, etc., must be made directly with the Office of the Registrar. August and December diplomas are available for pick up or can be requested by mail from the Office of the Registrar. The Office of the President sends invitations to the names indicated on the Graduation Application each graduating student submits online to the Graduate School or the Graduate School of Management, as applicable. However, there is no limit to the number of family members and friends who may attend the university-wide Commencement exercises; tickets are not needed. Department Commencement exercises, if occurring, may require tickets. For further information contact University Special Events at (414) 288-7431 or visit www.marquette.edu/pages/home/news/graduation.

ACADEMIC FACILITIES AND RESOURCES

LIBRARIES OVERVIEW

The University’s libraries support the teaching, research, and service mission of Marquette University by providing access to recorded knowledge through collections, services, cooperative programs, and connections to worldwide resources. The libraries combine state-of-the-art technologies with a repository of information in an atmosphere of service and learning. A full description of resources, hours, news, and services is found at the Libraries’ Web site, www.marquette.edu/library/.

Collections of more than 1.6 million volumes and 3,700 print subscriptions are housed in the John P. Raynor, S.J., Library and the adjoining Memorial Library; the Law Library is separately described below. The libraries’ shared online catalog, MARQCAT, includes all book and periodical holdings, locations, and circulation status.
RAYNOR MEMORIAL LIBRARIES

The new (2003) Raynor Library holds a commanding position at the physical and intellectual center of the campus. Raynor Library, seating 1,100, is designed around the needs of its users, preserving the university's extensive traditional collections, while expanding its capacity for incorporating digital technology into access and delivery of information. The library offers over 250 online databases, thousands of books in digital format, and an ever-growing (over 18,000 titles) collection of full-text online newspapers, journals, and magazines. The primary service point in Raynor is the two-level Information Commons (IC), with over 240 networked PCs and Macs, multimedia hardware and software, and comfortable small group study spaces. The Information Desk is open 104 hours weekly and, in addition, offers research consultations by appointment, and phone, e-mail and 24/7 “chat” assistance through its AskUs! services.

Raynor's first level is open 24/7 when classes are in session, and the second level and bridge are open until 2 a.m. Sunday through Thursday, offering access to workstations and comfortable, safe late-night study space. Library hours during the summer, intercessions, and holidays are posted and updated regularly on the 24-hour recorded message at (414) 288-1530.

Additional features of Raynor Library include: reference collections, circulating laptops with wireless connectivity, the Class Reserves and Media Services Desk, Browsing and Spirituality collections, and the Funding Information Center. A conference center accommodating large groups and video conferencing, the Writing Center, and the Center for Teaching and Learning are also located in the facility. The second-level bridge entrance to Memorial Library features a 4,800 square foot café with casual seating, popular reading materials, and wired and wireless network connections.

Memorial Library, renovated top-to-bottom in 2004 and entered via the 2nd level bridge, houses the majority of the book and journal collections. The library is open 104 hours weekly and offers a variety of seating choices for over 1,050 readers. An open stack arrangement presents over six linear miles of compact shelving for bound journals on the lower level, plus book shelving on five floors. The facilities in this library include a circulation desk, a cluster of PCs, and assigned research carrels for faculty and graduate students.

Most library services and online research databases are available to students 24/7 from both on- and off-campus locations. Class reserve readings are digitized for online access whenever possible. Interlibrary Loan provides both books and journal articles from other libraries on request and a variety of other cooperative programs assure library privileges for Marquette students at other libraries in Southeastern Wisconsin. The Milwaukee County Federated Library System, including the Central Library just four blocks from campus, also lends to Marquette students. Above all, service-oriented staff members are committed to guiding and teaching users throughout the research process.

SPECIAL COLLECTIONS AND ARCHIVES

Raynor Library also houses the Department of Special Collections and Archives and its research/exhibit area on the third floor. Its archival and manuscript collections and over 7,000 rare books include the archives of Marquette University; the papers of faculty, students, staff, and alumni; and major collections relating to Christianity among Native Americans and 20th-century Catholic social action. These include research collections for the following individuals and organizations: the Bureau of Catholic Indian Missions, Dorothy Day and the Catholic Worker movement, the National Catholic Conference for Interracial Justice, and the National Catholic Rural Life Conference. J.R.R. Tolkien’s original manuscripts form a unique and notable research collection.

For more information on Raynor Memorial Libraries:
- Libraries’ Web site: www.marquette.edu/library/
- Map showing campus libraries: www.marquette.edu/about/media/campusmap/campusmap.shtml
- AskUs! Phone, e-mail, or live “chat” information services: www.marquette.edu/library/askus/
- Hours: www.marquette.edu/library/information/libhours.html or 24-hour recorded message (414) 288-1530

LAW LIBRARY

The primary mission of the Marquette University Law Library is to support, through its information and service resources, the curricular, research, and service activities of the Marquette University Law School faculty and students.
The Law Library is located in the Law School in Sensenbrenner Hall. The collection is comprised of 339,000 volumes representing 160,000 titles and 3,500 electronic and print subscriptions. Wireless connectivity is available throughout Sensenbrenner Hall.

The Law Library maintains a comprehensive electronic and print collection of primary legal materials from all jurisdictions in the United States as well as a growing collection of international and comparative legal materials. In addition, the Law Library subscribes to BNA, the online CIS Serial Set, Hein Online, Lexis-Nexis, Loislaw, Westlaw and Wisconsin CLE materials, and is a depository of federal government information resources.

**HAGGERTY MUSEUM OF ART**

The Haggerty Museum of Art opened in 1984 as a home for the university’s permanent collection and a center for the visual arts on the Marquette campus. The collection comprises approximately 5,000 works of art from the 16th through the 21st centuries in the areas of painting, works on paper, sculpture, decorative arts, Asian and tribal arts. The museum serves the Marquette community and the city of Milwaukee with changing exhibitions and a variety of public programs.

Education is fundamental to the mission of the Haggerty Museum which aspires to stimulate lifelong interest in the visual arts. Programs include lectures by artists, scholars and critics; symposia; teacher workshops; and tours. Through these educational programs planned in conjunction with academic departments at Marquette and with area schools, the museum offers learning opportunities for all ages.

The museum’s exhibition schedule incorporates eight to ten special exhibitions annually including those organized by the Haggerty Museum staff and traveling exhibitions. The museum’s challenging contemporary and historical exhibitions incorporate experimental developments in the arts while maintaining the signature tradition of exploring culture, history and social change.

Admission to the museum is free. Hours are 10 a.m. to 4:30 p.m. Monday through Saturday, 10 a.m. to 8 p.m. Thursday, and noon to 5 p.m. Sunday. The museum is accessible to people with disabilities. For information or free tours, call (414) 288-1669 or visit www.marquette.edu/haggerty.

**HARTMAN LITERACY AND LEARNING CENTER**

The Hartman Literacy and Learning Center is a facility within the College of Education which supports undergraduate and graduate literacy-related programs. The center library houses a children’s literature collection which is used by College of Education students as well as children and families participating in the Marquette University Family Literacy Project, a collaboration between the university and neighborhood elementary schools. Students enrolled in EDUC 160 (Practicum in Reading) participate in the Family Literacy Project by tutoring small groups of children in reading and writing after school. The Hartman Literacy and Learning Center provides faculty and staff to support and conduct research regarding the project.

**INSTRUCTIONAL MEDIA CENTER**

The Kenneth Shuler Instructional Media Center (IMC) provides a wide range of multimedia creation and presentation services for the Marquette University community. The IMC’s primary obligation is to support and enhance Marquette’s classroom instruction through technology. The IMC is also responsible for audio-visual equipment distribution and technical support in presentation classrooms throughout the campus. In addition, the IMC produces media that augment the university’s public communication goals. These efforts include the creation of photography, audio, videos, and multimedia for informational, development and student recruiting purposes.

The facilities of the IMC are state-of-the-art and an important component of the J. William and Mary Diederich College of Communications’ broadcasting curriculum. Our facilities include two digital television studios, eight video editing suites, three audio studios, and computer graphics platforms. These advanced facilities are used as classrooms and laboratories by students pursuing a degree in Broadcast and Electronic Communication. Students also have access to these facilities as they participate in MUTV and/or MUR the student operated campus television and radio stations.
RESEARCH CENTERS AND INSTITUTES

In order to foster and enhance research and study at Marquette University, a number of units on campus have established thematic research centers and institutes. These centers and institutes offer the opportunity for active collaboration and research in a variety of categorical areas. Examples include the Center for Mass Media Research, the Center for Materials Science and Technology, the Institute for Transnational Justice, the Institute for Urban Environmental Risk Management, the Integrative Neuroscience Research Center, the Les Aspin Center for Government, the National Sports Law Institute, the Transportation Research Center, and the Center for Water Quality. The Office of the Provost maintains a list of currently active centers and institutes.

The centers generally are designed to bring an interdisciplinary focus to the study of complex problems and involve the participation of several faculty members. Opportunities are available for student participation in the programs of several of the centers and institutes.

PERSONAL RESOURCES AND FACILITIES

CAMPUS SAFETY

As the Marquette community is located in downtown Milwaukee, students need to be aware of the realities of city living. Recognizing this, the university strives to educate students about personal safety and crime prevention through a wide variety of safety programs and services.

Marquette maintains its own Department of Public Safety as a security and safety service to the university community. The department is located on the first floor of the 16th Street Parking Structure, 749 N. 16th St. (between Wisconsin Avenue and Wells Street). This location houses Public Safety Administration, Officer Operations, Communications Center, Preventive Services, and Student Safety Programs. Public Safety operates 24 hours a day, every day. Services can be obtained by calling (414) 288-6800. In cases of emergency, students and employees should contact Public Safety's emergency line by dialing 8-1911 from any campus extension or (414) 288-1911 from any off-campus phone.

Public Safety officers monitor on- and off-campus areas utilizing squad, foot and bicycle patrols. Public Safety officers are trained to respond to all calls for assistance, including crimes in progress and medical emergencies. University Service officers are responsible for monitoring campus buildings and property. The officers conduct walking patrols, provide authorized after-hours access to buildings, assist public safety officers and are available to provide information and assistance to students, staff and visitors. Security within the university's residence facilities is provided by Safety Services officers, who are on duty from 11:30 p.m. to 7:30 a.m., daily.

The department maintains an outdoor telephone system, including close to 200 Blue Light Phones. Blue Light Phones are located on campus pedestrian walkways, mall areas and within or near all of the university's parking lots. Blue Light Phones are located at Valley Fields as well as in the near off-campus residential area. Blue Light Phones provide a direct link to Public Safety's Communication Center. Upon activation of a Blue Light Phone, the caller's location is immediately known to the communications officer, who will provide the appropriate assistance.

A wide variety of crime prevention and safety awareness programs are made available to groups that are interested in promoting safety. Popular topics include self defense, personal safety, sexual assault prevention and alcohol awareness. Numerous brochures, the Awareness newsletter and crime statistics are readily available to provide information.

Any member of the Marquette community who becomes involved in a crisis situation can receive the benefits of the Victim/Witness Services program. The program provides resources for those in need of counseling or support services in addition to providing escorts to and from all necessary court-related appearances.

CHECKMARQ/SNAPSHOT

Marquette students obtain up-to-the-moment information, monitor their academic record, view courses, register and update their address/phone numbers online by using the CheckMarq system via the Internet. Students can access CheckMarq from any computer with Internet access. CheckMarq can be found at http://checkmarq.mu.edu. CheckMarq requires both a user name and password. Information Technology Services assigns user names and passwords to all new students for the duration of their studies at Marquette.

Snapshot is an online Schedule of Classes students access to determine what courses to take each term. Snapshot is located at: www.marquette.edu/registrar/soc.

DISABILITY SERVICES

Marquette University strives to integrate qualified students with disabilities as fully as possible into all aspects of university life. The Office of Disability Services, located within Student Educational Services, has been designated to coordinate this process in accordance with the university’s compliance responsibilities under the law. Accommodations determinations for all students with identified and documented disabilities will be made on a case-by-case basis. Examples of possible accommodations or services provided to students with disabilities include providing textbooks in alternative format, locating interpreters and note takers, orientation to campus, informal counseling, arranging for alternative tests, and advocacy.

A policies and procedures document containing more detailed information about accessibility for all students with disabilities at Marquette is available from the coordinator of disability services, Alumni Memorial Union, 317, P.O. Box 1881, Milwaukee, WI, 53201-1881; (414) 288-1645 (Voice/TDD). The Web site for the Office of Disability Services is www.marquette.edu/oses/disabilityservices.

GRADUATE STUDENT ORGANIZATION

The Graduate Student Organization (GSO) serves as a channel for graduate students to voice concerns, resolve difficulties, and provide feedback on issues that directly affect graduate student life at Marquette University.

The GSO will accomplish this goal by:

• Actively representing graduate students to the university
• Advocating changes deemed necessary by graduate students
• Fostering inter-departmental cooperation and exchange
• Encouraging unity among the graduate students as a whole
• Improving the academic environment for graduate students through sponsored events
• Providing social events for graduate students
• Working with University Ministry to provide spiritual support for graduate students who seek it

Membership in the GSO is available to any part-time or full-time graduate or professional student enrolled at Marquette University.

For a listing of events and meeting notices, past meeting minutes and the GSO constitution, go to: www.grad.mu.edu/current/GSO.shtml.

TRANSCRIPT OF RECORDS

A transcript is a complete and unabridged copy of all academic work attempted at Marquette University. Course and grade information contained on the transcript are released pursuant to the Family Educational Rights and Privacy Act of 1974 (as amended).

A student may obtain a transcript of his or her Marquette record by completing a Transcript Request Form available at www.marquette.edu/registrar and submitting it to the Office of the Registrar at least one week in advance of the date on which the transcript is needed. Fax requests are accepted, but transcripts will NOT be forwarded by fax.

The fee for this regular service is $5 per transcript. The fee for a rush transcript service is $10 per transcript. All transcript fees are payable at the time of the request, preferably by check.

Every transcript that is issued directly to a student is clearly marked. Because most institutions will not accept a transcript that has been in the student’s possession, we strongly recommend the student request the Office of the Registrar to mail a transcript directly to the institution involved. Students who elect not to follow this recommendation are liable for any further charges for additional transcripts.
VETERANS BENEFITS

The Office of the Registrar acts as liaison between the student and the Veterans Administration, the Wisconsin Department of Military Affairs and the Wisconsin Department of Veterans Affairs. Any student eligible to receive educational benefits under one of the various Veterans Administration programs must report to the Office of the Registrar at the beginning of each fall, spring or summer term for which he or she is registered. Information or consultation is available at any time during regular office hours. Information regarding veterans' benefits may also be found at www.marquette.edu/registrar.

VA regulations require schools to enforce certain standards of progress in regard to certifying veterans for educational benefits; therefore any veteran who wishes to receive veterans' educational benefits must meet the published academic standards and requirements of the university.
**TUITION, FEES AND HOUSING**

**PAYMENT POLICY**

Marquette University sends a monthly billing statement to each student as long as the student has an account balance. It is the student's responsibility to pay tuition, fees and housing by the published payment due date whether they receive a bill or not. Visit www.marquette.edu/bursar for payment due dates. A student may view their bursar account via CheckMarq. A student's registration is not considered complete until all fees are paid. All courses for which a student is officially registered as of the close of registration are subject to fee assessment and payment, and as such to appear as part of the student's permanent record even if the student does not attend any sessions of the class. To avoid unnecessary fee charges and unnecessary courses with permanent grades of UW, W or F on the student's permanent record, it is the student's responsibility to review his/her official registration prior to the end of registration to ensure it accurately reflects the courses in which the student plans to be enrolled. Students who do not plan to attend the university are responsible for dropping classes through CheckMarq and notifying their respective college office.

A student who does not pay in full, enroll on the Marquette Monthly Payment Plan, or submit a billing authorization from an approved sponsor will be subject to a 1 percent late payment fee, which is assessed monthly (12 percent annual percentage rate) on the outstanding balance. If the student does not pay the delinquent balance, Marquette may cancel a student's registration for the current term, prevent the student from registering for a subsequent term, withhold a student's academic transcript and/or diploma, turn the student's account over to a collection agency, and/or take legal action to collect any balance due.

**PAYMENT OPTIONS**

**TRADITIONAL SEMESTER PAYMENT**

Payment of all tuition, housing and other billed charges is due in full prior to the beginning of each term. Cash and checks are acceptable methods of payment. Payment may also be made electronically (direct debit from checking or savings account) by accessing the Bursar Web site at www.marquette.edu/bursar. Credit card payment is available through a third party provider. The convenience fee for using this service is variable depending on the amount of the charge. This service may be accessed through the link on the Bursar Web site www.paybyinternet.com or by calling (877) 685-7794.

**MARQUETTE MONTHLY PAYMENT PLAN**

Marquette offers the Marquette Monthly Payment Plan administered by Sallie Mae TuitionPay. The MMPP is intended to cover the costs of fall and spring terms (August through May) and enables a student to budget his or her annual tuition, room and board, and student fee expenses.
over 10 monthly payments. The Marquette Monthly Payment Plan is not a loan; there are no interest or finance charges. The only cost is a $55 annual enrollment fee. The 10-month program begins on August 1, 2008. The enrollment form may be completed and submitted online at www.tuition-pay.com/marquette. If you have any questions or would like assistance with enrollment, please contact TuitionPay at (877) 881-1015.

PAYMENT BY A UNIVERSITY APPROVED THIRD PARTY SPONSOR

Students whose tuition is paid by a university approved third party sponsor must submit their billing authorization to the Office of the Bursar by the payment due date.

TUITION DISCOUNTS

Students interested in taking a course on an audit basis must first register for the course for credit, then request a change in enrollment status to audit by informing their appropriate school (Graduate School or Graduate School of Management). Students must notify the Graduate School by submitting the Request to Add a Course, Change a Section, or Change to Audit form found at www.grad.mu.edu/forms. Graduate accounting, business administration, economics, executive business or human resources students must notify the Graduate School of Management.

Students must have the proper background and prerequisites for the course in question. Auditors are required to attend all classes and are expected to participate, based on the nature of the course, and/or complete assignments, at the discretion of the instructor. Students who register for an audit course will receive a 50 percent discount on the tuition for that course. This discount is not available to individuals who take the senior citizen discount.

A 50 percent senior citizen discount on tuition (only) is available to individuals 62 years of age and older taking graduate courses for credit and/or audit. This opportunity is offered to students who have the proper background and prerequisites for the course(s) in question. Students using the senior citizen discount are not eligible for the audit discount.

All rates in this bulletin are believed accurate and current when printed. However, Marquette University reserves the right to modify any rate to correct a printing mistake or to respond to any unforeseeable change in circumstances, e.g., energy surcharge, governmental action, etc.

TUITION

Graduate students are assessed at the per credit hour rate based on their academic plan for all registered courses, graduate or undergraduate.

Graduate ........................................................ $840.00
Graduate School of Management, Business Administration ................ 840.00
Graduate School of Management, Executive Business Administration (per program) ($1,000 deposit billed in fall term for new students)
  Continuing students (graduating December 2008)
    billed $12,000 fall 2007, 11,000/term spring, summer, fall ........ 45,000.00
  New students (graduating December 2009)
    billed $12,750 fall 2008, 11,750/term spring, summer, fall ........ 48,000.00
Education Graduate students with an academic plan of:
  COEP, COPS, COUN, EDUC, EDPL and EDPS ........................... 625.00
Dental Graduate students with an academic plan of:
  Dental biomaterials (per credit hour) .................................. 1,030.00
Endodontics, orthodontics, and prosthodontics: flat rate applies (see below).
  Flat rate:
    Endodontics 7,520.00
    Orthodontics 6,615.00
    Prosthodontics 5,530.00
  Summer term 15,040.00
  Fall term 15,040.00
  Spring term 15,040.00
Language reading courses (non-credit),
  Cost per course/Audit only .............................................. 480.00*
English as a Second Language courses,
  Cost per credit hour .................................................... 840.00
Pre-M.S.N. phase for M.S. program for Non-Nursing Graduates
  15-month program charged as follows:
    Continuing students (graduating August 2008)
      billed $8,172 for summer 2008 .................................. 8,172.00
    New students (start summer 2008) billed $8,600 summer terms,
      12,900 fall/spring terms ........................................... 43,000.00

*Special rate; no other discounts apply.
### Continuous Enrollments/Continuation Course Fees

- **Master’s Comprehensive Exam Preparation**
  - (less than half-time, LHT) = 867 ............................ 100.00
  - (half-time, HT) = 868 ................................. 100.00
  - (full-time, FT) = 869 ................................ 100.00

- **Doctoral Comprehensive Exam Preparation**
  - (less than half-time, LHT) = 870 .......................... 100.00
  - (half-time, HT) = 871 ................................ 100.00
  - (full-time, FT) = 872 .................................. 100.00

- **Graduate Standing Continuation**
  - (less than half-time, LHT) = 873 ......................... 100.00

- **Graduate Fellowship**
  - (full-time, FT) = 874 .................................. 100.00

- **Graduate Assistant Teaching**
  - (full-time, FT) = 875 .................................. 100.00

- **Graduate Assistant Research**
  - (full-time, FT) = 876 .................................. 100.00

- **Field Placement Continuation**
  - (less than half-time, LHT) = 877 ......................... 100.00
  - (half-time, HT) = 878 ................................ 100.00
  - (full-time, FT) = 879 ................................ 100.00

- **Thesis Continuation**
  - (less than half-time, LHT) = 881 ......................... 100.00
  - (half-time, HT) = 882 ................................ 100.00
  - (full-time, FT) = 883 .................................. 100.00

- **Professional Project Continuation**
  - (less than half-time, LHT) = 884 ......................... 100.00
  - (half-time, HT) = 885 .................................. 100.00
  - (full-time, FT) = 886 .................................. 100.00

- **Doctoral Dissertation Continuation**
  - (less than half-time, LHT) = 887 ......................... 100.00
  - (half-time, HT) = 888 ................................ 100.00
  - (full-time, FT) = 889 ................................ 100.00

### Service Fees

- **Application Fee** .................................................. $50.00
- **Diploma Fee, Replacement** .................................... 25.00
- **Doctoral Dissertation Publication Fee** .......................... 75.00
- **Examination, Comprehensive, for each attempt beyond the first** ........................................ 15.00
- **Examination, Marquette Foreign Language Test, for each attempt beyond the first** .................. 15.00
- **Examination, Special or Delayed** ................................ 25.00
- **Late Payment Fee (per month)** ................................. 1% (12% APR)
- **Readmission Fee** .................................................. 100.00
- **Master’s Thesis Binding Fee** ..................................... 30.00
- **Transcript Fee** ..................................................... 5.00
- **Transcript and Enrollment Verification Fee, Rush Processing** ........................................... 10.00

### Nursing Fees

- **Diagnostic Assessment Test for Licensure Examination for the M.S. program for Non-Nursing Graduates, after 15-month Pre-M.S.N. phase (Approximate fee. Exact amount based upon vendor costs in effect at time of registration.):** .................. 40.00
- **Health Assessment Equipment (Approximate fee.):** .................................................. 85.00
- **Stethoscope (Approximate fee. Exact amount based upon vendor costs in effect at time of registration. Must be purchased through a private vendor.):** .......................... 65.00
- **Sphygmomanometer (Approximate fee. Exact amount based upon vendor costs in effect at time of registration. Must be purchased through a private vendor.):** .................. 30.00

### Housing

The Office of University Apartments and Off-campus Student Services (UAOCSS) can assist graduate students with finding appropriate housing in the Marquette University neighborhood. UAOCSS publishes the **Tenant Guide**, an annual listing of properties in the Marquette neighborhood that provides information such as contact numbers, amenities, rent rates, and utilities included. Current and prospective students may request a **Tenant Guide** from the office via e-mail at muuaocss@marquette.edu or by phone at (414) 288-7281. UAOCSS is located at 1500 W. Wells Street and is open Monday through Friday from 8:00 a.m. to 4:30 p.m.
MEAL PLANS
Meal plans are available for purchase through the Office of Residence Life, and are automatically renewed for the second term unless cancelled through the office.

- Carte Blanche $1,800
- Block 175 1,620
- Block 125 1,490
- Loyalty 50 (off-campus/commuter students only) 285

REFUNDS AND ADJUSTMENTS
Students who have prepaid charges but do not register for classes will be given a full refund, less applicable non-refundable deposits. Students who register for classes and subsequently change their course load through either a partial withdrawal from courses or a complete withdrawal from the university will have adjustments made to their student accounts. If an adjustment results in a refund due to the student, proper application must be made with the Bursar’s Office to obtain the refund. See this bulletin for a full description of withdrawal procedures.

After the first class, laboratory and special course fees are non-refundable. Tuition deposits are non-refundable but are applied toward first term tuition charges.

Refunds for tuition and board will be given based on the following schedules:

Tuition Refund and Adjustment Schedule
- 100% refund. Through registration
- 80% refund. During the second week
- 60% refund. During the third week
- 40% refund. During the fourth week
- 20% refund. During the fifth week
- No refund. After the fifth week

NOTE: Graduate students who enroll in, and pay for, thesis or dissertation credits before actually beginning work on their projects will not be entitled to a refund of tuition for these credits if, for any reason, they do not complete their programs.

Board — Pro-rated; number of full weeks remaining in term as a percent of 16 weeks.

FINANCIAL AID
Both merit-based and need-based financial aid is available to graduate students at Marquette University. The Graduate School offers and administers merit-based aid such as teaching assistantships, research assistantships, tuition scholarships, and a variety of fellowships. The university’s Office of Student Financial Aid offers and administers need-based financial aid such as loans and federal work-study employment, and non-need based aid such as student work opportunity employment and private employment.

Students may opt to pay for their studies in a variety of ways. In addition to merit- and need-based aid, they may use their personal funds, sign up for the Marquette Monthly Payment Plan offered by the Office of the Bursar, receive assistantships funded by faculty members’ grants, or apply for outside scholarships and fellowships. Numerous funding options are listed and regularly updated in the financial aid section of the Graduate School’s Web site.

MERIT-BASED COMPETITIVE ASSISTANTSHIPS, SCHOLARSHIPS, AND FELLOWSHIPS FUNDED BY THE GRADUATE SCHOOL
Students applying for merit-based aid must:
- Be admitted to degree programs (exceptions are made for the Catholic Schools Personnel Scholarships and the Milwaukee Area Teachers Scholarships).
- Be registered as full-time students (exceptions are made for the Catholic Schools Personnel Scholarships and the Milwaukee Area Teachers Scholarship).
- Not be admitted on probation.
- Maintain 3.00 grade point averages (term and cumulative). Failure to do so may result in the withdrawal or discontinuation of their aid.

Awards are made on the basis of academic record and scholarly promise. Factors used in determining this aid include the applicants’ transcripts, letters of recommendation, GRE, GMAT, MAT scores, and academic backgrounds. Financial need is not a factor.
## Financial Information

### Merit-Based Competitive Assistantships, Scholarships, and Fellowships Funded by the Graduate School

<table>
<thead>
<tr>
<th>Program</th>
<th>Eligibility</th>
<th>Amounts</th>
<th>Application Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha Sigma Nu Graduate Scholarship</td>
<td>Members of Alpha Sigma Nu</td>
<td>Up to an 18 credit tuition scholarship. Renewable for a second year depending on fund availability.</td>
<td>Apply by February 15. Contact the Graduate School's Assistant Director for Financial Aid for more information.</td>
</tr>
<tr>
<td>The Greater Milwaukee Foundation's Frank Rogers Bacon Research Assistantship</td>
<td>Master's and doctoral students in the Department of Electrical Engineering.</td>
<td>$12,820 stipend and variable tuition scholarship amounts.</td>
<td>Interested students should write to the chairperson of the Department of Electrical and Computer Engineering.</td>
</tr>
<tr>
<td>Adelaide &amp; Hubert Booz Scholarship in Neuropsychology</td>
<td>Graduate students in counseling and educational psychology.</td>
<td>Amount varies depending upon fund availability.</td>
<td>Nominations are made by Dept. of Counseling and Educational Psychology.</td>
</tr>
<tr>
<td>R.A. Bourique Memorial Fellowship</td>
<td>Summer research support for graduate students in chemistry.</td>
<td>Amount varies depending upon fund availability.</td>
<td>Applicants should contact the Department of Chemistry for information.</td>
</tr>
<tr>
<td>John Braig Family Scholarship in Theology</td>
<td>Provides scholarship funds in varying amounts to students, particularly seminarians and members of religious orders, who are enrolled in theology graduate courses.</td>
<td>$2,000 stipend, though amount may vary depending upon fund availability.</td>
<td>Eligible students will be invited to apply.</td>
</tr>
<tr>
<td>Father Henry Casper, S.J., Memorial Fellowship in History</td>
<td>Graduate students in history.</td>
<td>$5,000 stipend.</td>
<td>Nominations are made to the Graduate School by the Department of History.</td>
</tr>
<tr>
<td>Catholic Schools Personnel Scholarship Program Scholarship (affiliated with the Kopmeier Family Milwaukee Foundation)</td>
<td>Teachers, administrators and other professionals employed by Catholic elementary and secondary schools in the Archdiocese of Milwaukee.</td>
<td>Covers up to two-thirds of a three credit course.</td>
<td>Applications are available from the Graduate School and online. Fall deadline June 15; Spring deadline November 15; Summer deadline April 15.</td>
</tr>
<tr>
<td>Dominican Sisters of Sinsinawa Graduate Education Award</td>
<td>Dominican Sisters of the Dominican Order of the Sinsinawa Province. Under special circumstances, funds may be available to other Catholic students.</td>
<td>Stipend for living expenses and/or tuition.</td>
<td>Recipients are authorized by the Superior of the Order.</td>
</tr>
<tr>
<td>John J. Eisch Graduate Research Fellowship in Chemistry</td>
<td>Fourth or fifth year doctoral students in chemistry. Recipient will have completed candidacy orals and demonstrate excellence in research.</td>
<td>Ten months of financial support. Amount varies depending upon fund availability.</td>
<td>Nominations are made by the chair of the Department of Chemistry in consultation with graduate faculty.</td>
</tr>
<tr>
<td>Forward Dental Graduate Residency Scholarship</td>
<td>Graduate residents enrolled in the prosthodontics, orthodontics, or endodontics programs.</td>
<td>Amount varies depending upon fund availability.</td>
<td>No application necessary. Awards selected by School of Dentistry scholarship committee. Recipients will be notified after July 1.</td>
</tr>
<tr>
<td>G.E. – Marquette Medical Systems, Inc. Scholarship</td>
<td>Graduate students in healthcare technologies management.</td>
<td>Amount varies depending upon fund availability.</td>
<td>Nominations are made by Healthcare Technologies Management.</td>
</tr>
<tr>
<td>Graduate Assistance in Areas of National Need (GAANN) program sponsored by the U.S. Department of Education</td>
<td>Ph.D. students in biomedical engineering, electrical engineering, or biological sciences.</td>
<td>Tuition scholarship up to 18 credits plus an annual stipend of up to $30,000 depending on need.</td>
<td>Applicants should contact departments for availability and application information.</td>
</tr>
<tr>
<td>Graduate Student Organization Graduate Assistantship</td>
<td>Graduate students in at least the second year of their programs.</td>
<td>Awards include a $12,820 stipend and a tuition scholarship up to 18 credits.</td>
<td>Application procedures are announced each spring for the following fall term.</td>
</tr>
<tr>
<td>PROGRAM</td>
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<tr>
<td>Graduate students in speech-language pathology.</td>
<td></td>
<td>Amount varies depending upon fund availability.</td>
<td>Nominations are made by Speech Pathology &amp; Audiology.</td>
</tr>
<tr>
<td>Need- and character-based scholarship for students in the Dept. of Counseling and Educational Psychology.</td>
<td></td>
<td>Amount varies depending upon fund availability.</td>
<td>The Department of Counseling and Educational Psychology make nominations to the Graduate School.</td>
</tr>
<tr>
<td>Jesuits from countries other than the U.S.</td>
<td></td>
<td>Tuition scholarship up to 18 credits.</td>
<td>Contact the Graduate School or the rector of the Jesuit community.</td>
</tr>
<tr>
<td>Master’s and doctoral students in biology, chemistry, mathematics, biomedical engineering, civil engineering, electrical engineering or mechanical engineering.</td>
<td></td>
<td>Up to a $2,000 stipend to supplement an assistantship.</td>
<td>Nominations are made to the Graduate School by the individual graduate units.</td>
</tr>
<tr>
<td>Degree-seeking students who are also eligible to apply for the Catholic Schools Personnel Scholarship (CSPS).</td>
<td></td>
<td>Up to 5 years if support. Amount varies depending upon fund availability.</td>
<td>Submit the CSPS application by June 15 for fall and by Nov. 15 for spring.</td>
</tr>
<tr>
<td>Master’s students in theology.</td>
<td></td>
<td>Amount varies depending upon fund availability.</td>
<td>Nominations are made to the Graduate School by the Department of Theology.</td>
</tr>
<tr>
<td>Graduate students in civil engineering. Available every other year to graduate students.</td>
<td></td>
<td>Amount varies depending upon fund availability.</td>
<td>Nominations are made by Civil and Environmental Engineering.</td>
</tr>
<tr>
<td>Minorities underrepresented in American graduate education (African Americans, Hispanics, and Native Americans). Must be a U.S. citizen.</td>
<td></td>
<td>For 2008-2009, a minimum stipend of $6,410 and a nine-credit scholarship. The student's department is strongly encouraged to supplement this award and to provide support in subsequent years.</td>
<td>Nominations are made to the Graduate School by the individual graduate units.</td>
</tr>
<tr>
<td>Students in all graduate programs who demonstrate financial need.</td>
<td></td>
<td>Amount varies depending upon fund availability from 1 to 9 credits per semester.</td>
<td>The various graduate programs make nominations to the Graduate School.</td>
</tr>
<tr>
<td>Graduate students in biomedical engineering.</td>
<td></td>
<td>Financial assistance usually in the form of a stipend.</td>
<td>Nominations are made to the Graduate School by the Department of Biomedical Engineering.</td>
</tr>
<tr>
<td>Students who received the baccalaureate degree at Marquette University.</td>
<td></td>
<td>$2,000 stipend.</td>
<td>Nominations are made to the Graduate School by a different graduate unit each year.</td>
</tr>
<tr>
<td>Graduate residents in the first year of the orthodontics program.</td>
<td></td>
<td>Amount varies depending upon fund availability.</td>
<td>No application necessary. Awards selected by orthodontics program faculty. Recipients will be notified after July 1.</td>
</tr>
<tr>
<td>Elementary and secondary school teachers in the Milwaukee area.</td>
<td></td>
<td>One-half tuition scholarships up to three credits per term.</td>
<td>Request application from Graduate School. Fall deadline February 15; Summer deadline April 15; Spring deadline November 15.</td>
</tr>
<tr>
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</tr>
<tr>
<td>Denis J. O’Brien Fellowship</td>
<td>Students involved in summer study and research in the Departments of Chemistry (2008) and Biological Sciences (2009).</td>
<td>Amount varies depending upon fund availability.</td>
<td>Nominations are made to the Graduate School by the department.</td>
</tr>
<tr>
<td>Charles O’Hara Scholarship</td>
<td>Graduate students in biology involved in summer work at Woods Hole, Massachusetts, Cold Spring Harbor Laboratory, or a similar laboratory devoted to the study of biological sciences.</td>
<td>Tuition scholarship.</td>
<td>Nominations are made by the Department of Biological Sciences.</td>
</tr>
<tr>
<td>Orthopaedic Human Motion Analysis Fellowship</td>
<td>Advanced graduate students in bioelectronics and biomechanics. Through clinical collaboration with the Department of Orthopaedic surgery at the Medical College of Wisconsin.</td>
<td>Monthly stipend and up to 18 credits tuition scholarship.</td>
<td>Nominations are made to the Graduate School by the Department of Biomedical Engineering.</td>
</tr>
<tr>
<td>Jeremiah L. O’Sullivan Fellowship in Public Affairs Journalism</td>
<td>Master’s students in journalism with a special emphasis in public affairs journalism.</td>
<td>Stipend and tuition scholarship.</td>
<td>Nominations are made to the Graduate School by the Diederich College of Communication.</td>
</tr>
<tr>
<td>Preparing Future Faculty Graduate Assistantship</td>
<td>Graduate students in at least the second year of their programs.</td>
<td>Awards include a $12,820 stipend and a tuition scholarship up to 18 credits.</td>
<td>Application procedures are announced each spring for the following fall term.</td>
</tr>
<tr>
<td>Reverend John P Raynor, S.J., Fellowship</td>
<td>Master’s and doctoral students. Recipients are expected to be in residence at Marquette and engaged in full-time study.</td>
<td>$15,000 stipend for doctoral students; stipend up to $2,000 for master’s students to supplement assistantship award; up to 18 credits of tuition scholarship.</td>
<td>Students wishing to be nominated for this fellowship should communicate their interest to their departments by November 15. Nominations from the departments are reviewed in the Graduate School and decisions are usually announced by February 15.</td>
</tr>
<tr>
<td>Ann Rehberg End of Life Care Scholarship</td>
<td>Graduate students in the College of Nursing.</td>
<td>Amounts vary depending upon fund availability.</td>
<td>Nominations are made by the College of Nursing.</td>
</tr>
<tr>
<td>Research Assistantship (online applications accepted at <a href="http://www.grad.mu.edu/forms">www.grad.mu.edu/forms</a>)</td>
<td>Full-time students in degree programs.</td>
<td>Stipends begin at $12,820. In addition, up to 18 credits of tuition scholarship.</td>
<td>Submit application to the Graduate School. The Graduate School does not offer RA awards in the summer. Fall deadline February 15, Spring deadline November 15.</td>
</tr>
<tr>
<td>Agnes A. Reinders Scholarship</td>
<td>Full-time graduate students in the College of Nursing.</td>
<td>Amount varies depending upon fund availability.</td>
<td>Contact department chairperson to apply.</td>
</tr>
<tr>
<td>Joseph A. and Dorothy C. Rutkauskas Scholarship</td>
<td>Graduate students in the College of Engineering.</td>
<td>$5,000 award.</td>
<td>Applicants should contact their departments for information.</td>
</tr>
<tr>
<td>Arthur J. Schmitt Fellowship</td>
<td>Students in doctoral programs who intend to pursue a career in college teaching.</td>
<td>Stipend of $13,650.</td>
<td>Students wishing to be nominated for this fellowship should communicate their interest to their departments by November 15. Nominations from the departments are reviewed in the Graduate School and decisions are usually announced by February 1.</td>
</tr>
<tr>
<td>Eugene J. Schumack Memorial Journalism Fund</td>
<td>Graduate students in journalism.</td>
<td>Amount varies depending upon fund availability.</td>
<td>Nominations are made to the Graduate School by the Diederich College of Communication.</td>
</tr>
<tr>
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<td>AMOUNTS</td>
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<tr>
<td>Smith Family Fellowship</td>
<td>Doctoral students in history, English, philosophy, and theology who have dissertation topics that require travel out of state to collect data.</td>
<td>Stipend of $13,650 plus reasonable travel expenses up to $3,000.</td>
<td>Students wishing to be nominated for this fellowship should communicate their interest to their departments by November 15. Nominations from the departments are reviewed in the Graduate School and decisions are usually announced by February 1.</td>
</tr>
<tr>
<td>Milo F. Snyder Scholarship in Business</td>
<td>Finance majors in the Graduate School of Management’s M.B.A. program.</td>
<td>Scholarship funds in varying amounts.</td>
<td>Nominations are made to the Graduate School by the Graduate School of Management.</td>
</tr>
<tr>
<td>Lawrence F. and Margaret C. Stollenwerk Scholarship Fund</td>
<td>Students enrolled in Advanced Gerontological Nursing.</td>
<td>Amount varies depending upon fund availability.</td>
<td>Contact the College of Nursing for nomination information before June 15.</td>
</tr>
<tr>
<td>Larry and Cindy Susienka Family Foundation Scholarship</td>
<td>Students in speech pathology and audiology. Preference given to an early acceptance program participant with a focus on geriatrics.</td>
<td>Amount varies depending upon fund availability.</td>
<td>Nominations are made to the Graduate School by the Department of Speech Pathology and Audiology.</td>
</tr>
<tr>
<td>Earl W. Swokowski Fellowship in Mathematics</td>
<td>Students with teaching or research assistantships in the Department of Mathematics, Statistics and Computer Science.</td>
<td>Summer stipend, or other support, up to $2,000. The award may also provide support for educational expenses.</td>
<td>Contact department chairperson to apply.</td>
</tr>
<tr>
<td>Teaching Assistantship (online applications accepted at <a href="http://www.grad.mu.edu/forms">www.grad.mu.edu/forms</a>)</td>
<td>Full-time students in degree programs.</td>
<td>Stipends are $12,820 to $18,400 depending upon department and level of award. In addition, up to 18 credits of tuition scholarship.</td>
<td>Submit application to the Graduate School. The Graduate School does not offer TA awards in the summer. Fall deadline February 15; Spring deadline November 15.</td>
</tr>
<tr>
<td>Trinity Fellowship</td>
<td>Graduate students in the programs of business, communication, political science, philosophy or public service with prior service in the Peace Corps, Jesuit Volunteer Corps, Americorps, or comparable service. Requires work in a specified social agency.</td>
<td>Stipend approximates Graduate School’s teaching assistantship stipend in addition to a tuition scholarship of up to 18 credits.</td>
<td>Contact the director of the Institute for Urban Life.</td>
</tr>
<tr>
<td>Tuition Scholarship (online applications accepted at <a href="http://www.grad.mu.edu/forms">www.grad.mu.edu/forms</a>)</td>
<td>Full-time students in degree programs.</td>
<td>Scholarships up to 18 credits.</td>
<td>Submit application to the Graduate School. Fall deadline February 15; Spring deadline November 15; Summer deadline April 15.</td>
</tr>
<tr>
<td>Weis Family Scholarship Fund</td>
<td>Students enrolled in Advanced Gerontological Nursing.</td>
<td>Amount varies depending upon fund availability.</td>
<td>Contact the College of Nursing for nomination information before June 15.</td>
</tr>
<tr>
<td>Wisconsin Province of the Society of Jesus Grant Fund</td>
<td>Non-Jesuit third-world priests and religious.</td>
<td>Funds awarded as either grants or loans.</td>
<td>Contact the Graduate School.</td>
</tr>
<tr>
<td>Dorothy Randles Wood Scholarship</td>
<td>Graduate students in Speech Pathology and Audiology.</td>
<td>Amounts vary depending upon fund availability.</td>
<td>Nominations are made by Speech Pathology and Audiology.</td>
</tr>
<tr>
<td>Other merit- and need-based awards for graduate students</td>
<td>A few small endowments support special programs as specified by the donors of the awards.</td>
<td>Small amounts for tuition or living expenses vary depending on earnings of endowments.</td>
<td>The various graduate programs make nominations to the Graduate School.</td>
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</table>
ASSISTANTSHIPS*
Assistants work a maximum of twenty hours per week in their departments. Outside employment is not allowed without written permission of the student's adviser and the Graduate School. Assistants receive stipends and tuition scholarships up to 18 credits.

TEACHING ASSISTANTSHIPS
TAs assist with various instructional duties. They may function as classroom teachers, lab or quiz instructors, or instructional assistants, and in some cases be assigned primary responsibility for an entire course under the supervision of faculty.

RESEARCH ASSISTANTSHIPS
RAs assist assigned faculty with their research projects.

GRADUATE ASSISTANTSHIPS
GAs perform a combination of TA and RA duties as determined by their departments.

The following graduate programs offer assistantships:
- Biological Sciences
- Biomedical Engineering
- Business Administration
- Chemistry
- Civil Engineering
- Communication
- Counseling and Educational Psychology
- Economics
- Educational Policy and Leadership
- Electrical and Computer Engineering
- English
- Foreign Languages and Literatures
- History
- Mathematics, Statistics and Computer Science
- Mechanical Engineering
- Nursing
- Philosophy
- Physical Therapy
- Political Science
- Psychology, Clinical
- Speech-Language Pathology
- Theology/Religious Studies

Refer to the table, found within this section, for more information about assistantships, or view the Rules and Guidelines for Graduate School Assistantships on the Graduate School's Web site at www.grad.mu.edu/finaid/merit.

*S Programs that do not offer graduate assistantships include: executive M.B.A., direct-entry nursing, dispute resolution, gerontology, law enforcement leadership and management, leadership studies, public service, and transfusion medicine. Dental students must contact the associate dean for research and graduate studies at the School of Dentistry for award consideration.

SCHOLARSHIPS*
Many programs offer scholarships to pay for tuition charges. Scholarships do not pay for prerequisites, audited courses, or non-related degree program courses and fees. They will not pay for more than six thesis or twelve dissertation credits. More information about scholarships is in the Rules and Guidelines for Graduate School Scholarships on the Graduate School's Web site at www.grad.mu.edu/finaid/merit.

* Programs that do not offer graduate scholarships include: executive M.B.A., direct-entry nursing, dispute resolution, gerontology, law enforcement leadership and management, leadership studies, physical therapy, physician assistant studies, public service, and transfusion medicine. Dental students must contact the associate dean for research and graduate studies at the School of Dentistry for award consideration.

FELLOWSHIPS
A number of foundations, corporations, individual philanthropists, as well as the university, provide fellowships to Marquette graduate students. Fellowships do not have departmental work obligations, but outside employment is not allowed without the written permission of the student's adviser and the Graduate School. Specific requirements of fellowships are included in award offer letters. Most fellowships require departmental nominations. Refer to the table, found
within this section, for a listing of fellowships and application and nomination requirements. More information about fellowships is on the Graduate School’s Web site at www.grad.mu.edu/finaid/merit.

APPLICATION PROCEDURES

New applicants for admission should complete the Application for Graduate Admission and Financial Aid or the Application for Graduate School of Management Admission and Financial Aid, as appropriate, and submit all admission materials by the application deadline (see below). Applicants for the Catholic Schools Personnel Scholarship must obtain a special paper application from the Graduate School, or they may apply online.

Admitted or continuing students should complete and submit the Financial Aid Application for Admitted Students by the application deadline (see below). The form may also be completed and submitted online at www.grad.mu.edu/finaid/forms.

APPLICATION DEADLINES

For priority consideration, applications are due in the Graduate School by 4:30 p.m. on the following dates. Deadlines falling on weekends or holidays will be extended to the close of the following business day.

- Fall Term: February 15
- Spring Term: November 15
- Summer Term: April 15

Some programs may have deadlines for fall admission that are earlier than the financial aid application deadlines. New applicants for financial aid in those programs must adhere to the earlier department deadlines that are listed in the Graduate Programs section of this publication.

RESOLUTION OF THE COUNCIL OF GRADUATE SCHOOLS IN THE UNITED STATES

Marquette University is a signatory to the CGS resolution. The resolution states that acceptance of an offer of financial support (such as a graduate scholarship, fellowship, traineeship, or assistantship) for the next academic year by a prospective or enrolled graduate student completes an agreement that both student and graduate school expect to honor. When a student accepts an offer before April 15 and subsequently desires to withdraw that acceptance, the student may submit a written resignation of the appointment at any time through April 15. However, an acceptance given or left in force after April 15 commits the student not to accept another offer without first obtaining a written release from the institution to which a commitment has been made. Similarly, an offer by an institution after April 15 is conditional on presentation by the student of written release from any previously accepted offer. It is further agreed that institutions subscribing to the CGS resolution will enclose a copy of the resolution with every scholarship, fellowship, traineeship, and assistantship offer it sends prior to April 15.

FINANCIAL AID AVAILABLE FROM THE OFFICE OF STUDENT FINANCIAL AID (OSFA)

Financial aid to help meet the costs of your graduate or professional program can be in the form of scholarships or assistantships, student loans and part-time employment.

Scholarships and assistantships are awarded by each school or program (dental, law, health sciences or graduate). Questions concerning scholarships and assistantships should be directed to the admissions office or dean’s office of the school or program in which you plan to enroll.

Although care is taken to ensure the accuracy and timeliness of information contained in this bulletin, due to constantly changing federal and state legislation, as well as unintended error, the contents are subject to change and/or deletion without notice. Up-to-date information can be obtained by calling the Office of Student Financial Aid.

ELIGIBILITY REQUIREMENTS

To receive financial aid from federal and state programs, students must meet the following requirements:

- Be a U.S. citizen or an eligible noncitizen. Students with F1, F2, J1, or J2 visas are not eligible.
- Be registered with Selective Service, if required.
- Demonstrate financial need, if applying for need-based aid.
- Be enrolled at least half-time. Audit, repeat and other non-credit classes do not apply.
OFFICE OF STUDENT FINANCIAL AID AVAILABLE ASSISTANCE

GIFT ASSISTANCE

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>ELIGIBILITY</th>
<th>AMOUNTS</th>
<th>APPLICATION PROCESS</th>
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</thead>
<tbody>
<tr>
<td>Indian Fellowship Program</td>
<td>1. Enrolled full-time. 2. Certified as Native American by tribe. 3. Must show financial need. 4. Be in post-baccalaureate degree program in one of the approved fields of study.</td>
<td>Federal government funds program, Indian Fellowship Program selects eligible students and determines amount of each student’s fellowship.</td>
<td>1. File the FAFSA. 2. Contact MU Financial Aid Office no later than December prior to the upcoming award year for agency address and phone number. Deadline date changes each year.</td>
</tr>
<tr>
<td>American Indian Graduate Center Fellowship Program (AIGC)</td>
<td>1. Enrolled full-time. 2. Certified as Native American by tribe. 3. Must show financial need. 4. Must be in post-baccalaureate program.</td>
<td>Federal government funds program, AIGC selects eligible students and determines amount of each student’s fellowship.</td>
<td>1. File the FAFSA. 2. Contact MU Financial Aid Office for agency address and phone number. Request application directly. Application deadline: June 1.</td>
</tr>
</tbody>
</table>

EMPLOYMENT ASSISTANCE

NEED-BASED EMPLOYMENT

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>ELIGIBILITY</th>
<th>AMOUNTS</th>
<th>TERMS</th>
<th>APPLICATION PROCESS</th>
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<tbody>
<tr>
<td>Federal Work Study (FWS)</td>
<td>1. Enrolled at least half-time each term. 2. Must show financial need. 3. Must be enrolled in a degree program making satisfactory progress. 4. Must show proof of identity and eligibility to work in U.S. (original birth certificate, Social Security card or U.S. passport, visa).</td>
<td>Awards range from $1,000–$3,000 per academic year. MU selects eligible students and determines amount of each student’s award.</td>
<td>Jobs are available on campus, off-campus (Job Location and Development), and in community service positions. Paid every 2 weeks; rate of pay depends on nature of job, skills, and experience. We recommend students work no more than 20 hours per week while classes are in session; students may work no more than 40 hours per week while classes are not in session, and may not earn more than dollar amount of award.</td>
<td>1. File the FAFSA. 2. Use JobConnection to access job listings.</td>
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</table>

NON-NEED BASED EMPLOYMENT

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<tr>
<th>PROGRAM</th>
<th>ELIGIBILITY</th>
<th>AMOUNTS</th>
<th>TERMS</th>
<th>APPLICATION PROCESS</th>
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<tbody>
<tr>
<td>Marquette Student Employment (MSE)</td>
<td>1. Students who do not demonstrate financial need or have not applied for financial assistance. 2. Must show proof of identity and eligibility to work in U.S. (original birth certificate, Social Security card or U.S. passport, visa).</td>
<td>Awards range from $1,000–$2,500. Students not eligible for FWS may work on campus using MSE.</td>
<td>Paid every two weeks; rate of pay depends on nature of job, skills, and experience. We recommend students work no more than 20 hours per week while classes are in session; students may work no more than 40 hours per week while classes are not in session.</td>
<td>Use JobConnection to access job listings.</td>
</tr>
<tr>
<td>Private Employment*</td>
<td>1. Students who do not demonstrate financial need or have not applied for financial assistance. 2. Must show proof of identity and eligibility to work in U.S. (original birth certificate, Social Security card or U.S. passport, visa).</td>
<td>Varies. Determined by each employer.</td>
<td>Employer determines rate of pay and frequency of payment. Off-campus positions with Milwaukee area businesses have no restrictions on hours worked; however, we recommend a student work no more than 20 hours per week while classes are in session.</td>
<td>Use JobConnection to access job listings.</td>
</tr>
</tbody>
</table>

* Development of these positions is subsidized by the federal government under Job Location and Development (JLD).
## LOAN ASSISTANCE

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>ELIGIBILITY</th>
<th>AMOUNTS</th>
<th>TERMS</th>
<th>APPLICATION PROCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>William D. Ford Federal Direct Loan — Subsidized (Stafford/Ford Loan)</td>
<td>1. Enrolled at least half-time. 2. Not in default on prior federal student loans. 3. Must show financial need. 4. U.S. citizen or eligible non-citizen. 5. Making satisfactory progress toward a degree.</td>
<td>Students may borrow up to $8500 per academic year. The exact amount will vary depending upon financial need. Cumulative maximum for graduate and professional students is $65,500 for both undergraduate and professional studies combined.</td>
<td>Interest rate is fixed at 6.8 percent. No interest is charged while enrolled at least half-time and during the grace period. Repayment begins 6 months after the last date of half-time enrollment. Standard repayment period is 10 years. Other repayment options are available. A 1 percent processing fee is deducted from the loan proceeds when the funds are disbursed.</td>
<td>1. File the Free Application for Federal Student Aid. 2. Eligible students who have accepted the Stafford Loan on CheckMarq will receive instructions on completing the electronic Master Promissory Note (eMPN).</td>
</tr>
<tr>
<td>William D. Ford Federal Direct Loan — Unsubsidized (Stafford/Ford Loan)</td>
<td>1. Enrolled at least half-time. 2. Not in default on other federal student loans. 3. U.S. citizen or eligible non-citizen. 4. Making satisfactory academic progress.</td>
<td>Loan limits are calculated in combination with any amounts borrowed from the Subsidized Stafford Loan. Annual combined limit cannot exceed $20,500.</td>
<td>Same as Subsidized Stafford except interest accrues while in school. Student may choose to make quarterly interest payments, or have the interest deferred and capitalized prior to repayment.</td>
<td>1. File the Free Application for Federal Student Aid. 2. Eligible students who have accepted the Stafford Loan on CheckMarq will receive instructions on completing the electronic Master Promissory Note.</td>
</tr>
<tr>
<td>Federal Direct Grad PLUS Loan</td>
<td>1. Enrolled at least half-time in a degree program. 2. Making satisfactory progress toward a degree. 3. U.S. citizen or eligible non-citizen. 4. Not in default on prior federal student loans. 5. Completed the FAFSA. 6. Must be credit worthy.</td>
<td>Students may borrow up to the difference between the cost of attendance minus the other financial aid.</td>
<td>Interest rate is fixed at 7.9 percent. Interest is charged for the life of the loan. Interest and principal may be paid while in school. No prepayment penalty. First payment is due 60 days after the loan is fully disbursed. In-school deferment may be available. There is no grace period.</td>
<td>1. File the Free Application for Federal Student Aid. 2. Complete and submit the Federal Direct Grad PLUS Loan Credit Authorization form.</td>
</tr>
</tbody>
</table>
• Be working toward a degree or certificate.
• Be making satisfactory academic progress (i.e., to be eligible for aid, a student must have academic standing that is consistent with university requirements for graduation).
• Not be in default on any loan or owe a refund on any grant made under Title IV of the Higher Education Act of 1965, as amended, at any institution.

APPLICATION PROCEDURES
Students may apply for financial aid through the Office of Student Financial Aid if they are currently enrolled or are applying for admission to Marquette University. Be advised that no offer of financial assistance will be made until the student is formally admitted to the university. All students applying for financial aid through the Office of Student Financial Aid must complete the Free Application for Federal Student Aid (FAFSA). The FAFSA is used to analyze the applicant's financial resources and to determine the expected contribution toward meeting educational expenses. The FAFSA is available online at http://www.fafsa.ed.gov beginning on January 1 for the upcoming academic year.

During the application process, students may be asked to verify the information reported on the FAFSA. Any aid offer will be contingent upon completion of the verification process.

SATISFACTORY ACADEMIC PROGRESS POLICY
By federal regulation, Marquette University is required to apply both qualitative and quantitative standards in measuring academic progress for financial aid purposes. These standards apply to all students who receive institutional, state and federal Title IV and Title VII funds administered by the university. Federal Title IV programs include Federal Pell Grants, Federal Supplemental Educational Opportunity Grants, William D. Ford Federal Direct Stafford and PLUS Loans, Federal Perkins Loans and Federal Work Study. Title VII programs include Federal Nursing Loans, Federal Health Professional Loans for dental students, and disadvantaged scholarships, grants, and loans.

Marquette has established the following criteria for graduate students in conjunction with federal regulation published on Oct. 6, 1993, Federal Register Part 668.16 and the Higher Education Amendments of 1986.

I. QUANTITATIVE STANDARDS OF ACADEMIC PROGRESS

Graduate Students

Master’s Degree
Applicants for financial aid are expected to complete their degrees within 12 terms.

Doctoral Degree
Applicants for financial aid are expected to complete their degrees within 12 terms. A student who enters a doctoral program with a master’s degree in the same field as that in which he or she will pursue the doctoral program must complete the program within 10 terms.

In addition, the following quantitative standards must be met by all graduate students:

<table>
<thead>
<tr>
<th>Enrolled Credits</th>
<th>Credits to be Completed (75 percent)</th>
<th>Enrolled Credits</th>
<th>Credits to be Completed (75 percent)</th>
</tr>
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<tbody>
<tr>
<td>24+</td>
<td>18</td>
<td>14</td>
<td>11</td>
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<tr>
<td>23</td>
<td>17</td>
<td>13</td>
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<td>15</td>
<td>11</td>
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</tbody>
</table>

Note: Incompletes, not reported grades, grades of “F” or audit credits will not be counted as earned credits.
II. FAILURE TO MEET THE SATISFACTORY ACADEMIC PROGRESS STANDARDS

Quantitative Standard

First Occurrence

For any academic year in which a student enrolls but does not satisfactorily meet the standards, the student will be put in a warning status. The student will be notified of this status in writing.

Second Occurrence

If a student fails to meet the standards for a second consecutive term, the student will be ineligible for further aid consideration. Eligibility can be regained by making satisfactory progress within one term at the student’s own expense.

If a student in an ineligible status receives aid, full repayment will be required of all funds received, excluding Federal Work Study. A student working on the Federal Work Study program will have his/her employment terminated under that program.

Reinstatement of Eligibility

Once a student has made satisfactory progress during a particular term at Marquette at his/her own expense, the student must provide the Office of Student Financial Aid with a final grade report. The student will then be reinstated to eligible status.

III. SATISFACTORY ACADEMIC PROGRESS APPEAL PROCEDURES

A. Student must complete Section A of the appeal form (available in the Office of Student Financial Aid) and forward it to the appropriate academic dean for completion of Section B. 
B. The Office of Student Financial Aid will communicate results of the appeal to the student. 
C. Appeal must be made prior to the end of the term for which aid is desired. 
D. Recommendation of the dean is final.
INTRODUCTION

LOCATION

The Graduate School office is located in Holthusen Hall, 305, 1324 W. Wisconsin Avenue, Milwaukee, WI 53233. Office hours are 8 a.m. to 4:30 p.m. with the exception of national or university holidays when the office is closed. Mail should be sent to Marquette University Graduate School, P.O. Box 1881, Milwaukee, WI 53201-1881. The Graduate School's telephone number is (414) 288-7137, the fax number is (414) 288-1902, the electronic mail address is mugs@marquette.edu, and the Web site is www.marquette.edu/grad.

PUBLICATIONS

GRADUATE BULLETIN

The Graduate Bulletin contains information regarding the academic calendar, admissions, degree requirements, fees, regulations, and course offerings. Prospective and current graduate students are responsible for all information contained in this bulletin that is pertinent to graduate study and their specific field. Academic policy and course changes will apply to all students as of the date they become effective, regardless of whether they were in effect at the time the student initially enrolled at Marquette. Graduate students may follow the program requirements of the bulletin that are in effect at the time they submit their application, or any other bulletin used during their enrollment. However, students must abide by only one bulletin's rules. If any exceptions to this policy are required due to length of time between submitting an application and beginning the program, the student will be notified in writing of the applicable bulletin to follow. In order to properly audit a student's academic record for graduation, the student must notify the Graduate School in writing if any bulletin other than the one in effect at the time of application is to be used. Furthermore, the policy applies primarily to master's degree students; doctoral students are bound by the specifics of their approved Doctoral Program Planning Form.

Graduate School students must assume full responsibility for knowledge of the rules and regulations of their school and the special requirements of their individual degree programs. It is the responsibility of each graduate student to verify and meet the deadlines listed in the Academic Calendar (e.g., for submitting financial aid forms, submitting theses or dissertations). The Academic Calendar for 2008-2009 is located on the inside front and back covers of this bulletin.

CHANGES TO THE GRADUATE BULLETIN

Marquette University reserves the right to make changes of any nature in its programs, calendar, or academic schedule whenever in its sole judgement it is deemed necessary or desirable. Certain provisions in the bulletin may be in the process of amendment or change. Accordingly, the bulletin is not intended to be relied upon as a statement of the university's contractual
undertakings. The decision of Marquette University as to the interpretation and method of implementation of its rules, regulations, program requirements, schedules, and calendars shall be conclusive and final.

The information in this bulletin and other university bulletins, publications, or announcements may change without notice. Current information is available from the Graduate School.

**SCHEDULE OF CLASSES AND SNAPSHOT**

The Schedule of Classes is published online and found at www.marquette.edu/registrar/soc. All available classes are listed for any term specified.

**FINANCIAL AID INFORMATION GUIDE**

The publication Award Information Guide provides an overview of the available financial aid, debt management, students rights and responsibilities, and federal loan programs. Copies are available at the Office of Student Financial Aid. Information about different types of financial aid available to graduate students may be found in this bulletin under Financial Information.

**MISSION STATEMENT — GRADUATE SCHOOL**

The mission of the Marquette University Graduate School is to contribute to the discovery of knowledge through scholarly activities, to provide leadership in defining the graduate experience, and to advocate for an environment that nurtures exploring and learning. To accomplish its mission, the Graduate School ensures quality, consistency and continuity in graduate programs; establishes and monitors institutional commitment to standards; and stimulates improvement and change in the research and pedagogical settings. The Graduate School communicates with stakeholders in a continuing effort to maintain the centrality of graduate education to the mission of Marquette University and to excite the graduate environment.

**PREPARING FUTURE FACULTY PROGRAM**

The Marquette University Preparing Future Faculty (PFF) Program, in collaboration with the Marquette University Center for Teaching and Learning, has developed the Documentation of Teaching Program to help prepare interested graduate students for a career in academia. Students with other career interests are welcome to engage in PFF activities, and may find the programs on developing a résumé, building presentation skills, and preparing for job interviews particularly helpful.

The PFF Documentation of Teaching Program requires graduate students to meet requirements in the following areas: (1) Theory and research on effective teaching and learning in higher education; (2) Introduction to specific teaching skills; (3) Obtaining feedback on teaching; (4) Assessing student learning; (5) Teaching with technology – e-learning applications; (6) Applying and interviewing for faculty positions; (7) Obtaining external funding.

In order to meet these requirements, graduate students have the option of either taking graduate classes offered by the College of Education or attending colloquia, workshops, and conferences sponsored by PFF. These PFF events satisfy many of the requirements or address pedagogic and professional issues to enhance the professional development of graduate students. Topics covered range from technology in the classroom to grant writing, and from the job search process to diversity in the classroom.

Participants of the PFF Documentation of Teaching Program create a professional portfolio detailing their achievements and abilities and providing future employers with a wealth of relevant information. The portfolio may include documents on: a) teaching (mentoring and development); b) publications; c) conference work/participation; d) professional development; e) institutional awareness; and f) university and community service.

Successful completion of the requirements for the PFF Documentation of Teaching Program is recognized with a notation on the graduate student’s official university transcript and is verified by a document issued by the PFF program and the Graduate School.
APPLICATION PROCEDURES

ADMISSION REQUIREMENTS

All applicants should have:

• A bachelor's degree from a recognized college or university, or the equivalent foreign degree.
• At least a B average (3.00 grade point average on a 4.00 scale).
• Course work suitable for the desired graduate program (applicants with a bachelor's degree but not the necessary course work should consult the Office of Undergraduate Admissions, [414] 288-7302 or [800] 222-6544, or the Undergraduate Bulletin, for information about Special Student Status).
• Some programs require professional experience in addition to a bachelor's degree. See the Graduate Programs section of this bulletin for more information.

In addition, no application for admission will be considered for any applicant with an outstanding balance of $3,000 or more owed to the university.

SUBMITTING AN APPLICATION

Beginning September 15, 2008, applications for admission must be submitted online. A link to our online application can be found at www.grad.mu.edu/future/apply.shtml.

PROGRAM INFORMATION

An applicant's program may have special requirements of background, tests, personal statements, other materials, and application deadlines. Check the Graduate Programs section of this bulletin for information and requirements specific to each program or see requirements on the Web at www.grad.mu.edu/programs/apps.shtml. Applicants are responsible for meeting and submitting all of their program's application requirements.

APPLICATION AND FINANCIAL AID DEADLINES

Applicants are admitted to the Graduate School on the recommendation of the intended department and the approval of the vice provost for research and dean of the Graduate School.

Applications for admission to programs that have no deadlines listed in the Graduate Programs section of this bulletin must be received in the Graduate School by August 1 for fall admission, by December 15 for spring admission, and by May 1 for summer admission. If the program has a listed application deadline, all application materials must arrive before that date. Admission to the program is valid only for the term specified on the application, unless a deferral is requested from the Graduate School. Deferral of admission may be requested by completing and submitting the Request for Deferral of Admission form available at www.grad.mu.edu/forms. Note that deferral is for admission only, and not for financial aid. Applicants should check the Graduate Programs section for more information.

Students applying to more than one program must submit a separate application and application package for each program. The first-choice program of interest must be indicated on at least one of the applications. The application fee is paid only once.

The deadline for applying for merit-based Graduate School financial aid (assistantships and scholarships) is February 15 for the following fall term, November 15 for the following spring term and April 15 for the summer sessions. Deadlines falling on weekends or holidays will be extended to the close of the following business day. Some programs may have deadlines for fall admission that are earlier than the financial aid application deadlines. New applicants for financial aid in those programs must adhere to the earlier department deadlines that are listed in the Graduate Programs section of this bulletin.

IMMUNIZATION AND TUBERCULOSIS SCREENING POLICY

In the interests of keeping individual students and the campus community healthy, effective with the fall 2006 term, all newly admitted or readmitted students at Marquette University — undergraduate, graduate and professional — are required to provide proof of certain immunizations and to complete a screening instrument for tuberculosis.

Proof of immunization, and/or disease as applicable, is required for MMR (measles, mumps, rubella), Varicella (chicken pox) and Tetanus/Diphtheria. The information should be provided in advance of coming to campus by completing a Health History Form and a Tuberculosis Questionnaire that will be included in your acceptance packet or sent under a separate mailing by your college or by the Student Health Service. The forms are also available on the Student
Health Service Web site at www.marquette.edu/shs. The information must be submitted to the Student Health Service, where it will be retained in confidence.

If a student fails to submit the required documentation within 30 days of the start of the student's first term at Marquette, a registration hold will be placed on future registrations. The hold will be removed once the Health History Form and Tuberculosis Questionnaire have been received by the Student Health Service and the immunization requirements have been met.

Health Sciences, Nursing and Dentistry students may be required by their department, college or school to receive additional immunizations. Contact your department, college or school for specifications.

INACTIVE FILES
Incomplete and inactive admission files are discarded after one year.

INTERNATIONAL STUDENT REQUIREMENTS

DEFINITION OF AN INTERNATIONAL STUDENT
An international student is defined as an applicant who is not a U.S. citizen or permanent resident.

APPLICATION INSTRUCTIONS
As described in the Application Instructions section later in this bulletin, international applicants are required to submit an application form, a non-refundable application fee, official transcripts with certified English translations, three letters of recommendation, test data (including the TOEFL), and other materials as required by the program to which they are applying.

ENGLISH LANGUAGE ASSISTANCE
All non-native English speaking teaching assistants will be required to take a language placement examination upon their arrival on campus. Based on the results of the exam, students may be required to enroll in one or more English as a Second Language (ESL) courses in addition to their required course work. ESL courses in writing, reading, listening comprehension, and speaking/pronunciation are offered during the fall and spring terms. (This requirement is in addition to the TOEFL requirement described in the Application Instructions section.) All international students with teaching assistantships (TAs) are also required to attend a one-week orientation program, where they are evaluated individually in language and communication skills before beginning course work.

FINANCIAL VERIFICATION AND VISA REGULATIONS
Upon acceptance to the Graduate School, F-1 students must adequately document their financial resources for the duration of the academic program before a visa will be issued. Financial verification, in the form of an appropriate sponsorship statement and an advance deposit (in U.S. currency) equal to the amount of the first term's tuition, must be sent to Marquette before the certificate of eligibility for a visa will be issued. Students wishing to have their I-20 express mailed to them must put their request in writing and submit it along with the required advance deposits and financial verification paperwork. The added cost for express mail requests will be subtracted from the advance deposit. The express mail charge is non-refundable. The premium for the first term of health and repatriation insurance, required of all F-1 and J-1 students, will be deducted from the advance deposit. Students must be prepared to pay any remaining balance of the first term's tuition when they arrive on campus. The advance deposit will be waived if the student receives a scholarship or other academic award that covers the cost of the first term's tuition. If a student chooses not to attend Marquette University after the I-20 has been issued, all but $10 (U.S. currency) will be refunded. A written request for a refund must be sent back to the Graduate School with the original I-20.

International students must abide by the regulations of their legal status in the United States regarding their defined educational objectives, academic load, and employment. Most international applicants are eligible only for regular degree status. Those seeking admission for non-degree status must obtain a statement of their legal eligibility from Marquette's Office of International Education.
APPLICATION INSTRUCTIONS

The Graduate School requires the following information from all master's and doctoral program applicants. Read the list carefully and follow the directions exactly. Applications will not be reviewed for admission until all materials, including those requested by the proposed graduate program, have been received. Submit all application materials by mail to: Marquette University Graduate School, P.O. Box 1881, Milwaukee, WI 53201-1881; or by courier to: Marquette University Graduate School, 1324 W. Wisconsin Ave., Room 305, Milwaukee, WI 53233.

SELF-COMPLETED APPLICATIONS

Students are required to apply online and are strongly advised to submit the application for admission and as many required documents as possible, at one time. Letters of recommendation and any transcripts must be in sealed envelopes with the signature/stamp of the issuing person/institution across the back flap. Official GRE/GMAT/TOEFL scores must come directly from the applicable testing service. However, applicants who have an unofficial copy of the score report are advised to submit it with all other documents; the score report will be considered unofficial until verified by the applicable testing service.

ALL APPLICANTS MUST SUBMIT THE FOLLOWING:

- A completed online application form (online applications are required beginning September 15, 2008).
- A non-refundable application processing fee (U.S. currency only). The fee will be $40 up until September 15, 2008, after which the fee will become $50.
  Note: Application fee is waived for Marquette University Graduate School alumni.
- A letter notifying the Graduate School if the last name (family name) on the transcripts or test scores is different from the name on the Graduate School application.
- Official transcripts:
  The Graduate School requires official transcripts detailing previous academic study from all universities or colleges attended, embossed with the school seal. Applicants with course work in progress toward the fulfillment of a degree are required to submit an official final transcript verifying receipt of their degree after completing the course work. All applicants who have transcripts in a language other than English must provide official transcripts accompanied by certified English translations.
  Applicants who previously attended Marquette University need not request Marquette transcripts but are required to furnish transcripts from other schools they attended.
- Letters of recommendation:
  Applicants should check the Graduate Programs section of this bulletin for information about the number of letters of recommendation needed, if any. Letters of recommendation from former professors are preferred and should comment on the applicant's past academic record and potential for future success. Most programs do not require special forms or format. However, the nursing, counseling, counseling psychology, and educational psychology programs require special forms for recommendation submission. Letters of recommendation should be submitted online as part of the online application system. Letters of recommendation, if not submitted online, may be sent directly to the Graduate School by the author or institution or may be sent with the self-completed application in sealed envelopes with the author's signature across the back flap.
  Applicants applying for financial aid through the Graduate School must submit three letters of recommendation and check the financial aid box on the application (see the Financial Information section of this bulletin).
- Permission to discuss the applicant's file with a third party (optional):
  Applicants who are unable to speak directly with an admissions counselor (due to distance, expense, etc.) may give the Graduate School permission to communicate with a third party. Marquette University requires that this request be made in writing, be signed by the applicant, and specify the name(s) of the third party.
- Additional application materials as requested by the program:
  It is the applicant's responsibility to obtain information about any additional requirements from the Graduate Programs section of this bulletin, from the Graduate School or department Web sites, or from the director of graduate studies in the proposed program.
• Test Data:
  
  One or more of the following tests may be required as part of the admission process. Consult the Graduate Programs section of this bulletin or the program requirements at www.grad.mu.edu/programs/apps.shtml for information specific to the applicant's proposed program. Regardless of the test, all scores will be considered unofficial until verified by the testing agency.

  Preparation books for these tests can be found at the public library and various bookstores. Free downloads of preparation materials are also available at www.mba.com for the GMAT and at www.gre.org for the GRE. A variety of tests, including the GRE (General Test only), the GMAT and the TOEFL, are administered locally at Prometric Testing, 19435 W. Capitol Drive, Suite L04, Brookfield, WI 53045. Call (262) 796-0836 for more information.

  The Graduate School urges applicants to take tests well in advance of the date the scores are needed. It usually takes at least six weeks for scores to reach the Graduate School office after the exam. Test scores should be relatively recent; scores more than five years old (two years for TOEFL) may not be accepted.

  **Graduate Record Examination (GRE)**

  Most graduate programs request a GRE (General Test) score. Departments may require applicants to take a “Subject” (advanced) GRE Test. Consult the Graduate Programs section of this bulletin for specific information. For information about this test, contact the Educational Testing Service, P.O. Box 6000, Princeton, NJ 08541-6000. Visit the Web site www.gre.org or call (609) 771-7670 or (866) 473-4373 for more information.

  Test takers applying to the Graduate School must enter the code 1448 in the Score Report Recipient section of the GRE registration form; those applying to the Graduate School of Management for economics or human resources must enter the code 5786. It is not sufficient to list Marquette as the undergraduate institution. Failure to enter the correct code will delay the admission decision.

  **Graduate Management Admission Test (GMAT)**

  The GMAT is required for admission to the business administration and accounting master's programs. For information about this test, contact the Graduate Management Admission Council®, 1600 Tysons Blvd., Ste. 1400, McLean, VA 22120. Visit www.mba.com or call (800) 717-GMAT (4628) for more information.

  **Millers Analogy Test (MAT)**

  This test may replace the GRE for admission to some programs. Check with the Graduate Programs portion of this bulletin for additional information.

  Those on or near a college campus should contact the student counseling center, testing service, or similar office on that campus to arrange for testing. If applicants live near Marquette University, they may make arrangements with the associate director of the Marquette University Counseling Center located in Holthusen Hall, 204. The telephone number is (414) 288-7172. The applicant may also request a list of test centers from Harcourt Assessment Inc., P.O. Box 708912, San Antonio, TX 78270-8912, call (800) 211-8378, or look online at www.milleranalogies.com. Test scores must be reported directly to the Graduate School.

  **Test of English as a Foreign Language (TOEFL)—International Students Only**

  International students whose language of instruction for their bachelor's degree education (or master's, if applicable) was not English must take the TOEFL. International students must have an adequate command of both written and spoken English, usually evidenced by a TOEFL score of at least 550 on the paper-based version and 213 on the computer-based version. The Internet-based, or iBT, version of TOEFL tests students in four areas: reading, writing, speaking, and listening. In general, a minimum score of 20 is required for each of the four sections, with an overall minimum score of 80. Applicants for some programs must test with higher minimums and should consult the Graduate Programs section of this bulletin for specific information.

  Test scores may not be more than two years old. For information about this test, contact TOEFL Services, Educational Testing Service, P.O. Box 6151, Princeton, NJ 08541-6151. Visit www.ets.org/toefl or call (609) 771-7100 for more information.
MASTER’S DEGREE PROGRAM

The master's degree is awarded in recognition of academic accomplishment as demonstrated by a program of course work, passing of the required examinations, and the preparation of a thesis, project, or essay.

ADMISSION REQUIREMENTS

Only applicants whose total record indicates that they can make independent, original and high quality contributions to knowledge will be admitted. Departments reserve the right to limit the number of students accepted within a given time period.

APPLICATION PROCEDURES

Applicants must follow the instructions detailed earlier in this section. It is the applicant's responsibility to obtain information about any additional requirements from the Graduate Programs section of this bulletin, from the Graduate School or department Web sites, or from the director of graduate studies in the proposed program.

MASTER’S DEGREE REQUIREMENTS

FOREIGN LANGUAGE REQUIREMENTS

Some programs require reading comprehension in one or more foreign languages. This requirement is used as an important tool to advance the scholarly and research efforts of the student. To determine foreign language requirements for a specific doctoral program, consult the Graduate Programs section of this bulletin. If required, students must select one (or more) language(s) in which there is significant scholarly literature in their program field.

There are a number of ways by which a student can complete the language requirement(s), including: taking a foreign language proficiency examination administered by the Department of Foreign Languages and Literatures; taking a three-credit, semester-long foreign language reading knowledge course (course number xxxx-204) offered by the Department of Foreign Languages and Literatures; proving to the student's departmental faculty that he/she has the necessary foreign language proficiency as evidenced by prior language study; or by taking an exam prepared and graded by the student's academic department.

If the student chooses to take a foreign language reading knowledge course, the tuition for the course will be charged at the normal Graduate School tuition rate in effect at the time the course is being taken, and the language credits will be in addition to regular course credits required for that program. The grades earned in the foreign language reading knowledge course will be included in the student's term and cumulative credits and grade point average.

Whatever method is chosen, it shall be the responsibility of the student's home department to determine what level of language proficiency is sufficient. It shall also be the department's responsibility to notify the Graduate School of each student's completion of foreign language requirements.

COMPREHENSIVE EXAMINATIONS

Candidates for a master's degree in many departments must successfully pass a comprehensive examination on their total graduate program of studies. If a student fails a major section of the examination, the entire examination is considered to be a failure. This will cause the department to review the student's record, and, if warranted, a second and final examination will be given.

Each department administers its own comprehensive exams. Students are encouraged to contact their program for specific information including deadlines and procedures. A department may require students to complete a specific course instead of passing a comprehensive exam. Generally speaking, this course may be taken only after the student has completed all of the other core course requirements.

PLAN A AND PLAN B

The Graduate School offers the master's degree under two plans: Plan A, which requires that the student write a thesis, and Plan B, which substitutes additional course work, a professional project or essay instead of the thesis. Some master's programs allow students to choose either Plan A or Plan B. For plans offered in each program, consult the Graduate Programs section of this bulletin.
Students may submit a petition to the Graduate School requesting a change from Plan A to Plan B (or vice versa) providing they have permission from their program and the Graduate School. The Master’s Program Change of Plan Form, available at www.grad.mu.edu/forms, must be completed and submitted to the Graduate School.

If a student changes plans after completing some or all of the required thesis or project courses, these credits will not automatically apply toward the new degree requirements.

**THESIS AND PROFESSIONAL PROJECT OUTLINE FORM**

Students must submit an outline for the proposed thesis or professional project. (No outline is required for writing a master’s essay.) The outline must be approved by the student’s adviser, the department chairperson, and the vice provost for research and dean of the Graduate School. Master’s thesis and professional project outline forms are available online at www.grad.mu.edu/forms.

**THESIS DIRECTIVES**

Directions for writing a thesis and the thesis submission checklist are available online at www.grad.mu.edu/forms. Students are strongly encouraged to consult both and to check with their department for additional guidelines, if any, before starting. The Graduate School updates the directives periodically and students are responsible for using the most recent version. Theses that do not conform exactly to the most recent directives will not be accepted by the Graduate School.

**PROFESSIONAL PROJECT AND ESSAY GUIDELINES**

Formatting of professional projects and essays is at the discretion of the department. Thesis Directives, found at www.grad.mu.edu/forms, may be used as a guide.

**RESEARCH INVOLVING HUMANS OR ANIMALS**

A student whose thesis or professional project involves research either on or with humans or animals must receive written approval before undertaking such research. The approval forms for human or animal research may be obtained through the Office of Research Compliance. This approval form and any additional paperwork must be submitted to the Graduate School. Additional information may be found in the Thesis Directives or at www.marquette.edu/researchcompliance.

**EARNING A SECOND MASTER’S DEGREE**

Students already holding a Marquette master’s degree may earn a second Marquette master’s degree in another discipline following the same application procedures stated in this bulletin. Other master’s program requirements apply, including thesis, project, essay, and comprehensive examination.

During the first term of study for a second master’s degree, students must plan, with their adviser, a program of study to include at least thirty credit hours of which at least eighteen must be completed at Marquette. A maximum of twelve semester hours may be transferred from a student’s first master’s degree at Marquette University and/or another accredited graduate school provided departmental endorsement and Graduate School approval are obtained (see Transfer of Credit). The second degree must be completed within six years of the date of the earliest transfer credit.

**PLAN A — MASTER’S DEGREE WITH THESIS**

**MINIMUM CREDIT REQUIREMENTS**

A minimum of 30 credit hours is required, including six hours of thesis credits and a minimum of 18 credit hours of course work in the major field. Some departments may require additional semester hours; students should consult the Graduate Programs section of this bulletin for more information. At least one-half of the minimum total course program (twelve credit hours in most programs, exclusive of thesis credits) must be taken at the graduate level (200-course number or above). In the major field, at least one-half (nine credit hours) of the minimum course program must be taken at the 200-course level or above. The remaining courses may be selected from among those undergraduate courses that are eligible for graduate credit.
**THESIS CREDITS**

Students must register for six hours of thesis credit but may not do so until the thesis outline has been approved. Students who enroll in, and pay for thesis credits before actually beginning work on their project will not be entitled to a refund of tuition for these credits even if they should subsequently drop out, withdraw from their program, or transfer to a Plan B option.

**MASTER’S THESIS**

In a master’s thesis, students demonstrate familiarity with the tools of research or scholarship in their major field, show thorough knowledge of the subject covered, and reflect independence of thought, critical insight and originality. The thesis must also be acceptable in style and composition. Students are required to follow the instructions on the *Thesis Directives* and thesis submission checklist, available online at www.grad.mu.edu/forms. A thesis that does not conform to the directives, including format specifications, will not be accepted by the Graduate School.

The original and two copies of the completed master’s thesis must be submitted on or before the deadline listed in the Academic Calendar. Although the student holds the copyright of the thesis, the thesis is considered a public document by Marquette University and may be placed in the Marquette University library, used by students and faculty, or otherwise released to the public.

**PLAN B — MASTER’S DEGREE WITHOUT THESIS**

**MINIMUM CREDIT REQUIREMENTS**

A minimum of 30 credit hours is required and a minimum of 18 credit hours of the course work must be taken in the major field. Some departments require more semester hours; students should consult the Graduate Programs section of this bulletin. At least one-half of the minimum total course program (fifteen credit hours in most programs, exclusive of professional project credits) must be taken at the graduate level (200-course number or above). The remaining courses may be selected from among those undergraduate courses that are eligible for graduate credit. Consult individual program listings and department advisers to determine the specific requirements for Plan B programs.

**PROFESSIONAL PROJECT CREDITS**

Departments may require students to register for three hours of project credit or similar course work. Students may not register for project credits until their project outline has been approved. Students who enroll in, and pay for project credits before actually beginning work on their project will not be entitled to a refund of tuition of these credits even if they should subsequently drop out of or be withdrawn from their programs.

**PROFESSIONAL PROJECT**

In a project, students demonstrate familiarity with the tools of research or scholarship in the major field, show thorough knowledge of the subject covered, and reflect independence of thought, critical insight and originality. The project must be acceptable to the department in style and composition. Formatting of professional projects is at the discretion of the department. *Thesis Directives*, found at www.grad.mu.edu/forms, may be used as a guide.

An original copy and a *Master’s Thesis/Essay/Professional Project Approval Form* with appropriate signatures must be submitted to the Graduate School office on or before the deadline listed in the Academic Calendar. Although the student holds the copyright of the finished project, the project is considered a public document by Marquette University and may be placed in the Marquette University library, used by students and faculty, or otherwise released to the public.

**ESSAY**

In many graduate programs, a master’s essay may be required even though no formal credit is given for it and no outline is required. Students should confer with their advisers about topics and guidelines for producing an acceptable paper, including requirements for length and references. An original copy of the essay and a *Master’s Thesis/Essay/Professional Project Approval Form* with appropriate signatures must be submitted to the Graduate School office on or before the date listed in the Academic Calendar. Essays must be acceptable to the department in style and composition. Formatting of essays is at the discretion of the department. *Thesis Directives*, found at www.grad.mu.edu/forms, may be used as a guide. The university or its departments retain final approved copies of essays for use by the public as reference or instructional materials.
DOCTORAL DEGREE PROGRAM

The doctor of philosophy (Ph.D.) degree is awarded in recognition of high attainment and ability in a special subject field. Candidates are required to pass examinations that cover general and specific knowledge in their area of expertise, and prepare and successfully defend a dissertation based on original research that makes a significant contribution to the field.

Faculty from both doctoral and non-doctoral departments may propose interdisciplinary Ph.D. programs for individual students to the University Board of Graduate Studies. This provides students and faculty with opportunities for creative academic programming and research opportunities that cross traditional disciplinary boundaries. Since there is no departmental structure to support these programs, certain understandings, commitments, and restrictions, beyond those required in regular doctoral programs, are necessary. Additional information appears later in this bulletin. Direct specific questions to the Graduate School or relevant department chairperson.

ADMISSION REQUIREMENTS

Admission requirements for the doctoral degree are substantially higher than those for a master's degree. Only applicants whose total record indicates that they can make independent, original and high-quality contributions to knowledge will be admitted. Doctoral students are not admitted on a probation status. Departments may require that students obtain a master's degree before beginning doctoral studies. For more information, check the Graduate Programs section found in this bulletin or with the director of graduate studies for the proposed program. Departments reserve the right to limit the number of students accepted within a given time period.

APPLICATION PROCEDURES

Applicants must follow the instructions detailed earlier in this section. It is the applicant's responsibility to obtain information about any additional requirements from the Graduate Programs section of this bulletin, from the Graduate School or department Web sites, or from the director of graduate studies in the proposed program. Students with master's degrees from Marquette are required to submit a new application to the Graduate School if they wish to be considered for doctoral admission.

DOCTORAL DEGREE REQUIREMENTS

CREDIT REQUIREMENTS

Depending on previous preparation and the nature of the research undertaken, the number of credits required for individual students, even within the same program, may vary considerably. Minimum credit requirements have, however, been established by the university and the Graduate School.

DOCTORAL DEGREE

This is the highest degree conferred by Marquette University. There are significant differences in degree requirements between the physical/natural sciences and other fields, and these are addressed below. However, in all cases, students must complete a minimum of 12 dissertation credits and must satisfy the university's residency requirements. The credit requirements listed below are the minimum established by the Graduate School. Individual departments may set their own requirements that meet or exceed these minimums.

PHYSICAL AND NATURAL SCIENCES (BIOLOGICAL SCIENCES AND CHEMISTRY)

A minimum of 24 credits of course work beyond the bachelor's degree is required, plus 12 dissertations credits. In cases in which the student enters the program with a master's degree in the same or closely related field, the student may request the department and the Graduate School to allow the master's degree to satisfy up to 25% of the 24 required credits. In all cases, a minimum of 18 credits of course work exclusive of the dissertation must be taken at Marquette while in the Ph.D. program.

ALL OTHER PROGRAMS

A minimum of 45 credits of course work beyond the bachelor's degree is required, plus 12 dissertation credits. In cases in which the student enters the program with a master's degree in the same or closely related field, the student may request the department and the Graduate School to allow the master's degree to satisfy up to 50% of the required credits. In all cases, a
minimum of 21 credits of course work exclusive of the dissertation must be taken at Marquette while in the Ph.D. program.

FOREIGN LANGUAGE REQUIREMENTS

Some programs require reading comprehension in one or more foreign languages. This requirement is used as an important tool to advance the scholarly and research efforts of the student. To determine foreign language requirements for a specific doctoral program, consult the Graduate Programs section of this bulletin. If required, students must select one (or more) language(s) in which there is significant scholarly literature in their program field.

There are a number of ways by which a student can complete the language requirement(s), including: taking a foreign language proficiency examination administered by the Department of Foreign Languages and Literatures; taking a three-credit, semester-long foreign language reading knowledge course (course number xxxx-204) offered by the Department of Foreign Languages and Literatures; proving to the student’s departmental faculty that he/she has the necessary foreign language proficiency as evidenced by prior language study; or by taking an exam prepared and graded by the student’s academic department.

If the student chooses to take a foreign language reading knowledge course, the tuition for the course will be charged at the normal Graduate School tuition rate in effect at the time the course is being taken, and the language credits will be in addition to regular course credits required for that program. The grades earned in the foreign language reading knowledge course will be included in the student’s term and cumulative credits and grade point average.

Whatever method is chosen, it shall be the responsibility of the student’s home department to determine what level of language proficiency is sufficient. It shall also be the department’s responsibility to notify the Graduate School of each student’s completion of foreign language requirements.

DOCTORAL PROGRAM PLANNING FORM

Students must prepare a program of study, with their adviser, that lists the steps and classes needed to complete their doctoral degree. The Doctoral Program Planning Form, available online at www.grad.mu.edu/forms, is used for this purpose. The approved Doctoral Program Planning Form constitutes a formal agreement between the student and Marquette University and, once established, may be changed only by formal amendment. It should be submitted to the Graduate School no later than the end of the student’s first year. Course work, foreign language and residency requirements are accepted as part of a student’s doctoral program only after approval of the Doctoral Program Planning Form.

SPECIALIZATIONS/MINOR AREAS OF STUDY

A specialization (or sub-plan), normally consisting of twelve credits of course work in a specific field, may be required for some doctoral programs. When a specialization is required, it must be selected from those offered within approved Marquette University programs and must be a minor area of study recognized by the Office of the Registrar. A minor area of study must be outlined on the Doctoral Program Planning Form. For additional information, consult the Graduate Programs section of this bulletin.

RESIDENCY REQUIREMENT

The residency requirement is designed to immerse doctoral students in the campus community of scholars. It must be satisfied in the department in which the student is seeking a doctoral degree. The residency requirement is met when a student completes nine credits of course work, or its equivalent per term, for two terms within an 18-month period, or alternatively, completes at least 6 credits of course work, or its equivalent per term, for three terms within an 18-month period. Plans for the residency must be included on the Doctoral Program Planning Form. The credit load necessary to meet the six- or nine-credit requirement may be met by course work alone or course work in conjunction with dissertation credits (departmental seminars will be sufficient to satisfy the course work requirement).

DOCTORAL QUALIFYING EXAMINATION

The DQE is an exploration of the student’s understanding in the program field and may be written, oral, or both. It may also include an explanation of the proposed dissertation. Required elements for the DQE are defined by the student’s program department. The DQE is typically scheduled after all course work, language and residency requirements have been completed. Taking the DQE before all requirements have been satisfied requires written permission from the student’s department and the Graduate School.
The exam is conducted by a committee made up of at least three faculty members from the student's program. (If the committee includes a non-Marquette member, the department must note this exception in writing, submit a request and a curriculum vitae for that person to the Graduate School.) Some departments require students to pass cumulative examinations. For more information, consult the Graduate Programs section of this bulletin.

Students who fail the examination may take a second examination, if warranted, after fulfilling all conditions stipulated by the doctoral examining committee. If the second examination is unsatisfactory, no further examination is permitted.

**OFFICIAL DOCTORAL CANDIDACY**

Students advance to doctoral candidacy upon recommendation of their department, having completed all course work, language, and residency requirements, and passing the DQE. The departments shall notify the Graduate School in writing, using the *Advancement to Doctoral Candidacy* form found online at www.grad.mu.edu/forms, for all students recommended for candidacy.

**DISSERTATION PROCESS**

**ASSEMBLING A DISSERTATION COMMITTEE**

Candidates select their dissertation committee with the assistance of their adviser. The names of at least three members, including the chairperson, must be on the *Outline for Dissertation, Thesis, or Professional Project* form, available online at www.grad.mu.edu/forms. If the committee includes a non-Marquette member, the department must submit a recent curriculum vitae for that member to the Graduate School with their *Outline for Dissertation* form.

**DOCTORAL DISSERTATION OUTLINE FORM**

Students must submit an outline for the proposed dissertation on the *Outline for Dissertation* form, typically within the first term that dissertation credits are taken. Outlines must be approved by the student's adviser, the department chairperson, and the Graduate School. If the proposed research involves a real or apparent conflict of interest on the part of the student, the dissertation director, or the committee members, it must be declared at the time the outline is submitted.

**RESEARCH INVOLVING HUMANS, ANIMALS OR RADIOISOTOPES**

A student whose dissertation involves research with humans, animals or radioisotopes must receive written approval before undertaking such research. The approval forms for human, animal or radioisotope research may be obtained through the Office of Research Compliance. This approval form and other required paperwork must be submitted to the Graduate School. Additional information may be found on the *Dissertation Directives* or at www.marquette.edu/researchcompliance.

**DISSERTATION CREDITS**

Students must register for 12 hours of dissertation credits and may enroll for these while working on their doctoral dissertation outline. Each department determines the number of credit hours that a candidate may take during any one term. Students who enroll in, and pay for, dissertation credits before actually beginning work on their project will not be entitled to a refund of tuition of these credits even if they should subsequently drop out of or are withdrawn from their program.

**DISSERTATION DIRECTIVES**

Directions for writing the dissertation and the dissertation submission checklist are available online at www.grad.mu.edu/forms. Students are strongly encouraged to consult both and to check with their departments for additional guidelines, if any, before starting. The Graduate School updates the directives periodically and students are responsible for using the most recent version. Dissertations that do not conform exactly to the most recent directives will not be accepted by the Graduate School.

**WRITING THE DISSERTATION**

A dissertation demonstrates a student's familiarity with the tools of research and scholarship in the field, shows thorough knowledge of the subject covered, and reflects independence of thought, critical insight and originality. The dissertation must exhibit the student's mastery of
the literature of the subject and familiarity with the sources, and be presented with a satisfac-
tory degree of literary skill. Students are required to follow the instructions in the Dissertation
Directives. Dissertations not conforming to the directives, including format specifications, are
not accepted by the Graduate School.

The original and one copy of the completed dissertation and the completed Dissertation
Approval Form must be turned into the Graduate School office by the date listed in the Academic
Calendar inside the back cover of this bulletin. Students must consult the dissertation submis-
sion checklist prior to submitting the dissertation and must consult the Dissertation Directives
for a complete list of forms and other requirements that must be turned in to the Graduate
School at the time of submission of the dissertation. Although the student retains copyright
privileges, approved dissertations are considered the property of Marquette University. Bound or
microfilm copies may be made available to the public at the Marquette University library.

PUBLIC DEFENSE OF THE DISSERTATION

A public defense of the dissertation is conducted after the candidate has completed all other
formal requirements for the doctoral degree. The vice provost for research and dean of the Graduate
School appoints an examining committee with three or more members for each candidate. Although
the examination is primarily a defense of the dissertation, it will include material relevant to the
general field in which the dissertation is written, with particular attention to the more recent and
significant developments.

The candidate and adviser select a date, during weekday working hours and avoiding public
or religious holidays, for the public defense of the dissertation. If the student wants to graduate
the same term the defense is made, the defense must be held before the deadline listed in the
Academic Calendar. Candidates prepare the Announcement for Public Defense of the Dissertation
form (instructions included in the Dissertation Directives) along with an abstract. All committee
members must sign this form indicating their agreement to the date of the public defense.

At least four weeks prior to the scheduled date for the dissertation defense, the student
must submit a signed Announcement for Public Defense of the Dissertation form, available online
at www.grad.mu.edu/forms. The form must be accompanied by an electronic version of the
abstract in MS Word, e-mailed to grad.records@marquette.edu.

POLICIES OF THE GRADUATE SCHOOL

ACADEMIC COURSE LOAD

The maximum academic course load for a graduate student is thirteen semester hours of
course work for fall or spring term. Residents in the graduate dental programs have higher
limits. Seven hours are the maximum permitted for each of the summer sessions but no more
than 13 credits for the entire summer term. Teaching or research assistants may register for a
maximum of ten semester hours each fall or spring term and seven hours for each of the sum-
mer sessions. Overloads must have the approval of the Graduate School on the Credit Overload
Request Form, available on the Office of the Registrar's Web site at www.marquette.edu/registrar/
registration/maximum.shtml.

ACADEMIC PERFORMANCE

ACADEMIC REVIEW

Every academic unit evaluates the academic performance of its graduate students at the close
of each term, adhering to the standards of the Graduate School and any additional standards
promulgated by the unit. Graduate students must maintain a grade point average of at least
3.00 in all course work, including prerequisites and other course work that does not apply to
the degree. Students who fall below 3.00 in any given enrollment period but who maintain a
3.00 cumulative grade point average will be sent a letter of warning from the Graduate School.
Students who fall below a 3.00 cumulative grade point average or receive a grade of F or U in any
of their courses will automatically be placed on academic probation for the subsequent enroll-
ment term. A student who fails to achieve a 3.00 grade point average during an enrollment peri-
od while on academic probation or fails to achieve a cumulative 3.00 grade point average after
a second academic probationary period will be reviewed by their department and the Graduate
School and may be dismissed from the university. Satisfactory academic work is not, however,
determined exclusively by course grades. All degree graduate students must make substantial
and visible progress toward their degrees. This includes successful completion of such program requirements as a language examination, a comprehensive or qualifying examination, a thesis or dissertation outline, the thesis or the dissertation.

ACADEMIC STANDING

Non-degree and degree seeking graduate students must maintain a cumulative grade point average of at least 3.00 to satisfy university requirements. These are minimum standards for graduate courses; individual programs may specify more stringent standards to which students will be held by the programs. Students are responsible for awareness of these standards which are listed in the program sections of the Graduate Bulletin and in handbooks or Web pages provided by the programs. Students enrolled in the professional programs of dentistry, law, physician assistant studies, and physical therapy are subject to the standards stated within their programs.

GOOD STANDING

A graduate student is in good standing whenever the student's cumulative grade point average is at least 3.00, and the student has not warranted a warning or probation status as noted below.

WARNING

Whenever the grade point average for any enrollment period is less than 3.00, but the overall grade point average is 3.00 or above, the student will be notified in writing of failure to meet academic standard requirements.

ACADEMIC PROBATION

If a student's cumulative grade point average falls below 3.00, or if the student receives a grade of F or U, the student will be placed on academic probation for the next enrollment period. At the discretion of the academic unit, an additional period of academic probation may be granted if the student has earned a 3.00 or above during the period on academic probation, but the cumulative grade point average remains below 3.00.

ACADEMIC PROBATION REMOVED

When the conditions of Good Standing are restored, academic probation will be removed.

DISMISSAL

Students placed on academic probation who fail to earn at least a 3.00 grade point average in the subsequent enrollment period, or who fail to achieve a 3.00 cumulative grade point average while on a second academic probationary period, will be dismissed from the university. Within 10 days after the date of the notice of dismissal based upon academic grades, a student may appeal the decision to the dean of the Graduate School. A student who does not appeal will be disenrolled 11 days after the date of the notice of dismissal. In the case of an appeal, the dean of the Graduate School convenes a meeting of a subcommittee of the University Board of Graduate Studies to weigh the appeal materials and to obtain testimony delivered live to the subcommittee by the student and academic unit representatives. The subcommittee's recommendations are taken into consideration by the dean whose decision on the appeal is final. If dismissal is upheld, then disenrollment is made at that time.

Dismissed students may apply for readmission through the normal admission process. A period of one semester may be required by the academic department before readmission will be considered. If so required, the department may specify conditions that must be met during this period.

The student must send a written request for readmission to the assistant dean of the Graduate School who will, in turn, forward the student's file to the academic program for review and a recommendation on readmission. The request for readmission must include a statement by the student addressing previous weaknesses, steps taken to correct the weaknesses, and an explanation of why the student feels he or she has the ability to succeed in graduate studies.

The student's transcript will not indicate the semesters the student has been on academic probation but will indicate dismissal if such should occur. If the student is subsequently granted readmission, the grade point average will continue from the previous calculation and the student must obtain a 3.00 grade point average after a new sequence of academic probation.

ACADEMIC STATUS

Every graduate student, except those with non-degree status, must be enrolled as a full-time, half-time, or less than half-time student each fall and spring term to maintain his or her status.
Registration in the summer is only required if the student intends to graduate in August. A full-time load consists of 7 or more academic credits; half-time consists of 4-6.99 academic credits; and less than half-time consists of less than 4 academic credits. All degree graduate students must enroll in adviser-approved academic course work; independent study; field placement; graduate assistant teaching or research; thesis, professional project, or dissertation credits; comprehensive exam preparation; or graduate standing continuation credits. Degree students who fail to enroll for a fall or spring term will be discontinued and must apply for readmission to the Graduate School (see Readmission).

THESIS, DISSERTATION, OR PROFESSIONAL PROJECT CONTINUATION

Students who have completed all credit requirements for their degree but need to continue work on their thesis, dissertation or professional project may retain graduate status by enrolling in Thesis Continuation (881/882/883), Doctoral Dissertation Continuation (887/888/889), or Professional Project Continuation (884/885/886). Each of these non-credit courses will allow students to be considered full-time, half-time, or less than half-time depending on the amount of work being completed on their project each term. Registration for Thesis Continuation, Doctoral Dissertation Continuation, or Professional Project Continuation requires completion of a registration form, identification of the type and amount of work to be done, and the approval of the student's adviser or thesis/dissertation director (and director of graduate studies or chair if required by departmental policy).

FIELD PLACEMENT CONTINUATION

Students who have completed all credit requirements for their degree but still must participate in a practicum or internship experience may retain graduate status by enrolling in Field Placement Continuation (887/888/889). This non-credit offering will allow students to be considered full-time, half-time, or less than half-time depending on the amount of work being devoted to their placement each term. Registration for Field Placement Continuation will require the consent of the student's adviser or thesis/dissertation director (and director of graduate studies or chair if required by departmental policy) and completion of a registration form outlining the number of hours a student will devote to the Field Placement Continuation.

GRADUATE ASSISTANTSHIPS

Graduate assistants who enroll in 6 academic credits in a term may earn full-time status by enrolling in a non-credit Graduate Assistant Teaching (875) or Graduate Assistant Research (876) course. Graduate fellows may enroll in six academic credit hours plus a non-credit Graduate Fellowship course (874) to maintain full-time status.

COMPREHENSIVE EXAM PREPARATION

Students who are preparing for comprehensive exams may retain graduate status by enrolling in the appropriate Master's Comprehensive Exam Preparation course (867/868/869) or Doctoral Comprehensive Exam Preparation course (870/871/872). These zero-credit courses are graded on an S/U basis, and they may be taken alone or in conjunction with for-credit courses.

The Comprehensive Exam Preparation course will normally be taken during the term in which the student anticipates taking the exam, and it may be taken only once. If the student either fails the exam or for some reason does not take the exam, the student should register for Graduate Standing Continuation (873) for less than half-time status for the following term to retake or complete the exam.

GRADUATE STANDING CONTINUATION

Students who are not able to take academic courses in a particular session, but need to maintain active academic status, may take a non-credit course entitled Graduate Standing Continuation (873). This offering is designed to allow graduate students to engage in such activities as completing preparation for comprehensive examinations or participating in other projects. This option is designated as less than half-time, cannot be used in conjunction with other courses, and will not qualify an individual for financial aid.

All of the above courses shall be graded Satisfactory or Unsatisfactory and charged at the stated fee as listed in the Tuition, Fees and Housing section of this bulletin. Any needed registration forms can be found on the Graduate School's forms Web site at www.grad.marquette.edu/forms.
ADMISSION STATUS

Marquette University admits graduate students under four different categories: degree, non-degree, temporary and visiting scholar status.

DEGREE STATUS

When applicants are admitted to a program leading to a master's or doctoral degree, they are said to be in “degree status.” This designation is made after the department and the Graduate School have accepted an application. An applicant may be admitted into one of two categories.

Regular degree status — Designates a student who is admitted to the Graduate School and is working towards a master's or doctoral degree in a particular program. Students are eligible for tuition scholarships, graduate assistantships and fellowships, as available.

Probationary degree status — This status is awarded to master's degree students only by the applicant's department or the Graduate School. Probationary status is assigned when an applicant's academic performance falls below Graduate School standards but there is other evidence to suggest the potential for successful graduate-level study. Students admitted on probation are not eligible to receive financial aid from the Graduate School but may apply for financial assistance from the Office of Student Financial Aid. Probationary status is typically removed upon completion of nine semester hours of work with an average grade of B or above, with at least one-third of the course work having been completed at the 200 course level.

NON-DEGREE STATUS

This status designates any student taking graduate-level classes who is not seeking a master's or doctoral degree. Students in a certificate program or visiting scholars are in this category. Non-degree students are not eligible to receive financial aid from the Graduate School except for Catholic Schools Personnel Scholarships and the Milwaukee Area Teachers Scholarships. Non-degree students are typically not eligible to receive federally subsidized loans. Non-degree students should contact the Office of Student Financial Aid for exceptions.

All applicants are required to submit an application, the application fee, certified copies of transcripts and other information as requested by the department. Non-degree applicants seeking admission to degree status must meet the same admission standards as other applicants to a degree program.

Completion of any number of non-degree credits does not guarantee acceptance into a degree program, and, if a non-degree student is subsequently admitted to a degree program, there is no guarantee that credits earned while in non-degree status will count toward the degree. Most degree programs accept no more than twelve credits taken as a non-degree student. Non-degree students will not be permitted to take more than 9 credits until they certify in writing that they are aware of the policies and limits regarding the transfer of credits into the degree program.

Credits earned as a non-degree student may be considered as graduate credits and certified as such to school boards or other authorities. Non-degree students may register for any course (with the exception of courses in dentistry) if they have met the prerequisites and have department permission. Non-degree students interested in taking courses in dentistry must have special permission from the Graduate School and the School of Dentistry.

Probationary status — This status is awarded by the applicant's department or the Graduate School. Probationary status is assigned when an applicant's academic performance falls below Graduate School standards but there is other evidence to suggest the potential for successful graduate-level study. Probationary status is typically removed upon completion of nine semester hours of work with an average grade of B or above, with at least one-third of the course work having been completed at the 200 course level. Students failing to have their probationary status removed after completing nine semester hours are not permitted to remain in the Graduate School.

TEMPORARY ADMISSION STATUS

Applicants who have applied to a degree or a non-degree program, and meet the minimum admission requirements but have not submitted all the necessary documents may be admitted under temporary status. This admission is valid for only one term. Students must apply for and be admitted as a degree or non-degree student before being allowed to register for additional courses. Exceptions are rarely made to this policy.

VISITING SCHOLAR STATUS

This status designates a student, seeking a master's or doctoral degree at another institution, who takes one or more classes at Marquette University with the intention of transferring the
earned credits. Evidence of the student's status and academic performance at the other institution will be required, although submission of official transcripts may not be necessary.

Visiting scholars may apply for federal financial aid through the student's home school or through Marquette. Students applying for aid through Marquette must request a Consortium Agreement from the Office of Student Financial Aid. When the completed form is returned to Marquette, the student will become eligible for federal financial aid and the Office of Student Financial Aid will process the student's FAFSA. Students applying for federal aid through their home institutions should consult their home institutions for their application policies and procedures.

ADVISING

In the admission letter, the Graduate School notifies each student to contact his/her department for identification of the assigned adviser and for advising prior to registration. A student is required to meet or talk with the adviser before registering for classes. The Graduate School strongly recommends that students meet regularly with their advisers; an adviser plays an important role in the graduate student's course of study. An adviser's signature is required on most forms submitted to the Graduate School and a student's program of study is not valid until it has been approved by both the adviser and the Graduate School. Students who want to change advisers should check with their department for additional information and instructions.

Non-degree and temporary graduate students are normally not assigned academic advisers. Students in these categories who need assistance should contact the department in which they will focus their course of study.

APPEALS

Students have the right to appeal the imposition of any sanctions due to unsatisfactory academic performance or findings of academic dishonesty. The point of appeal is dependent upon who has the responsibility for imposing the sanction. Cases of academic dishonesty are governed by the Marquette University Academic Honesty Policy, as applicable to graduate students. Sanctions due to unsatisfactory academic performance are governed by the Graduate Bulletin.

GRADE APPEALS

All grade appeals shall be heard for the Graduate School by the school or college that teaches the course, following the rules of that school or college. Their decision is final, and no further appeal is available. In schools or colleges with a departmental structure, the appeal procedure usually begins with the department chairperson.

ASSISTANTSHIPS, FELLOWSHIPS AND SCHOLARSHIPS

All graduate students that receive merit-based financial aid, which include graduate assistantships, fellowships, and scholarships, must be full-time students in the term in which they receive the aid. Full-time status can be achieved by taking six credits of course work plus Graduate Assistant Teaching, Graduate Assistant Research or Graduate Fellowship, depending on the award received. These zero-credit courses will carry the status of full-time when combined with six credits of course work.

The following course numbers will be used in conjunction with the department acronym:

- Graduate Fellowship (full-time, FT) = 874
- Graduate Assistant Teaching (full-time, FT) = 875
- Graduate Assistant Research (full-time, FT) = 876

Students may use their scholarships to pay for Graduate Assistant Teaching, Graduate Assistant Research or Graduate Fellowship course fees. It is not required that all TAs and RAs be registered for one of these continuation courses. If a student already meets full-time status based on course work, then these continuation courses need not be used to obtain full-time status.

REGISTRATION PROCEDURES

Teaching and research assistants, and recipients of scholarships or fellowships, must register for the appropriate course, which will be graded on an S/U basis. Registration will require the consent of the student's adviser and department, which must be secured prior to registering.

Registration requires the following procedures:

1. The student and his/her adviser meet and complete the registration form.
2. The student will be given a permission number to be used during the registration process.
3. The student registers via CheckMarq for the appropriate course, using the permission number received.
4. The completed and approved form shall be delivered to the Graduate School.

CONTINUOUS ENROLLMENT POLICY

All graduate students in degree status must enroll in either: adviser-approved course work; thesis, professional project, or dissertation credits; one of the continuation courses; or a combination of these every fall and spring term until graduation to maintain their graduate student status. Graduate students who intend to graduate in August must enroll in one of the above courses during the summer term prior to their graduation. Students who fail to register for one of these terms will automatically be discontinued and must apply for readmission. Readmission requires departmental consent and the payment of all fees in arrears. Continuation courses allow those graduate students who have completed their degree requirements but are still working on their thesis, project or dissertation to be considered full-, half-, or less than half-time students.

There are four types of continuation courses: thesis, professional project, doctoral dissertation, and field placement, and there are two comprehensive exam preparation courses: master's and doctoral. There are three categories within each: full-time, half-time, and less than half-time. All must be requested in writing via the appropriate registration form available online at www.grad.marquette.edu/forms. The student's academic adviser, director of graduate studies, or department chairperson must verify and approve the non-credit academic work. All of the above courses are zero-credit and will be graded on an S/U basis.

Graduate Standing Continuation carries a less than half-time status only. It is to be used to keep students in active status while pursuing some type of academic work (e.g., studying for DQEs, preparing the doctoral dissertation outline) that does not meet any of the above types of continuation.

Students will be billed by the Office of the Bursar for the course fees as listed in the Tuition, Fees and Housing section of this bulletin. Also see Academic Status for more information.

The following course numbers are used in conjunction with the department acronym:
- Master's Comprehensive Exam Preparation (less than half-time, LHT) = 867
- Master's Comprehensive Exam Preparation (half-time, HT) = 868
- Master's Comprehensive Exam Preparation (full-time, FT) = 869
- Doctoral Comprehensive Exam Preparation (less than half-time, LHT) = 870
- Doctoral Comprehensive Exam Preparation (half-time, HT) = 871
- Doctoral Comprehensive Exam Preparation (full-time, FT) = 872
- Graduate Standing Continuation (less than half-time, LHT) = 873
- Graduate Fellowship (full-time, FT) = 874
- Graduate Assistant Teaching (full-time, FT) = 875
- Graduate Assistant Research (full-time, FT) = 876
- Field Placement Continuation (less than half-time, LHT) = 877
- Field Placement Continuation (half-time, HT) = 878
- Field Placement Continuation (full-time, FT) = 879
- Thesis Continuation (less than half-time, LHT) = 881
- Thesis Continuation (half-time, HT) = 882
- Thesis Continuation (full-time, FT) = 883
- Professional Project Continuation (less than half-time, LHT) = 884
- Professional Project Continuation (half-time, HT) = 885
- Professional Project Continuation (full-time, FT) = 886
- Doctoral Dissertation Continuation (less than half-time, LHT) = 887
- Doctoral Dissertation Continuation (half-time, HT) = 888
- Doctoral Dissertation Continuation (full-time, FT) = 889

REGISTRATION PROCEDURES

The appropriate registration form must be approved by the student's adviser and director of graduate studies/chairperson, and the student must have registered for the course on or before the last day of registration.

Enrollment information may not be accurate for students who are not registered by the close of registration and may affect requests for information provided through the Office of the Registrar (such as enrollment verification requests from lending institutions, insurance companies, etc.).
Students enrolling in one of these courses must register to activate their desired status. Registration will require the consent of the student's adviser and department, which must be secured prior to registering.

Registration requires the following procedures:
1. The student and his/her adviser meet and complete the registration form. An explanation of the student's involvement in non-credit academic work is required.
2. The student will be given a permission number to be used during the registration process.
3. The student registers via CheckMarq for the appropriate course, using the permission number received.
4. The completed and approved form shall be delivered to the Graduate School.

DEADLINES
All degree and non-degree graduate students are responsible for ascertaining and meeting all deadlines listed in the Academic Calendar. This includes, but is not limited to, deadlines for registration, withdrawing from courses, financial aid applications, graduation applications, comprehensive exams, theses, essays, projects and dissertations.

ENROLLMENT CHANGES
Changes in a graduate student's enrollment are under the jurisdiction of the Graduate School. Most enrollment changes, i.e., adding and withdrawing from courses, can be done using the online registration system (CheckMarq) prior to the close of registration (typically the second Tuesday of the term). Instructions for adding or withdrawing from courses are available at www.marquette.edu/registrar. Instructions for using CheckMarq are available at www.marquette.edu/registrar/registration/studentselfservice.shtml.

After registration each term, the student must notify the Graduate School office directly and must complete appropriate forms before any enrollment change will become effective. It is not sufficient for a student to notify the course instructor or someone in the department office.

ADDING COURSES
Students who wish to add one or more courses after the close of registration must submit a Request to Add a Course form, available online at www.grad.mu.edu/forms. New courses will not be added to a student's enrollment until a completed Request to Add a Course form, with the signature of the course instructor, is returned to the Graduate School office. Normally, courses must be added within one week of the first day of classes.

WITHDRAWING FROM (DROPPING) COURSES
Students who, after the close of registration, decide to withdraw from one or more, but not all courses in a particular term or summer session must notify the Graduate School office by obtaining a Request to Drop a Course(s) form online at www.grad.mu.edu/forms. (See also Withdrawing From All Courses, below.) It is extremely important that the student contact the Graduate School office as soon as the decision to withdraw is made. Changes will not be processed or be considered official until the appropriate forms, with all required signatures, are returned to the Graduate School office. Forms may be mailed, dropped off in person, or faxed to (414) 288-1902. Tuition refunds (refer to Refunds and Adjustments) and W (Withdrawal) grades will be based on the date that the form is submitted to the Graduate School office, not on the date that the student last attended classes.

A student who wishes to withdraw from a course with a W (Withdrawal) grade must do so before the deadline date listed in the Academic Calendar. Due to excessive absences or other reasons, including failure to formally withdraw before the deadline, a student may be administratively withdrawn from a course and incur a grade of either ADW (Administrative Withdrawal), UW (Unexcused Withdrawal) or F (Failure).

When withdrawing from any portion of a course load, students must carefully consider the ability of their remaining enrollment to satisfy any enrollment requirements to which they might be subject due to applications for student loans, loan repayment deferments, visas, etc.

WITHDRAWING FROM ALL COURSES
Students enrolled for one or more classes who, after the close of registration, decide to discontinue study for the term must notify the Graduate School office and complete a Request to Drop a Course(s) form. The same rules, procedures, and cautions for partial withdrawals also
apply to complete withdrawals. (Refer to Withdrawing From Courses, above.) Withdrawing from all courses will not automatically withdraw a student from a graduate program, but it might affect the student's eligibility to register in subsequent terms.

**GRADING SYSTEM**

The following letter grades and their achievement equivalents are used by instructors in the Graduate School to evaluate a student's performance in a course. Grade points corresponding to each letter grade determine a student's academic average and eligibility to graduate. Each grade, A through F, has a specific grade point value. The grade points earned in any course equal the grade point value of the grade multiplied by the number of semester hours credited. The grade point average (GPA) is found by dividing the total grade points earned by the total number of semester hours credited in those courses for which grade points have been assigned. Determination of the cumulative GPA will be based on all courses taken during the student's graduate career, including prerequisite and repeated courses, if any. Note: Credits that are accepted for a Marquette degree, if transferred from another university, will not be included when calculating the student's grade point average.

All graduate students must maintain a grade point average of at least 3.00 to graduate. (For the effect of F and U grades, refer to Academic Review.) Graduate students may not be assigned a CD or a D grade in any course whatsoever, including undergraduate courses.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Achievement</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Superior</td>
<td>4.00</td>
</tr>
<tr>
<td>AB</td>
<td></td>
<td>3.50</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3.00</td>
</tr>
<tr>
<td>BC</td>
<td></td>
<td>2.50</td>
</tr>
<tr>
<td>C</td>
<td>Minimally acceptable on a limited basis for graduate credit</td>
<td>2.00</td>
</tr>
<tr>
<td>CD</td>
<td>Not approved for graduate students</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Not approved for graduate students</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>0</td>
</tr>
</tbody>
</table>

Grade points are not affected by the following grades:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Circumstance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADW</td>
<td>Administrative Withdrawal; student was withdrawn from the course for administrative reasons, as determined by the university via a dean’s decision, a formal hearing and/or appeal process.</td>
</tr>
<tr>
<td>AU*</td>
<td>Audit.</td>
</tr>
<tr>
<td>CR</td>
<td>Credit; equivalent of C work or better.</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete; assigned on a pre-arranged basis, to allow completion of course assignments other than the final examination; the student's performance in the course must merit this exception otherwise, the instructor will assign either a grade of F or a passing grade that reflects both the quality of the work completed and the significance of the work which has not been completed.</td>
</tr>
<tr>
<td>IC</td>
<td>Course Incomplete; assigned to all students enrolled in a course, clinical, independent study/research, capstone, etc. that will not be completed by the grading deadline for the term in which the course is scheduled; changed to a letter grade by the faculty at the time of completion (no initiation needed by the student).</td>
</tr>
<tr>
<td>IE</td>
<td>Incomplete Extension; assigned by the college office to those students who are granted an extension to the deadline for removal of an I, IX or X grade.</td>
</tr>
<tr>
<td>IX</td>
<td>Incomplete course work and final exam not taken; assigned to a student who has incomplete course work and is absent from the final examination; must meet the criteria for both the I grade and the X grade; a student not qualifying for the IX will be assigned the grade of F</td>
</tr>
<tr>
<td>NC</td>
<td>No Credit; equivalent of less than C work.</td>
</tr>
<tr>
<td>SNC</td>
<td>Satisfactory completion in a course bearing no credit; mandatory grade for all zero credit bearing courses.</td>
</tr>
<tr>
<td>UNC</td>
<td>Unsatisfactory completion in a course bearing no credit; mandatory grade for all zero credit bearing courses.</td>
</tr>
<tr>
<td>S</td>
<td>Satisfactory completion in a credit bearing competency-based course; equivalent of C work or better.</td>
</tr>
</tbody>
</table>
SY  A permanent grade indicating satisfactory work completed in the first term of a series of year-long courses, where grades are assigned only in the final course in the series.
U  Unsatisfactory completion of a credit bearing, competency-based course; equivalent of less than C work.
UW Unexcused withdrawal; withdrawal initiated by the faculty or college office when a student registered for a course, never attended and failed to officially withdraw.
W** Official withdrawal; withdrawal initiated by the student, with approval of the college office.
WA Withdrawn-Excessive Absences; withdrawal initiated by the faculty or college office due to excessive absences in the course or student is found to be in violation of the “Undergraduate Attendance Policy” section of the Undergraduate Bulletin.
X  Completed coursework and final exam not taken; assigned to a student who is absent from the final examination and who might earn a passing grade in the course were he/she to take a delayed examination; both conditions must exist, or the student is assigned the grade of F; student receiving the grade of X must file a written explanation for the absence with his/her college office.

*Carries no graduate credit. Refer to Audit, below.
**Signifies an official withdrawal with the approval of the vice provost for research and dean of the Graduate School.

Note that grades of CD and D are not approved for graduate students, including those in undergraduate courses.

ADW GRADE
This grade is assigned by the college office offering the course, and will take precedence over the W, WA or UW grade, should the student withdraw or be withdrawn from a course after the faculty or other university personnel initiated the administrative action which ultimately results in this grade.

AUDIT
Students must first register for a course via CheckMarq, then request the audit option from the Graduate School. The Request to Add a Course, Change a Section, or Change to Audit form on the Graduate School’s Web site www.grad.mu.edu/forms is used for this request. The deadline to request the audit option for each session is listed on the University Academic Calendar. Classes being audited are not charged at the normal tuition rate. Refer to the Financial Information section of this bulletin for information on tuition rates.

CR/NC GRADING
Under no circumstances may the undergraduate CR/NC option be exercised by a graduate student taking an undergraduate course for graduate credit. Further, graduate students required to take undergraduate courses as prerequisites or to remedy deficiencies may not take those courses for S/U grades, as this option is not available.
However, a few select graduate courses are offered for S/U grades only. Courses of this type usually are limited to practica, department colloquia, or special seminar courses. Students should check the individual course descriptions in this bulletin and the grading basis when conducting a class search in CheckMarq to determine whether a course is offered on this basis.
For the effect of U grades, refer to Academic Review.

GRADE CHANGES
There are two types of grade adjustments: changing a temporary grade (I, IC, IE, IX or X) to a permanent grade, and correcting a permanent grade.

TEMPORARY GRADES — I, IC, IE, IX OR X
Graduate students who do not complete course requirements during the term in which the class is offered may be given one of the following temporary grades after consultation with their instructor: X, when one or more examinations are missed; I, when the course work has not been completed; IE, when an I grade extension has been approved via student request (Request for Extension of I Grade Deadline form, found at www.grad.mu.edu/forms); or IX, a combination of missed examinations and incomplete course work. The temporary grade of IC is issued when the course extends beyond the grading period.
The faculty member must submit a grade change form, found in CheckMarq, to change an I, IC, IE, IX or X to a permanent grade. The grade change deadline listed in the Academic Calendar pertains to I, IX, and X grades. For these grades, the student is obligated to submit all missing work to the instructor by the deadline, or to issue an extension request to the Graduate School by the deadline.

It is the responsibility of the faculty member to initiate the grade change procedure for the I, IX, and X grades by the deadline listed in the Academic Calendar. Grades of I, IE, or IX or X that are not resolved by the deadline will become permanent grades of PI on the student's record. Change of the IC grade is faculty initiated, once the class is completed.

**CORRECTING A PERMANENT GRADE**

Changing a permanent grade because of miscalculation on the part of the instructor or a misunderstanding between the instructor and the student, may be initiated by either the student or the instructor. Changing a permanent grade should be done within six months of the end of the term.

**GRADUATE CREDIT**

A student can earn graduate credit for a course only if a) the course has been approved for graduate credit and b) he or she has been accepted, through an official letter of admission, into the Graduate School. Students taking courses while in non-degree status may request the transfer of credits to their degree program (see Transfer of Credit).

Graduate credit may be earned for undergraduate 100-level courses identified as “upper division courses” in this bulletin (and denoted in Class Attributes when conducting a class search). Extra work beyond that expected for undergraduate credit is required of students wishing to earn graduate credit for these 100-level courses. Graduate students who take an upper division course but do not want to receive graduate credit for it must advise the Graduate School office, in writing, before beginning the course.

No student may register for a 200- or 300-level course unless he or she has been admitted to the Graduate School or has the approval of the student's home college and the department offering the course.

**INDEPENDENT STUDY**

Independent Study (295) courses provide students the opportunity to study and investigate areas of interest not available through normal course offerings. A 295 course is taken on the recommendation of the student’s adviser and with the approval of the department chairperson. An approval form, which must be completed for each 295 course, is available on the Office of the Registrar’s Web site at www.marquette.edu/registrar/policies. Normally, no more than six credits of 295 course work can be included in a master's degree program, no more than nine credits in a doctoral program.

**INTER-UNIVERSITY VISITATION**

Marquette University participates in two programs, detailed below, by which its students may take courses at another university or college in order to expand the breadth of their education.

**MARQUETTE-UWM AND MARQUETTE-MEDICAL COLLEGE OF WISCONSIN**

Marquette University has agreements with both the University of Wisconsin–Milwaukee and with the Medical College of Wisconsin. The course being taken at the host institution must not be available at Marquette. In no case will more than six credits taken at UWM or MCW be counted toward degree completion at Marquette, unless the courses are taken as part of a joint program. The students must apply for admission to the host institution as a special student; the application fee is waived. A Marquette student must complete an *Inter-University Exchange Course Approval and Manual Registration Form*, found online at www.grad.mu.edu/future/MUandUWM.shtml (for UWM) or www.grad.mu.edu/future/test1.shtml (for MCW), then get their adviser's approval, and finally submit the completed form to the Graduate School. This will register the student for the course GRAD 201 (UWM course) or GRAD 202 (MCW course), both of which are variable title and variable credit courses that reflect the title and number of credits of the course at the host institution. The student must also register for the courses at the host institution. Tuition is paid at the home institution for the GRAD 201 or GRAD 202 course. The course at the host institution is tuition-free. Only degree-seeking graduate students in good standing are eligible to participate. This program is not intended for students in joint programs such
as bioinformatics, biomedical engineering, and healthcare technology management, where the courses between Marquette and MCW are cross-listed. Interested students should contact the Graduate School office for additional information and enrollment forms.

MIDWEST CATHOLIC GRADUATE SCHOOLS CONSORTIUM
The consortium of Midwest Catholic Graduate Schools (MCGS), which includes Loyola University, Chicago, Ill.; Marquette University, Milwaukee, Wis.; University of Notre Dame, South Bend, Ind.; and St. Louis University, St. Louis, Mo.; has established the protocol whereby a degree-seeking student at one university may take course work at any of the other three universities to apply toward degree requirements at the home institution.

With prior approvals, the student enrolls at the home institution and makes financial arrangements there, but attends classes, on a short-term basis, as a visiting student at the host university. Final grades are forwarded from the host to the home university for listing on the student's permanent record. The following restrictions apply: 1) Participation is restricted to those fields of study which are under the academic jurisdiction of the graduate deans at both the home and the host institutions; 2) Non-degree or temporary students may not participate; 3) The degree-seeking student must have completed at least the equivalent of one full term at the home university before visiting one of the other institutions; 4) A student may gain approval for more than one visitation at more than one host institution, but no more than nine credit semester hours of courses from host institutions can become part of a degree program at the home institution.

To participate, a student must complete, for each course to be taken at a host institution, an Inter-University Visitation Enrollment Form and an Inter-University Exchange Course Approval and Manual Registration Form, both of which require signatures of approval. Because of the paperwork involved and the number of approvals that must be obtained, the student must begin the inter-university visitation application process no later than June 1 for a fall term visitation, October 1 for the spring term, or March 1 for summer sessions. Interested students should contact the Graduate School office for additional information and enrollment forms.

LEAVE OF ABSENCE
Marquette University supports a leave of absence policy to assist graduate students who are temporarily unable to continue their programs. The leave of absence may extend for up to one academic year. Under unusual circumstances, a second year of absence may be requested. Reasons for requiring such a leave may include: bereavement, illness, injury, care giving, military service, maternity, and paternity. Students requesting a leave of absence must submit an application to the Graduate School via their department/school/unit chairperson or director. Students granted a leave of absence will not have the right to use university facilities during the time of their leave. This includes the library, the recreation center, and any other resources normally granted to enrolled students. Leaves of absence must be requested prior to the start of a term, and will not be approved retroactively.

PREPARING THE APPLICATION FOR LEAVE OF ABSENCE
In consultation with the supervising faculty member, the Request for Leave of Absence form found at www.grad.mu.edu/forms is to be completed by the student, and signed by both the student and the adviser or supervising faculty member. The application is to be submitted to the chairperson/director for review and signature before being forwarded to the dean of the Graduate School for consideration on a case-by-case basis. The application should be made in advance of the anticipated leave and the termination of the leave should coincide with the end of a semester or session. In situations where it is necessary for a student to leave during a term, the student should seek a late withdrawal for that term rather than a leave of absence. Leaves of absence will not be granted retroactively, i.e., for previous terms, unless the leave of absence approval process was initiated at the beginning of a term and the decision of the university was delayed.

It is the student’s responsibility to ensure that the proposed leave is compatible with the regulations of any granting agency from which funding would normally be received during the leave period and that such agencies are informed of the proposed leave. Students on student loan programs are responsible for determining the consequences that such a leave may have on their repayment status prior to applying for a leave of absence. International students are advised to consult with the Office of International Education regarding their immigration status prior to applying for a leave of absence.

Students granted a leave of absence will have their time-to-completion of degree extended by the amount of time granted in the leave of absence. The continuous enrollment policy will
also be held in abeyance during this time. Students granted a leave of absence are not held to
the readmission process unless they do not enroll in the term indicated on the Request for Leave
of Absence form.

Graduate student assistants who are granted a leave of absence will have their salary and
stipend suspended during the period of their leave. Whenever possible however, the remainder
of their appointment will be held for them upon their return to the next term.

**READMISSION**

Students who have withdrawn from the university, failed to enroll for one or more
academic-year terms, were administratively withdrawn from their program, or who were sus-
pended for any reason must be formally readmitted to the Graduate School before resuming
their studies. To be readmitted, students must receive departmental endorsement, pay all fees
in arrears, and be in good financial standing with the Bursar. Furthermore, no application for
readmission will be considered for any former Marquette student with an outstanding balance of
$3,000 or more owed to the university. The vice provost for research and dean of the Graduate
School and the major department jointly decide if a student will be readmitted.

In being readmitted, students face the possibility that previously completed work might not
be accepted with the readmission decision, even if taken within the same program. The major
department and vice provost for research and dean of the Graduate School may also set read-
mission conditions on the student’s resumption of work toward a degree such as registering for
additional course work, retaking examinations, completing the degree within in a specified time
period, or other appropriate terms.

Requests for readmission from students who have been suspended will be based on many
considerations including the applicant's ability, evidence of growth and maturity, credits earned
at another institution, and time elapsed since leaving Marquette.

**SUMMER STUDIES**

During the summer term, Summer Studies offers graduate and selected undergraduate courses
that may be taken for graduate credit. These courses are applicable to degrees in all colleges
and schools of the university in the following modular formats: two consecutive six-week ses-
sions and four additional sessions longer than the traditional six-week format. Several of the six
summer sessions offer short courses varying in length.

For information, contact the Office of the Registrar, Marquette University, Marquette Hall,
310, P.O. Box 1881, Milwaukee, WI 53201-1881; call (414) 288-7506; fax (414) 288-1773;
e-mail summerstudy@marquette.edu; or visit the Summer Studies Web site at www.marquette.
edu/summer.

**ADMISSION TO SUMMER STUDIES**

Detailed information on admission to Summer Studies may be found on the Summer Studies
Web site at www.marquette.edu/summer. For more information, contact the Marquette University
Graduate School, Holthusen Hall, 305, P.O. Box 1881, Milwaukee, Wisconsin 53201-1881; call
(414) 288-7137; fax (414) 288-1902; e-mail mugs@marquette.edu; or visit the Graduate School
Web site at www.marquette.edu/grad.

**TIME LIMITATIONS**

Students must complete all requirements for a master’s or doctoral degree within six years of
their first term of registration in the program. For students in a master’s program, the six-year
period begins from the date of transfer work completed at another institution or a previous
Marquette graduate program.

Students who are unable to complete their degree within the six-year limit may petition the
Graduate School for an extension; Request for Extension of Time forms are available online at
www.grad.mu.edu/forms. To ensure timely consideration, the Request for Extension of Time form
should be filed early in the term in which the time limit expires. If the extension is approved, the
student is notified of the expectations for progress and completion of the degree. If the extension
is denied, the student is terminated from the graduate program.

Failure to complete the program or to obtain an approved extension of time may result in the
student’s being administratively withdrawn from the program. These students must follow the
guidelines for readmission (see Readmission).
TRANSFER OF CREDIT

Limits are placed on the number of credit hours that may be transferred from other institutions in order to protect the integrity of the Marquette degree programs. Only credits directly applicable to a student's Marquette degree program will be considered for transfer, and there is no guarantee that these will be approved. Credits that are accepted for a Marquette degree, if transferred in from another university, will not be included when calculating the student's GPA. However, credits taken at Marquette in another program, if accepted for transfer into a degree program, will be included in the student's GPA. Only courses in which a grade of B or above has been earned may be transferred for credit into a master's program or used on a Doctoral Program Planning Form. Students are strongly urged to consult their advisers before requesting or taking any course for which they will want to transfer credits.

MASTER'S PROGRAMS

Normally, six credit hours of approved graduate work from an outside master's program will be transferred with the consent of the vice provost for research and dean of the Graduate School and the department chairperson. Upon recommendation of the department and concurrence by the vice provost for research and dean of the Graduate School, a maximum of 12 credit hours or one-third of the program's credit hour requirement for course work (exclusive of thesis), whichever is smaller, may be transferred. A student can anticipate a maximum transfer of credit only in unusual or compelling circumstances. Under no circumstances will Marquette accept more than 12 credit hours from another institution toward a Marquette master's degree. Credits approved for transfer will have been earned within the previous six years and will affect the time limits for completing a Marquette program.

Only credits for courses directly comparable in content to the requirements of the current degree program will be considered for transfer, and no credits will be considered until the student has completed the Master's Degree Transfer of Credit Request form, found online at www.grad.mu.edu/forms. The student must also have met the following conditions: 1) completed six credits (nine credits if admitted on probation) as a degree-status student in his or her Marquette master's program; 2) taken the courses requested for transfer at the graduate level and for graduate credit; 3) earned a grade of B or above in each of the courses; and 4) official transcripts are on file from the institutions involved, if other than Marquette.

Credits approved from a school using a quarter system will transfer as two-thirds credit each when converted to Marquette's term system. Semester credit equivalents for transfers from schools using a trimester system will vary by school and must be evaluated individually. Students who are less than one credit short of graduation requirements after such transfers will need no additional course work. Students short one full credit or more for graduation must take additional course work.

Graduate-level credits earned at Marquette, as a degree student in a different graduate program or as a non-degree student, may transfer following the same request and approval procedures outlined above. Students are responsible for initiating this process. Credits transferred between Marquette programs or statuses are included as part of the 12-credit transfer limit.

DOCTORAL PROGRAMS

Graduate credits both from other institutions and from Marquette are accepted for a doctoral program when a Doctoral Program Planning Form is approved. Most master's-level or other graduate-level course work from an accredited program in a field directly related to the current doctoral program will be accepted. Normally, 30 graduate credits taken prior to enrollment in the doctoral program at Marquette may be applied to the Marquette program. These credits must be specified on the Doctoral Program Planning Form.

Doctoral-level credits taken at another university are considered on an individual basis, in consultation with the student's adviser, the department, and the Graduate School, for acceptance into a Marquette program. Any graduate student contemplating additional course work to be transferred from another institution is urged to seek prior approval from the department and the Graduate School and should have the course(s) and the institution(s) listed on the Doctoral Program Planning Form. Credits from another institution accepted into a Marquette doctoral program on the Doctoral Program Planning Form typically will not appear on the student's official Marquette transcript.
UNDERGRADUATE STUDENTS IN GRADUATE COURSES

An undergraduate senior may, with the permission of his or her home college and the department offering the course, register for a 200-level graduate course if the student has a B (3.00) or above average. To register for a graduate course, the undergraduate student must complete the Permission to Enroll in a Graduate Course form, available online at www.grad.mu.edu/forms. Once all signatures of approval have been obtained and the student has received the permission number from the department offering the course, a copy of the completed form shall be forwarded to the Graduate School. The student must then register for the course online through CheckMarq.

An undergraduate student who enrolls in an upper division (100-level) course (any of those designated for graduate credit in the Snapshot of the Schedule of Classes) with the intention of earning graduate credit that might, subsequently, be transferred to a graduate program, must complete the Permission to Enroll in a Graduate Course form following the above instructions. The student must notify the course instructor that the course is being taken for graduate credit. The course cannot be taken under the S/U option.
PROGRAMS AND COURSES
OF THE GRADUATE SCHOOL

The following pages describe the graduate instruction and research programs offered at Marquette University. Prospective students are reminded to read the preceding section of this bulletin for general information on Graduate School admission requirements, academic regulations, and graduate programs.

Please note:

a) The prerequisites for any graduate program include an undergraduate major which has qualified the student for either research or professional work at advanced levels.

b) The courses described for each program are graduate offerings. These are numbered 200-399 and 867-889. Other courses listed (numbered 100 through 199) are upper division undergraduate courses. These undergraduate courses have been approved for graduate credit and may be taken with the approval of the student's department. To receive graduate credit, students must do extra work beyond that required for undergraduate credit. Course descriptions and prerequisites for 100-level courses are found in the Undergraduate Bulletin.

c) Some courses are listed with a variable number of credits (e.g., 1-3 credit hours). Usually the department or college determines the specific number of credits for these courses each term. This information is published on CheckMarq at www.marquette.edu/registrar/soc prior to each registration. For a few variable credit courses, (e.g., master's thesis, doctoral dissertation) the bulletin indicates the possible number of credits which might be taken during a given term. Students should consult with their adviser before registering for these types of classes to determine the appropriate number of credits for which to enroll.

d) The specific courses offered during any given term will be listed on CheckMarq for that term. Students should be aware that Marquette University cannot promise to offer all required courses during the summer sessions.
APPLICATION REQUIREMENTS
Applicants must submit, directly to the Marquette University Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. An essay outlining relevant work experience or education, career goals, possible areas of interest, and reasons for seeking admission to this program.
4. Three letters of reference from professors or professionals familiar with the applicant’s abilities, academic work, and/or professional background.
5. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency along with a recent GRE score (both are strongly recommended).

GENERAL INFORMATION
Students interested in applying to the program should consult the program Web site www.brc.mcw.edu/AP for a list of currently approved courses and scheduled course offerings for the next term.

MASTERS REQUIREMENTS
Students are admitted to the program under Plan B (non-thesis option), although with the co-directors’ approval, students may elect to transfer to Plan A (thesis option). In both options below, courses taken for credit in this program must be from the list of courses approved by the Steering Committee. Exceptions must be approved by the Steering Committee.

PLAN B OPTION (36 CREDITS)
Students must complete 36 credit hours of course work, of which at least 24 hours must be earned in graduate-level courses (200-level and above).

PLAN A OPTION (30 CREDITS)
Students must complete 24 credit hours of course work, of which at least 18 credit hours must be earned in graduate-level courses (200-level and above). Students must also complete a master’s thesis for 6 credit hours and pass an oral examination concentrated on the thesis.

For both options, students are required to earn 6 credits for Bioinformatics I & II (BIIN 200 and 201), 3 credits for Practicum in Bioinformatics (BIIN 290), a minimum of 6 credits of approved computer science courses at the 200-level, and a minimum of 6 credits of approved biological science courses at the 200-level.

COURSE DESCRIPTIONS

GRADUATE COURSES:

Designed to aid students in the application of knowledge gained through previous course work in informatics, information systems, mathematics, medical and/or biological research to the design, development, implementation and evaluation of information systems and analysis methods applied to biomedical data. Prereq: BIOL 4 and CHEM 24 which may be taken concurrently and COSC 68 and cons. of dept. ch.

BIIN 201. Bioinformatics 2 3 sem. hrs.
Designed to aid students in the application of knowledge gained through previous course work in informatics, information systems, mathematics, medical and/or biological research to the design, development, implementation and evaluation of information systems and analysis methods applied to biomedical data. Prereq: BIIN 200.

Emphasizes genetics, including Mendel and applications of molecular genetics. Also genome sequence comparison between species and the effect of gene modifications on phenotype. Offered at Medical College of Wisconsin. Offered occasionally. Prereq: Cons. of dept. ch.; knowledge of human physiology and genetics.

BIIN 211. Advanced Molecular Genetics 3 sem. hrs.
Program prepares students to six different specific topics in molecular genetics in an initial lecture followed by several discussion sessions in which research papers from that area are presented and critically evaluated. Emphasis is placed on developing the ability to critically read and evaluate experimental approaches and data from original research papers. Examples of topics include: the DNA binding properties of proteins; regulation of gene expression at the translation level; mechanisms of DNA replication; regulation of gene expression by enhancer elements; and DNA transposition mechanisms. Offered at Medical College of Wisconsin. Offered occasionally. Prereq: Cons. of dept. ch.

BIIN 212. Statistical Genetics 3 sem. hrs.
Fundamental elements of mathematical and population genetics, and statistical theory of the methods of human genetic analysis. Topics include: Hardy-Weinberg equilibrium, inbreeding, selection, mutation, models for polygenic and multifactorial inheritance, variance components estimation for the genetic analysis of familial aggregation, linkage and segregation analysis, and ascertainment problems. Offered at Medical College of Wisconsin. Offered occasionally. Prereq: MSCI 261 or equiv. and cons. of dept. ch.

BIIN 280. Topics in Bioinformatics 3 sem. hrs.
Offered occasionally. Prereq: Cons. of dept. ch.

BIIN 290. Practicum in Bioinformatics 3 sem. hrs.
Provides students with an opportunity to participate in the practice of research and/or development in the area of bioinformatics. Prereq: Admitted to BIIN program, BIIN 200 and cons. of dept. ch.

BIIN 295. Independent Study 1-3 sem. hrs.
Prereq: Admitted to BIIN program; cons. of dept. ch.

BIIN 296. Seminar 1-3 sem. hrs.
Seminar in research and development tools and applications designed for M.S. in bioinformatics program.

BIIN 298. Special Topics in Life Sciences 1-3 sem. hrs.
Graduate-level course in selected areas of the life sciences offered at Medical College of Wisconsin. Prereq: Cons. of dept. ch.

BIIN 299. Master’s Thesis 3-6 sem. hrs.
S/U grade assessment. Prereq: Cons. of dept. ch.
**BIOL 100. Biochemistry and the Molecular Basis of Biology** 3 sem. hrs.

**BIOL 101. Experimental Molecular Biology** 3 sem. hrs.

**BIOL 125. Genetics** 3 sem. hrs.

**BIOL 126. Experimental Genetics** 3 sem. hrs.

**BIOL 135. Cell Biology** 3 sem. hrs.

**BIOL 137. Experimental Cell Biology** 3 sem. hrs.

**BIOL 140. Advanced Ecology** 3 sem. hrs.

**BIOL 142. Plant Biology** 3 sem. hrs.

**BIOL 155. Neurobiology** 3 sem. hrs.

**BIOL 156. Experimental Neurobiology** 3 sem. hrs.

**BIOL 160. Animal Development** 3 sem. hrs.

**BIOL 171. Experimental Physiology** 3 sem. hrs.

**BIOL 176. Microbiology** 3 sem. hrs.

**BIOL 185. Immunobiology** 3 sem. hrs.

**GRADUATE COURSES:**

**BIOL 201. Radioisotope Safety** 2 sem. hrs.

Ionizing radiation: proper safety procedures in the independent use of radiotopes and current regulatroy guidelines and licensing procedures. Offered summer term. *Prereq: BIOL 2 and CHEM 2; or BIOL 5 and CHEM 2; or cons. of dept. ch.

**BIOL 205. Scientific Writing Workshop** 1-3 sem. hrs.

Designed to teach basics of clear and effective scientific writing with emphasis on preparing and evaluating research manuscripts and proposals. Students learn editing techniques through deconstructing and revising others’ work. Offered alternate spring terms.

**BIOL 211. Structure and Function of Proteins** 3 sem. hrs.

Advanced protein biochemistry stressing methodology and primary literature. Topics include: properties of amino acids, peptide and proteins; protein folding and assembly; protein-protein interactions; allostery and regulation; enzyme kinetics and energetics; protein-ligand interactions; and post-translational modification of proteins. Offered alternate fall terms. *Prereq: BIOL 100 or cons. of inst.

**BIOL 212. Biochemistry and Function of Nucleic Acids** 3 sem. hrs.

The biochemistry of RNA and DNA with emphasis on biological function and evolution. Specific topics include: nucleic acid structure, biophysical properties, biosynthesis, and molecular function. Offered alternate fall terms. *Prereq: BIOL 100 or cons. of inst.

**BIOL 213. Signaling, Structure, and Motility of Eukaryotic Cells** 3 sem. hrs.

Discusses the dynamics, role, and regulation of cytoskeleton and molecular motors, as well as the principles and mechanisms of signal transduction in eukaryotic cells. Offered alternate spring terms. *Prereq: BIOL 135 or equiv.

**APPLICATION DEADLINE**

No official deadline exists for the master’s or the doctoral programs; however, completed applications will be reviewed starting on January 15. Applications for admission received after this date will be considered as space permits.

**APPLICATION REQUIREMENTS**

Applicants must submit, directly to the Graduate School:

1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. A statement of professional goals and aspirations.
4. Three letters of recommendation which give evidence of the applicant’s scholarly promise.
5. GRE scores (General Test is required, Subject Test is recommended).
6. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

**MASTER’S REQUIREMENTS**

The program of course work and research for the master’s degree is determined in consultation with the student’s advisory committee. Each student is advised to take such courses as are properly related to academic background and research interests. All master’s students are required to gain the equivalent of one year of teaching experience during the program.

A master’s student must complete 24 credit hours of course work and six credit hours of thesis work. The student must pass a master’s comprehensive examination and submit an approved thesis.

**DOCTORAL REQUIREMENTS**

The program of course work and research for the doctoral degree is determined in consultation with the student’s advisory committee. Each student is advised to take such courses as are properly related to academic background and research interests. All doctoral students are required to gain the equivalent of one year of teaching experience during the program.

A doctoral student must complete a program of study defined, in conjunction with an adviser, on an approved Doctoral Program Planning Form. Advancement to candidacy for the doctoral degree is considered following successful completion of all requirements specified on the Doctoral Program Planning Form and after passing a qualifying examination. A typical doctoral student completes a minimum required 24 credit hours of course work and 12 credit hours of dissertation work. The student must submit and defend a dissertation after completing all other formal requirements for the doctoral degree.

**COURSE DESCRIPTIONS**

**UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:**

**BIOL 100. Biochemistry and the Molecular Basis of Biology** 3 sem. hrs.

**BIOL 101. Experimental Molecular Biology** 3 sem. hrs.

**BIOL 125. Genetics** 3 sem. hrs.

**BIOL 135. Cell Biology** 3 sem. hrs.

**BIOL 137. Experimental Cell Biology** 3 sem. hrs.

**BIOL 140. Advanced Ecology** 3 sem. hrs.

**BIOL 142. Plant Biology** 3 sem. hrs.

**BIOL 155. Neurobiology** 3 sem. hrs.

**BIOL 156. Experimental Neurobiology** 3 sem. hrs.

**BIOL 160. Animal Development** 3 sem. hrs.

**BIOL 171. Experimental Physiology** 3 sem. hrs.

**BIOL 176. Microbiology** 3 sem. hrs.

**BIOL 185. Immunobiology** 3 sem. hrs.

**GRADUATE COURSES:**

**BIOL 201. Radioisotope Safety** 2 sem. hrs.

Ionizing radiation: proper safety procedures in the independent use of radioisotopes and current regulatory guidelines and licensing procedures. Offered summer term. *Prereq: BIOL 2 and CHEM 2; or BIOL 5 and CHEM 2; or cons. of dept. ch.

**BIOL 205. Scientific Writing Workshop** 1-3 sem. hrs.

Designed to teach basics of clear and effective scientific writing with emphasis on preparing and evaluating research manuscripts and proposals. Students learn editing techniques through deconstructing and revising others’ work. Offered alternate spring terms.

**BIOL 211. Structure and Function of Proteins** 3 sem. hrs.

Advanced protein biochemistry stressing methodology and primary literature. Topics include: properties of amino acids, peptide and proteins; protein folding and assembly; protein-protein interactions; allostery and regulation; enzyme kinetics and energetics; protein-ligand interactions; and post-translational modification of proteins. Offered alternate fall terms. *Prereq: BIOL 100 or cons. of inst.

**BIOL 212. Biochemistry and Function of Nucleic Acids** 3 sem. hrs.

The biochemistry of RNA and DNA with emphasis on biological function and evolution. Specific topics include: nucleic acid structure, biophysical properties, biosynthesis, and molecular function. Offered alternate fall terms. *Prereq: BIOL 100 or cons. of inst.

**BIOL 213. Signaling, Structure, and Motility of Eukaryotic Cells** 3 sem. hrs.

Discusses the dynamics, role, and regulation of cytoskeleton and molecular motors, as well as the principles and mechanisms of signal transduction in eukaryotic cells. Offered alternate spring terms. *Prereq: BIOL 135 or equiv.

**DEGREES OFFERED**

Master of Science, Plan A only; Doctor of Philosophy

**SPECIALIZATIONS**

Master's: Cell Biology, Developmental Biology, Ecology, Epithelial Physiology, Genetics, Microbiology, Molecular Biology, Muscle and Exercise Physiology

Doctoral: Cell Biology, Developmental Biology, Ecology, Epithelial Physiology, Genetics, Microbiology, Molecular Biology, Muscle and Exercise Physiology, Neuroscience

**PROGRAM DESCRIPTION**

The biological sciences graduate program aspires to train experimental scientists capable of teaching and directing independent research by providing a broad theoretical background and an appreciation for the rigor of the scientific method. Students are prepared for employment in faculty positions and research posts in academia and industry.

**NEUROSCIENCE SPECIALIZATION**

A specialization in neuroscience is offered within the Department of Biological Sciences in collaboration with the neuroscience faculty in the Department of Biomedical Sciences at Marquette University. In addition to general training in the biological sciences, students will receive specialized course work in the neurosciences and will choose a neuroscience laboratory from either department for their thesis research.

**PREREQUISITES FOR ADMISSION**

Applicants are expected to have completed 36 semester hours of biology, as well as two terms of organic chemistry, one term of calculus, and two terms of physics. Also, applicants are encouraged to take course work in physical chemistry and biochemistry.

As a general rule, preference will be given to applicants to the doctoral program.
BIOL 214. Protein Trafficking and Cellular Homeostasis 3 sem. hrs.

BIOL 215. Neuroscience 1 – Cellular and Molecular Neuroscience 3 sem. hrs.
Designed to provide a comprehensive survey of the study of the nervous system focusing on cellular and molecular neuroscience, developmental neuroscience, and motor systems. Offered alternate fall terms. Prereq: Cons. of instr.

Designed to provide a comprehensive survey of the study of the nervous system focusing on sensory systems, regulatory systems, cognitive neuroscience and behavior. Offered alternate fall terms. Prereq: Cons. of instr.

BIOL 227. Genomic Analysis and Bioinformatics 3 sem. hrs.
The organization and evolution of selected bacterial and eukaryotic genomes. Genomic structure as viewed from the perspective of evolutionary rearrangements and gene expression. Analysis of current experimental methods for determining and modifying gene function and of computational approaches to the identification of unique patterns in respective protein and nucleic acid databases. Prereq: Open to Senior undergraduates with cons. of instr. and cons. of Graduate School.

BIOL 232. Bacterial Physiology 3 sem. hrs.
Diversity, mechanisms, regulation, and evolution of prokaryotic biological activities. Points of emphasis: 1) the use of bacterial genetics and molecular biology to study physiology; and 2) bacterial activities that are important to the rest of biology, including symbiosis. Offered alternate fall terms. Prereq: BIOL 100 or equiv.; or BIOL 176 or equiv.; or cons. of instr.

The effect of the environment on microbial growth and the role of microorganisms in the environment. Examines diversity, activity and abundance of microbes and involves examples from literature. Offered alternate spring terms. Prereq: BIOL 176 or equiv.; or cons. of instr.

BIOL 244. Developmental Genetics and Epigenetics 3 sem. hrs.
Analysis of genetic and epigenetic influences on development, looking at specific examples from yeast, plant and animal model organisms. Topics include: genetics of flower development, yeast mating type switching, DNA methylation, genomic imprinting, chromatin remodeling, permutation and prions. Offered alternate fall terms. Prereq: BIOL 125 and 135 or equiv.

BIOL 250. Techniques in Neuroscience Research 1 sem. hr.
Laboratory course. Provides an introduction to important laboratory techniques in experimental neuroscience. Offered summer term. S/U grade assessment. Prereq: BIOL 215 and 216; or cons. of instr.

BIOL 251. Advanced Survey in Neuroscience 1 sem. hr.
An introduction to current neuroscience literature with a focus on research at Marquette. Offered fall term. Prereq: Cons. of instr.

BIOL 252. Advanced Survey in Neuroscience 2 sem. hr.
An introduction to current neuroscience literature with a focus on research at Marquette. Offered spring term. Prereq: Cons. of instr.

BIOL 255. Eukaryotic Genetics and Chromosome Structure 3 sem. hrs.
Genetics of eukaryotic model organisms. Focus on genetic approaches to the analysis of contemporary biological problems related to eukaryotic chromosome structure and function. Offered alternate fall terms. Prereq: BIOL 125 or equiv.

Covers aspects of early development, including gametogenesis, fertilization and early embryo development, with emphasis on cell cycle control and stem cell biology. Offered alternate spring terms. Prereq: BIOL 135 or equiv.; or BIOL 160 or equiv.

BIOL 263. Cell and Molecular Biology of Early Development 3 sem. hrs.
Study of the molecular mechanisms underlying developmental pathways and processes in a variety of model organisms including fruit flies, nematodes, mice and zebrafish. Emphasizes genetic, biochemical and molecular techniques used in studying these complex systems. Offered alternate spring terms. Prereq: BIOL 135 or equiv.; or BIOL 160 or equiv.

BIOL 274. Advanced Physiology Seminar 1 sem. hr.
In-depth analysis and discussion of the scientific literature in the field of physiology. Offered as needed fall term. Prereq: BIOL 172 or equiv.; credit will not be given for both BIOL 274 and BIOL 275.

BIOL 275. Advanced Physiology 5 sem. hrs.
An advanced mammalian physiology course including an analysis of muscle, cardiovascular, respiratory, neural, endocrine and renal functions. Emphasis is placed on cellular mechanisms and the control and interaction of organ systems. Offered as needed fall term. Prereq: BIOL 100 or equiv. and BIOL 172 or equiv. or cons. of instr.

BIOL 277. Advanced Exercise Physiology 3 sem. hrs.
Study of the effects of acute and chronic exercise on selected organ systems. Particular emphasis will be placed on muscle, cardiovascular, respiratory, and environmental physiology. Offered alternate spring terms. Prereq: BIOL 172 or equiv.; or cons. of instr.

BIOL 281. Systems Physiology 3 sem. hrs.
The first third of the course focuses on renal physiology. Covers the physiology of the mammalian kidney in detail, including the transport functions of the segments of the nephron, the identification of the molecular components underlying such transport, and the analysis of genetic diseases affecting renal function. Also covers the interactions between the renal and cardiovascular systems. This section ends with vibrate and invertebrates. The last two thirds of the course focuses on muscle biology. Covers skeletal, cardiac and smooth muscle relative to their regulation, structure and function. Emphasizes structural organization, composition, mechanics and kinetics. In addition, covers development, regulation and disease states. Enphasis is placed on critical reading of the primary scientific literature. Prereq: BIOL 172 or equiv.

BIOL 295. Independent Study 1-3 sem. hrs.
Investigations in selected areas of biology. Offered every term. Prereq: Cons. of instr. and cons. of dept. ch.

BIOL 296. Laboratory Rotations in Biology 1-3 sem. hrs.
Informal lab rotation of first-year graduate students based on mutual preferences of the student and faculty member including lab group meetings, literature research, benchwork, presentation of findings and/or research plan to lab members. S/U grade assessment. Prereq: Cons. of dept. ch.

BIOL 297. Department Colloquium 0 sem. hrs.
Scholarly reports on selected topics in modern biology by visiting and resident investigators and graduate students. Attendance required of all full-time students. Required of all full-time graduate students in biology, S/N/CUNG grade assessment.

BIOL 298. Special Topics in Biology 1-3 sem. hrs.
Subject matter variable as determined by needs of biological sciences graduate students. Students may enroll more than once as subject matter changes. Prereq: Cons. of dept. ch.

BIOL 299. Master’s Thesis 1-6 sem. hrs.
Offered every term. S/U grade assessment. Prereq: Cons. of dept. ch.

BIOL 320. Special Topics in Cell and Developmental Biology 1-3 sem. hrs.
Topics of current interest in cell and developmental biology. Offered occasionally. Prereq: BIOL 135 or equiv.; or cons. of instr.

BIOL 323. Special Topics in Biochemistry and Genetics 1-3 sem. hrs.
Topics of current interest in biochemistry and genetics. Offered occasionally. Prereq: Cons. of instr.

BIOL 325. Special Topics in Plant Molecular Biology 1-3 sem. hrs.
Topics of current interest in plant molecular biology. Offered occasionally. Prereq: Cons. of instr.

BIOL 350. Special Topics in Neuroscience 1-3 sem. hrs.
Topics of current interest in neuroscience. Offered occasionally. Prereq: Cons. of instr.

BIOL 380. Special Topics in Physiology 1-3 sem. hrs.
Topics of current interest in physiology. Offered occasionally. Prereq: Cons. of instr.

BIOL 399. Doctoral Dissertation 1-12 sem. hrs.
Offered every term. S/U grade assessment. Prereq: Cons. of dept. ch.

BIOL 867. Master’s Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. S/N/CUNG grade assessment. Prereq: Cons. of dept. ch.

Fee. S/N/CUNG grade assessment. Prereq: Cons. of dept. ch.
BIOL 869. Master’s Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.
BIOL 870. Doctoral Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.
BIOL 871. Doctoral Comprehensive Exam Preparation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.
BIOL 872. Doctoral Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.
BIOL 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.
BIOL 874. Graduate Fellowship – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.
BIOL 875. Graduate Assistant Teaching – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.
BIOL 876. Graduate Assistant Research – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.
BIOL 882. Thesis Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.
BIOL 883. Thesis Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.
BIOL 888. Doctoral Dissertation Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.
BIOL 889. Doctoral Dissertation Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIOMEDICAL ENGINEERING (BIEN)
Chairperson and Professor: Rozella Professor Brower, Clough, Harris, Jeutter, Josse, Sances (Emeritus), Seitz, Winters Associate Professor: Brown, Cariapa, Goldberg, Nagurka, Olson, Riedel, Schmit, Silver-Thorn Assistant Professor: Audi, Beardsley, Gilat-Schmidt, LaDisa
Adjunct Professor: Battocletti, Cowley, Hoffman, Hudetz, Hyde, Krenz, Larson, Madden, Martin, Merritt, Pintar, Sarna, Schweb, J-Smith, Toth, Warthier, Wertsch, Yoganandan
Adjunct Associate Professor: Abler, Greene, Jodat, Schlagel, Schmeling, Soto

Adjunct Assistant Professor: Bandettini, Boskamp, DeVoe, Donnell, Hause, Hubbard, Iams, Liebenthal, Liu, Lyon, Marks, Merker, Molthen, Ninomiya, P. Smith, Patel, Pielak, Prieto, Rao, Rickaby, Schmaida, Shi, Stemper, Street, Tonellato, Ulmer, Wang
Research Assistant Professor: Johnson
Note: Faculty members and their ranks are for the 2007-2008 academic year.

DEGREES OFFERED
Master of Science, Master of Engineering; Doctor of Philosophy

MISSION STATEMENT
The Department of Biomedical Engineering is a dedicated team committed to the Jesuit tradition of the pursuit of truth. We develop leaders and problem solvers skilled at applying engineering, science and design principles to improve health in the service of humanity by:
- Discovering and disseminating new knowledge;
- Promoting critical thinking and lifelong learning;
- Guiding students to meaningful and ethical professional and personal lives;
- Fostering interdisciplinary and collaborative research and education through academic and industrial alliances;
- Continuing innovative leadership in education, research and industrial relationships; and
- Inspiring faculty and students to serve others.

SPECIALIZATIONS
M.S.: Bioinstrumentation/Computers, Biomechanics, Rehabilitation Bioengineering, Systems Physiology
M.E.: Biocomputing, Bioimaging, Bioinstrumentation, Biomechanics, Biorehabilitation
Ph.D.: Bioinstrumentation/Computers, Biomechanics/Biomaterials, Functional Imaging, Rehabilitation Bioengineering, Systems Physiology

PROGRAM DESCRIPTIONS
The biomedical engineering program is interdisciplinary in nature, involving the application of engineering and mathematics to the solution of problems related to medicine and biology. The faculty reflect this interdisciplinary nature in their courses and research. Marquette faculty are synergistically complemented by adjunct faculty from the Medical College of Wisconsin. The MU/CMC/WI Center for Biomedical Engineering and Biomatics fosters collaborative interactions between the two institutions. Research can be characterized by the general areas of bioinstrumentation/computers, biomechanics/biomaterials, rehabilitation bioengineering, and systems physiology. More specific areas of research include: artificial limbs/prostheses, biomaterials, biotelemetry, cell transport and metabolism, cardiac electrophysiology, computers in medicine, functional imaging (magnetic resonance, X-ray), head and spinal cord trauma, hemodynamics, human motion analysis, medical and biological image analysis, physiological signal processing, rehabilitation engineering, systems physiology (cardiovascular, gastrointestinal, musculoskeletal, neuroscience, pulmonary), telerehabilitation, tissue engineering, hard and soft tissue biomechanics, and transcutaneous power transfer.

FUNCTIONAL IMAGING SPECIALIZATION — MU/CMC/WMU JOINT PROGRAM
Functional imaging is the simultaneous quantification of the structural and functional aspects of a biological system. Modern X-ray, nuclear magnetic resonance, and other means of imaging in relatively noninvasive ways have made functional imaging increasingly practical. The doctoral program in functional imaging, a collaborative effort between Marquette University and the Medical College of Wisconsin, trains students in the use of these new technologies to obtain high-resolution structural, kinetic, and kinetic data from intact organs, and in the use of mathematical modeling to understand the organ physiology.

PREREQUISITES FOR ADMISSION
Students with backgrounds in engineering, physical science, and life science disciplines are eligible for admission to the master of science, master of engineering and doctoral programs in biomedical engineering. A baccalaureate degree in an appropriate area with a minimum grade point average of 3.00 is required. For the master of engineering, at least one year of post-baccalaureate professional work experience is required prior to starting the program. Applicants who do not have an engineering degree must complete prerequisite engineering requirements. The list of prerequisites can be obtained from the department office.

APPLICATION REQUIREMENTS
Applicants must submit, directly to the Marquette University Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation.
4. GRE scores (General Test only).
5. A brief statement of purpose that includes the proposed area of research specialization.
6. (For master of engineering applicants only) an interview with the M.E. program director.
7. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

GENERAL INFORMATION
All admitted students are required to obtain and read the department’s Graduate Student Handbook, which contains complete details about the biomedical engineering programs and additional departmental degrees. This handbook is available through the Biomedical Engineering Office, (414) 288-3375.

BACHELOR’S-MASTER’S PROGRAM
This program allows students to earn both their master of science degree in biomedical engineering and a bachelor of science degree in five years. Students currently enrolled in the undergraduate biomedical engineering program at Marquette University (with a GPA of 2.50 or above) may apply for admission to the five-year program during their junior year. Students must submit an application to the Graduate School, indicate their interest in the five-year program, and meet all other admission criteria as stated in the Application Requirements section. (GRE test scores must be submitted before the start of the fifth year.)
Students may take master's level courses in their senior undergraduate year. These graduate courses count towards both the undergraduate and graduate degrees. The remaining courses are taken during the students’ fifth year. Work on the students’ theses research begins the summer between the junior and senior years. Students will continue to gain research laboratory experience the summer between the senior and fifth year, culminating in preparation of a written thesis and defense. Upon completion of the first term as master’s candidates, students must petition the Graduate School to transfer courses taken as undergraduates to the master’s degree.

**MASTER’S REQUIREMENTS**

**MASTER OF SCIENCE**

Upon enrolling in the master of science program in biomedical engineering, a student selects one of four specializations. Faculty will design a curriculum and research program to address the specific goals of each student. Programs will include course work in engineering, biology, mathematics, and medicine, all of which will be integrated with research laboratory experience.

A master of science student must complete 24 credit hours of course work (including three credit hours of physiology) and six credit hours of thesis work. The student also must pass a comprehensive examination and submit an approved thesis.

**MASTER OF ENGINEERING**

Upon enrolling in the master of engineering program in biomedical engineering, a student selects one of five specializations and follows the curriculum designed for that specialization. The program includes course work in engineering, life sciences, mathematics, medicine and healthcare technologies management, all of which will be integrated in a capstone comprehensive written exam. A master of engineering student must complete a total of 30 credit hours of course work, which includes three credits of independent readings and research. The student also must pass the capstone comprehensive examination.

**DOCTORAL REQUIREMENTS**

Upon enrolling in the doctoral program in biomedical engineering, a student selects his or her area of specialization. Faculty will design a curriculum and research program to address the specific goals of each student. Programs will include course work in engineering, biology, mathematics, and medicine, all of which will be integrated with research laboratory experience.

The doctor of philosophy degree is conferred in recognition of marked ability and high attainment in the advancement of knowledge and pursuit of truth. The comprehensive knowledge expected of the student in his or her major field is such that the requirements for the degree usually take no less than four years of full-time work, or the equivalent, beyond the baccalaureate degree.

A doctoral student must complete a program of study prepared in consultation with his or her dissertation adviser and outlined on an approved Doctoral Program Planning Form. The program normally requires 45 credit hours of course work beyond the baccalaureate degree (a minimum of 30 credit hours beyond the master’s degree) plus 12 credit hours of dissertation work. Doctoral course work must include a minimum of three credit hours of graduate-level physiology. The student also must pass a doctoral qualifying examination (DQE) and submit and successfully defend a dissertation.

The Doctoral Candidacy Examination consists of both written and oral components. Students entering the doctoral program with a master’s degree are required to take the written portion within two terms after entering the program. Students entering the doctoral program with a bachelor’s degree are required to take the written portion before or at completion of 30 graduate credit hours or completion of the master’s degree, whichever comes first. Each student is expected to complete the oral portion by the end of his or her third year.

The dissertation must represent an original research contribution showing high attainment and clear ability to do independent research. A public defense of the dissertation (the final oral examination) is conducted after the student has completed all other formal requirements for the doctoral degree and has submitted a completed doctoral dissertation to his or her doctoral committee. The dissertation defense is conducted in the form of a department seminar.

**COURSE DESCRIPTIONS**

**UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:**

- **BIEN 112. Embedded Biomedical Instrumentation** 3 sem. hrs.
- **BIEN 151. Topics in Biomedical Engineering** 1-3 sem. hrs.
- **BIEN 152. Analysis of Physiological Models** 3 sem. hrs.
- **BIEN 153. Applied Finite Element Analysis in Biomechanics** 3 sem. hrs.
- **BIEN 157. Intelligent Biosystems** 3 sem. hrs.
- **BIEN 160. Neural Engineering** 3 sem. hrs.
- **BIEN 165. Introduction to Rehabilitation Robotics** 3 sem. hrs.
- **BIEN 170. Introduction to Biomaterials Science and Engineering** 3 sem. hrs.
- **BIEN 180. Systems Physiology** 3 sem. hrs.
- **BIEN 182. Medical Imaging Physics** 3 sem. hrs.
- **BIEN 183. Cardiopulmonary Mechanics** 3 sem. hrs.
- **BIEN 184. Image Processing for the Biomedical Sciences** 3 sem. hrs.
- **BIEN 187. Biomedical Instrumentation Design** 3 sem. hrs.

**GRADUATE COURSES:**

- **BIEN 201. Analysis of Physiological Systems** 3 sem. hrs.
  Introduction to the use of mathematical models in quantifying physiological systems. Model formulation will be analyzed. Applications of analytical and numerical solution techniques and parameter estimation methods. Offered occasionally. Prereq: BIEN 152.
  Electrophysiology of excitable membranes, electromagnetic fields in volume conductors, mathematical models of neural elements and volume conductor fields. Offered alternate years.
- **BIEN 205. Cellular and Molecular Bioengineering** 3 sem. hrs.
  Main topics include: cellular biomechanics with an emphasis on the cardiovascular system, molecular bioengineering, biotransport phenomena, and tissue engineering with focus on artificial internal organs. Cellular biomechanics topics covered are biomechanics of the endothelium, endothelial-immune cell interactions, and blood cell structural biomechanics. Topics in molecular bioengineering include chemotaxis and chemokinesis, and modeling of receptor-mediated endocytosis. Biotransport and tissue engineering topics include bioreactor design and the analysis and development of artificial internal organs like the liver and pancreas. Offered occasionally.
  Development of the theory of fluid mechanics as applied to living systems. Both steady and unsteady flows of Newtonian and non-Newtonian fluids will be considered. Topics to be covered include viscometry, blood flow, gas and aerosol flows, pulsatile flow and wave propagation and applications to the understanding of flows in organs and to the measurement of blood pressure and flow. Offered alternate years. Prereq: BIEN 106 or equiv.; or MEEN 107 or CEEN 151.
- **BIEN 212. Biological Mass Transfer** 3 sem. hrs.
  Development of the theory of mass transfer. Fick’s law and free diffusion. Osmosis, facilitated diffusion, active transport, transport across cell membranes and applications to cell biology and organ physiology. Offered alternate years.
- **BIEN 221. Biomechanical and Biomaterial Systems Analysis** 3 sem. hrs.
  Using fundamentals of biomaterials engineering and biocompatibility, this course is designed to analyze the functions that organs serve and to analyze the efficacy and safety of artificial organs systems. Some organs/tissues that will be discussed include the kidneys, liver, skeleton, skin, heart, muscles, eyes, and ears. The suitability of state-of-the-art artificial organ systems, including artificial hearts, orthopaedic prostheses, kidney dialyzers, and cochlear devices to fulfill the functions of the replaced organs/tissues will be critically examined. Prereq: BIEN 170 and BIEN 175.
- **BIEN 222. Biomedical Engineering Analysis of Trauma** 3 sem. hrs.
  An engineering analysis of the physiological changes following impact to the head, spinal cord, and limbs, and electrical events and effects on tissues are treated. Offered occasionally.
BIEN 230. Musculoskeletal Biomechanics 1
3 sem. hrs.
Emphasis on the interrelationship of force and motion as related to anatomic structure and function. The student will become acquainted with the forces and motions acting in the skeletal system and the various techniques used to describe them. Current concepts as revealed in the recent scientific and engineering literature will be highlighted. Topics covered include bone mechanics, joint mechanics, gait kinematics, instrumentation and measurement of biomechanical phenomena, and computer modeling of the musculoskeletal system. Offered alternate years. Prereq: MEEN 20 or MEEN 20 and MEEN 130 or MEEN 130.

BIEN 231. Musculoskeletal Biomechanics 2
3 sem. hrs.
Advanced concepts of kinematics and mechanics as they apply to the fields of biomechanics and rehabilitation. Aspects of gait, bone and joint surgery, and soft tissue surgery will be covered. Detailed study of joint mechanics, implant applications and mobility device function will be performed. Includes advanced analysis and modeling as well as laboratory-based final project. Offered alternate years. Prereq: BIEN 230.

BIEN 232. Applied Finite Element Analysis in Biomechanics 1
3 sem. hrs.
Introduction to finite element analysis as applied to linear, static problems. Application to problems in plane strain, plane stress, and axisymmetry. Development of shape functions and element stiffness matrices. Although primarily structural analysis, will also consider problems in heat transfer and fluid mechanics. Use of user-written and packaged software. Offered fall term, alternate years. Prereq: MEEN 130 or MEEN 130; and Matrix/Linear Algebra or equiv.

BIEN 233. Applied Finite Element Analysis in Biomechanics 2
3 sem. hrs.
Advanced finite element analysis as applied to non-linear (both material and geometric nonlinearities), dynamic problems. Use of penalty methods and perturbed Lagrangian methods. Use of user-written and packaged software. Critical reviews of finite element analysis in biomechanical research. Offered occasionally. Prereq: BIEN 232; or MEEN 245 or equiv.

BIEN 235. Biomechanics of the Spine
3 sem. hrs.
Analyzes the anatomical and functional relationships among the hard and soft tissue structures of the spine as a function of vertebral column development, aging, disease and trauma. Emphasis will be given to the mechanisms of external and internal load transfer. Imaging (e.g. CT), experimental and finite element methods will be used to study the effects of physiologic/traumatic loading, surgery and spinal disorders. Current advancements in biomechanical/literature will be discussed. Offered occasionally.

BIEN 237. Neuromotor Control 3 sem. hrs.
Overview of current issues in neuromotor control and movement biomechanics. Special emphasis on the study of normal and impaired human movement. Topics include: muscle mechanics, biomechanics of movement, neural circuitry, strategies for the neural control of movement (including a discussion of adaptation and motor learning) and potential applications of biomechanical engineering techniques to the study and improvement of impaired motor function. Offered occasionally. Prereq: BIEN 155 which may be taken concurrently or equiv.; or cons. of instr.

BIEN 240. Biomedical Instrumentation 3 sem. hrs.
Introduces students to statistical processing of biomedical data. Topics include: data acquisition, probability and estimation, signal averaging, power spectrum analysis, windowing, digital filters and data compression. Students will complete several computer projects which apply these processing methods to physiologic signals. Offered alternate years. Prereq: MATH 83; and proficiency in C or FORTRAN.

BIEN 241. Advanced Biomedical Signal Processing 3 sem. hrs.
Introduces students to statistical processing of biomedical data. Topics include: data acquisition, probability and estimation, signal averaging, power spectrum analysis, windowing, digital filters and data compression. Students will complete several computer projects which apply these processing methods to physiologic signals. Offered alternate years. Prereq: MATH 83; and proficiency in C or FORTRAN.

BIEN 242. Radio Frequency Applications in Biomedical Engineering 3 sem. hrs.
Radio frequency design and applications for biomedical engineering and medicine. Circuit elements, equivalent circuits, impedance transformations, Smith Chart, two ports, scattering parameters, amplifiers, resonant circuits, mixers, receivers. Applications include telemetry, transcutaneous power transfer, hyperthermia, rf ablation, magnetic resonance imaging; HF-EEG OF LIBRA and Ascent CAD are introduced as analysis and design tools. Guest speakers. Written and oral design reports. Offered occasionally. Prereq: Undergraduate background in circuit theory and analog electronics.

BIEN 245. Advanced Topics in Biomedical Instrumentation 3 sem. hrs.
Advanced topics in design and analysis of biomedically instruments, devices and interfaces. Project approach drawn from current literature and current projects of laboratories of affiliated institutions. Topics include bioelectronics, biomechanics, biomaterials, and rehabilitation engineering. Offered occasionally.

BIEN 246. Biomedical Signal Processing 3 sem. hrs.
Introduces students to statistical processing of biomedical data. Topics include: data acquisition, probability and estimation, signal averaging, power spectrum analysis, windowing, digital filters and data compression. Students will complete several computer projects which apply these processing methods to physiologic signals. Offered alternate years. Prereq: MATH 83; and proficiency in C or FORTRAN.

BIEN 249. Advanced Topics in Biomedical Engineering 3 sem. hrs.
Advanced topics in design and analysis of biomedically instruments, devices and interfaces. Project approach drawn from current literature and current projects of laboratories of affiliated institutions. Topics include bioelectronics, biomechanics, biomaterials, and rehabilitation engineering. Offered occasionally.

BIEN 250. Biomedical Signal Processing 3 sem. hrs.
Introduces students to statistical processing of biomedical data. Topics include: data acquisition, probability and estimation, signal averaging, power spectrum analysis, windowing, digital filters and data compression. Students will complete several computer projects which apply these processing methods to physiologic signals. Offered alternate years. Prereq: MATH 83; and proficiency in C or FORTRAN.

BIEN 251. Advanced Biomedical Signal Processing 3 sem. hrs.
Introduces students to statistical processing of biomedical data. Topics include: data acquisition, probability and estimation, signal averaging, power spectrum analysis, windowing, digital filters and data compression. Students will complete several computer projects which apply these processing methods to physiologic signals. Offered alternate years. Prereq: MATH 83; and proficiency in C or FORTRAN.

BIEN 252. Multidimensional Biomedical Time Series Analysis 3 sem. hrs.
Theory and implementation of methods used to collect, model and analyze multidimensional time series encountered in biomedical applications such as functional imaging, electrophysiologic mapping and the study of physiologic control systems. Offered occasionally. Prereq: BIEN 250 or equiv.; knowledge of C or FORTRAN.

BIEN 259. Advanced Topics in Biomedical Computing 3 sem. hrs.
Application of signal processing, information management, modeling and artificial intelligence techniques in biomedical research and clinical environments. Project approach drawing from current literature and data from laboratories of affiliated institutions. Typical projects include analysis of actually recorded neurophysiologic data, development and solution of physiologic models, application of artificial intelligence to ordering of diagnostic terminology. Offered occasionally.

BIEN 263. Biomedical Signal Processing 3 sem. hrs.
Introduces students to statistical processing of biomedical data. Topics include: data acquisition, probability and estimation, signal averaging, power spectrum analysis, windowing, digital filters and data compression. Students will complete several computer projects which apply these processing methods to physiologic signals. Offered alternate years. Prereq: MATH 83; and proficiency in C or FORTRAN.

BIEN 265. Biomedical Signal Processing 3 sem. hrs.
Introduces students to statistical processing of biomedical data. Topics include: data acquisition, probability and estimation, signal averaging, power spectrum analysis, windowing, digital filters and data compression. Students will complete several computer projects which apply these processing methods to physiologic signals. Offered alternate years. Prereq: MATH 83; and proficiency in C or FORTRAN.

BIEN 266. Biomedical Signal Processing 3 sem. hrs.
Introduces students to statistical processing of biomedical data. Topics include: data acquisition, probability and estimation, signal averaging, power spectrum analysis, windowing, digital filters and data compression. Students will complete several computer projects which apply these processing methods to physiologic signals. Offered alternate years. Prereq: MATH 83; and proficiency in C or FORTRAN.

BIEN 268. Biomedical Signal Processing 3 sem. hrs.
Introduces students to statistical processing of biomedical data. Topics include: data acquisition, probability and estimation, signal averaging, power spectrum analysis, windowing, digital filters and data compression. Students will complete several computer projects which apply these processing methods to physiologic signals. Offered alternate years. Prereq: MATH 83; and proficiency in C or FORTRAN.

BIEN 269. Biomedical Signal Processing 3 sem. hrs.
Introduces students to statistical processing of biomedical data. Topics include: data acquisition, probability and estimation, signal averaging, power spectrum analysis, windowing, digital filters and data compression. Students will complete several computer projects which apply these processing methods to physiologic signals. Offered alternate years. Prereq: MATH 83; and proficiency in C or FORTRAN.
BIEN 289. Topics in Biomedical Engineering 3 sem. hrs.
Subject matter variable as determined by needs of biomedical graduate students. Students may enroll more than once as the subject matter changes. Possible topics: biostatistics, experimental methods, neuro-anatomy, etc. Offered occasionally.

BIEN 295. Independent Study 1-3 sem. hrs.
Offered every term.
Prereq: Cons. of instr. and cons. of dept. ch.

BIEN 297. Department Seminar 0 sem. hrs.
Scholarly presentations on current topics in biomedical engineering and related areas by visiting professors, resident faculty and graduate students. Attendance is required of all full-time graduate students. Offered every term. SNC/UNC grade assessment. Mandatory for all full-time BIEN graduate students.

BIEN 299. Master's Thesis 1-6 sem. hrs.
Offered every term. S/U grade assessment.
Prereq: Cons. of instr.

BIEN 300. Human Physiology 8 sem. hrs.
Human physiology describes the normal function of cells and organs systems, laying a foundation for understanding the altered physiologic states of specific disease entities and human organism. Computer-simulated laboratory experiences, animal labs and discussion groups reinforce concepts. Offered at the Medical College of Wisconsin. Variable weekly schedule. (Course generally begins in the first week of January.) For planning purposes, MU students must register by December 15 of the previous year. Prereq: Cons. of dept. ch.; taught at the Medical College of Wisconsin.

BIEN 396. Seminar 0-3 sem. hrs.
Offered occasionally.

BIEN 398. Special Topics in Life Sciences 1-9 sem. hrs.
A graduate-level course in selected areas of the life sciences offered at the Medical College of Wisconsin. May be taken for credit by students enrolled in the Ph.D. degree program in biomedical engineering at Marquette University. No more than three 398 courses may be included in the required minimum course work in the Ph.D. program. The schedule of classes often will be variable and may depend on the course. Prereq: Cons. of dept. ch.

BIEN 399. Doctoral Dissertation 1-12 sem. hrs.
Offered every term. S/U grade assessment.
Prereq: Cons. of instr.

BIEN 871. Doctoral Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 872. Doctoral Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 874. Graduate Fellowship – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 875. Graduate Assistant Teaching – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 876. Graduate Assistant Research – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 877. Field Placement Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 878. Field Placement Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 879. Field Placement Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 880. Professional Project Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 881. Thesis Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 883. Thesis Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 884. Professional Project Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 885. Professional Project Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 886. Professional Project Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 887. Doctoral Dissertation Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 888. Doctoral Dissertation Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BIEN 889. Doctoral Dissertation Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

BUSINESS ADMINISTRATION (BUAD)
See GRADUATE SCHOOL OF MANAGEMENT SECTION

CHEMISTRY (CHEM)
Chairperson and Associate Professor: Hossenlopp
Professor: Cremer (Emeritus), Donaldson, Haworth, N. Hoffman (Emeritus), Jache (Emeritus), Kincaid, McKinney, Nakamoto (Emeritus), S. Reid, Ryan, Schrader (Research Professor), Steinmetz, Tran, Wilkie
Associate Professor: Rathore, Yi
Assistant Professor: Babikov, Gardiner, Sem
Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREES OFFERED
Master of Science, students are admitted under Plan A (thesis option) but Plan B (non-thesis option) is also offered; Doctor of Philosophy

SPECIALIZATIONS
Subspeciality areas of research within the Department of Chemistry include: photochemistry; molecular spectroscopy; organometallic, physical organic, bioorganic, polymer, and theoretical chemistry; and chemical dynamics.

PROGRAM DESCRIPTION
The Department of Chemistry offers graduate degree programs for both full- and part-time students. Two tracks of study are offered: 1) Plan A: preparation for a career as a professional chemist and 2) Plan B: enhancement of scientific background for persons employed as high school science teachers. The heart of the professional track is research, conducted in concert with a faculty mentor. The focus of the background track is enrichment and strengthening of the skills that teachers bring to their students. Plan B, the background track, is offered only at the master’s level.

PREREQUISITES FOR ADMISSION
Applicants should have graduated with, or be about to graduate with, a bachelor’s degree from an accredited institution. The minimum prerequisite for any graduate course is one year of undergraduate physical chemistry. In addition, an undergraduate course in an area of study (e.g., analytical, inorganic, organic) appropriate to the graduate course involved is required. A student’s undergraduate grade point should be equivalent to a B (3.00) or above.
APPLICATION REQUIREMENTS

Applicants must submit a paper application (applicants may not apply online), directly to the Department of Chemistry:
1. A completed application form.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation from individuals familiar with the applicant’s academic work.
4. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.
5. GRE scores are optional, but it is to the applicant’s advantage to have taken the Subject Test for chemistry.

GENERAL INFORMATION

For more detailed and comprehensive information about the master of science and doctoral programs in chemistry, students should consult the most recent edition of the Chemistry Department’s Graduate Student Handbook. This publication defines the current rules and guidelines that govern department and program requirements.

FOREIGN LANGUAGE REQUIREMENTS

Normally, no reading knowledge of a foreign language is required in either the master’s or doctoral programs. However, at the discretion of the student’s thesis or dissertation committee, proficiency in a foreign language may be required if it is necessary in the student’s research.

PROFICIENCY EXAMINATIONS

Incoming chemistry students must pass three proficiency examinations, which may be selected from among the four traditional areas of chemistry (analytical, inorganic, organic, and physical chemistry). Incoming chemical physics students must pass proficiency examinations in physics, physical chemistry, and one other area of chemistry. These examinations can be repeated up to two times each, and the student must pass three by the end of his/her second term of full-time study or the equivalent.

MASTER’S REQUIREMENTS

A program for the master’s degree is determined by the student’s research adviser in consultation with the student’s thesis committee.

DOCTORAL REQUIREMENTS

A program for the doctoral degree is determined by the student’s research adviser in consultation with the student’s dissertation committee.

A doctoral student must complete a program of study defined on an approved Doctoral Program Planning Form. Normally, the student will be required to complete 24 credit hours of course work and 12 credit hours of CHEM 299 for a total of 36 post-bachelor’s degree credit hours. An intense program of laboratory instruction and research to begin no later than the second term of study is also required. Six credit hours of course work may be CHEM 295 (Independent Study). In addition, seminar course work (CHEM 296) is required for the program but earns no credit. A series of cumulative examinations constitutes a qualifying examination. Eight of these examinations are given each year. The student is expected to pass four exams by the end of the fifth semester of doctoral study. The student must submit a dissertation describing a significant body of independent research carried out in concert with a faculty mentor. The dissertation must be of a caliber that would be publishable in the leading scientific journals. A public defense of the dissertation is required.

COURSES DESCRIPTIONS

UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:

CHEM 123, 124, 131, 132 and 133 do not carry graduate credit for Chemistry graduate students.

CHEM 295. Inorganic Chemistry 3 sem. hrs.

CHEM 123. Organic Chemistry for Majors 1 4 sem. hrs.


CHEM 125. Introduction to Biochemistry 3 sem. hrs.


CHEM 131. Physical Chemistry: Fundamentals with Applications in Biological Sciences 3 sem. hrs.

CHEM 132. Physical Chemistry 1 3 sem. hrs.

CHEM 133. Physical Chemistry 2 3 sem. hrs.

CHEM 160. Introduction to Polymer Science 3 sem. hrs.

CHEM 166. Introduction to Quantum Chemistry 3 sem. hrs.

CHEM 198. Advanced Topics in Chemistry 1-3 sem. hrs.

GRADUATE COURSES:

CHEM 201. Advanced Inorganic Chemistry 1 3 sem. hrs.

Atomic and molecular structure, chemistry of the compounds of metals, transition metals and nonmetals, introduction to symmetry, ligand field theory, mechanisms, acids and bases, non-aqueous solvents, organometallic compounds, and applications of spectroscopy. Offered spring term.
CHEM 258. Selected Topics in Analytical Chemistry 1-3 sem. hrs. Topics of current interest in analytical chemistry. Offered occasionally.

CHEM 260. Advanced Physical Chemistry 3 sem. hrs. Atomic and molecular structure and chemical bonding from the point of view of quantum mechanics; illustrations from spectroscopy. Offered alternate years.

CHEM 262. Research Tools in Physical Chemistry 3 sem. hrs. Group theory (formal theory, theory of representations, point groups, applications to atoms and molecules), molecular orbital theory, and computational chemistry (molecular mechanics, semiempirical and ab initio molecular orbital calculations). Offered fall term. Prereq: CHEM 133.


CHEM 264. Statistical Thermodynamics 3 sem. hrs. Applications of statistical methods to chemical systems at equilibrium, including the calculations of thermodynamic functions, the properties of gases, and the theories of the liquid state. Introduction to non-equilibrium statistics and quantum statistics. Offered occasionally.

CHEM 265. Chemical Kinetics 3 sem. hrs. Mathematical and phenomenological description of chemical rate processes and application to the solution of chemical problems. Offered alternate years.


CHEM 268. Infrared and Raman Spectroscopy 3 sem. hrs. General theories of molecular vibrations and applications of infrared and Raman spectroscopy to chemical problems. Offered occasionally.

CHEM 269. Selected Topics in Physical Chemistry 1-3 sem. hrs. High temperature chemistry, hot atom chemistry, phase equilibria, theoretical chemistry, and other special topics of current interest. Offered occasionally.

CHEM 271. Selected Topics in Biochemistry 1-3 sem. hrs. Topics of current interest in biochemistry. Offered occasionally.

CHEM 295. Independent Study 1-3 sem. hrs. Offered every term. Prereq: Cons. of dept. ch.

CHEM 296. Departmental Seminar 0 sem. hrs. Papers and discussions as a means of interpreting present trends in chemical research. Required of all full-time graduate students in chemistry. Offered every term. SNC/UNC grade assessment.

CHEM 297. Special Topics in Chemistry 0-1 sem. hrs. Topics of current interest in chemistry. Offered every term. SNC/UNC or S/U grade assessment, depending on credits.


CHEM 875. Graduate Assistant Teaching – Full-Time 0 sem. hrs. Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.


CIVIL ENGINEERING

Chair and Associate Professor: Wenzel
Director of Graduate Studies and Professor: Heinrich
Professor Emeritus: Faherty, Novotny, Zanoni
Professor: Karshenas, Switchenbaum, Vinnakota
Associate Professor: Crandall, Crovetti, Drakopoulos,
Foley, Melching, Zitomer
Assistant Professor: Wan
Adjoint Professor: Kueimmel
Adjunct Associate Professor: Sonntag, Vogel
Adjunct Assistant Professor: Dobereck, Meus
Note: Faculty members and their ranks are for the 2007–2008 academic year.

CIVIL ENGINEERING (CIEN)

DEGREES OFFERED
Master of Science; Doctor of Philosophy; Certificate

MISSION STATEMENT
The mission of the Department of Civil and Environmental Engineering is to educate students in the Catholic, Jesuit tradition. These students will be competent in their technical fields, appreciate the moral and ethical impact of their professional work, and continue their professional development throughout their careers. They will advance the state of technical and scientific knowledge through research and provide service to civic and professional communities.

SPECIALIZATIONS
M.S., Ph.D.: Construction/Public Works
Management, Environmental/ Water Resources Engineering, Structural/Geotechnical Engineering, Transportation Engineering and Planning


PROGRAM DESCRIPTIONS

CERTIFICATE PROGRAMS
The Department of Civil and Environmental Engineering offers five non-degree graduate certificate programs. The certificate programs are designed for practicing engineers and other qualified individuals with bachelor’s degrees, who wish to update and/or expand their knowledge in specific technical areas, but do not necessarily wish to pursue master’s or doctoral degrees.

DEGREE PROGRAMS
The master of science and doctor of philosophy degree programs are designed to provide graduate students with both broad fundamental knowledge and up-to-date information on current and emerging technologies. Students may enroll on either a full-time or part-time basis. Doctoral students and research-oriented master’s students (e.g., Plan A) engage in research activities under the close supervision of their advisors, gradually learning to become independent researchers. Their projects are often supported by government and industry grants. Courses and research projects make significant use of the department’s extensive laboratory and computational facilities. Graduates find employment in industry, government, academia, and research laboratories.

PREREQUISITES
FOR ADMISSION
Applicants should have graduated with, or be about to graduate with, a baccalaureate degree in an appropriate area of study from an accredited institution. In addition, doctoral applicants are required to have earned a master's degree in a related field. (In some instances, exceptional applicants may be considered for entry into the doctoral program without a master's degree.)

APPLICATION REQUIREMENTS
Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
In addition to completing their undergraduate degree requirements, students will take master’s level courses in their senior year. (Note that no course is permitted to satisfy both the undergraduate and graduate degree requirements in the Five-Year B.S.-M.S. program of the Department of Civil and Environmental Engineering.) The remaining master’s level course work is taken during the student’s fifth year. Students are strongly encouraged to pursue Plan A (thesis option), in which case work on the thesis research should begin the summer between the junior and senior years. Students will continue to gain research experience during the summer between the senior and fifth years, continuing throughout the fifth year and culminating in preparation of a written thesis and defense. Combined bachelor’s-master’s programs following Plan B (course work option) may also be designed for completion in five years.

CERTIFICATE REQUIREMENTS
Each graduate certificate program requires completion of four courses (12 credits) selected from a prescribed list of courses pertinent to the area of study. All courses taken must be approved for graduate credit, and at least two of the courses must be strictly graduate level (courses numbered 200 or above). Students must complete all courses within a three-year time period and must earn a grade point average of at least 3.00 with no grade below a C.

CONSTRUCTION ENGINEERING AND MANAGEMENT (12 credits)
CEEN 181, 280, 285, 295, and/or 298.

STRUCTURAL DESIGN (12 credits)

TRANSPORTATION (12 credits)
CEEN 175, 177, 271, 272, 273, 274, 275, 276, 277, 278, 279, 285, 295, and/or 298.

WATER AND WASTEWATER TREATMENT PROCESSES (12 credits)
CEEN 129, 154, 155, 156, 158, 159, 252, 253, 254, 258, 259, 295, and/or 298.

WATER RESOURCES ENGINEERING (12 credits)

MASTER’S REQUIREMENTS
Students may earn a master’s degree under either Plan A (thesis) or Plan B (non-thesis). Regardless of the option chosen, at least one-half of the total course work requirement must be taken at the 200-level. In most cases, master’s students are admitted to the program under Plan B but may transfer to Plan A with permission from their adviser. Note that recipients of teaching or research assistantships are required to pursue Plan A (thesis option). Plan A requires the student to complete 30 credit hours (24 hours of course work, 6 hours of thesis work), submit an approved thesis, and pass a final oral comprehensive examination (thesis defense). The comprehensive exam for Plan A is focused mainly on the student’s thesis topic. Under the Plan B option, students must complete 30 credit hours of course work and pass a final comprehensive examination. The comprehensive exam for Plan B is usually an oral exam, administered by the student’s three-person master’s committee. The scope of the Plan B comprehensive exam may span the student’s entire body of course work.

Both Plans A and B require that at least 18 credit hours be from the Department of Civil and Environmental Engineering course offerings.

DOCTORAL REQUIREMENTS
A doctoral student must complete a program of study prepared in consultation with his or her doctoral adviser and outlined on an approved Doctoral Program Planning Form. This form must be submitted within the first year of the student’s doctoral studies. The program normally requires a minimum of 45 credit hours of course work beyond the baccalaureate degree plus 12 credit hours of dissertation work. In cases in which the student enters the program with a master’s degree in civil engineering or a closely related field, the student may request that the department and the Graduate School allow credits from the master’s degree to satisfy up to 21 credit hours of the required course work. Thus, a minimum of 24 credit hours of course work exclusive of the dissertation must be taken at Marquette University while the student is in the doctoral program. The student must also pass a doctoral qualifying examination (DQE) and submit and successfully defend a dissertation.

A dissertation must represent an original research contribution showing high attainment and clear ability to do independent research. A public defense of the dissertation (the final oral examination) is administered after the student has completed all other formal requirements for the doctoral degree.

COURSE DESCRIPTIONS

UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:

CEEN 111. Matrix Structural Analysis 3 sem. hrs.

CEEN 114. Steel Design 2 3 sem. hrs.

CEEN 123. Urban Hydrology and Stormwater Management 3 sem. hrs.

CEEN 124. Air Pollution Engineering 3 sem. hrs.

CEEN 125. Mechanical and Electrical Systems for Buildings 3 sem. hrs.

CEEN 127. Water Resources Engineering 3 sem. hrs.

CEEN 128. Groundwater Engineering 3 sem. hrs.

CEEN 129. Geographical Information Systems in Engineering and Planning 3 sem. hrs.


CEEN 146. Advanced Concrete and Masonry Design 3 sem. hrs.
CEEN 147. Prestressed Concrete Design 3 sem. hrs.

CEEN 148. Timber Structures 3 sem. hrs.

CEEN 149. Bridge Design 3 sem. hrs.

CEEN 152. Sustainable Engineering 3 sem. hrs.


CEEN 155. Industrial Wastewater Management 3 sem. hrs.

CEEN 156. Treatment Plant Design and Operation 3 sem. hrs.


CEEN 158. Environmental Engineering Microbiology 3 sem. hrs.

CEEN 159. Municipal Solid Waste Management 3 sem. hrs.

CEEN 160. E-Business in the Construction Industry 3 sem. hrs.

CEEN 161. Construction Planning, Scheduling, and Control 3 sem. hrs.

CEEN 163. Foundation Engineering 3 sem. hrs.


CEEN 175. Pavement Management 3 sem. hrs.

CEEN 177. Advanced Transportation Materials 3 sem. hrs.


CEEN 185. Urban Planning for Civil Engineers 3 sem. hrs.

CEEN 186. Law for Engineers 3 sem. hrs.

CEEN 188. Topics in Civil Engineering 1-3 sem. hrs.

CEEN 193. Health, Environment, and Infrastructure in Latin America 3 sem. hrs.

GRADUATE COURSES:


Interpolation polynomials; numerical integration and differentiation; Taylor series, Fourier, cubic spline, and least-squares polynomial approximations; numerical solution of initial-value problems by prediction-correction and Runge-Kutta methods; numerical solution of boundary-value problems by finite difference method; numerical solution of integral equations; approximate solution of ordinary differential equations by weighted residuals and Galerkin methods; approximate solution of variational problems by Rayleigh-Ritz method. Offered alternate spring terms.

CEEN 213. Plastic Analysis of Structures 3 sem. hrs.


CEEN 215. FRP in Civil Engineering Infrastructure 3 sem. hrs.

Introduces Fiber Reinforced Polymer (FRP) material properties, FRP reinforced concrete, FRP prestressed concrete, FRP repaired and retrofitted structures, and FRP thin shells. Prereq: CEEN 144 or equiv. reinforced concrete design course.

CEEN 217. Structural Dynamics 3 sem. hrs.

Formulation of single-degree-of-freedom (SDOF) equation of motion; generalized SDOF systems; free-vibration response; harmonic excitation; periodic loading and Fourier series; impulsive loads; response (shock) spectra; general response by Duhamel and Fourier integrals; non-linear dynamic analysis; Rayleigh’s method; formulation of multiple-degree-of-freedom (MDOF) equations of motion; structural property matrices and load vectors; eigenvalue problem for natural frequencies and mode shapes; orthogonality of mode shapes; mode superposition. Offered fall term.

CEEN 218. Advanced Steel Design 3 sem. hrs.

Selected topics in advanced steel structural design; interpretation of specifications and codes for the elastic and plastic design of steel buildings. Discussion of the behavior of steel connections, members and structures; introduction to empirical design for axial, beam, plane stress, plate, shell, and solid elements; synthesis of global stiffness matrix, solution of the finite element equations; introduction to numerical implementation of FEM and general purpose FEM software. Offered alternate fall terms.

CEEN 219. Topics in Reinforced Concrete 3 sem. hrs.

Selected topics in advanced concrete structural analysis and design; torsion; interaction surfaces for beam-columns; two-way slab systems; analysis and design of walls for low-rise and multi-story buildings; shearwall-frame interaction; brackets, corbels and beam ledges; deep beams; concrete building systems; beam-to-column joint design. Discussion of the behavior of concrete members and structures and study of the relationship between behavior and design specifications. Use of commercial computer programs and their application in the design of concrete structures and components. Offered occasionally. Prereq: CEEN 110 and CEEN 111 and CEEN 144; or cons. of instr.

CEEN 220. Structural Engineering for Natural Hazard Mitigation 3 sem. hrs.

Introduction to the mechanics of ground motion (earthquake), the nature of wind (hurricane and tornado) and the effects of these phenomena on building and bridge structures. Introduction to structural dynamic principles in relation to structural analysis for wind and earthquake generated forces. Lessons learned from past earthquakes and extreme wind events. Discussion of the philosophies upon which code mandated earthquake and wind design forces are based (IBC, NEHRP). Introduction to state-of-the-art methods for estimating forces generated by tor-nadic winds and design of tornado shelter. Offered alternate spring terms. Prereq: CEEN 110 and CEEN 111 and CEEN 113 and CEEN 144; or cons. of instr.

CEEN 221. Nonlinear Structural Analysis 3 sem. hrs.

Application of the principle of virtual displacements in the formulation of element stiffness equations that include geometric and material nonlinearity. Determination of critical (buckling) loads of structural systems using eigenvalue analysis. Formulation and application of algorithms for nonlinear structural analysis. Application of commercial software in geometrically nonlinear analysis, material nonlinear analysis, and critical load (buckling) analysis. Offered alternate spring terms. Prereq: CEEN 111 or equiv.

CEEN 224. Theory of Elasticity 3 sem. hrs.

Mathematical preliminaries (indicial notation, vectors, Cartesian tensors, coordinate transformations, eigenvalue problems, divergence theorem); kinematic relations (strain-displacement and compatibility); stress tensor and traction vector; differential and virtual work expressions of equilibrium; constitutive relations; stored energy functions; formulation of elastostatics boundary value problems; uniqueness theorems; theorem of minimum potential energy; Saint-Venant’s principle; Saint-Venant beam theory; plane stress and plane strain. Offered spring term.


CEEN 245. Introduction to the Finite Element Method 3 sem. hrs.

Theoretical development of the finite element method (FEM) of analysis, with particular emphasis on problems of solid mechanics; development of element stiffness matrices for finite elements; plate, shell, and solid elements; synthesis of global stiffness matrix, solution of the finite element equations; introduction to numerical implementation of FEM and general purpose FEM software. Offered alternate fall terms.


Review of linear elastic finite element analysis (FEA) theory in solid/structural mechanics; review of commercial FEA code use (ANSYS®) in linear elastic applications; introduction to advanced theories, including theories of vibration, material nonlinearities, geometric nonlinearities, structural instabilities, and/or time-dependent deformations (creep); use of ANSYS® to simulate complex structural behavior; model development, verification, and improvement. Offered alternate spring terms. Prereq: CEEN 245 or equiv.

CEEN 248. Advanced River Engineering 3 sem. hrs.

Offers a solid background in the basic principles of open-channel hydraulics, gradually-varied flow, rapidly-varied flow, hydrologic and hydraulic flood routing, and river restoration/naturalization. Hand calculations of numerous open-channel flow problems, and application of the HEC-RAS program for flood routing. Review of HEC-1. Includes concepts for stream restoration/naturalization.
Prereq: Ceen 123; or cons. of instr.
Water resources planning, institutions, legislation
water resources, optimization, objective function in
quantity and quality modeling, benefit cost ratio in
process, economic principles in planning, water
standards. attainability of water quality goals.
include: water demand, pollutant loads from point and
nonpoint sources, watershed planning and manage-
ment process. Total Maximum Daily Load (TMDL)
principle, economic principles in planning, water
quantity and quality modeling, benefit cost ratio in
water resources, optimization, objective function in
water resources planning, institutions, legislation and
laws. Offered occasionally.
Prereq: CEE 123; or cons. of instr.

CEEN 250. Watershed Planning 3 sem. hrs.
Relation between water quality and quantity and
economical development. Effect of urbanization and
industrialization on water resources. Special topics
include: water demand, pollutant loads from point and
nonpoint sources, watershed planning and manage-
ment process. Total Maximum Daily Load (TMDL)
process, economic principles in planning, water
quantity and quality modeling, benefit cost ratio in
water resources, optimization, objective function in
water resources planning, institutions, legislation and
laws. Offered occasionally.
Prereq: CEE 123; or cons. of instr.

CEEN 251. Water Quality Modeling and
Management 3 sem. hrs.
Water and environment. Water quality criteria
and standards. Attainability of water quality goals.
Oxygen balance and self-purification. River, estu-
aries, and reservoirs water quality modeling. Toxicity
and bioassays. Limnological aspects, waste assim-
lative capacity. Groundwater protection, river and
estuary and groundwater quality management sys-
tems. Offered alternate fall terms.
Prereq: CEE 126; or cons. of instr.

CEEN 252. Biochemical Transformations in
the Environment 3 sem. hrs.
Study of biologically catalyzed chemical transfor-
mations in natural and engineered environments.
Presentation of microbiology, biologically impor-
tant oxidation-reduction reactions, bioenergetic
principles, fermentation kinetics, and toxicity
considerations relating to wastewater treatment and
remediation of contaminated groundwater and soil.
Review of aerobic processes for biochemical
oxygen demand reduction and ammonia oxidation,
anoxic processes for denitrification, and anaerobic
processes for reduction dechlorination. Offered
alternate spring terms.
Prereq: CEE 156; or cons. of instr.

CEEN 253. Environmental Laboratory 1 –
Analyses 3 sem. hrs.
Physical, chemical and biological analyses for the
characterization of waters, wastewaters, solid
wastes, sludges and leachates. Use of modern
instrumentation in laboratory analyses. Applicability
of analytical results to the environmental field.
Offered fall term. Prereq: CEE 150 or equiv. and
CEE 154 or equiv.

CEEN 254. Environmental Laboratory 2 –
Processes 3 sem. hrs.
Theoretical principles and laboratory experimenta-
tion governing the processes of settling, coagulation,
adsorption, flotation, disinfection, oxygen transfer,
biological treatment, and sludge conditioning,
thickening and dewatering. Offered alternate spring
terms.
Prereq: CEE 156 and CEE 253; or cons. of instr.

CEEN 258. Hazardous Waste Remediation
Technologies 3 sem. hrs.
Hazardous waste remediation technology selection.
Chemical kinetics, equilibria and mass transfer.
Aqueous phase treatment and solid/liquid separation
processes. Physical, chemical and biological inter-
actions under environmental conditions. Specific
technologies will include: physical barriers, bioreme-
diation, and soil vapor extraction, soil flushing and
chemical extraction, immobilization and chemical
and thermal destruction technologies. Multi-media,
multi-contaminant treatment approaches. Computer
model simulations and case studies. Offered occa-
sionally. Prereq: CEE 154 and CEE 156; or cons.
of instr.

CEEN 259. Physical and Chemical Processes
of Environmental Engineering 3 sem. hrs.
Theory and design of unit operations and processes
utilized for the treatment of water and wastewater,
including coagulation, flocculation, sedimentation,
filtration, adsorption, ion exchange and aeration.
Offered occasionally.
Prereq: CEE 154 and CEE 156.

CEEN 266. Geotechnical Aspects of Waste
Disposal 3 sem. hrs.
Review of basic soil mechanics, use of soil maps
and boring logs. Site investigations using soil bor-
ings, test pits, and laboratory and field permeability
tests. Basic geological and hydrogeological consid-
erations in site selection. Geotechnical aspects of
landfill design, including clay and synthetic mem-
brane liners, cover soil, leachate collection, and cut-
out walls, among others. Offered occasionally.
Prereq: CEE 270. Bituminous Materials 3 sem. hrs.
Study of the behavior and properties of asphalt
cement and hot mix asphalt pavement materials.
The chemistry and rheological properties of asphalt
cement as well as the physical properties of aggre-
gates are examined. Aspects of pavement perfor-
mance related to asphalt and aggregate properties
are studied. Mix design methods currently utilized
for hot mix asphalt production and performance-
based laboratory tests are examined. Offered alter-
nate spring terms.
Prereq: CEE 43 and CEE 177; or equiv.

CEEN 270. Bituminous Materials 3 sem. hrs.
Study of the behavior and properties of asphalt
cement and hot mix asphalt pavement materials.
The chemistry and rheological properties of asphalt
cement as well as the physical properties of aggre-
gates are examined. Aspects of pavement perfor-
mance related to asphalt and aggregate properties
are studied. Mix design methods currently utilized
for hot mix asphalt production and performance-
based laboratory tests are examined. Offered alter-
nate spring terms.
Prereq: CEE 43 and CEE 177; or equiv.

CEEN 271. Advanced Traffic Characteristics
and Design 3 sem. hrs.
Components of the Traffic System: Vehicle and
Road User characteristics, geometric design, traffic
controls. Intersection types, cross-section design
elements and typical dimensions. Basic variables of
traffic flow, observed traffic flow values. Freeway
operations. Signalized intersection: flow, capacity,
level of service. Projects addressing: intersection
existing conditions (traffic, geometry, signalization);
approach delay; safety performance; capacity;
suggestions for improvements. Use of the Highway
Capacity Manual and the Highway Capacity
Software. Emphasis on technical report-writing and
presentation. Offered fall term.
Prereq: CEE 170 or equiv.

CEEN 272. Advanced Urban Street Design
3 sem. hrs.
Planning considerations, highway system compo-
nents, design elements, including horizontal and
vertical alignment, cross sectional elements, sight
distance, intersections, parking, one way streets,
mass transit and bicycle considerations. Offered fall
term. Prereq: CEE 170 or equiv.

CEEN 273. Airport Planning and Design
3 sem. hrs.
Introduction to airport planning and design param-
eters, airport characteristics, payload versus range,
runway length requirements, air traffic control, wind
analysis, airside capacity and delay, airside separa-
tion criteria, terminal analysis and delay, airport
access flow and capacity, ramp charts. Economic
analysis of facility improvements. Offered fall term.
Prereq: CEE 170 or equiv.

CEEN 274. Advanced Pavement Design
3 sem. hrs.
Study of the behavior and properties of pavements
with emphasis on asphalt and portland cement
concrete pavements. Structural design of pavement
systems using current design methods. Use of com-
puter programs and their application in the design of
pavements. Offered alternate fall terms.
Prereq: CEE 174 or equiv.

CEEN 275. Advanced Highway Interchange
Design 3 sem. hrs.
Planning, analysis, design and operational analysis
of highway interchanges. Determination and adapt-
ability of interchange types for freeway-to-freeway
and service interchanges. Offered alternate fall
terms.
Prereq: CEE 172 and CEE 176; or cons. of instr.

CEEN 276. Advanced Traffic Engineering
3 sem. hrs.
Design, analysis and use of traffic control devices.
Traffic administration, traffic flow theory, and high-
way capacity. An introduction to computer aided
traffic engineering. Offered alternate spring terms.
Prereq: CEE 176; or cons. of instr.

CEEN 277. Advanced Traffic Management
3 sem. hrs.
Planning and operational considerations of
advanced freeway traffic management, incident
management and traffic signal control systems, free-
way corridor management, integration of transporta-
tion control systems, interrelationships and deploy-
ment of key elements of Intelligent Transportation
Systems (ITS). Offered alternate spring terms.
Prereq: CEE 176; or cons. of instr.

CEEN 278. Advanced Highway Planning and
Design 3 sem. hrs.
Highway planning. Alternative highway align-
ments. Alternative evaluation. Geometric design of
highways: horizontal and vertical alignment, cross-
section design. Projects on detailed design or
reverse curves (plan and profile views); intersec-
tion design; cross-section and earthwork quantities.
Legal aspects of engineering. Use of the American
Association of State Highway and Transportation
Officials (AASHTO) design guidelines, the Manual
on Uniform Traffic Control Devices (MUTCD), Wisconsin
Department of Transportation Facilities Development
Manual (FDM) and CalTRANS Design Manual.
Technical literature review on geometric design
topic. Offered spring term. Two hrs. lecture, two hrs.
lab. Prereq: CEE 170; or cons. of instr.

CEEN 279. Environmental Impacts of
Transportation 3 sem. hrs.
Environmental impact analysis, including air quality
analysis, noise impact methodology, energy policy
issues, water quality and transportation impacts on
wetlands and land use impacts of transportation.
Offered alternate spring terms.
Prereq: CEE 170; or cons. of instr.
CEEN 280. Construction Equipment and Methods 3 sem. hrs.
Construction equipment cost and productivity analysis. Design of equipment fleet operations. Building construction methods and design of temporary structures used during construction such as earth-retaining structures, formwork systems, and temporary bracing systems. Safety standards related to earthwork, concrete, masonry, carpentry and steel operations. Offered fall term.

Application of probability and statistics to modeling, analysis and design of civil engineering systems. Topics include: probability theory, decision theory, utility theory, and simulation. Offered spring term.
Prereq: CEEN 180 and MATH 164; or cons. of instr.

CEEN 286. Public Works Administration 1
3 sem. hrs.
Study of the duties and responsibilities of Public Works Administration. Internal management and organizational requirements and procedures for the operations of the organization are covered. Offered occasionally.

CEEN 287. Public Works Administration 2
3 sem. hrs.
Study of the duties and responsibilities of Public Works Administration. The managerial requirements and procedures of external relations are covered, along with political, social and ethical considerations. Offered occasionally.

CEEN 288. Object-Oriented Analysis and Design for Engineers 3 sem. hrs.
Application of the engineering systems development model to software analysis and design. Object-oriented concepts including classes, inheritance, polymorphism, and relationships. Component based design. Application of object technology in modeling and implementation of large engineering systems using a modern object-oriented language.
Prereq: Familiarity with a computer language.

CEEN 295. Independent Study 1-3 sem. hrs.
Offered every term.
Prereq: Cons. of instr and cons. of dept. ch.

CEEN 296. Graduate Seminar 1 sem. hr.
Review of current literature. Group discussion of recent work and current research by students and staff. Offered occasionally.

CEEN 298. Topics in Civil Engineering 3 sem. hrs.
Course content announced each term. Areas of topics may include structural optimization, design of structures for random loads, transportation systems analysis and design, water and wastewater systems analysis and design, and soil-structure interaction. Offered occasionally.

CEEN 299. Master’s Thesis 1-6 sem. hrs.
Offered every term. S/U grade assessment.
Prereq: Cons. of dept. ch.

CEEN 396. Seminar 0-3 sem. hrs.

CEEN 399. Doctoral Dissertation 1-12 sem. hrs.
Offered every term. S/U grade assessment.
Prereq: Cons. of dept. ch.

CEEN 867. Master’s Comprehensive Exam Preparation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 868. Master’s Comprehensive Exam Preparation – Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 869. Master’s Comprehensive Exam Preparation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 870. Doctoral Comprehensive Exam Preparation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 871. Doctoral Comprehensive Exam Preparation – Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 872. Doctoral Comprehensive Exam Preparation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 873. Graduate Standing Continuation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 874. Graduate Fellowship – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 875. Graduate Assistant Teaching – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 876. Graduate Assistant Research – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 877. Field Placement Continuation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 878. Field Placement Continuation – Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 879. Field Placement Continuation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 881. Thesis Continuation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 882. Thesis Continuation – Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 883. Thesis Continuation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 884. Professional Project Continuation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 885. Professional Project Continuation – Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 886. Professional Project Continuation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 887. Doctoral Dissertation Continuation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 888. Doctoral Dissertation Continuation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

CEEN 889. Doctoral Dissertation Continuation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.

Prereq: Cons. of dept. ch.

CLINICAL PSYCHOLOGY (CLPS)

Chairperson and Associate Professor: Wierzbicki
Assistant Chair and Associate Professor: Nielson
Director of Clinical Training and Associate Professor: Saunders
Professor: Franzoi, Guastello, Quereshi (Emeritus),
Sheikh
Associate Professor: Czech (Emeritus), de St. Aubin, Grych
Assistant Professor: Gerdes, Kaugars, Kuchan, Oswald, Sanders, Siderits, Torres, Van Hecke
Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREE OFFERED
Doctor of Philosophy

PROGRAM DESCRIPTION
The clinical psychology program offers courses and training leading to the degree of doctor of philosophy in clinical psychology. Students in the doctoral program acquire a master of science degree as they progress toward their doctoral degree. The doctoral program is accredited by the American Psychological Association (APA). Courses cover scientific areas of psychology, the historical foundations of psychology, research methods, and professional practice skills. Supervised clinical experiences are planned throughout the curriculum. Practica are available at the Department of Psychology's center for Psychological Services and with collaborating agencies in the Milwaukee urban area.

PREREQUISITES FOR ADMISSION
The applicant is expected to show evidence of adequate preparation in psychological and related sciences. The following courses are prerequisites to graduate study in clinical psychology: general psychology, psychological measurements and statistics, experimental psychology (with laboratory), personality theory, abnormal psychology, plus two additional
courses chosen from the following: psychology of learning, psychological testing, history and systems of psychology, biopsychology (physiological psychology), social psychology, and developmental psychology. One year of laboratory science in physics, biology, or chemistry, an undergraduate course in calculus, and a course in logic are strongly recommended.

APPLICATION DEADLINE
To be considered for admission, all application requirements must be completed and received in the Graduate School by December 15.

APPLICATION REQUIREMENTS
Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of reference, in letter form, briefly indicating educational and vocational plans.
4. Three letters of reference from individuals familiar with the applicant’s academic work and/or research experience.
5. Graduate Record Examination (GRE) test scores (General Test and Subject Test in psychology).
6. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

The highest ranking applicants will be invited to an interview with the Psychology Department’s Graduate Admission Committee.

DOCTORAL REQUIREMENTS
A doctoral student must complete a program of study defined, in conjunction with the director of clinical training, on an approved Doctoral Program Planning Form. Students obtain a master’s degree while in the doctoral program. The program requires a total of 84 credit hours of course work beyond the baccalaureate degree including: semestery enrollment in and attendance at a non-credit colloquium (PSYC 297), 6 credit hours of master’s thesis work, completion of an approved master’s thesis, successful completion of a doctoral qualifying examination (DQE), 12 credit hours of dissertation work, submission of an approved dissertation and an approved internship.

Required courses are: 21 credit hours in substantive core courses (PSYC 201, 202, 211, 223, 224, 225, 226, 227, 232, 235, 237), 6 credit hours in assessment (PSYC 222, 223, 224, 241), 12 credit hours in intervention (PSYC 238, 239, 240, 241), 12 credit hours of master’s thesis work, completion of an approved master’s thesis, successful completion of a doctoral qualifying examination (DQE), 12 credit hours of dissertation work, submission of an approved dissertation and an approved internship.

The student is required to complete a satisfactory master’s thesis and pass an oral defense. The defense is overseen by a committee of three department faculty and the defense constitutes the master’s comprehensive exam. Students who successfully defend their master’s thesis and who have completed at least 36 credit hours of study are awarded the master’s degree. Students must successfully complete the DQE to be advanced to doctoral candidacy.

Requirements to earn the master of science degree on the way to earning the doctoral degree total 42 credit hours: 30 credit hours of required course work (PSYC 221, 222, 223, 224, 241, 242, 250, 251, 252, 301, 302, 303), 6 credit hours of electives (PSYC 201, 202, 211, 222, 223, and/or 235), 6 credit hours of PSYC 299 (master’s thesis), a completed master’s thesis, and public defense of the thesis.

The doctoral student must complete an internship approved by the Psychology Department. Before the student is permitted to apply for internship, personal and professional readiness must be verified through meeting with the director of clinical training. Readiness is evaluated by both a review of the student’s graduate study portfolio and a “clinical exam,” which entails an oral examination of necessary clinical skills. Permission will be granted only to students who have scheduled the defense of the dissertation proposal. Students may not accept internship interviews unless the proposal has been approved.

A public defense of the dissertation will be conducted only after the student has completed all other formal requirements for the doctoral degree, with the possible exception of the internship. To conduct research projects, permission from the university Institutional Review Board must be obtained.

COURSE DESCRIPTIONS
UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT (WITH PERMISSION OF THE D.C.T.):

Psychology (PSYC)

PSYC 107. The Psychology of the Exceptional Child 3 sem. hrs.
PSYC 114. Human Factors Engineering 3 sem. hrs.
PSYC 131. The Psychology of Individual Differences 3 sem. hrs.
PSYC 132. Theories of Personality 3 sem. hrs.
PSYC 138. Childhood Psychopathology 3 sem. hrs.
PSYC 160. Psychology of Religion 3 sem. hrs.
PSYC 165. Human Sexuality 3 sem. hrs.
PSYC 166. Psychology of Gender Roles 3 sem. hrs.
PSYC 170. The Psychology of Death and Dying 3 sem. hrs.
PSYC 180. The Psychology of Fantasy and Imagination 3 sem. hrs.
PSYC 181. Psychology of Happiness 3 sem. hrs.
PSYC 198. Selected Topics in Psychology 3 sem. hrs.

GRADUATE COURSES:

Psychology (PSYC)

PSYC 201. History and Theoretical Foundations of Psychology 3 sem. hrs.
The history of psychology as a scientific discipline and of clinical psychology as a profession. Current relevant issues in the philosophy of science.

An experiential seminar for in-depth study of organizational diagnosis, change and development processes, motivation dynamics, creativity and innovation, leadership and group processes, negotiation, organizational culture and structure. Workshop format features interactive learning.

PSYC 204. Industrial Psychology and Organizational Development 3 sem. hrs.
An experiential seminar for in-depth study of organizational diagnosis, change and development processes, motivation dynamics, creativity and innovation, leadership and group processes, negotiation, organizational culture and structure. Workshop format features interactive learning.

PSYC 205. Personnel Selection 3 sem. hrs.
Theory and contemporary applications concerning job analysis; ability, aptitude, and personality, and other forms of pre-employment testing; racial bias in testing; performance appraisal; utility analysis for selection techniques; special selection requirements for management, sales, creative people, and other professionals; career choice and planning composition of work groups. Offered occasionally. Prereq: PSYC 125 or equiv.; and cons. of instr.

PSYC 211. Advanced Social Psychology 3 sem. hrs.
Analysis of social psychological theory and research, including self processes, attitudes, persuasion, social influence, prejudice, group behavior, interpersonal relationships, aggression, and helping behavior. Offered annually. Prereq: Cons. of instr; completion of B.A. or B.S. in management, social sciences, or engineering.

Examines the history, current theories and methods of cognitive psychology and cognitive neuroscience with emphasis on perception, attention, memory, language, and executive functions. Discusses the relevance of gender, age, and culture to cognitive process, as well as clinical applications. Offered annually. Prereq: Cons. of instr; admission to clinical program.
PSYC 224. Advanced Statistics and Design 1
3 sem. hrs.
Covers inferential statistics commonly used in psychological research. Topics include: probability and hypothesis testing; t-tests; one-way, two-way, and repeated measures analysis of variance; post-hoc and planned comparisons; correlation; bivariate regression; nonparametric statistics; power and effect size. Emphasizes identifying the appropriate statistical model for a research question, understanding the assumptions underlying the tests, and being able to compute and interpret the test statistics accurately. Use of statistical packages. Offered fall term. Prereq: PSYC 80 or equiv., and admission to clinical program or cons. of dept. ch.

PSYC 225. Advanced Statistics and Design 2
3 sem. hrs.
Statistics covered include: multiple regression, logistic regression, multivariate analysis of variance and covariance, principal components analysis, and exploratory factor analysis. Covers psychometric and procedures related to item selection, scale construction, reliability and validity. Emphasizes identifying the appropriate statistical model for a research question, understanding the assumptions underlying the tests, and being able to compute and interpret the test statistics accurately. Continued use of statistical packages. Offered spring term. Prereq: PSYC 224 and admission to clinical program or cons. of dept. ch.

PSYC 226. Advanced Statistics and Design 3
3 sem. hrs.
Experimental and quasi-experimental designs in psychological research. Single-case designs and time-series analysis in clinical research. Trend analysis and analysis of covariance. Meta-analysis and research synthesis in psychology. Selection of research projects, choice of appropriate experimental designs, and execution of research projects. Continued use of statistical packages. Offered annu-
ally. Prereq: PSYC 224 or equiv. and cons. of instr. or admission to clinical program.

PSYC 232. Advanced Personality Psychology
3 sem. hrs.
Covers major theoretical models and empirical approaches to the study of the person. Emphasis is placed on the current science of personality, the study of the whole person in context and over time. Offered occasionally. Prereq: Cons. of instr. or admission to clinical program.

PSYC 235. Physiological Psychology
3 sem. hrs.
The nervous system as the mediator of behavior. Physiological and neural factors in sensation, motor response, instinct, emotion, learning, and thinking. Offered occasionally. Prereq: Cons. of instr. or admission to clinical program.

PSYC 237. Abnormal Psychology 3 sem. hrs.
Scientific overview of psychopathology. Diagnostic criteria, etiology, and current treatments of important psychological disorders, including anxiety disorders, mood disorders, personality disorders, schizophrenia. Offered annually. Prereq: Cons. of instr. or admission to clinical program.

PSYC 238. Principles of Child Psychopathology and Intervention
3 sem. hrs.
Introduces students to research on the development of psychopathology in childhood, including attention to biological, family, and sociocultural influences on maladjustment. It also will describe approaches for interven ing clinically with childhood problems such as Attention Deficit Hyperactivity Disorder, conduct disorder, depression, and anxiety. Offered occasionally. Prereq: Cons. of dept.

PSYC 240. Psychological Assessment 1
3 sem. hrs.
Development of skills in the administration, scoring, interpretation, and integration of individual intelligence and achievement tests. Development of basic clinical assessment skills and understanding of the nature, development, etiology, and implications of individual differences in intelligence. Offered annually. Prereq: Admission to clinical program.

PSYC 241. Psychological Assessment 2
3 sem. hrs.
Extension of the assessment skills developed in PSYC 240; the administration and interpretation of projective techniques with emphasis on the Rorschach and TAT, special emphasis on the MMPI and report writing. Offered annually. Prereq: PSYC 240 and admission to clinical program.

PSYC 250. Clinical Interviewing 3 sem. hrs.
Basic listening skills, interviewing to establish diagnoses and treatment goals and plans, and the development of the therapist-client relationship. Prereq: Admission to graduate program or cons. of instr.

PSYC 251. Theories of Psychotherapy 1
3 sem. hrs.
Focuses on interpersonal, client-centered, and psychodynamic models of psychotherapy. Covers conceptual foundations, intervention strategies, and empirical research on effectiveness. Prereq: PSYC 250, admission to graduate program or cons. of instr.

PSYC 252. Theories of Psychotherapy 2
3 sem. hrs.
Focuses on the cognitive, behavioral, and cognitive-behavioral models of psychotherapy. Covers conceptual foundations, intervention strategies, and empirical research on effectiveness. Prereq: PSYC 250, admission to graduate program or cons. of instr.

PSYC 253. Theories of Psychotherapy 3
3 sem. hrs.
Elective course covering complementary, alternative and cross-cultural approaches to psychotherapy. Prereq: PSYC 250, admission to graduate program or cons. of instr.

PSYC 257. Family Therapy 3 sem. hrs.
Focuses on the evaluation and treatment of problems in couple and family functioning. It will introduce students to family systems theory and evaluate different models for assessing and intervening with couples and families. Offered occasionally. Prereq: Cons. of dept.

PSYC 295. Independent Study 1-3 sem. hrs.
Offered every term. Prereq: Cons. of dir. of clinical training.

PSYC 297. Departmental Colloquium
0 sem. hrs.
Research and scholarly reports on selected topics in scientific and professional psychology by visiting investigators, departmental faculty and graduate students. Offered every term. S/C/UN grade assessment. Attendance required of all full-time regular students.

PSYC 298. Selected Topics in General Psychology
3 sem. hrs.
Contemporary theoretical and research trends, particularly in areas of experimental, social, developmental, abnormal, quantitative or physiological psychology. Offered occasionally. Prereq: Cons. of dir. of clinical training.

PSYC 299. Master's Thesis
3-6 sem. hrs.
Offered every term. S/U grade assessment. Prereq: Cons. of dir. of clinical training.

PSYC 301. Ethics and Professional Issues in Clinical Psychology
3 sem. hrs.
A study of professional ethics drawing on APA guidelines, state statutes, research and case studies. Consideration of practice issues relevant to clinical psychology. Active participation in seminar presentations and formulation and resolution of ethical dilemmas. Offered occasionally. Prereq: Cons. of instr. or admission to clinical program.

PSYC 302. Multicultural Issues in Clinical Psychology
3 sem. hrs.
Designed to provide training in the culturally informed practice of clinical psychology. Students will learn to recognize and understand dimensions of cultural diversity in our communities, including (but not limited to) race, ethnic background and identity, sexual orientation, and religion. The course will also train students in developing culturally competent psychological interventions with individuals from diverse groups. Offered occasionally. Prereq: Cons. of instr. or admission to clinical program.

PSYC 338. Psychopharmacology
3 sem. hrs.
Study of the major classes of drugs, their physiological mechanisms of action, and their efficacy in the treatment of mental disorders. Offered occasionally. Prereq: PSYC 250 or equiv., PSYC 237, and cons. of instr. or admission to clinical program.

PSYC 339. Introduction to Neuropsychological Assessment
3 sem. hrs.
Prereq: PSYC 223, PSYC 225 or equiv., PSYC 240 and PSYC 241 or equiv., and cons. of instr. or admission to clinical program.

PSYC 353. Advanced Practicum in Clinical Psychology 0-3 sem. hrs.
Supervised experience in psychological assessment, interventions, and consultation. Students enroll in 6 credit hours over the course of study. A maximum of 6 credit hours can be applied to the credit hours required for the degree. Offered every term. Prereq: Admission to clinical program.

PSYC 354. Consultation and Supervision Strategies 1-3 sem. hrs.
Students attend weekly seminar on supervision and consultation strategies and models. Students conduct supervision of other clinical students under supervision on instructor or other clinical faculty. Offered annually; students attend both terms. Prereq: Cons. of dir. of clinical training.

PSYC 356. Teaching of Psychology
0 sem. hrs.
This seminar covers some of the theories and strategies of effective teaching, including creating syllabi, course management, lecture styles, student management issues, creating tests, grading and assessment strategies. Available to third and fourth year students. Meets all year, once or twice per month. Practice lectures with feedback will be incorporated. Students who plan to teach for the department or who plan on teaching as part of their careers should strongly consider taking this course. Offered annually; students must attend both terms. S/C/UN grade assessment. Prereq: Cons. of instr. and admission to clinical program.
PSYC 394. Internship in Clinical Psychology
0 sem. hrs.
All students in the doctoral program in clinical psychology are required to complete a full-year (2000 hours) internship program that meets the requirements for internship training as stipulated by the American Psychological Association. Registration for this full-time non-credit course in each of three terms during the internship year is obligatory. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 398. Topics in Clinical Psychology
Seminar 3 sem. hrs.
Seminar format in which special topics related to the assessment, etiology, or treatment of psychological problems are examined. A maximum of 3 credit hours can be applied to the credit hours required for the degree. Offered annually.
Prereq: Cons. of dir. of clinical training.

PSYC 399. Doctoral Dissertation
Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 399. Doctoral Dissertation
Preparation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 399. Doctoral Dissertation
Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 867. Master’s Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 867. Master’s Comprehensive Exam Preparation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 867. Master’s Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 870. Doctoral Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 870. Doctoral Comprehensive Exam Preparation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 870. Doctoral Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 875. Graduate Assistant Teaching – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 876. Graduate Assistant Research – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 881. Thesis Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 882. Thesis Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 883. Thesis Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 884. Professional Project Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 885. Professional Project Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 886. Professional Project Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 887. Doctoral Dissertation Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 888. Doctoral Dissertation Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

PSYC 889. Doctoral Dissertation Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dir. of clinical training.

COMMUNICATION (COMM)
Dean and Professor: Pauly
Associate Dean and Associate Professor: Meyer
Associate Dean for Graduate Studies and Research and Associate Professor: Wolburg
Assistant Dean: Richard
Chair of Advertising and Public Relations and Associate Professor of Advertising: Pokrywczynski
Chair and Associate Professor of Broadcast and Electronic Communication: Havice
Chair and Professor of Communication Studies: Shuter
Chair of Journalism and Associate Professor: Thorn
Professor: Badaracco, Goldowitz, Griffin, Helbert (Emeritus), Soley (Cyril & Gretchen Colnik Chair), L. Staudacher (Emeritus), Turner
Associate Professor: Ekchiae, Darayon, Garnes, Price (Emeritus), Scotton, Slattery
Assistant Professor: Berg, Chattapadhyay, D’Urso, Feldner, Grow, Ravel, Ugland, Webb
Adjunct Associate Professor: Krajec
Adjunct Assistant Professor: Campbell, Garinger, Hudson-Mauret, Loefler-Bell
Visiting Assistant Professor: Juraneck
Lecturer: Byers, Vollbrecht
Professional in Residence: Menck
Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREES OFFERED
Master of Arts; Certificate

SPECIALIZATIONS
Master’s: Advertising and Public Relations; Broadcast and Electronic Communication; Communication Studies; Journalism; Mass Communication; Science, Health and Environmental Communication

Certificate: Professional Communication

PROGRAM DESCRIPTION
The J. William and Mary Diederich College of Communication graduate program prepares students for intellectual, artistic, professional and ethical leadership in a complex technological and multicultural world. It uses a core of common knowledge, values, and communication skills to improve understanding of communication as a cultural and social process and to develop the skills necessary for success in constantly changing information environments. Graduate students are partners in the production of knowledge and are actively involved in systematic research and professional development which enables them to develop a mastery of the intellectual and professional content of the discipline. All students complete a core curriculum and develop a specialization in areas such as: advertising and public relations; broadcast and electronic communication; communication studies; journalism; mass communication; and science, health and environmental communication.

The program offers an interdisciplinary bridge between courses in a variety of areas and individual interests and goals. For example, students might wish to develop emphasis in such areas as: health communication or visual communication. Faculty advisers assist students in course planning and approve the final programs of study which are custom-tailored to meet individual needs. Advisers help students develop programs that can include supplements from health care, business, marketing, English, psychology, sociology, political science and others.

The program can be tailored for students who have undergraduate training in their field of choice, who are working as practitioners, as well as those who wish to teach or conduct research.

The program prepares students to work in a variety of settings from education to industry. Students study and work in an urban laboratory with a wide array of advertising, publications, and communications consulting firms, network television stations, leading radio stations, and one of the world’s most respected newspapers. Marquette alumni work in many of these organizations, which offers enriching opportunities for graduate students.

Core courses broaden knowledge about current communication theory and professional and research practices. Other courses examine social issues, help prepare students for industry leadership, and sharpen the students’ professional skills.

Upon the completion of the master of arts degree program in communication, graduates will be able to:
1. Articulate the historical, theoretical and methodological foundations of the discipline of communication.
2. Apply research-based, theory-informed knowledge to the identification and solution of real-life issues in the field.
3. Apply ethical decision-making skills in a variety of communication situations.
4. Integrate knowledge from theory, methods, and ethics from the discipline of communications to a particular specialization area (advertising and public relations; broadcast and electronic communication; communication studies; journalism; mass
communication; religious communication; science, health, and environmental communication).

PREREQUISITES FOR ADMISSION

For all master of arts specializations in communication and the certificate in professional communication, the applicant should have graduated with, or be about to graduate with, a bachelor's degree from an accredited institution and must have an undergraduate grade point average equivalent of at least 3.00 on a 4.00 scale. Master of arts applicants without sufficient academic or professional background will be required to take some undergraduate courses with no graduate credit to satisfy deficiencies.

APPLICATION REQUIREMENTS

Applicants to all specializations and the certificate in professional communication must submit, directly to the Graduate School:

1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation.
4. (For M.A. applicants only) a 300-word statement of academic and professional goals.
5. (For M.A. applicants only) GRE scores (General Test only). Minimum GRE scores are as follows: verbal 450, quantitative 450, and analytical 4.5; however, verbal plus quantitative scores must be at least 1,000.
6. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency. A minimum score of 600 on the paper-based version, 250 on the computer-based version, or 100 on the Internet-based version is required.

GENERAL INFORMATION

All papers and oral presentations produced by students in all classes are expected to conform to professional standards of lucidity, coherence, grammar, and syntax. All instructors in all classes in communication will consider the factors listed above, as well as substance, in grading written and oral presentations. Integrity is essential to any communication professional and is expected of students in communication. The worst offenses are plagiarism, unapproved collaboration, or falsifying work in whole or in part.

JOINT PROGRAM OF STUDY

M.A. IN COMMUNICATION AND IN POLITICAL SCIENCE OR IN INTERNATIONAL AFFAIRS

The J. William and Mary McDermott College of Communication, in conjunction with the Department of Political Science, offers a program of joint study leading to a master of arts degree in communication and a master of arts degree in political science or in international affairs. The program is designed for students whose interests overlap aspects of communication such as advertising, journalism, or broadcasting and politics. Joint degree students are able to complete both degree programs in less time than if both degrees were pursued separately.

Students seeking admission into the joint degree program must submit to the Graduate School separate applications for admission to both programs, including two sets of required documentation, and must meet the admission requirements of each program. Acceptance into one program does not guarantee acceptance into the other. If a student is accepted into one program and not the other, the student can still choose to accept the admission offer from the first program but would not be considered a joint degree student. Because students are officially admitted into only one Marquette University graduate program at a time, applicants must indicate which program they intend to pursue and complete first, although once accepted for admission to both programs, students may take courses from both departments. Upon completion of the first program, the student will be officially admitted to the second program for completion of the remainder of the joint program.

Joint degree students count 9 credits of course work in each program toward the required course work credits of the other program. Thus, 9 of the 30 credits required for the thesis track, or 9 of the 36 credits required for the non-thesis track for the master of arts degree in communication will come from POSC courses, and 9 of the 36 credits required for the master of arts degree in political science or in international affairs will come from COMM courses.

MASTER’S REQUIREMENTS

In addition to the credit requirements for Plan A (thesis track, 30 credits) or Plan B (non-thesis track, 36 credits), all students must satisfactorily pass a comprehensive examination. At least 50% of the credits must be at the 300-level or above.

THESIS TRACK (PLAN A)

Students must complete 24 credit hours of course work and 6 credit hours of thesis work (a total of 30 credit hours), pass a comprehensive examination, and submit an approved thesis. Students are required to orally defend their theses.

NON-THESIS TRACK (PLAN B)

All students are admitted to the program in Plan A (thesis) but may transfer to Plan B (non-thesis) with approval of the program. Non-thesis students must complete 36 credit hours of course work and pass a comprehensive examination. A professional project of 3 credit hours (COMM 289) can fulfill 3 of the 21 credit hours of course work.

COMPREHENSIVE EXAMINATION

All students are required to pass a comprehensive examination which tests their abilities to integrate theory and research methods in subject areas within their specializations. The exam normally is taken during the student’s final term and cannot be scheduled until the student has completed COMM 200 and 201.

REQUIRED CORE COURSES

All Plan A and Plan B students are required to take the following college core courses (15 credits total) in addition to those required for their areas of specialization.

COMM 200 Theories of Communication
COMM 201 Research Methods in Communication
COMM 206 Ethics in Communication

COMM 202 Qualitative Research Methods in Communication
COMM 203 Quantitative Research Methods in Communication

and at least one of the following:

COMM 202 Qualitative Research Methods in Communication
COMM 203 Quantitative Research Methods in Communication

and at least one additional course from:
COMM 202—215.

PROGRAM DETAILS

Upon admission to the graduate program, students are assigned faculty advisers to work with throughout their time at Marquette. Students work with their advisers to select courses that will meet their needs. Some areas of specialization require specific courses in addition to the core courses. Students must earn a grade point average of at least 3.00 with no grades below a C.

The specializations are described below along with any required course work.

ADVERTISING AND PUBLIC RELATIONS

Advertising and public relations is designed for those who wish to learn theory, research and professional skills needed to succeed in the dynamic world of marketing communications. Students may study in areas such as advertising and public relations or to focus in either field. Students are required to take three of the following courses: ADPR 240, ADPR 241, ADPR 242, and ADPR 296. ADPR 296 may be counted twice toward this requirement as long as the topics vary.

BROADCAST AND ELECTRONIC COMMUNICATION

This specialization is designed to provide students with the knowledge and skills necessary for the creative extension and application of theory to the development and utilization of audio and video messages in a variety of settings, particularly news and entertainment. Students may study in areas such as broadcast communication or broadcast journalism. Broadcast journalism is offered in conjunction with journalism.

COMMUNICATION STUDIES

Communication studies is designed for those interested in applying theory and research in the analysis of a variety of messages from diverse sources including organizations, families, media and political leaders, enabling graduates to work in a variety of careers from education to industry. Students must complete at least three of the following: COMM 207, COMM 208, COMM 212, CMST 257, or CMST 262.

JOURNALISM

The journalism specialization is designed to provide students with the theory, research and professional skills needed for the many varied media of journalism in the information age. Students may study in areas such as journalism, broadcast journalism or public affairs. Broadcast journalism is offered in conjunction with the broadcast and electronic communication academic area. Students with Plan A (thesis) emphasis must complete a Plan of Study with the help of their adviser to specify course selections in the specialization. Students with Plan B (non-thesis) emphasis must complete COMM 240, JOUR 242 and JOUR 243. Recommended electives are: COMM 209 (preferred), 210, 211, 213 and 215.

MASS COMMUNICATION

This interdisciplinary specialization is designed to provide students with both the theoretical background to understand mass communication phenomena and the specialized knowledge and skills necessary for professional work in a variety of mass communication fields.
For students who want to tailor their program to meet their individual needs, the mass communication specialization allows maximum flexibility. Students work with an adviser to design their program, which may include diverse areas such as global studies, visual communication, and media effects.

**SCIENCE, HEALTH AND ENVIRONMENTAL COMMUNICATION**

This interdisciplinary specialization provides students with the theory, research and fundamental professional knowledge needed (1) to understand the processes, roles and effects of communicating about science, health and environment interpersonally, in organizations and in society, and (2) to apply this understanding to the task of communicating technical, specialized information to a variety of audiences, especially non-expert, lay audiences.

Students following the Plan A master’s thesis track must complete a total of 36 credits: the required core courses (15 credits); JOUR 173 (3 credits), the master’s thesis (6 credits), and additional course work (CMST 146 is recommended) from relevant college and university courses that complement this specialization (6 credits).

Students following the Plan B non-thesis track must complete a total of 36 credits: the required core courses (15 credits), JOUR 173 (3 credits), the professional project related to this specialization (3 credits), and additional course work (CMST 146 is recommended) from relevant college and university courses that complement this specialization. The all-course option (no thesis or professional project) is not available in this specialization.

**CERTIFICATE IN PROFESSIONAL COMMUNICATION**

In addition to its master’s program, the J. William and Mary Diederich College of Communication also offers a non-degree, graduate certificate program in professional communication. This program provides an accordion certificate for bachelor’s and graduate degree holders.

The certificate in professional communication is for those who want to strengthen their communication skills in the workplace to solve professional communication challenges. The 15 credit hour certificate can stand alone or can be applied toward the master’s degree in communication for students admitted to the degree program.

**CERTIFICATE REQUIREMENTS**

The certificate in professional communication requires the completion of five courses for a total of 15 credits: two theory courses (6 credits), two professional skills courses (6 credits), plus a capstone course (3 credits). Students select specific courses in consultation with the associate dean of graduate studies and research in the Diederich College of Communication in order to best meet their needs and career goals. Students submit their plan of study, which must be approved by the associate dean.

**Theory Courses**

Students must choose two courses from the following list of theory courses: COMM 200, COMM 202, COMM 208, COMM 209, CMST 265, COMM 311, COMM 313. These courses provide students with an understanding of the ethical, psychological, sociological, organizational and/or persuasive aspects of various communication strategies and enable them to analyze a communication challenge in light of audience needs.

**Professional Courses**

Students must also choose two professional courses from the following list, which provide them with the professional skills needed to write and present information to the intended audience: ADPR 143, ADPR 148, ADPR 149, ADPR 151, ADPR 240, BREC 265, CMST 141, CMST 142, COMM 204, COMM 205, COMM 240, JOUR 151, JOUR 152, JOUR 173, JOUR 174, among others.

**Capstone Course**

Students must also complete the capstone course COMM 294. To complete their certificate, students will develop a professional communication project that will allow them to integrate learning from the theoretical and professional skills courses taken. This project culminates in a final paper, and will be supervised by a faculty member from the College of Communication, plus one additional member if appropriate to the student’s field of interest. This project will be completed as part of COMM 294.

** COURSE DESCRIPTIONS**

Following is a listing of all J. William and Mary Diederich College of Communication courses followed by area specialization courses.

**Communication (COMM)**

**UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:**

COMM 160. Mass Media and the American Family 3 sem. hrs.
COMM 162. International Communication 3 sem. hrs.
COMM 164. Introduction to Survey Research in the Communications Media 3 sem. hrs.
COMM 177. Media Management 3 sem. hrs.
COMM 181. Media and Politics 3 sem. hrs.
COMM 196. Seminar in Communication 1-3 sem. hrs.

**GRADUATE COURSES:**

COMM 200. Theories of Communication 3 sem. hrs.
Comm 200. Theory courses. Introduction to the theories used to understand the communication process. Students will learn to recognize, analyze and apply theory to communication-related problems or settings. Offered fall term.
Introduction to the characteristics of qualitative and quantitative methods used by professionals and scholars in communication. Students will learn to identify and analyze communication-related problems and derive research questions and appropriate methods. Offered spring term. Prereq: COMM 200.
Study of theory-based qualitative research applied to professional and scholarly problems and the effective communication of research results. Based on the fundamentals of theory and research methods offered in COMM 200 and COMM 201. Offered fall term. Prereq: COMM 200 or equiv. and COMM 201 or equiv.; or cons. of instr.
Study of theory-based quantitative research applied to professional and scholarly problems and the effective communication of research results. Based on the fundamentals of theory and research methods offered in COMM 200 and COMM 201. Offered fall term. Prereq: COMM 200 or equiv. and COMM 201 or equiv.; or cons. of instr.
COMM 204. International Communication 3 sem. hrs.
Development of international communication systems; flow of information, including news, entertainment and advertising. Influence of media systems upon international relations and national development. Comparison of media systems. Offered once every three years.
COMM 205. Communication Analysis and Design 3 sem. hrs.
Advanced study of human and mass communication content, audience analysis, public opinion formation, effects, message design and related topics. Offered once every three years. Prereq: Cons. of instr.
COMM 206. Ethics in Communication 3 sem. hrs.
Explores the role of ethics in professional and scholarly life. Students will learn ethical theories, how to analyze a communication related ethics problem, derive and answer a normative-question related to the problem and learn to critically analyze and evaluate texts from a variety of communicative settings. Offered spring term. Prereq: Cons. of instr.
COMM 207. Intercultural Communication 3 sem. hrs.
Examines the influence of culture on communication in international transactions and cross-cultural encounters within the United States. Explains the dynamics of intercultural communication between people from different societies as well as the interpersonal patterns of selected ethnic groups and races within the United States. Provides an analytical framework for analyzing intercultural exchanges. Offered once every three years.
COMM 208. Theories of Persuasion 3 sem. hrs.
Identification and examination of the role and influence of communication variables central to the process of persuasion in human and mass communication. Offered once every three years.
COMM 209. Media Law 3 sem. hrs.
Constitutional and administrative law principles affecting freedom of expression and mass communication. Laws and regulations which pertain to media management and business practices explicitly and exclusively applied to mass communication. May be taken in place of JOUR 203. Offered once every three years.
COMM 210. Communication History 3 sem. hrs.
Analysis of the origins and development of human and mass communication. Social, technological, political and economic influences of the growth and development of communication. Offered once every three years.
COMM 211. Media Economics and Management 3 sem. hrs.
Examines problems and issues in media economics and management. Emphasis on finance, personnel, advertising, audience promotion and research. Offered once every three years.

COMM 212. Seminar in Rhetorical Criticism 3 sem. hrs.
Explores the nature, function, principles, and methods of contemporary rhetorical criticism. Intergates a variety of critical approaches useful in describing, analyzing, interpreting and evaluating a variety of persuasive messages and contexts. Offered once every two years.

COMM 213. Sociology of Communication 3 sem. hrs.
The nature and function of human and mass communication as a function of sociological concepts. The role of social institutions and systems in forming the human response to communication. Offered once every three years.

COMM 214. Psychology of Communication 3 sem. hrs.
The nature and function of human and mass communication as a function of psychological concepts. Perception, cognition, comprehension, dynamics, semantics and symbols as related to human response. Offered once every three years.

Media as cultural forces associated with the diffusion of technological development and their economic, political and social consequences. Offered once every three years.

COMM 240. Proseminar and Multimedia Technology 3 sem. hrs.
Consists of a proseminar which requires students to read and respond to texts on program recommended reading list and hands on training in all aspects of media editing and production (e.g. print and Web page construction, audio production, video production). Offered fall term.

COMM 268. Independent Projects in Communication 1-3 sem. hrs.
Graduate student projects in applied and production areas under the supervision of a full-time faculty member. Offered every term. Prereq: Cons. of the associate dean for graduate studies.

COMM 289. Professional Project 1-3 sem. hrs.
Offered every term. S/U grade assessment. Prereq: Cons. of dept. ch., approved project proposal, and cons. of the associate dean for graduate studies.

COMM 294. Special Institute/Workshop/Project 1-3 sem. hrs.

COMM 295. Independent Study 1-3 sem. hrs.
Offered every term. Prereq: Cons. of dept. ch.; cons. of the associate dean for graduate studies.

COMM 296. Special Topics in Communication 3 sem. hrs.
Directed individual/group investigation of a selected topic or problem in communication. May be taken more than once when topics vary. Offered occasionally. Prereq: COMM 200 and COMM 201; cons. of the associate dean for graduate studies.

COMM 299. Master’s Thesis 1-6 sem. hrs.
Offered every term. S/U grade assessment. Prereq: Cons. of dept. ch.; approved thesis outline and cons. of the associate dean for graduate studies.

COMM 867. Master’s Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

COMM 869. Master’s Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

COMM 873. Graduate Standing – Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; cons. of associate dean for graduate studies.

COMM 874. Graduate Fellowship – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; cons. of associate dean for graduate studies.

COMM 875. Graduate Assistant Teaching – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; cons. of associate dean for graduate studies.

COMM 876. Graduate Assistant Research – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; cons. of associate dean for graduate studies.

COMM 881. Thesis Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; cons. of associate dean for graduate studies.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; cons. of associate dean for graduate studies.

COMM 883. Thesis Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; cons. of associate dean for graduate studies.

COMM 884. Professional Project – Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; cons. of associate dean for graduate studies.

COMM 885. Professional Project – Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; cons. of associate dean for graduate studies.

COMM 886. Professional Project – Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; cons. of associate dean for graduate studies.

Advertising and Public Relations (ADPR)

UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:

ADPR 142. Strategic Research for Advertising and Public Relations 3 sem. hrs.

ADPR 143. Marketing Communications Design and Production 3 sem. hrs.

ADPR 144. Advertising Copywriting 3 sem. hrs.

ADPR 145. Advertising Media Planning 3 sem. hrs.

ADPR 147. Advanced Advertising Copywriting 3 sem. hrs.


ADPR 149. Business to Business Communication 3 sem. hrs.

ADPR 150. Advertising, Public Relations, and the Internet 3 sem. hrs.

ADPR 151. Multicultural and International Advertising and Public Relations 3 sem. hrs.

ADPR 181. Public Relations Writing 3 sem. hrs.

ADPR 185. Cultural Identity, Media, and World Religions 3 sem. hrs.

ADPR 196. Seminar in Advertising and Public Relations 1-3 sem. hrs.

GRADUATE COURSES:

Intensive analysis of advertising and public relations theory and the factors affecting their management. Study of issues and situations in advertising and public relations decision-making, such as defining objectives, planning and strategy, budgeting, media selection, and agency/client relations. Offered fall term. Prereq: ADPR 140; or ADPR 140 or cons. of dept. ch.

Study of the origin and development of advertising and public relations. Analysis of their social, economic, and political influences. Special attention given to ethical issues. Offered spring term.

ADPR 242. Integrated Marketing Communication Campaigns: Merging Theory with Practice 3 sem. hrs.
Clarifies the fundamentals of integrating advertising and public relations into a marketing communications program. Integrates professional skills with theory through readings, professional speakers and the completion of an integrated marketing communications plan for a real client. Offered spring term. Prereq: ADPR 240 and ADPR 241.
BREC 263. Seminar in Broadcast and Electronic Communication (BREC)

UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:

BREC 135. Advanced Scriptwriting
3 sem. hrs.

BREC 146. Television Reporting
3 sem. hrs.

BREC 147. News and Information Gathering
3 sem. hrs.

BREC 150. Advanced Television Production and Direction
3 sem. hrs.

BREC 156. Technology and Learning
3 sem. hrs.

BREC 157. Multi-Media Authoring
3 sem. hrs.

BREC 164. Television Criticism
3 sem. hrs.

BREC 170. Radio Programming
3 sem. hrs.

BREC 171. Television Programming
3 sem. hrs.

BREC 183. Early History of Broadcasting
3 sem. hrs.

BREC 184. American Television: 1946-Present
3 sem. hrs.

BREC 186. Communication and Social Issues of the Internet
3 sem. hrs.

BREC 197. Topics in Broadcast and Electronic Communication
1-3 sem. hrs.

GRADUATE COURSES:

BREC 260. Telecommunications and Public Policy
3 sem. hrs.

Analysis of the public policy process and its impact on the development of telecommunication systems. Examination of current policy issues relating to content, structure, economics, and technological change. Offered once every three years.

BREC 263. Seminar in Broadcast and Electronic Communication
3 sem. hrs.

Directed individual/group investigation of a selected topic or problem in broadcast communication. May be taken more than once when topics vary. Offered occasionally.

BREC 264. Special Topics in Broadcast and Electronic Communication
1-3 sem. hrs.

Topics of current interest in broadcast and electronic communication. May be taken more than once when topics vary. Offered occasionally. Prereq: Enrolled in Graduate School.

BREC 265. Multimedia Communication
3 sem. hrs.

Surveys the technology, role and management of electronic media in education, business and industry. Emphasizes design and evaluation of purposive communication through electronic media. Offered once every three years.

BREC 268. Independent Projects in Broadcast and Electronic Communication
1-3 sem. hrs.

Student projects in designated areas of special interest. Offered every term. Prereq: Cons. of dept. ch.; cons. of the associate dean for graduate studies.

Communication Studies (CMST)

UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:

CMST 121. Principles and Methods of Teaching Speech Communication
3 sem. hrs.

CMST 124. Directing Speech Activities
3 sem. hrs.

CMST 132. Organizational Communication
3 sem. hrs.

CMST 133. Group Dynamics
3 sem. hrs.

CMST 134. Communication and Conflict
3 sem. hrs.

CMST 135. Communication Approaches to Training and Development
3 sem. hrs.

CMST 136. Managerial Communication
3 sem. hrs.

CMST 137. Gender and Communication
3 sem. hrs.

CMST 140. Intercultural Communication
3 sem. hrs.

CMST 141. Cross-Cultural Communication in the United States
3 sem. hrs.

CMST 142. Communicating in Multinational Organizations
3 sem. hrs.

CMST 144. Leadership and Communication
3 sem. hrs.

CMST 145. Family Communication
3 sem. hrs.

CMST 146. Health Communication
3 sem. hrs.

CMST 147. New Communication Technologies in the Workplace
3 sem. hrs.

CMST 150. Philosophy of Communication
3 sem. hrs.

CMST 156. Classical Rhetorical Theory
3 sem. hrs.

CMST 157. Modern Rhetorical Theory and Criticism
3 sem. hrs.

CMST 160. Rhetoric of Social Movements
3 sem. hrs.

CMST 166. Freedom of Speech
3 sem. hrs.

CMST 170. Communication and Urban Families
3 sem. hrs.

CMST 180. Communication Audits and Consulting
3 sem. hrs.

CMST 196. Seminar in Communication Studies
1-3 sem. hrs.

GRADUATE COURSES:

CMST 257. Seminar in Intercultural Communication
3 sem. hrs.

Explores new directions in research in interpersonal communication. Focuses on communication in the following relationships: friendships, dating, and marriage. Emphasizes the theoretical perspectives and the methodological approaches that enable us to understand how communication processes and relationship development inform each other. Offered once every three years.

CMST 262. Seminar in Organizational Communication
3 sem. hrs.

Directed individual/group investigation of a selected topic or problem in communication and rhetorical studies. May be taken more than once when topics vary. Offered occasionally. Prereq: COMM 200 and COMM 201; approval of the associate dean for graduate studies.

Film (FILM)

UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:

With approval of the adviser, one or more of the following film courses may be taken for graduate credit.

FILM 110. History of Film
3 sem. hrs.

FILM 111. Issues in Film Studies
3 sem. hrs.

FILM 115. Film as Art
3 sem. hrs.

FILM 116. Film and Popular Culture
3 sem. hrs.

FILM 166. The Documentary
3 sem. hrs.

FILM 196. Seminar in Film
1-3 sem. hrs.
Journalism (JOUR)

**UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:**

JOUR 100. Publications Editing 3 sem. hrs.

JOUR 110. Persuasive Writing 3 sem. hrs.

JOUR 111. Feature Writing 3 sem. hrs.

JOUR 112. Critical Writing 3 sem. hrs.

JOUR 150. Newspaper Design and Production 3 sem. hrs.

JOUR 151. Magazine Design and Production 3 sem. hrs.

JOUR 152. Web Design and Production for Journalists 3 sem. hrs.


JOUR 171. Communication of Urban Issues 3 sem. hrs.

JOUR 172. Religious Journalism 3 sem. hrs.


JOUR 175. Public Affairs Reporting 3 sem. hrs.


JOUR 182. News Media and Foreign Policy 3 sem. hrs.

JOUR 185. School Publications 3 sem. hrs.

JOUR 196. Seminar in Journalism 1-3 sem. hrs.

**GRADUATE COURSES:**

JOUR 202. Seminar in Media History 3 sem. hrs.

JOUR 203. Seminar in Media Law 3 sem. hrs.

JOUR 205. Seminar on Mass Media in Contemporary Society 3 sem. hrs.

JOUR 206. Journalism as Literature 3 sem. hrs.

JOUR 211. Religious Communication 3 sem. hrs.

JOUR 212. Religious Communication 3 sem. hrs.

JOUR 213. Political Analysis 3 sem. hrs.


JOUR 243. Specialized Reporting 3 sem. hrs.

JOUR 296. Special Topics in Journalism 1-3 sem. hrs.

Music (MUSI)

**UPPER DIVISION COURSE THAT MAY CARRY GRADUATE CREDIT:**

MUSI 152. History of the Musical in America 3 sem. hrs.

Theatre Arts (THAR)

**UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:**

THAR 120. Lighting Design 3 sem. hrs.

**COMPUTING (COMP)**

Program Director and Professor: Harris
Professor: Bankston, Corliss, Hock, Karshenas, Krenz
Associate Professor: J. Factor, Feng, Riedel, Simms, Slattery
Assistant Professor: Ahmed, Brylow, K. Factor, Johnson, Madiraju, Povinelli, Struble

Note: Faculty members and their ranks are for the 2007-2008 academic year.

**DEGREE OFFERED**

Master of Science, students are admitted under Plan B (non-thesis option) but Plan A (thesis option) is also offered

**PROGRAM DESCRIPTION**

The program is designed to meet the educational needs of present and future computing professionals interested in starting a career or updating their skills in areas such as systems analysis, software engineering, database design and administration, network design and administration, systems engineering, and technical support. Students may select courses (including some designated as EECE, MSCS, CSEN, COEN and COSC) from a large number of approved courses offered by the Department of Electrical and Computer Engineering, the Department of Mathematics, Statistics and Computer Science and other units on campus. Students may pursue the degree on a full-time or part-time basis. Many courses are offered evenings.

**PREREQUISITES FOR ADMISSION**

Applicants must have completed or be in the process of completing a bachelor’s degree from an accredited college or university. Applicants should also have taken at least two terms of computer programming courses in a modern computer program-
COUNSELING AND EDUCATIONAL PSYCHOLOGY

APPLICATION REQUIREMENTS

Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Essay outlining relevant work experience or education, career goals, possible areas of interest, and reasons for seeking admission to this program.
4. Three letters of reference from professors or professionals familiar with the applicant’s abilities, academic work, and/or professional background.
5. (For international applicants only) a TOEFL score (minimum 600 on the paper-based version, 250 on the computer-based version, 100 on the new Internet-based version including Speaking, or 75 on the new Internet-based version not including Speaking) or other acceptable proof of English proficiency.

GENERAL INFORMATION

Students interested in applying to the program should consult the program Web site www.comp.mu.edu for a list of the currently approved courses for the degree and scheduled course offerings for the next term.

MASTER’S REQUIREMENTS

Students are admitted to the program under Plan B (non-thesis option), and most students graduate under this plan. Students may transfer to Plan A (thesis option) on approval of a thesis outline by their adviser and the Computing Graduate Committee. The course of study is very flexible. Students complete a breadth requirement, primary and secondary concentrations, and additional courses suited to their backgrounds and career goals. The program director and faculty advisers work very closely with students to ensure that they achieve their educational goals through appropriate course selection.

BREADTH REQUIREMENT (12 CREDITS)

Computing students experience the breadth of the field. Students complete (or have completed before entering the program) at least three credits in four of the following five areas:
1. Information Management: COSC 153 or COEN 150
2. Architecture and Organization: COEN 171, COEN 173, or have completed COSC 65 before beginning the program
3. Operating Systems: COSC 125 or COEN 182
4. Programming Concepts and Skills: COSC 152 or COEN 190
5. Software Engineering: COSC 158 or COEN 181

More advanced 200-level classes designated by the program in each area also satisfy the breadth requirement.

CONCENTRATIONS (18 CREDITS)

Computing students gain both breadth and an in-depth knowledge of their field. Concentrations provide in-depth knowledge areas and often reflect possible long-term career objectives. Each student must have one primary concentration of at least 12 credits, and one different secondary concentration of at least six credits. For students in Plan A (thesis option), the six thesis credits are considered a secondary concentration.

Courses taken to satisfy the breadth requirement also count toward primary and secondary concentrations. No course may be counted toward satisfying both a primary and a secondary concentration. The breadth and concentration requirements may be satisfied with any combination of approved 100- and 200-level classes, subject to the overall Plan A or Plan B requirements for 200-level credits.

Primary or secondary concentrations include:
- Foundations of Computation
- Distributed Computing
- Software Engineering, Programming Concepts and Skills
- Intelligent Systems and Information Management
- Architecture and Organization

Specific courses in each concentration are designated by the computing program.

ADDITIONAL COURSE WORK

Courses beyond the breadth and concentration requirements are taken from a list of computer science and computer engineering courses approved by the computing program. Six out-of-program elective credits may be selected from other Marquette graduate courses germane to computing or its applications.

Plan B Option (36 credits)

Students must complete 36 credit hours of course work, of which at least 18 hours must be earned in graduate-level courses (200-level and above).

Plan A Option (30 credits)

Students must complete 24 credit hours of course work, of which at least 12 hours must be earned in graduate level courses (200-level and above). Students must also complete a master’s thesis for 6 credit hours and pass a comprehensive oral examination concentrated on the thesis. The six thesis credits are considered a secondary concentration.

COUNSELING (COUN)

See COUNSELING AND EDUCATIONAL PSYCHOLOGY (COEP)

COUNSELING AND EDUCATIONAL PSYCHOLOGY (COEP)

Chair and Associate Professor: Campbell Professor: Bloom, Fox, Ivanoff (Emeritus), Nordberg (Emeritus), Wiener Associate Professor: Bardwell, Burkard, Knox, Melchert, Taft
Assistant Professor: Edwards

Note: Faculty members and their ranks are for the 2007-2008 academic year.

DEGREES OFFERED

Master of Arts, Plan A (thesis option) or Plan B (non-thesis option), Doctor of Philosophy

PROGRAM DESCRIPTIONS

The Department of Counseling and Educational Psychology offers master’s degree programs in counseling and educational psychology and a doctoral degree program in counseling psychology.

COUNSELING

Our master’s in counseling program includes a variety of courses, practicum, and other training experiences which offer comprehensive preparation for professional practice as a counselor or therapist. Course work focuses on human development, psychopathology, psychological research, and ethical and legal issues as well as individual, group, and other counseling interventions. Training in counseling skills begins right in the first semester, and formalized internship usually begins in the second year. Specializations are offered in community counseling (including emphases in child and adolescent or addiction-mental health counseling) or school counseling.

COUNSELING PSYCHOLOGY

Our doctoral program in counseling psychology is based on a scientist-practitioner model for training professional psychologists, and is fully accredited by the American Psychological Association. Students acquire a solid foundation of knowledge in the biological, cognitive, affective, individual, and social bases of human behavior. Through course work in research design, measurement, and statistics, students develop the skills needed to critically evaluate psychological research and to conduct their own independent research. Training in diagnosis, assessment, psychotherapy, consultation, practica, internship, and ethics provides students with the necessary professional skills to practice as competent and ethical counseling psychologists. Supervised practica and internship experiences are available through the university’s Counseling Center and at a wide variety of community sites. Graduates are prepared to practice as psychologists, professors, consultants, administrators, and researchers.

EDUCATIONAL PSYCHOLOGY

The objectives of the master’s program in educational psychology are to provide knowledge and skills in the principal content areas of basic and applied psychology as required for the preparation of researchers and consultants for work in diverse settings, such as private and public schools, colleges and universities, research centers, and business and industry.

PREREQUISITES FOR ADMISSION

Applicants to all graduate programs in the Department of Counseling and Educational Psychology should have graduated with, or be about to graduate with, a bachelor’s or a master’s degree from an accredited institution appropriate to their chosen field of graduate study. Students applying to a doctoral program without a master’s degree must complete an appropriate master’s degree as part of their doctoral program requirements.

APPLICATION DEADLINES

Students are admitted to the department in the spring term to begin their programs the following summer or fall. To be considered for admission, all application requirements must be completed and received in the Graduate School by the deadlines listed below:

December 1 For admission to doctoral program in counseling psychology
February 1 For admission to master’s programs in counseling and in educational psychology

APPLICATION REQUIREMENTS

Applicants, regardless of program, must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation along with doctoral requirements.
4. Three letters of recommendation along with master's requirements.
5. A resume/vita.
6. GRE scores (General Test only).
7. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

After all applications are reviewed, the highest ranking applicants will be contacted for an interview with the faculty. This is required for admission. International applicants residing in foreign countries and applicants with extenuating circumstances may conduct their interviews over the phone.

MASTER'S REQUIREMENTS

COUNSELING
The master of arts degree program in counseling is offered with specializations in community or school counseling. Both specializations require a minimum of 48 credit hours and successful completion of a comprehensive examination.

Community counseling requires the following core course work:
- COUN 216, 217, 218, 219, 220, 222, and 235; EDPS 261 and 286; COPS 288 and 283; and COUN 230.

School counseling requires the following core course work:
- COUN 216, 217, 218, 219, 220, 222, and 289 (topic must focus on the politics of educational systems); EDPS 261 and 286; COPS 288 and 283; and COPS 273.

As part of their course work, students in each specialization must also complete field experiences, practicum and an internship in a clinical or educational setting. More detailed requirements for each of the specializations can be obtained from the department office. The master of arts degree can be completed under Plan A, which requires a thesis, or Plan B, which does not require a thesis.

EDUCATIONAL PSYCHOLOGY
The master of arts degree in educational psychology requires a minimum of 30 credit hours and successful completion of a comprehensive examination. The program requires 18 credits of core course work in human development; the theories, philosophies, and psychology of learning; intermediate-level statistics and research methods; and measurement. The remaining elective course work allows students to tailor their program to be consistent with a variety of educational and career goals. The master of arts degree can be completed under Plan A, which requires a thesis, or Plan B, which does not require a thesis.

DOCTORAL REQUIREMENTS

COUNSELING PSYCHOLOGY
The counseling psychology program consists of 30 credits of course work in psychological foundations, 46 credits of course work in the counseling psychology professional core, a minimum of 1600 hours of clinical practicum, a collaborative research project and a 12-credit dissertation, and an approved 2000-hour clinical internship typically completed in one calendar year. Specific course requirements can be obtained from the department office. Students who have completed relevant graduate course work prior to entry into the program may have some of their requirements waived if the previous course work is equivalent to the courses currently required by the program.

Students must pass a portfolio doctoral qualifying examination (DQE) which is evaluated near the end of their course work in the program. Students must pass the portfolio DQE and have their dissertation proposals accepted before they can apply for an internship. To be advanced to candidacy, students must complete the DQE, have their dissertation proposal accepted, and complete all program course work and the Graduate School's residency requirement.

COURSE DESCRIPTIONS

GRADUATE COURSES:

Counseling (COUN)

COUN 216. Introduction to Counseling (3 sem. hrs.)
Introduction to the philosophical bases, history, and development of counseling as a profession. Includes basic skills training, counselor roles and functions in various settings, and current issues in counseling. Usually offered fall term. Prereq: Cons. of dept. ch.; concurrent field experiences may be required.

COUN 217. Individual Counseling (3 sem. hrs.)
Examines the theory and research on individual counseling and therapy. Also emphasizes skill development in the techniques and methods of counseling and psychotherapy. Concurrent field experiences may be required. Usually offered spring term. Prereq: COUN 216 and EDPS 266 and cons. of instr.; or COPS 316 and EDPS 268 and cons. of instr.; admis. to degree program.

COUN 218. Group Counseling (3 sem. hrs.)
Purposes, functions, types, and principles of group counseling. Dynamics of group interaction. Leadership of groups. Understanding of and ability to engage in and evaluate small group processes and relationships. Students experience group processes and the therapeutic value of groups by participating as members of an in-class group. Usually offered fall term. Prereq: COUN 218 and COUN 222; concurrent field experiences may be required.

COUN 219. Career Development (3 sem. hrs.)

COUN 220. Assessment in Counseling (3 sem. hrs.)

COUN 222. Theories of Counseling and Psychotherapy (3 sem. hrs.)
Review and critical analysis of major theoretical systems of counseling and psychotherapy. Focus on comparative evaluation of theoretical orientations as they apply to counseling. Usually offered spring term.

COUN 227. Counseling with Children and Adolescents (3 sem. hrs.)
Developmental stages and tasks of children and adolescents; theories and techniques of developmental and remedial counseling with children and adolescents; warning signs, possible causes, and prevention and intervention strategies of behavior problems. Usually offered summer term. Prereq: COUN 216 and COUN 217 and COUN 222.

COUN 228. Introduction to School Counseling (3 sem. hrs.)
Focuses on the principles and techniques of counseling and developmental guidance with children. Covers consultation with parents and school personnel, program planning and curriculum intervention, roles and functions of counselors and other school personnel, and contemporary school counseling issues. Usually offered spring term. Prereq: COUN 216 and EDPS 266 and cons. of dept. ch.

COUN 230. Psychopathology and Counseling Processes (3 sem. hrs.)

COUN 233. Introduction to Family Counseling (3 sem. hrs.)
Introduction to theoretical approaches and methods of family counseling. Overview of the history and current issues in family counseling. Usually offered spring term. Prereq: COUN 218, and concurrent or previous enrollment in COUN 222.

COUN 235. Etiology and Treatment of Substance Abuse (3 sem. hrs.)
Introduction to the prevention and treatment of substance abuse disorders. Emphasizes research supported prevention and intervention strategies, and counseling skills and approaches designed to meet individual client needs. Appropriate for students in behavioral health and related fields. Usually offered summer term.

COUN 269. Counseling Practicum (1-4 sem. hrs.)
Supervised practice experiences that total a minimum of 100 clock hours must be completed over the minimum of an academic term. Practicum includes all of the following: 1. 40 clock hours of direct service that leads to the development of counseling skills; 2. Weekly interaction with an average of one (1) hour per week of individual and/or triadic supervision throughout the practicum by a program faculty member, a student supervisor, or a site supervisor working in a bi-weekly consultative with a program faculty member; 3. An average of one and one half (1½) hours per week of group supervision that is provided on a regular schedule throughout the practicum by a program faculty member or a site supervisor working in bi-weekly consultation with a program faculty member; 4. Opportunity for the student to develop program-appropriate audio/video recordings for use in supervision, and/or to receive live supervision of the student’s interactions with clients; and 5. Evaluation of the student’s counseling performance throughout the practicum including documentation of a formal evaluation after the student completes the practicum. S/U grade assessment. Prereq: Cons. of dept. ch.
COUN 270. School Counseling Practicum
1-4 sem. hrs.
Supervised practicum experiences that total a minimum of 100 clock hours must be completed over the minimum of an academic term. Practicum includes all of the following: 1. 40 clock hours of direct service that leads to the development of counseling skills; 2. Weekly interaction with an average of one (1) hour per week of individual and/or triadic supervision throughout the practicum by a program faculty member, a student supervisor, or a site supervisor working in bi-weekly consultation with a program faculty member; 3. An average of one and one half (1½) hours per week of group supervision that is provided on a regular schedule throughout the practicum by a program faculty member or a student supervisor; 4. Opportunity for the student to develop program-appropriate audio/video recordings for use in supervision, and/or to receive live supervision of the student's interactions with clients; and 5. Evaluation of the student's counseling performance throughout the practicum including documentation of a formal evaluation after the student completes the practicum. S/U grade assessment.
Prereq: Cons. of dept. ch.

COUN 294. Institute 1-3 sem. hrs.
Topical institutes on various issues and problems in counseling. Scheduled according to need and demand. Offered occasionally.

COUN 296. Internship in Counseling
1-6 sem. hrs.
Supervised counseling experiences in assessment, diagnosis, intervention, prevention, and consultation. Students engage in their practicum activities at approved sites in the greater Milwaukee area and meet on campus weekly for a didactic seminar and group supervision. Attendance at the monthly departmental colloquium also required. Three credits of internship requires a minimum of 300 clock hours of practicum activities. S/U grade assessment.
Prereq: COPS 273 and COUN 216 and COUN 220 and COPS 287 and cons. of dept. ch.; COUN 218 and 220 and COPs 268 must be taken prior to or concurrently with COUN 269; additional prerequisites may be required within each area of specialization.

COUN 298. Special Topics in Counseling
2-3 sem. hrs.
In-depth study of theories and concepts in counseling which, because of their topicality, are not the subject of a regular course. The special topics will be designated in the Schedule of Classes. Offered occasionally. Prereq: Cons. of instr.

COUN 867. Master's Comprehensive Exam Preparation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

COUN 868. Master's Comprehensive Exam Preparation – Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

COUN 869. Master's Comprehensive Exam Preparation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

Counselling and Educational Psychology (COEP)

COEP 294. Independent Research
1 sem. hr.
S/U grade assessment. Offered every term.
Prereq: Cons. of instr. and cons. of dept. ch.

COEP 295. Independent Study
1-3 sem. hrs.
Provides graduate students opportunities to investigate and study areas of interest through readings, research, field experience, projects, and/or other educational activities under the direction of a faculty advisor. Normally on advanced or specialized topics that are not covered by regularly offered courses. Offered occasionally.
Prereq: Cons. of instr. and cons. of dept. ch.

COEP 299. Master's Thesis
1-6 sem. hrs.
Prereq: Cons. of instr. and cons. of dept. ch.

COEP 399. Doctoral Dissertation
1-12 sem. hrs.
Prereq: Cons. of instr. and cons. of dept. ch.

COEP 873. Graduate Standing Continuation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

COEP 874. Graduate Fellowship – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

COEP 875. Graduate Assistant Teaching – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

COEP 876. Graduate Assistant Research – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

COEP 877. Field Placement Continuation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

COEP 878. Field Placement Continuation – Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

COEP 879. Field Placement Continuation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

COEP 881. Thesis Continuation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

COEP 882. Thesis Continuation – Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

COEP 883. Thesis Continuation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

COEP 887. Doctoral Dissertation Continuation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

COEP 888. Doctoral Dissertation Continuation – Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

COEP 889. Doctoral Dissertation Continuation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

Counseling Psychology (COPS)

COPS 263. Behavior Therapy
3 sem. hrs.
Learning theory applied in home, school, and other settings. Includes behavioral assessment (inter-viewing, checklists, observation) and intervention procedures (reinforcement, token economies), maintenance and generalization issues, single subject research design, self-control. Offered occasionally.

COPS 268. Multicultural Counseling
3 sem. hrs.
Explores the topic of cultural diversity. Sensitizes students to influence of culture on human behavior and its implications for professional practice as counselors and psychologists. Concurrent field experiences and/or small group experiences may be required. Usually offered every spring.
Prereq: COUN 216 and COUN 222.

COPS 273. Behavior Disorders in Children and Youth
3 sem. hrs.
Advanced study of emotional, cognitive, behavioral, and social problems of childhood and adolescence. Major topics include: (a) nature, etiology, and incidence within a developmental/interactionist framework; (b) diagnostic and classification systems; (c) psychological, educational, and medical intervention-management approaches; and (d) research and program evaluation methods. Usually offered spring term.
Prereq: EDPS 266 or equiv.

COPS 283. Professional Ethics and Legal Issues
3 sem. hrs.
Examines the ethical foundations and current ethical and legal guidelines for professionals in the behavioral health field. Prereq: Cons. of instr.

COPS 285. Consultation Strategies
3 sem. hrs.
Analysis of consultation models; designing and implementing intervention strategies; evaluation of the total process. Introduction to the role and functions of a consultant. Analysis of current conceptual models, overview of design and implementation of intervention strategies, and evaluation methods. Usually offered summer term.
Prereq: COUN 216 and cons. of instr.

COPS 286. Organizational Counseling and Consultation Strategies
3 sem. hrs.
Focuses on the theory and methods relevant to the assessment, design, implementation, and evaluation of clinical interventions in organizational settings. Course content will address both individual and organizational interventions and evaluation methods. Offered occasionally.
Prereq: COPS 285 and cons. of instr.
COPS 316. Introduction to Counseling Psychology 3 sem. hrs.
Introduction to the specialization of counseling psychology, including the history, philosophical bases, and current and emerging directions. Emphasis on critically reviewing literature in the field and examining psychologist roles and functions. Includes basic therapy skills training and field experiences. Offered fall term. Prereq: Cons. of instr.; admission to counseling psychology program.

Introduction to the theory and practice of cognitive assessment. Development of skills in administration and interpretation of intelligence and achievement tests and writing testing reports; introduction to special topics of testing children and neuropsychological assessment. Usually offered fall term. Prereq: Cons. of instr.

COPS 321. Personality Assessment 3 sem. hrs.
Extension of assessment skills developed in COPS 320. Development of skills in selection and interpretation of objective personality assessments and self-report inventories; integration of results in testing reports, and an introduction to projective personality assessment. Usually offered in spring term. Prereq: COPS 320 and cons. of instr.

COPS 322. Projective Assessment 3 sem. hrs.
Supervised study in administration, interpretation, and application of projective techniques. Offered occasionally. Prereq: COPS 321 and cons. of instr.

COPS 323. Advanced Assessment 3 sem. hrs.

COPS 324. Qualitative Research Methods in Psychology 3 sem. hrs.
Survey of qualitative research methods used in psychology. Includes discussion of the evolution of qualitative research in counseling psychology, as well as other related fields, and the controversies therein. Prereq: EDPS 322; and cons. of instr.

COPS 333. Seminar in Counseling Psychology 1 sem. hr.
Examines trends in the field with emphasis on current practices in professional psychology. Prereq: COPS 369; and cons. of instr.

COPS 335. Psychopharmacology 3 sem. hrs.
Introduction to psychopharmacology including central nervous system, basic drug mechanisms, modes of drug action, medication treatment for psychological/psychiatric disorders, efficiency of drugs. Offered every other spring term. Prereq: COUN 230.

Introduction to discipline of neuropsychology, brain-behavior relationships, neuropsychological mechanisms in neuropathological conditions, neuropsychological assessment and treatment. Offered every other fall term. Prereq: COPS 320 and cons. of instr.

COPS 337. Advanced Issues in Counseling and Psychotherapy 3 sem. hrs.
Prereq: Cons. of instr.

COPS 338. Practicum 1-4 sem. hrs.
S/U grade assessment. Prereq: COUN 269 or equiv. and cons. of director of training.

COPS 339. Seminar and Practicum in Supervision 1-3 sem. hrs.
Examines theory, research, and the practice of supervision in counseling psychology. Reviews ethical and professional guidelines for the training and supervision of counselors and psychologists. Includes practicum experiences supervising master’s and/or doctoral students. Continues over two consecutive semesters for a total of three credits, and includes weekly seminar and group supervision meetings. Prereq: COPS 369 and cons. of instr.

COPS 341. Special Topics in Counseling Psychology 1-3 sem. hrs.
In-depth study of theories and concepts in counseling psychology which, because of their topicality, are not the subject of a regular course. The special topics will be designated in the Schedule of Classes. Offered occasionally. Prereq: Cons. of instr.

COPS 348. Externship in Counseling Psychology 1-3 sem. hrs.
Supervised experiences in professional psychology. Externships must be planned in accordance with the departmental Counseling Psychology Internship handbook. A minimum of 2000 hours over one calendar year required. S/U grade assessment. Prereq: Cons. of dept. ch.; cons. of director of training.

COPS 349. Doctoral Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.


COPS 351. Doctoral Comprehensive Exam Preparation – Full-Time 0-3 sem. hrs.

COPS 352. Special Topics in Educational Psychology 1-3 sem. hrs.
In-depth study of theories and concepts in educational psychology which, because of their topicality, are not the subject of a regular course. The special topics will be designated in the Schedule of Classes. Offered occasionally. Prereq: Cons. of instr.

COPS 587. Internship in Counseling Psychology 1-3 sem. hrs.
Prereq: Cons. of instr.

COPS 588. Doctoral Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.


COPS 590. Doctoral Comprehensive Exam Preparation – Full-Time 0-3 sem. hrs.

Educational Psychology (EDPS)

EDPS 216. Introduction to Research Methods 3 sem. hrs.
Prereq: EDPS 321 or equiv. and EDPS 275 or equiv.

EDPS 221. Psychology in Education 3 sem. hrs.
Advanced survey of selected topics in educational psychology; measurement, personality, the school as a social system, learning, theories of instruction. Offered occasionally.

EDPS 223. Psychology of Classroom Learning 3 sem. hrs.
Consideration of classroom learning and instructional methods in the light of theories of learning and research findings concerning readiness, motivation, guidance and reinforcement, retention and transfer. Offered occasionally.

EDPS 226. Life-Span Human Development 3 sem. hrs.
An examination of the interaction among biological, psychological, social and cultural factors that influence human development over the life span. Educational and counseling implications of these issues are discussed. Offered fall term.

EDPS 271. Student Development in Higher Education 3 sem. hrs.
Overview of the psychological and student affairs literature related to college student development. Applications of psychosocial, cognitive, developmental, and person-environment interaction theories to student affairs work are considered in depth. Prereq: Cons. of instr.

EDPS 275. Introduction to Statistics 3 sem. hrs.
Introduction to descriptive and inferential statistics including parametric, non-parametric techniques, correlation, etc. Use of computers to analyze statistical data. Usually offered spring term.

EDPS 284. Social Basis of Behavior 3 sem. hrs.
Advanced study of the problems and paradigms of social psychologists and how they are used by the practitioner. Major topics include: socialization, value and attitudes, social comparison, conformity, and group dynamics. Usually offered alternate spring term.

EDPS 294. Institutes 1-3 sem. hrs.
A series of institutes on various problems in educational psychology. Scheduled according to need and demand. Offered occasionally.

EDPS 298. Special Topics in Educational Psychology 1-3 sem. hrs.
In-depth study of theories and concepts in educational psychology which, because of their topicality, are not the subject of a regular course. The special topics will be designated in the Schedule of Classes. Offered occasionally. Prereq: Cons. of instr.

EDPS 312. Intermediate Research and Statistics 3 sem. hrs.
Advanced topics in univariate and bivariate statistical analyses and related methodological issues. Covers analysis of variance, correlation, non-parametric statistics, and multiple regression. Includes use of statistical software. Usually offered fall term. Prereq: EDPS 261 or equiv. and EDPS 275 or equiv.

Psychometric theory, test construction, and evaluation procedures. Includes use of statistical software for investigating the reliability and validity of educational and psychological instruments. Usually offered spring term. Prereq: EDPS 321 or equiv.
EDPS 323. Advanced Statistics and Research 3 sem. hrs.
A comprehensive survey of multivariate data analysis. Reviews multiple regression and proceeds through an introduction to structural equation modeling. Includes use of statistical software. Usually offered fall term. Prereq: EDPS 321 or equiv.

EDPS 362. Educational Psychology of Motivation 3 sem. hrs.

EDPS 363. Theories of Learning 3 sem. hrs.
Systematic survey of theories, methods, and research findings in learning. Advanced treatment of selected topics. Offered occasionally.

EDPS 365. The Development of Memory and Cognition 3 sem. hrs.
Advanced study of normal development of memory and cognition and instructional strategies useful for imparting memory abilities in retarded and learning disabled children and young adults. Offered occasionally. Prereq: EDPS 286 or equiv. and EDPS 363 or equiv.

EDPS 385. Advances in Educational Psychology 3 sem. hrs.
Current topics, problems, research trends and methods in the field of educational psychology: measurement and evaluation of human abilities; the study and modification of cognitive, affective and psychomotor behaviors; and present and projected issues facing professional development in educational psychology. Offered occasionally.

EDPS 394. Internship in Educational Psychology 3-6 sem. hrs.
Supervised experiences in educational psychology. Internships must be identified and planned by student with an appropriate faculty member. Supervision should normally be by a College of Education faculty member. Each individual internship plan must be approved by the dean or his or her designee. Offered annually. S/U grade assessment. Prereq: Cons. of instr.; post-master's std.; on program at Marquette.

EDPS 867. Master's Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

EDPS 869. Master's Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

COUNSELING PSYCHOLOGY (COPS)
See COUNSELING AND EDUCATIONAL PSYCHOLOGY (COEP)

DENTISTRY (DENT)
Dean: Lobb
Associate Dean for Academic Affairs: Lynch
Associate Dean for Research and Graduate Studies: Hefter
Program Directors: Berzins (Dental Biomaterials), Bahcall (Endodontics), Bradley (Orthodontics), Ziegbert (Prosthodontics), Vitolo (Advanced Education in General Dentistry)

For the complete 2007–2008 faculty listing, please see the University Directory section in the back of this publication.

DEGREES OFFERED
Master of Science, Plan A only; with two options (see the Master's Requirements section for details): Certificate

SPECIALIZATIONS
Master’s: Dental Biomaterials, Endodontics, Orthodontics, Prosthodontics
Certificate: Advanced Education in General Dentistry, Endodontics, Orthodontics, Prosthodontics

GRADUATE PROGRAM OVERVIEW
The School of Dentistry offers graduate programs in dental biomaterials, and the ADA-accredited programs in advanced general dentistry (AEGD), endodontics, orthodontics, and prosthodontics. These programs can be modified to allow concurrent interdisciplinary graduate work to be undertaken in any other unit of the university, and a master of science or doctoral degree can be obtained through an appropriate graduate degree-granting department of the university or through the interdisciplinary Ph.D. program. Faculty for each dental graduate program are drawn both from full-time Dental School faculty and from practicing specialists in the field who serve as adjunct faculty (part-time faculty).

The AEGD program is an ADA-accredited one-year clinical program with a non-accredited two- or three-year option. Upon successful completion of all clinical and didactic requirements, a certificate is issued. There is no tuition for this program and the resident receives a generous stipend. The dental biomaterials program is a non-accredited 2-year program leading to a master’s degree and is comprised of courses from the School of Dentistry and the College of Engineering. Tuition for this program is charged at roughly 23% above the university per credit hour rate.

The specialty programs of endodontics, orthodontics, and prosthodontics are clinically and research based, offering a specialty certificate and a master's degree. Graduates are prepared to handle comprehensive clinical cases and to work effectively with both general dentists and other dental specialists. For all the specialty programs, the master’s degree is required (certificates will not be awarded without the master’s degree). The endodontics and orthodontics programs are two-year programs and the prosthodontics program is a three-year program. Tuition for the specialty programs is charged at a flat rate (20% during the summer term, 40% during the fall term, and 40% during the spring term). Any applicable instrument or service fees are charged during the fall term each year.

SPECIALTY CERTIFICATE REQUIREMENTS
Course work requirements for each graduate specialty program (endodontics, orthodontics, and prosthodontics) are determined by the director of the specific program in accordance with accreditation standards. Course work includes study in basic health sciences, dental biomaterials, research methodology, clinical dental specialties and other related science disciplines, as appropriate. In addition to course work, students also must complete patient care requirements, pass a comprehensive clinical examination, and submit all required evaluation data to receive the certificate.

MASTER’S REQUIREMENTS
Graduates may only be admitted to the program upon Plan A, which has two options.

The first master’s option is the traditional thesis option. Each candidate must conduct a research project on an appropriate clinical or basic science topic and successfully defend a thesis. Candidates are encouraged to pursue research which is appropriate to their chosen areas of study. Research projects are selected in consultation with the graduate program directors and the associate dean for research and graduate studies. Where possible, students in endodontics, orthodontics, and prosthodontics are encouraged to do clinically relevant research. Dental biomaterials students usually pursue the application of materials science principles to the study of dental biomaterials including relationships among compositions, physical properties, and clinical properties for dental biomaterial systems. The research and thesis work is supervised and approved by a primary mentor and a thesis committee according to Graduate School standards and protocol. Master’s candidates are required to satisfactorily complete the Research Methodology and Statistics/Experimental Design sections of the graduate core curriculum as a prerequisite to their thesis research.

The second master’s option is acceptance of a first author peer-reviewed publication based on an original research project. The thesis committee closely monitors preparation/submission of the publication and determines appropriate coauthorship. Selection of the publication option requires completion of a traditional thesis in the event the work is not accepted for publication.

ADVANCED EDUCATION IN GENERAL DENTISTRY
The School of Dentistry offers an Advanced Education in General Dentistry program that provides clinical experiences in all phases of general dentistry. The clinical training is complemented by a graduate didactic core curriculum that provides interdisciplinary education in the specialties of dentistry, and comprehensive diagnosis and treatment planning. The AEGD program is a twelve-month intensive clinical care program. Successful completion of the program requires positive assessment of the resident’s diagnostic and clinical skills as well as completion of the graduate core curriculum. Successful completion of the clinical and didactic components of the program results in a certificate of completion through the Marquette University Graduate School. No thesis is required. Additionally, there are non-accredited optional second and third years of training available. During these years, students may work toward a fellowship in the Academy of General Dentistry or the master of science degree in another program.
To qualify for an AEGD program stipend, applicants must be graduates of U.S. or Canadian dental schools. Applicants who have graduated from dental schools other than U.S. or Canadian will only be eligible for non-stipend positions, in which the space is very limited. All applicants, including those who have graduated from dental schools other than U.S. or Canadian, must take and submit scores from Part I and Part II of the National Board Dental Examinations.

**DENTAL BIOMATERIALS**

A student in the dental biomaterials program must complete a minimum of 30 credit hours of course work, consisting of a curriculum of graduate dental biomaterials courses (24 credits) and six credit hours of thesis work. The dental biomaterials graduate program is an interdisciplinary program covering principles of materials science, engineering, chemistry, physics, biology, and dentistry. Satisfactory completion of the didactic and research components of the program results in a master’s degree through the Marquette University Graduate School. In addition to the courses offered by the School of Dentistry (described in detail under the Dental Biomaterials course description section of this bulletin), master’s candidates may be required by their program adviser to select courses offered through the Department of Mathematics, Statistics and Computer Science or other departments. Elective courses in appropriate areas such as the dental graduate core curriculum (from the School of Dentistry) or materials science (from the College of Engineering) may also be selected according to the backgrounds and interests of the individual students.

**ENDODONTICS AND ORTHODONTICS**

A student in the endodontics or orthodontics program must complete a minimum of 30 credit hours of course work, including four credit hours in clinical practice per academic year (a total of eight credit hours for the two-year program), and six credit hours of thesis work. The remaining credits may be divided among courses specific to the specialty discipline and elective courses. The endodontics and orthodontics programs each require two full years of patient care. Satisfactory completion of the didactic and clinical components of the programs results in a specialty certificate through the Marquette University Graduate School. Satisfactory completion of the research component of the programs results in a master’s degree through the Marquette University Graduate School. The master’s degree is required in order to receive the specialty certificate.

**PROSTHODONTICS**

The prosthodontic program is a three-year program. A student in the prosthodontic program must complete a minimum of 42 credit hours of course work, including 12 credit hours of clinical practice, and six credit hours of thesis work. The remaining credits will be from courses assigned by the program director. The prosthodontics program requires three full years of patient care. Satisfactory completion of the didactic and clinical components of the program results in a specialty certificate through the Marquette University Graduate School. Satisfactory completion of the research component of the program results in a master’s degree through the Marquette University Graduate School. The master’s degree is required in order to receive the specialty certificate.

**PREREQUISITES FOR ADMISSION**

Selection for admission is based upon the applicant’s academic standing and clinical abilities. Competitive applicants will rank high in their dental school classes, have strong clinical skills and experiences, and have some experience with research. In general, to be admitted to any of the graduate programs in clinical dentistry, the applicant must have graduated from an approved dental school.

For the dental biomaterials program, the applicant may be either a dental school graduate or have a baccalaureate degree in science or engineering. In special cases, a student with a baccalaureate degree in another area, but who has an appropriate background, may be admitted to the dental biomaterials program.

**APPLICATION DEADLINES**

**September 1**

For endodontics, orthodontics, and prosthodontics programs starting in June of the following year.

**October 1**

For first round interviews for the AEGD program starting July 1st of the following year. Applications will be accepted beyond this deadline until all available AEGD positions are filled. For information on position availability, applicants applying after October 1st should call (414) 288-3323 or e-mail jacqueline.webster@marquette.edu.

**Notes:** No official deadline exists for the dental biomaterials program. The biomaterials program may begin during the summer session or during any semester. The program director notifies admitted students regarding the starting date for their program.

**APPLICATION REQUIREMENTS**

Applicants must submit, directly to the Graduate School:

1. A completed application form and fee. Applicants may also apply through the Postdoctoral Application Support Service (PASS) operated by the American Dental Education Association (ADEA).
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. International applicants must have course grades converted to numerical values of 4.00, 3.00, 2.00, and 1.00 or to corresponding letter grades of A, B, C, and D, respectively. Where such a conversion is not possible, an explanation of the grading system used in the foreign dental school and undergraduate institution should accompany the official English translation of the grade transcripts.
4. Undergraduate and dental school grade-point averages and class rank in dental school.
5. Three letters of recommendation reflecting the applicant’s clinical and academic abilities.
6. The orthodontics program is part of the Postdoctoral Dental Matching Program. Applicants must enter the matching program. Details of this program can be obtained through the orthodontics department.
7. (For dental biomaterials applicants only) GRE scores (General Test only).
8. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

**GENERAL INFORMATION**

**NON-DEGREE STUDENTS IN DENTISTRY COURSES**

Normally, students with non-degree status are not permitted to enroll in dentistry courses; however, students from approved dental residency programs may enroll in dental graduate courses. Other students may be allowed to take dental graduate courses with prior approval from the School of Dentistry’s associate dean for research and graduate studies.

**DDS/GRADUATE PROGRAM**

The School of Dentistry, in close cooperation with the Graduate School, offers a doctor of dental surgery/graduate program which allows qualified students to take selected graduate courses while still in dental school. Interested dental students must formally apply for entrance into the program. Information is available from the associate dean for research and graduate studies in the School of Dentistry.

Once accepted into the DDS/graduate program, students are eligible to register for graduate courses offered by the School of Dentistry and other units of the university. To enroll in graduate courses, DDS/graduate program students must have written consent from course directors, the associate dean for research and graduate studies in the School of Dentistry, and the vice provost for research and dean of the Graduate School. Students must also submit a request form (available in the Graduate School office). The amount of graduate work available to students is determined by ability and progress within the DDS program.

DDS/graduate students may seek admission to the following certificate or graduate programs offered by the School of Dentistry: gerontology, dental biomaterials, endodontics, orthodontics, or prosthodontics. Applications are subject to specified deadlines, and students are required to follow the normal competitive admission process. DDS/graduate students also may seek admission to other master’s programs such as biological sciences, education, engineering, business administration, mathematics/statistics/computer sciences, clinical psychology or public service. Upon acceptance into a master’s program, DDS/graduate students may formally request a transfer of completed graduate credits into the master’s program. Normally, a maximum of 12 credits may be transferred. (Transfer of credit forms are available in the Graduate School office.) Further information about the DDS/graduate program can be obtained from the School of Dentistry associate dean for research and graduate studies.
 COURSE DESCRIPTIONS
GRADUATE COURSES:

DENTISTRY (DENT)

DENT 201. Dental Graduate Didactic Core Curriculum 1 1-3 sem. hrs. Section credit hours range from 1-3 for sections comprising 12-36 class hours.

DENT 202. Dental Graduate Didactic Core Curriculum 2 1-3 sem. hrs. Section credit hours range from 1-3 for sections comprising 12-36 class hours.

DENT 203. Dental Graduate Didactic Core Curriculum 3 1-3 sem. hrs. Section credit hours range from 1-3 for sections comprising 12-36 class hours.

The Dental Graduate Didactic Core Curriculum (DENT 201-203) is designed to cover all didactic content areas applicable to the advanced practice of general dentistry and to each of the specialty areas of dentistry. The content areas are sequenced to present: 1) material of interest for the general dentist seeking additional training beyond undergraduate dental education; 2) material of interest for each of the dental specialty areas; and 3) advanced material of interest for those intending to pursue academic/research careers. The presentations are organized to emphasize the overlapping nature of scientific foundational material and each of the dental specialties. Additionally, the presentations are designed to accommodate those students entering the program immediately after undergraduate education as well as those students returning from varying years of private dental practice. The course of study is comprised of yearly repeating content cycles (sections) within the summer session and fall/spring terms. The Dental Graduate Didactic Core Curriculum (DENT 201-203) is offered from 8-9 a.m. Monday - Friday. Beyond the required classes for their program, students may register for as many DENT 201-203 sections as they wish during their graduate education. The sections covered in DENT 201-203 are listed below and a detailed description of section content is maintained in the form of comprehensive section syllabi available in the School of Dentistry office of the associate dean for research and graduate studies. Students may register repeatedly for any grading period containing material of interest and are free to rotate in and out of the courses as desired to obtain sections containing such material. Repeated registration for DENT 201-203 is differentiated through the use of section numbers that appear on official transcripts. Examinations and credit hours are variable and are determined by selected course sections. Grades for each course section are submitted directly to the Graduate School by course instructors at the end of each term. Official transcripts will designate the specific sections completed and the credit hours associated with those sections.

The content area sections covered annually by the Graduate Didactic Core Curriculum are as follows: 1) Emergency Medicine - A comprehensive review of the pathophysiology and treatment of the most common medical emergency states. Emphasis is placed on prevention, diagnosis, and patient stabilization. 2) Dental Biomaterials - Physical, mechanica, chemical, biologic behavior, properties, characterization, and testing of dental biomaterials. Biocompatibility and odontocompatibility of implant materials as well as advanced clinical concepts for general dentistry. 3) Advanced Prosthodontic Biomaterials - Advanced biomaterials and clinical concepts specific for prosthodontics. 4) Advanced Endodontic Biomaterials - Advanced biomaterials and clinical concepts specific for endodontics. 5) Advanced Orthodontic Biomaterials - Advanced biomaterials and clinical concepts specific for orthodontics. 6) Interdisciplinary Periodontics - Structure/function of the periodontium. Periodontal disease and therapy as it relates to all other aspects of dentistry emphasizing surgical approaches, occlusion, splinting, and periodontic/endodontic pathosis. 7) Interdisciplinary Prosthodontics - A comprehensive discussion of prosthodontic procedures as they relate to other areas of dental practice emphasizing removable complete dentures, fixed partial dentures, maxillofacial prosthetics, and implants. 8) Advanced Prosthodontics - Advanced prosthodontic procedures emphasizing removable complete/partial dentures, fixed partial dentures, maxillofacial prosthetics, and implants. 9) Advanced Prosthodontics - Advanced prosthodontic procedures emphasizing removable complete/partial dentures, fixed partial dentures, maxillofacial prosthetics, and implants. 10) Advanced Endodontontology - Advanced endodontic techniques with emphasis on sophisticated clinical procedures/surgical approaches and their rationale. 11) Interdisciplinary Orthodontics - A comprehensive discussion of orthodontic techniques as they relate to other areas of dental practice emphasizing cephalometrics, biomechanics of tooth movement, and tissue response to orthodontic procedures. 12) Advanced Orthodontics - Advanced orthodontic techniques emphasizing cephalometrics, biomechanics of tooth movement, and tissue response to orthodontic procedures. 13) Technology and Informatics - A review of the current computer-based technologies for independent self-directed learning, research, teaching approaches, patient care, and professional communication. Emphasis is placed on biomedical applications and laboratory exercises are included to reinforce didactic concepts. 14) Craniofacial Growth and Development - Dental and facial growth and development from the embryonic period through adult life. 15) Advanced Oral Pathology - Principles and concepts of histopathology presented through review and microscopic study of surgical material and biopsy specimens of craniofacial lesions emphasizing pathogenesis of disease and histologic diagnosis. Laboratory exercises included to reinforce didactic concepts. 16) Head/Neck Anatomy and Osteology - Systemic and regional approaches to the study of head/neck anatomy. Emphasis is placed on vasculature, musculature, innervation, lymphatic drainage, and morphology/anatomical landmarks of the various bones of the head/neck. Laboratory dissection and demonstration reinforce didactic concepts. 17) Pharmacology and Pain/Anxiety Management - The pharmacology of drugs commonly used for treatment of non-dental conditions that may affect the delivery of dental care either through direct action or through interaction with drugs commonly used in dental care. Emphasizes the neuropharmacology of pain, control of pain by various classes of pharmacologic agents, and the behavioral management of dental fears. 18) Academics and Research Methodology/Design - A comprehensive presentation of the academic, scholarly, and research process. Emphasis is placed on evaluating the literature, scientific writing, grant writing, animal/human use, ethics, professional communication, and preparing abstracts, manuscripts, and presentations. 19) Biostatistics - A comprehensive presentation of the various aspects of statistics and statistical evaluation. Emphasis is placed on reproducibility, power, validity, precision, and accuracy. 20) Oral Microbiology, Infection, and Immunology - Inflammation, immunity, and oral microbiology emphasizing the mechanisms of microbial colonization and invasion, host response, and pathogenesis of dental diseases. 21) Pulpal/Periapical Biology and Pathology - Applied basic sciences of pulpal and periapical histology, physiology, and pathology. Emphasis is placed on preparation, diagnosis, and interpretation of biopsy samples. 22) Biochemistry and Physiology of Mineralized Tissues - The chemical and cellular constituents of mineralized tissues and modern methods for their study. Emphasis is placed on bone physiology and metabolism. 23) Radiology and Imaging - Advanced concepts in radiation and modern imaging techniques applied to all aspects of dentistry. 24) Craniofacial/Maxillofacial Function and Disorders - Neuromuscular and occlusal physiology, diagnosis, and treatment of functional disturbances involving the craniofacial region. 25) Temporomandibular Disorders in Orthodontics - Neuromuscular and occlusal physiology, diagnosis, and treatment of functional disturbances involving the temporomandibular articulation specific to orthodontics. 26) Oral Physiology - Current topics in salivary function/dysfunction, oral neurophysiology, and physiology of taste, craniofacial musculature, and breathing/swallowing reflexes. Emphasis is placed on the relationship between oral diseases and systemic diseases/conditions. 27) Geriatrics/Gerontology - A comprehensive presentation of oral health care for older adults emphasizing demographies/epidemiology, specific age-related pathosis, customized treatment approaches, and interdisciplinary/integrative patient management. 28) Pediatrics - The special management and treatment concerns of pediatric patients emphasizing prevention and trauma. 29) Inflammation and Wound Healing - Current concepts in the cell/molecular biology of inflammation and wound healing emphasizing predictable manipulation of the wound environment. 30) Cell/Molecular Biology and Molecular Medicine - Current concepts in cell/molecular biology as they relate to diagnostics and treatment with emphasis on immunologic approaches and gene therapy. 31) Speech Pathology - A review of the various speech pathologies emphasizing the interdisciplinary and integrative nature of treatment involving the dental professional. 32) Applied Clinical Prosthodontics - The latest applications of new treatment techniques and methodologies as they relate to endodontics. 33) Applied Clinical Orthodontic Techniques - The latest applications of new treatment techniques and methodologies as they relate to orthodontics. 34) Applied Clinical Prosthodontic Techniques - The latest applications of new treatment techniques and methodologies as they relate to prosthodontics. 35) Public Health/Public Service - The epidemiology of dental disease and access to care emphasizing the role of the dental professional in community health. A review of current local, state, and federal programs for dental services. 36) Practice Management for Prosthodontists - A review of the current business aspects of dental practice for all aspects of prosthodontics with special emphasis on solo practice, group practice, dental clinics, and community health centers/institutionalized care. 37) Practice Management for Endodontists - A review of the current business aspects of dental practice for all aspects of endodontics with special emphasis on solo practice, group practice, dental clinics, and community health centers/institutionalized care. 38) Practice Management for Orthodontists - A review of the current business aspects of dental practice for all aspects of ortho-
DENT 220. Clinical Orthodontics 1 2 sem. hrs. Lectures, laboratory and clinical treatment of patients with various types of malocclusion. Prereq: Admitted to Orthodontic program.

DENT 221. Clinical Orthodontics 2 2 sem. hrs. Lectures, laboratory and clinical treatment of patients with various types of malocclusion. Prereq: Admitted to Orthodontic program.

DENT 222. Clinical Orthodontics 3 2 sem. hrs. Lectures, laboratory and clinical treatment of patients with various types of malocclusion. Prereq: Admitted to Orthodontic program.

DENT 223. Clinical Orthodontics 4 2 sem. hrs. Lectures, laboratory and clinical treatment of patients with various types of malocclusion. Prereq: Admitted to Orthodontic program.

DENT 227. Histopathology of Tooth Movement 1 sem. hr. Histological and pathological aspects of tooth movement emphasizing tissue response to orthodontic forces. Prereq: Admitted to Orthodontic program.

DENT 235. Orthodontic Seminar 1 1 sem. hr. Combines basic/applied technics and maintenance of normal occlusal development. Students will learn the fabrication and biomechanics of various appliances used in prevention and interception of malocclusions. Concurrently, students will be taught in the theory of normal occlusal development, diagnosis, prevention, and interception of certain malocclusions. Prereq: Admitted to Orthodontic program.


DENT 274. Seminar in Complete Denture Prosthodontics 1 sem. hr. In-depth review and discussion of complete denture literature and its theoretical, technical, and clinical application. Includes regularly-scheduled diagnosis and treatment planning sessions in all phases of prosthodontics. Offered on a rotating schedule with other prosthodontics seminars. Prereq: Admitted to Prosthodontics program.

DENT 275. Seminar in Removable Partial Denture Prosthodontics 1 sem. hr. In-depth review and discussion of removable partial dentures literature and its theoretical, technical, and clinical application. Includes regularly-scheduled diagnosis and treatment planning sessions in all phases of prosthodontics. Offered on a rotating schedule with other prosthodontics seminars. Prereq: Admitted to Prosthodontics program.

DENT 276. Seminar in Fixed Partial Denture Prosthodontics 1 sem. hr. In-depth review and discussion of fixed partial denture and rehabilitation literature, its theoretical, technical, and clinical application. Includes regularly-scheduled diagnosis and treatment planning sessions in all phases of prosthodontics. Offered on a rotating schedule with other prosthodontics seminars. Prereq: Admitted to Prosthodontics program.

DENT 277. Seminar in Maxillofacial Prosthetics and Related Disciplines 1 sem. hr. In-depth literature review and discussion of theoretical, technical, and clinical application of maxillofacial prosthetics, surgical and radiation oncology, speech pathology, and other related disciplines. Includes regularly-scheduled diagnosis and treatment planning sessions in all phases of prosthodontics. Offered on a rotating schedule with other prosthodontics seminars. Prereq: Admitted to Prosthodontics program.

DENT 278. Seminar in Implant Prosthodontics 1 sem. hr. In-depth review and discussion of complete and partial fixed, single tooth and removable implant rehabilitation literature and its theoretical and clinical applications. Includes regularly-scheduled diagnosis and treatment sessions in all phases of prosthodontics. Offered on a rotating schedule with other prosthodontics seminars. Prereq: Admitted to Prosthodontics program.

DENT 279. Seminar in Occlusion/TMD 1 sem. hr. In-depth review and discussion of concepts of occlusion and articulation, occlusal analysis, diagnosis and treatment of facial pain and temporomandibular disorders. Includes regularly-scheduled diagnosis and treatment planning sessions in all phases of prosthodontics. Offered on a rotating schedule with other prosthodontics seminars. Prereq: Admitted to Prosthodontics program.

DENT 280. Clinical Patient Care 1-7 sem. hrs. Designed to account for time dental graduate residents spend providing patient care. This can range from 1-7 credit hours per semester. S/U grade assessment.

DENT 284. Endodontic Literature and Book Review 1 1 sem. hr. Discussion of current and classic literature, library research; review current textbooks, conventions and dental meetings. Some lectures by graduate students relating endodontics to the other disciplines, systemic health, and potential areas of research. Prereq: Admitted to Endodontics program.


DENT 286. Endodontic Literature and Book Review 3 1 sem. hr. See DENT 284. Prereq: Admitted to Endodontics program.

DENT 287. Endodontic Literature and Book Review 4 1 sem. hr. See DENT 284. Prereq: Admitted to Endodontics program.

DENT 288. Endodontic Clinic and Case Review 1 2 sem. hrs. Complete diagnosis and treatment of clinic cases using all available diagnostic aids and treatment modalities. Endodontic surgical cases to be performed. Clinical cases to be presented for discussion. Prereq: Admitted to Endodontics program.

DENT 289. Endodontic Clinic and Case Review 2 2 sem. hrs. Complete diagnosis and treatment of clinic cases using all available diagnostic aids and treatment modalities. Endodontic surgical cases to be performed. Clinical cases to be presented for discussion. Prereq: Admitted to Endodontics program.

DENT 290. Endodontic Clinic and Case Review 3 2 sem. hrs. Complete diagnosis and treatment of clinic cases using all available diagnostic aids and treatment modalities. Endodontic surgical cases to be performed. Clinical cases to be presented for discussion. Prereq: Admitted to Endodontics program.

DENT 291. Endodontic Clinic and Case Review 4 2 sem. hrs. Complete diagnosis and treatment of clinic cases using all available diagnostic aids and treatment modalities. Endodontic surgical cases to be performed. Clinical cases to be presented for discussion. Prereq: Admitted to Endodontics program.
DENT 294. Teaching Experience in Dentistry 1-2 sem. hrs.
Assigned teaching duties in the didactic, preclinical, and clinical dental sciences.

DENT 295. Independent Study 1-3 sem. hrs.
Course work customized to meet specific student interests/needs. Prereq: Cons. of instr.

Designed for students with little to no dentistry knowledge and will focus on readings and case-studies of the basic concepts involved in geriatric dentistry. Emphasis will be placed on patient assessment including oral/palatal anatomical aspects, patient management including advocacy/referral, and the interdisciplinary/multidisciplinary aspects of patient care. Offered occasionally.

DENT 298. Advanced Topics in Geriatric Dentistry 3 sem. hrs.
Designed for dentists and dental students and will focus on readings and case-studies of advanced topics of geriatric dental care. Emphasis will be placed on cell/molecular biology and medicine, specialized techniques for care of geriatric patients, and integrated preventive measures. Offered occasionally.

DENT 299. Master’s Thesis 1-6 sem. hrs.
Credit hours assigned to thesis preparation and scholarship. S/U grade assessment.

DENT 867. Master’s Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch

DENT 869. Master’s Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch

DENT 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

DENT 878. Thesis Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

DENT 880. Professional Project Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

DENT 886. Professional Project Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

Advanced Education in General Dentistry (AEGD)

AEGD 210. Introduction to Advanced Clinical Dentistry 4 sem. hrs.
Residents are assigned clinical cases that require treatment in two or more clinical disciplines. Trainees are responsible for accurate compilation and documentation of clinical findings essential for appropriate treatment planning and case completion. Residents will provide comprehensive dental services to patients or will make referrals to appropriate specialists. Trainees will also engage in assessment, management, and treatment of dental emergencies. S/U grade assessment. Prereq: Admitted to AEGD program.

AEGD 211. Clinical Advanced General Dentistry 2 4 sem. hrs.
Residents continue cases begun earlier (see AEGD 210) and begin treatment of additional cases. Increasingly difficult patients, including those with compromised medical histories, are introduced. Residents will also respond to dental consults from medical disciplines in a hospital setting and learn hospital protocol. Emphasis on development of critical thinking skills and abilities to conduct individualized risk assessments and to design appropriate prevention measures while treating a diverse array of patients. S/U grade assessment. Prereq: Admitted to AEGD program.

AEGD 212. Clinical Advanced General Dentistry 3 4 sem. hrs.
See AEGD 211. S/U grade assessment. Prereq: Admitted to AEGD program.

See AEGD 211. S/U grade assessment. Prereq: Admitted to AEGD program.

AEGD 214. Discipline Topics/Multi-Disciplinary Treatment Planning in Advanced General Dentistry 1 3 sem. hrs.
Residents will develop and present cases that will be evaluated on the quality of the documentation and treatment planning demonstrated. Emphasis in the seminars will be placed on developing the ability to diagnose, treatment plan, and problem solve. S/U grade assessment. Prereq: Admitted to AEGD program.

AEGD 215. Discipline Topics/Multi-Disciplinary Treatment Planning in Advanced General Dentistry 2 3 sem. hrs.

AEGD 216. Discipline Topics/Multi-Disciplinary Treatment Planning in Advanced General Dentistry 3 3 sem. hrs.

AEGD 217. Discipline Topics/Multi-Disciplinary Treatment Planning in Advanced General Dentistry 4 3 sem. hrs.

Dental Biomaterials (BIMA)

BIMA 201. Mechanical Behavior of Dental Biomaterials 3 sem. hrs.
Basic principles of mechanics, elastic deformation, plastic deformation and fracture. Comparison of mechanical behavior of metallic, ceramic and polymer dental biomaterial systems. Discussion of tension, compression, shear, bending, torsion, hardness and impact tests for dental biomaterials. Includes laboratory exercises.

BIMA 203. Polymeric Dental Biomaterials 2 sem. hrs.
Compositions and properties of polymers utilized in prosthetic, restorative, orthodontic, preventive, and implant dentistry. The materials include poly (methyl methacrylate), Bis-GMA, polyurethane and polyvinyl products in the form of resins, composites and microfills polymerized by heat, chemicals and ultraviolet or visible lights. Includes laboratory exercises.

BIMA 204. Advanced Principles of Dental Biomaterials Science 3 sem. hrs.
Basic and advanced principles of dental biomaterials science. Fundamental scientific principles, and physical, mechanical, chemical and biological properties of restorative and preventive dental biomaterials. Relationships between properties and clinical performance of these materials and methods used for testing them.

BIMA 205. Dental Metallurgy 1 3 sem. hrs.
Theory and application of metallurgical principles to the study of dental alloy systems. Dental amalgams, noble and base metal casting alloys, and wrought alloys. Area and extent of study determined by individual needs of student. Includes laboratory exercises.

BIMA 206. Dental Metallurgy 2 3 sem. hrs.
Theory and application of metallurgical principles to the study of dental alloy systems. Dental amalgams, noble and base metal casting alloys, and wrought alloys. Area and extent of study determined by individual needs of student. Includes laboratory exercises.

BIMA 207. Dental Ceramics 3 sem. hrs.
Basic principles of ceramic structures and properties. History, properties and technology of dental porcelains, gypsum products and dental casting investments. Includes laboratory exercises.

BIMA 210. Advanced Experimental Techniques for Dental Biomaterials Research 1 1 sem. hr.
Biomaterials Research Laboratory courses. Topics may vary, but will generally include scanning electron microscopy, mechanical testing procedures, and X-ray diffraction. Prereq: Admission to graduate program in dental biomaterials.
BIMA 211. Advanced Experimental Techniques for Dental Biomaterials Research 2 1 sem. hr. Biomaterials Research 2 Laboratory courses. Topics may vary, but will generally include scanning electron microscopy, mechanical testing procedures, and X-ray diffraction. Prereq: Admission to graduate program in dental biomaterials.

BIMA 219. Dental Castings 2 sem. hrs. Compositions, setting reactions and properties of zinc phosphate, zinc oxide-eugenol, poly(carboxylate), glass ionomer and resin dental cements. Effects of clinical variables and the ADA specifications related to these materials will be included. May include laboratory exercises.

BIMA 227. Dental Impression Materials 2 sem. hrs. Classification, composition and properties of the various impression materials used in restorative and prosthodontic dentistry. The material systems to be discussed include impression compound, hydrocolloids, polysulfides, polyethers and silicones. May include laboratory exercises.


BIMA 265. Special Topics in Dental Biomaterials 1-3 sem. hrs. Practical laboratory exercises designed to provide the student with specific skill sets and analytic approaches used in modern materials research.

BIMA 275. Dental Biomaterials Literature Review 1 1-3 sem. hrs. Discussion of current and classic literature in dental biomaterials. Topics and journals discussed will be rotated to provide an overview and range of different materials, properties, and applications. Class discussion and presentations are a main component of the class. Prereq: Grad. student stndgd. in BIMA grad program or cons. of dept.

BIMA 276. Dental Biomaterials Literature Review 2 1-3 sem. hrs. Discussion of current and classic literature in dental biomaterials. Topics and journals discussed will be rotated to provide an overview and range of different materials, properties, and applications. Class discussion and presentations are a main component of the class. Prereq: Grad. student stndgd. in BIMA grad program or cons. of dept.

BIMA 277. Dental Biomaterials Literature Review 3 1-3 sem. hrs. Discussion of current and classic literature in dental biomaterials. Topics and journals discussed will be rotated to provide an overview and range of different materials, properties, and applications. Class discussion and presentations are a main component of the class. Prereq: Grad. student stndgd. in BIMA grad program or cons. of dept.

BIMA 278. Dental Biomaterials Literature Review 4 1-3 sem. hrs. Discussion of current and classic literature in dental biomaterials. Topics and journals discussed will be rotated to provide an overview and range of different materials, properties, and applications. Class discussion and presentations are a main component of the class. Prereq: Grad. student stndgd. in BIMA grad program or cons. of dept.


BIMA 295. Independent Study 1-3 sem. hrs. Course work customized to meet specific student interests/needs. Prereq: Cons. of instr.


BIMA 300. Biomaterials Seminar 1 sem. hr. Current topics and concepts in materials science.


DISPUTE RESOLUTION (DIRS)

Director and Associate Professor of Law: Soeka Adjunct Associate Professor: Aleman, Ballman, Egdorff, Harris Taylor, Kelly Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREES OFFERED

Master in Dispute Resolution; Graduate Certificate in Dispute Resolution

PROGRAM DESCRIPTIONS

Dispute resolution is an interdisciplinary, graduate program leading to either a master’s degree or graduate certificate in dispute resolution. The program combines the fields of law, business, psychology, sociology, political science, health sciences, education and communication in dealing with today’s multi-faceted issues in resolving disputes. The program seeks to train professionals, primarily those in the fields of law, health care, education, and business, to practice as third party neutrals in the field of dispute resolution, or to be knowledgeable participants in the dispute resolution process. Note: Students must begin their course work with DIRS 203.

CERTIFICATE PROGRAM

The College of Professional Studies offers a 15 credit graduate certificate in dispute resolution. (For information on a master in leadership studies or a master of arts in public service with a specialization in dispute resolution, see Leadership Studies or Public Service.) DIRS also offers a joint certificate program with the Law School.

MASTER’S DEGREE PROGRAM

The College of Professional Studies offers a professional degree program leading to a master in dispute resolution (M.D.R.). With an emphasis on mediation and its applications, the primary program objective is to increase the knowledge and skill competency of working professionals across all disciplines. Students are expected to demonstrate their competency in dispute resolution theory and practice by employing critical thinking and the tools of research when completing either a master’s thesis or an integrative capstone project.

PREREQUISITES FOR ADMISSION

Applicants must have a baccalaureate degree from a college or university of recognized standing and minimally two years of work experience preferred.

APPLICATION REQUIREMENTS

Applicants must submit, directly to the Graduate School:

1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation. Waived if M.D.R. or C.D.R. applicants are currently attending or have graduated from Marquette’s Law School. Waived if M.D.R. applicants graduated from the DIRS certificate program.
4. GRE, GMAT, LSAT (applicants must score at the 50th or higher percentile), or MAT scores. Waived if the applicant has completed any advanced degree from any school – M.A., M.S., M.B.A., Ph.D., J.D., or M.D. – is required to provide references unless specifically waived.
5. The college of Professional studies offers a 15 credit graduate certificate in dispute resolution. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

MASTER’S REQUIREMENTS

The master’s degree requires completion of 33 credits. The degree requirements are as follows:

Required Courses (27 credits):

Note: Students must begin their course work with DIRS 203.

DIRS 203 Mediation (3 credits)

DIRS 200 Theory of Conflict (3 credits)

DIRS 207 Advanced Mediation (3 credits)

DIRS 210 Practicum in Dispute Resolution (3 credits)

Master’s Thesis (6 credits) OR Capstone Integrative Project (6 credits, research project)

and three of the following four courses:

DIRS 201 Advanced Issues in Dispute Resolution (3 credits)

DIRS 209 Arbitration (3 credits)

DIRS 211 Negotiation (3 credits)
**Elective Courses (6 credits):**

- DIRS 205 Dispute Resolution and the Family (3 credits)
- DIRS 206 Dispute Resolution and Education (3 credits)
- DIRS 208 Dispute Resolution and the Workplace (3 credits)
- DIRS 213 Dispute Resolution and Health Care (3 credits)
- DIRS 295 Independent Study (used as necessary) (3 credits)

Students must choose either Plan A (thesis) or Plan B (capstone project). Students in Plan A must enroll in six thesis credits after the thesis outline has been approved by their program adviser and by the Graduate School. Similarly, students in Plan B must enroll in six capstone project credit hours after the project outline has been approved by their program adviser and by the Graduate School.

Regardless of the plan chosen (Plan A – thesis or Plan B – capstone project), students must complete the program within six years. Students are expected to earn a B or above in all courses and must maintain a 3.00 cumulative grade point average to earn the certificate. The only requirement in this respect is that the student cannot wait so long that it becomes mathematically impossible to complete the requirements of both programs in four years (six years for part-time students). Law students must complete a Graduate School application, but only the first two sections; they do not need to submit test scores, transcripts or letters of recommendation.

In general, joint program students will pay tuition at the full-time (flat tuition) Law School rate while a full-time law student, regardless of whether or not they are taking additional graduate courses. Upon receiving the juris doctor degree, joint program students will pay Graduate School tuition at the per credit rate for graduate courses. Part-time law students will pay the per credit Law School rate for all courses.

Additional details about the C.D.R.–J.D. program are available from the Center for Dispute Resolution Education office or from the Law School Admissions office.

**COURSE DESCRIPTIONS**

**GRADUATE COURSES:**

- DIRS 200. Theory of Conflict 3 sem. hrs. The development of conflict between and among individuals, organizations, and governmental units; various models for conflict and types of conflict resolution will also be surveyed. Prereq: DIRS 203.

- DIRS 201. Advanced Issues in Dispute Resolution 3 sem. hrs. Explores current theoretical and applied issues in mediation. These issues may include: communication theories and models, legislative enactments, dispute resolution systems design, and court-conceived dispute resolution systems. Case studies provide an opportunity to examine the theory through an applied approach. Prereq: DIRS 203.

- DIRS 203. Mediation 3 sem. hrs. Mediation as facilitated negotiation, three-party processes vs. two-party processes, interest-based bargaining vs. positional or adversarial bargaining. Concepts will be explored through the use of class role plays, which will be videotaped and critiqued as a part of mediation training.

- DIRS 205. Dispute Resolution and the Family 3 sem. hrs. Explores the many ways that dispute resolution processes are used in the family dynamic, including the division of marital property, the resolution of child custody issues, the resolution of parent-child behavioral issues, the resolution of contested adult guardianship, the resolution of issues involving the termination of parental rights, and the placement of adult family members in institutional settings. Includes an analysis of the roles of unique stakeholders, such as guardian ad litem, medical personnel, and extended family members. Uses a significant number of role plays to allow students to apply and refine their skills. Prereq: DIRS 203.

- DIRS 206. Dispute Resolution and Education 3 sem. hrs. Explores the many ways dispute resolution processes are used in the educational context, including: collective bargaining agreements, student peer mediation programs, student-teacher disputes, ombuds programs in higher education institutions, mediation of special education disputes. The problem-solving skills helpful to any teacher or school administrator in dealing with parents, students, and colleagues are addressed. Uses a significant number of role plays to allow students to apply and refine their skills. Prereq: DIRS 203.

- DIRS 207. Advanced Mediation 3 sem. hrs. An exploration of more advanced issues in the practice of mediation, including brokering, emotions in mediation, agenda, joint session, caucuses, agreements and multi-party/multi issue cases. Prereq: DIRS 203.

- DIRS 208. Dispute Resolution and the Workplace 3 sem. hrs. Explores the many ways dispute resolution processes are used in the workplace, including interest arbitration, grievance arbitration, the negotiation of collective bargaining agreements, ombuds systems, peer review panels, mediation systems in unionized and non-unionized environments, and the use of processes for addressing issues of sexual discrimination, sexual harassment, and the lack of retention and promotion of minority workers. Uses a significant number of role plays to allow students to apply and refine their skills. Prereq: DIRS 203.

- DIRS 209. Arbitration 3 sem. hrs. Explores the adjudicative process of arbitration or private-judging in commonly used contexts, such as labor, construction, securities, and consumer disputes. Examines the United States Supreme Court’s line of precedent regarding the enforceability of arbitration clauses in contracts. The common techniques used in the arbitration process are addressed. Prereq: DIRS 203.

- DIRS 210. Practicum in Dispute Resolution 1-3 sem. hrs. Required of all students; for example, an internship may be established with a community mediation center, a court system, a hospital peer review committee, or a public school teachers’ collective bargaining unit. Placements will be arranged on an individual basis. SU grade assessment. Prereq: DIRS 203 and DIRS 207.

- DIRS 211. Negotiation 3 sem. hrs. Explores a variety of styles of negotiation, focusing primarily on interest-based bargaining. Addresses criticisms of the efficacy of interest-based bargaining in some depth. Uses a significant number of role plays for instructional purposes, utilizing scenarios from two-party single issue negotiations to multi-party multi-issue negotiations. Prereq: DIRS 203.
ECONOMICS (ECON)  

See GRADUATE SCHOOL OF MANAGEMENT SECTION

EDUCATION (EDUC)  

Dean: Henk  
Chair of Counseling and Educational Psychology and Associate Professor: Campbell  
Chair of Educational Policy and Leadership and Professor: Lowe  
Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREES OFFERED  
Master of Arts; Master of Education; Doctor of Philosophy; Certificate  
Certificate programs prepare students to obtain state certification and licensure.

PROGRAM OVERVIEW  
The College of Education prepares graduate students to assume leadership roles in the areas of study provided by its programs and specializations. The College of Education is made up of two departments: Counseling and Educational Psychology (COEP) and Educational Policy and Leadership (EDPL). The following degrees are offered through Counseling and Educational Psychology: doctoral degree in counseling psychology; master’s degree in counseling and in educational psychology.

The following degrees and specializations are offered through Educational Policy and Leadership: doctoral degree; master of arts degree with specializations in curriculum and instruction, educational leadership, and literacy; master of education degree with specializations in college student personnel administration, educational administration, elementary education, and secondary education.

While Marquette University is concerned about the professional advancement of its students, facilitates the process of certification, and provides excellent educational opportunities, it cautions that professional success in a chosen field requires, above all else, constant development of individual abilities, personal initiative, and a professional sense of responsibility for fulfilling all one’s appropriate legal, ethical, and other professional responsibilities. Hence, the university facilitates the licensure process for students pursuing careers in education and other human service fields, but students must also take responsibility for meeting all the requirements for licensure or certification in their chosen fields.

EDUCATION: COUNSELING PSYCHOLOGY (COEPS)  
See COUNSELING AND EDUCATIONAL PSYCHOLOGY (COEP)

EDUCATION: EDUCATIONAL POLICY AND LEADERSHIP (EDPL)  
See EDUCATIONAL POLICY AND LEADERSHIP (EDPL)

EDUCATION: EDUCATIONAL PSYCHOLOGY (EDPS)  
See COUNSELING AND EDUCATIONAL PSYCHOLOGY (COEP)

DEGREES OFFERED  
Master of Arts (M.A.), Plan B (non-thesis option, default) or Plan A (thesis option, by request), Master of Education (M.Ed.), Plan B (non-thesis option, default) or Plan A (thesis option, by request); Doctor of Philosophy; Certificate

SPECIALIZATIONS  
M.A.: Curriculum and Instruction, Educational Leadership, Literacy  
M.Ed.: College Student Personnel Administration, Educational Administration, Elementary Education, Secondary Education  
Certificate: Director of Instruction, Elementary Education, Principal, Reading Specialist, Reading Teacher, Secondary Education, Superintendent  
Ph.D.: None

GENERAL PROGRAMS DESCRIPTION  
The educational policy and leadership programs prepare graduate students to assume educational leadership roles in the areas of study provided by its programs and specializations. A distinctive characteristic of the programs are their commitment to the development of professionals as agents of critical inquiry and social justice. This is done through a systematic focus on the social, cultural, philosophical and historical contexts of education. The educational policy and leadership programs seek to apply the university goals of Christian commitment.
and scholarship to settings related to educational practice and policy, especially in public and private schools and institutions of higher education.

**MASTER’S PROGRAMS**

The goal of the master’s programs is to engage the professional educator in extended critical reflection on the principles, practices, and rationales of human-service leadership in contemporary society. Specifically, the programs seek to develop educa-
tional leaders in K-12 schools, colleges, universities, and organizations with expertise in the historical, philosophical, and sociological foundations of educational policy issues. The programs are designed to accommodate the working professional, and program content is composed to reflect student backgrounds, interests, and professional objectives.

**M.A. – CURRICULUM AND INSTRUCTION**

The master of arts with a specialization in curriculum and instruction invites students to pursue critical study of curriculum, teaching, and subject area knowledge. This program is designed for prac-
ticing teachers in K-12 schools or higher education. The program is grounded in the National Board of Professional Teaching Standards and is designed to help students become master teachers, conduct action research, and act as leaders and change agents in their schools, districts, and communities. Courses in this specialization are offered in both online and face-to-face formats.

**M.A. – EDUCATIONAL LEADERSHIP**

The master of arts with a specialization in educational leadership is designed for those who wish to combine the study of foundations in educational leadership with research in an area of interest. A thesis is required for this program.

**M.A. – LITERACY**

The master of arts with a specialization in literacy is designed for licensed teachers interested in the Reading Teacher license in the state of Wisconsin (DPI License 316) acquired in conjunc-
tion with a master’s degree. This program is grounded in the National Board of Professional Teaching Standards and is designed to help students become master teachers, conduct action research, and act as leaders and change agents in their schools, districts, and communities. Courses in this specialization are offered in both online and face-to-face formats.

**M.Ed. – ELEMENTARY EDUCATION**

The master of education with a specialization in elementary education is designed for students with a bachelor’s degree who wish to earn an initial Wisconsin elementary/middle (middle childhood/early adolescence — grades 1-8) teaching license. This license to master’s program is aligned with the knowledge, skills and dispositions related to effective teaching and articulated in the Wisconsin State Teaching Standards for Licensure and Professional Development. Like Marquette’s under-
graduate teacher preparation program, this program prepares teachers to uphold the Jesuit traditions of care for the person, social justice, academic excel-
rence, ethical behavior and service to the urban community.

**M.Ed. – SECONDARY EDUCATION**

The master of education with a specialization in secondary education is designed for students with a bachelor’s degree in biology, chemistry, economics, English, a foreign language, history, mathematics, physics, political science, psychology, or sociology who wish to earn an initial Wisconsin middle/sec-
ondary (early adolescence/adolescence — grades 6-12) teaching license. This license to master’s program is aligned with the knowledge, skills and dispositions related to effective teaching and articu-
lated in the Wisconsin State Teaching Standards for Licensure and Professional Development. Like Marquette’s under-
graduate teacher preparation program, this program prepares teachers to uphold the Jesuit traditions of care for the person, social justice, academic excellence, ethical behavior and service to the urban community.

**PREREQUISITES FOR ADMISSION TO MASTER’S PROGRAMS**

Applicants should have graduated with, or be about to graduate with, a bachelor’s or master’s degree from an accredited institution appropriate to their chosen field of graduate study.

**APPLICATION DEADLINE**

The department offers rolling admission for all master’s and certificate programs. However, stu-
dents are advised to keep the following deadlines in mind when applying. All applications materials must be submitted by the following dates:

- July 15 (for fall admission)
- April 15 (for spring admission)
- November 15 (for spring admission)

**APPLICATION REQUIREMENTS**

Applicants must submit, directly to the Graduate School:

1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation addressing the applicant’s ability to do graduate-level work.
4. A personal statement of purpose that includes professional and academic goals.
5. For administrative leadership certificate appli-
cants only) proof of an earned master’s degree.
6. For master’s applicants only) GRE scores (General Test only; scores must be received by application deadline).
7. For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

An interview and/or writing test may be required of applicants following the initial screening.

**Teacher certification applicants are required to submit Praxis I and II scores to the College of Education’s Office of Teacher Education. These applicants must also undergo a criminal background check, conducted by Marquette University. A second criminal background check is conducted at the state level when student teaching is completed, as part of the teacher license application.**

**M.A. – CURRICULUM AND INSTRUCTION**

The master of arts degree in curriculum and instruction requires students to complete 30 credit hours of course work, complete research and lead-

**Required courses (21 credits)**

EDPL 220, EDPL 234, EDPL 237, EDPL 221, EDPL 222, EDPL 223, and EDPL 238.

**Elective courses (9 credits)**

Chosen from content area of specialization.

**M.A. – EDUCATIONAL LEADERSHIP**

The master of arts degree in educational leadership requires students to complete 33 credit hours of course work, complete a comprehensive examination, and defend an approved thesis.

**Required courses (24 credits)**

EDPL 200, EDPL 220 OR EDPS 261, EDPL 205, EDPL 249 OR EDPL 209, EDPL 202, an additional research course, and EDPL 299 (master’s thesis – 6 credits).

**Elective courses (9 credits)**

Chosen from content area of specialization.

**M.A. – LITERACY**

The master of arts degree in literacy requires students to complete 33-36 credit hours of course work, complete research and leadership projects, and compose a capstone essay.

**Required courses (33-36 credits)**

EDPL 220, EDPL 234, EDPL 237, EDPL 221, EDPL 222, EDPL 223, EDPL 283, EDPL 284, EDUC 125 (taken for graduate credit), EDPL 286, EDPL 288, and EDPL 289 (required only for students with deficient back-
ground in children’s literature).

**Required for licensure:**

- Wisconsin Teaching license
- Two years of teaching experience
- 12 hours of post-bachelor’s course work

**M.Ed. – COLLEGE STUDENT PERSONNEL ADMINISTRATION**

The master of education degree in college student personnel administration requires students to complete 33 credits of course work and complete a professional project.
Required courses (30 credits)
EDPL 200, EDPL 250, EDPL 220 OR EDPS 261, EDPL 205, EDPL 210 (capstone course), EDPL 259, COUN 216, EDPS 271, EDPL 272, and EDPL 212.

Elective course (3 credits)

M.ed. – EDUCATIONAL ADMINISTRATION

The master of education degree in educational administration requires students to complete 33-36 credit hours of course work and complete a leadership portfolio and/or professional project.

Required courses (15 credits)
EDPL 200, EDPL 220 OR EDPS 261, EDPL 205, EDPL 249 OR EDPL 209, and EDPL 210.

Additional graduate-level requirements for PRINCIPAL LICENSE (18 credits)
EDPL 202, EDPL 203, EDPL 206, EDPL 234 OR EDPL 242, EDPL 240, and EDPL 208 (consent required).

Additional graduate-level requirements for DIRECTOR OF INSTRUCTION LICENSE (21 credits)
EDPL 202, EDPL 203, EDPL 234, EDPL 240, EDPL 242, EDPS 266, and a practicum course.

M.ed. – ELEMENTARY EDUCATION

The master of education degree in elementary education requires students to complete 33-38 credit hours of course work. This includes one term of full-time student teaching.

Undergraduate prerequisites (13-16 credits)
A literacy practicum (4 credits), math and math methods courses (6-9 credits), and a fine arts methods or elective course (9 credits).

Graduate courses (40-42 credits)
EDPL 244; a course in life-span development or child/adolescent development, e.g. EDPS 266; a foundations of education course, e.g. EDUC 158 (taken for graduate credit), EDPL 249, or EDPL 255; EDPL 215; EDPL 245; EDUC 128 (taken for graduate credit – 4 credits); EDPL 234; EDPL 237; EDPL 238; literacy methods courses (6-8 credits); a science methods course; and a student teaching practicum.

Prerequisite course work**
Graduate level course(s) in content area of specialization.
* Course work completed at the undergraduate level (either at Marquette or in another institution) may reduce course requirements in this program. A minimum of 33 credits must be completed at the graduate level for the master’s degree.
** Based on an analysis of the undergraduate transcript, students may be required to complete additional course work in their content area of certification to meet Wisconsin Department of Public Instruction certification requirements.

CERTIFICATE PROGRAMS

The College of Education offers a variety of certificate programs in alignment with requirements for educational licensure through the Wisconsin Department of Public Instruction.

ADMINISTRATIVE LICENSURE CERTIFICATES
Certificate programs are available for the Wisconsin Director of Instruction, Principal, and Superintendent licenses. Licensed teachers who wish to acquire a principal or director of instruction license may also do so in conjunction with the master of education in educational administration.

LITERACY CERTIFICATES
Certificate programs are available for the Wisconsin Reading Teacher (316) and Reading Specialist (317) licenses. Licensed teachers who wish to complete the 316 license may do so separately or in conjunction with the master of arts in literacy. The additional requirements for the 317 license can also be fulfilled separately, or in addition to the 316 license with the master of arts.

TEACHING CERTIFICATES
Certificate programs are available for Wisconsin teaching licensure at the middle childhood/early adolescence level (elementary/middle, grades 1-8) or the early adolescence/adolescence level (middle/secondary, grades 6-12). Students can earn either license alone or in conjunction with a master of education degree.

TEACHER AND ADMINISTRATIVE CERTIFICATION APPLICANTS
All applicants seeking teacher certification or administrative certification must have transcripts evaluated by the College of Education BEFORE formally applying to the Graduate School for admission to any certificate program. Only upon approval of the department should students submit application materials to the Graduate School. Students seeking an advanced degree and certification must meet the criteria for both admission to the Office of Teacher Education and the Graduate School.

All inquiries concerning certification should be directed to the College of Education Graduate Office, located at Schroeder Health and Education Complex, 176, P.O. Box 1881, Milwaukee, WI 53201-1881, or via telephone at (414) 288-0659.

APPLICATION REQUIREMENTS
After having transcripts evaluated by the College of Education, applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation addressing the applicant’s ability to do graduate-level work.
4. A personal statement of purpose that includes professional and academic goals.
5. (For administrative leadership certificate applicants only) proof of an earned master’s degree.
6. (For master’s applicants only) GRE scores (General Test only; scores must be received by application deadline).
7. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.
An interview and/or writing test may be required of applicants following the initial screening. Teacher certification applicants are required to submit Praxis I and II scores to the College of Education’s Office of Teacher Education. These applicants must also undergo a criminal background check, conducted by Marquette University. A second criminal background check is conducted at the state level when student teaching is completed, as part of the teacher license application.

Individuals submitting applications for administrative licenses must undergo a criminal background check, conducted by the state, when their administrative program is complete and they submit their administrative license application to the state.

CERTIFICATE/LICENSURE REQUIREMENTS
Certificates in several fields involving graduate instruction are granted by the Wisconsin Department of Public Instruction. The university’s decisions on recommendations for certification are made by its Licensing Officer after appropriate consultations. In this process, professional judgments are exercised. Thus, while certain courses are normally specified for various certificates, any such requirements are a necessary but not sufficient condition for certification.

DIRECTOR OF INSTRUCTION
This certificate program is designed for licensed teachers interested in the Director of Instruction license in the state of Wisconsin and requires students to complete 30 credit hours of course work.

Prerequisites:
• Wisconsin Teaching license
• Master’s degree
• Licensed teaching experience

Required courses (30 credits)
EDPL 200, EDPL 220 OR EDPS 261, EDPL 205, EDPL 202, EDPL 203, EDPL 234, EDPL 240, EDPL 242, EDPS 266, and a practicum course.

ELEMENTARY EDUCATION
This certificate program is designed to meet the needs of adults with a bachelor’s degree who wish to earn an initial Wisconsin middle childhood/early adolescence (grades 1-8) teaching license and requires students to complete 17-36 credit hours of course work.

Undergraduate prerequisites:
• Literacy practicum (4 credits)
• Math and math methods courses (6-9 credits)
• Fine arts methods or elective course (3 credits)

Graduate courses (17-36 credits)
EDPL 244; a course in life-span development or child/adolescent development, e.g. EDPS 266; a foundations of education course, e.g. EDUC 158 (taken for graduate credit), EDPL 249, or EDPL 255; EDPL 215; EDPL 245; EDUC 128 (taken for graduate credit – 4 credits); EDPL 234; EDPL 237; EDPL 238; EDUC 125 (taken for graduate credit); a specialized advanced methods course in the area of certification, e.g. English, social studies, math, science, foreign language, and a student teaching practicum.
PRINCIPAL
This certificate program is designed for licensed teachers interested in the Principal license in the state of Wisconsin and requires students to complete 30 credit hours of course work.

Prerequisites:
- Wisconsin Teaching license
- Master's degree
- Licensed teaching experience

Required courses (30 credits)
EDPL 200, EDPL 220 OR EDPS 261, EDPL 205, EDPL 249 OR EDPL 250, EDPL 202, EDPL 203, EDPL 206, EDPL 208, EDPL 234 OR EDPL 242, and EDPL 240.

READING SPECIALIST
This certificate program is designed for licensed teachers interested in the Reading Specialist license in the state of Wisconsin (DPI License 317) and requires students to complete 27-30 credit hours* of course work.

Required courses for reading specialist certificate only – DPI License 317 (27-30 credits)
EDPL 283, EDPL 284, EDUC 125 (taken for graduate credit), EDPL 285 (required only for students with deficient background in children's literature), EDPL 286, EDPL 288, EDPL 289, EDPL 290, EDPL 291, and EDPL 240.

Required for licensure:
- Master's degree or 30 hours of graduate course work equivalent
- Wisconsin Teaching license
- Two years of teaching experience

READING TEACHER
This certificate program is designed for licensed teachers interested in the Reading Teacher license in the state of Wisconsin (DPI License 316) and requires students to complete 15-18 credit hours* of course work.

Required courses for reading teacher certificate only – DPI License 316 (15-18 credits)
EDPL 283, EDPL 284, EDUC 125 (taken for graduate credit), EDPL 286, EDPL 288, and EDPL 285 (required only for students with deficient background in children's literature).

Required for licensure:
- Wisconsin Teaching license
- Two years of teaching experience
- 12 hours of post-bachelor's course work

SECONDARY EDUCATION
This certificate program is designed to meet the needs of the working professional with a bachelor's degree who wish to earn an initial Wisconsin early adolescence/adolescence (grades 6-12) teaching license and requires students to complete 15-28 credit hours* of course work.

Required courses (28 credits)
EDPL 244; a course in life-span development or child/adolescent development, e.g. EDPS 266; a foundations of education course, e.g. EDUC 158 (taken for graduate credit), EDPL 249, or EDPL 255; EDPL 215, EDPL 245; EDUC 128 (taken for graduate credit – 4 credits); EDUC 125 (taken for graduate credit); a specialized advanced methods course in the area of certification, e.g. English, social studies, math, science, foreign language; and a student teaching practicum.

Prerequisite course work**
Graduate level course(s) in content area of specialization.

SUPERINTENDENT
This certificate program is designed for licensed teachers interested in the Superintendent license in the state of Wisconsin and requires students to complete 27 credit hours of course work.

Prerequisites:
- Wisconsin Teaching license
- Three years of teaching experience
- Master's degree
- Principal license
- Human development course

Required courses (24 credits)
EDPL 302, EDPL 303, EDPL 304, EDPL 306, EDPL 307, EDPL 308, EDPL 342, and EDPL 349.

Elective course (3 credits)
* Depending on background and/or equivalent course work completed (either at Marquette or in another institution).
** Based on an analysis of the undergraduate transcript, students may be required to complete additional course work in their content area of certification to meet Wisconsin Department of Public Instruction certification requirements.

DOCTORAL PROGRAM
The goal of the doctoral program in educational policy and leadership is to engage the professional educator in extended critical reflection on the principles, practices, and rationales of human-service leadership in contemporary society. Specifically, the program seeks to develop educational leaders in K-12 schools, colleges, universities, and educational organizations with expertise in the historical, philosophical, and sociological foundations of educational policy issues. The program is designed to accommodate the working professional, and program content is composed to reflect student backgrounds, interests, and professional objectives.

The doctoral program is designed to foster the development of scholar-practitioners. It asks students not only to inquire deeply into the process of teaching and learning, but also how the organization of schooling shapes this process. In addition, the program asks students to acquire adjacent disciplinary strengths that provide contexts for considering what knowledge is of most worth, how forms of knowledge are socially distributed, and what educational measures might help bring about a more just society. Students are expected to gain expertise in research that will enable them to contribute to the ways we think about education, and they are expected to develop technological and other practical skills that will enable them to implement strategies for change.

PREREQUISITES FOR ADMISSION
Applicants should have graduated with, or be about to graduate with, a master's degree from an accredited institution appropriate to their chosen field of graduate study. The exceptional student applying to the doctoral program without a master's degree must complete an appropriate master's degree as part of his or her doctoral program requirements.

APPLICATION DEADLINE
January 15 Applicant files must be completed by this date for admission consideration to the doctoral program. Applicants will be notified by March 15.

APPLICATION REQUIREMENTS
Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation addressing the applicant's ability to do graduate-level work.
4. GRE scores (scores MUST be received by application deadline – January 15).
5. A sample of scholarly writing, such as a master's thesis or a published article.
6. A personal statement articulating research interests with professional aspirations.
7. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

An interview and/or writing test may be required of applicants following the initial screening.

DOCTORAL REQUIREMENTS
A doctoral student must complete a program of study prepared in consultation with his or her adviser. Each program of study must include a minimum of 45 credit hours of course work beyond the master's degree (at least 33 of which must be in the College of Education), plus a minimum of 12 credit hours of work on a dissertation. A doctoral program must contain the following elements:

1. Doctoral seminars (9 credits)
EDPL 330, EDPL 331, and EDPL 335.

2. Foundation courses (12 credits)
EDPL 337, EDPL 348, EDPL 349, and EDPL 355.

Students must take two of the four courses listed above, including EDPL 349. Additional foundation courses can be selected from 200/300-level courses in areas such as curriculum, leadership, history, philosophy, sociology or psychology.

3. Research courses (12 credits)
EDPL 312, EDPL 315, EDPS 321, or PSYC 224, and at least one elective course.

4. A supportive elective sequence of courses, approved by the student's adviser (12 credits)

5. Dissertation work (12 credits)
Students interested in obtaining principal or superintendent licensure with the doctoral program will be required to complete additional course work. Normally, no foreign language is required, unless, at the discretion of the student's adviser, proficiency in a foreign language is necessary in a student's research.

A doctoral student must pass both the written and oral parts of a qualifying examination (DQE) prior to the advancement to candidacy. This is normally taken after the completion of a minimum of 33 credit hours. Program faculty determines the format for the examination. A student's DQE committee (and dissertation committee, although these do not need to have the same membership) should include at least two faculty from the EDPL Department. The remaining members may be from outside the department with no more than one coming from outside

*  depending on background and/or equivalent course work completed (either at Marquette or in another institution).
** Based on an analysis of the undergraduate transcript, students may be required to complete additional course work in their content area of certification to meet Wisconsin Department of Public Instruction certification requirements.
the university. Students should select all committee members in consultation with their advisor. The doctoral dissertation must represent an original research contribution and show high attainment and clear ability to do independent research. Students must successfully defend both their dissertation proposal and the final dissertation.

**COURSE DESCRIPTIONS**

**UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:**

**Education (EDUC)**

EDUC 104. Parenting and Family Issues 3 sem. hrs.
EDUC 110. Teaching Elementary Reading, Language Arts, and Children’s Literature 1 4 sem. hrs.
EDUC 120. Teaching Elementary Reading, Language Arts, and Children’s Literature 2 4 sem. hrs.
EDUC 125. Literacy in the Content Areas 3 sem. hrs.
EDUC 128. Teaching in the Middle School 4 sem. hrs.
EDUC 145. Teaching Middle/Secondary Social Science 3 sem. hrs.
EDUC 158. Philosophy of Education 3 sem. hrs.
EDUC 165. Strategies in Religious Education 3 sem. hrs.
EDUC 192. Reading Instruction for School Service Personnel 3 sem. hrs.
EDUC 198. Special Topics in Education 1-4 sem. hrs.

**GRADUATE COURSES:**

Some courses, numbered at two levels, permit distinction of master’s and doctoral enrollees with corresponding differences in course expectations to be specified by the instructor at the beginning of each course. Master’s students will generally register for the 200-level designation, doctoral for the 300-level. Students should review this policy and its implications with their advisors early in the program. Some 100-level courses have been approved for graduate credit. These courses are designated in the Schedule of Classes with the comment “Course May Carry Grad Credit.”

**Educational Policy and Leadership (EDPL)**

EDPL 200. Theory and Practice of Educational Leadership 3 sem. hrs.
Contemporary theories of organizational behavior and administration and their applications to schools. Educational governance and leadership. Offered annually. To be taken toward the beginning of program.
EDPL 201. Motivation and Human Relations in Educational Leadership 3 sem. hrs.
Theoretical and practical dimensions of human relations in educational organizations. Human motivation, communication, interpersonal, and group skills.
Theoretical and practical dimensions of the socio-cultural, economic, and political forces affecting educational organizations and how educational leaders can respond and interact with them. Offered annually.
EDPL 203. Business Administration of the Educational Organization 3 sem. hrs.
The various business management support functions and their impact on the delivery of educational services. School finance, theories of taxation, legislative and judicial context for school business management, human resource management and employee contract administration, information management systems and technology, budget planning, facilities management, and related topics.
EDPL 205. American Law and the Educational Organization 3 sem. hrs.
The legal basis for American education: constitutional interpretations; court decisions and legislation affecting schools and school systems; tort liability; contracts; civil rights; teacher and student rights and responsibilities; church/state issues; school property and finance; legal aspects of special education. Offered annually.
EDPL 206. The Principalship 3 sem. hrs.
Leadership of the individual school. Operational tasks of the principal including policy formation, implementation, coordination, and evaluation of the general and special instructional programs. Leadership roles of the principal in regard to faculty, students, parents, and community. Offered annually.
EDPL 208. Practicum in the Principalship 3 sem. hrs.
Field application relating to educational leadership theory to applied practice of the principalship in a university-approved setting. Participation in an on-campus seminar is required. Offered annually. S/U grade assessment. Prereq: Cons. of dept.
EDPL 210. Practicum in Student Affairs Leadership 1 3 sem. hrs.
Field application relating to educational leadership theory to applied practice of higher education leadership in a university-approved setting. Participation in an on-campus seminar is required. Offered annually. S/U grade assessment. Prereq: Cons. of dept.
EDPL 212. Practicum in Students Affairs Leadership 2 3 sem. hrs.
Field application relating to educational leadership theory to applied practice of higher education leadership in a university-approved setting. Participation in an on-campus seminar is required. Offered annually. S/U grade assessment.

**EDPL 215. Introduction to Learning, Assessment, and Technology 3 sem. hrs.**
Introduction to the use of instructional technologies to enhance planning, assessment and learning. Offered annually.

**EDPL 220. Introduction to Educational Inquiry 3 sem. hrs.**
Multiple approaches to educational research with emphasis on reading, critiquing and using research to inform educational practice. Introduction to the development of a research proposal. Offered every term.

**EDPL 221. Practitioner Research Methods 3 sem. hrs.**
Designing and conducting research on own practice for the purpose of improvement. Emphasis on participant observation, interviewing, reading and conducting literature reviews, data collection and analysis. Offered every term. Prereq: At least 12 graduate credits including EDPL 220; cons. of dept.

**EDPL 222. Practitioner Research Practicum 3 sem. hrs.**
Students design, conduct, write and present results of a practice-based research project. Implications of practitioner research for curriculum, pedagogy, leadership and educational reform are addressed. Offered annually. Prereq: Cons. of dept.

**EDPL 223. Teacher as Leader 3 sem. hrs.**
Survey of leadership theories and roles for teachers in schools. Skill development in group dynamics, motivation, communication and human relations. The teacher leader in relation to organizational change, decision-making, team-building and moral leadership. Offered fall and spring terms. Available online annually. Prereq: EDPL 222 which may be taken concurrently.

**EDPL 228. Elementary/Middle Education Practicum 3 sem. hrs.**
Full day, full term of public or private school teaching, Monday through Friday. Regular on-site visitation by university faculty. Weekly seminar required. S/U grade assessment. Prereq: EDUC 128 and cons. of dept.; admission to the College of Education.

**EDPL 229. Middle/Secondary Education Practicum 3 sem. hrs.**
Full day, full term of public or private school teaching, Monday through Friday. Regular on-site visitation by university faculty. Weekly seminar required. S/U grade assessment. Prereq: EDUC 128 and cons. of dept.; admission to the College of Education.
Historical, philosophical, sociocultural, political, and economic forces which shape curriculum development and change. Theories of curriculum. Skill development in curricular planning and evaluation. Offered annually.

EDPL 237. Theories of Learning Applied to Instruction 3 sem. hrs.
Survey of major theories of learning. Use of learning theory to analyze and critique curriculum and design learner-centered instruction and assessments. Offered annually.

EDPL 238. Seminar: Analysis of Teaching 3 sem. hrs.
Use of current theories and research on teaching to examine and assess teaching practice. Offered annually. Prereq: EDPL 237.

EDPL 240. Supervision of Instruction 3 sem. hrs.

EDPL 241. Supervision of Student Teaching 3 sem. hrs.
The role of the supervising teacher in student teaching or internship programs. Attention will be given to the development of understanding, attitudes, and skills essential in working effectively with student teachers to facilitate the improvement of instruction. Offered occasionally. Prereq: Three years of teaching experience.

Exploration, applications, and critique of current models of curriculum design. Emphasis on curricular decision-making and implementation at the school or district level. Offered alternate years. Prereq: EDPL 234 or EDPL 334.

EDPL 244. Introduction to Schooling in a Diverse Society 3 sem. hrs.
Critical and reflective examination of assumptions about schooling in the United States including the impacts of race, ethnicity, class, and gender; power and control in school and community contexts; and the concerns, demands, conditions, and rewards of the teaching profession.

EDPL 245. Differentiation of Instruction for Exceptional Learners 3 sem. hrs.
Introduction to theories and educational practices that help teachers to adapt instruction to meet the needs of students with exceptional educational needs.

An examination of the interaction among biological, psychological, social, and cultural factors that influence human development. Educational implications of these issues.

Selected texts from a number of ancient and contemporary thinkers significant in the philosophical and educational tradition. Analysis of ramifications for current educational theory and practice. Offered every other year.

EDPL 249. History of Education in the United States 3 sem. hrs.
Examines the development of public education. Emphasizes contests over the proper role of schools in promoting equity, diversity, and democracy. Pays particular attention to how different groups experienced and shaped schools over time. Considers the relationship between the expansion of schooling and equal educational opportunity.

Basic history of the American college and university. Colonial foundations, private and state-controlled institutions, professional, technical, and graduate studies. Recent trends and issues in higher education. Offered alternate years.

Contemporary philosophical approaches to educational problems and issues, including pragmatist, analytic, existentialist, phenomenological, critical, hermeneutic, post-modern, and feminist. Offered occasionally.

Those aspects of the science of sociology and social anthropology which help the student to understand the individual as a member of society, Education and the school in the social structure. Offered every other year.

EDPL 256. Catholic Theology and Education 3 sem. hrs.
History of philosophical theology in the Catholic tradition and its bearing upon educational theory and practice. Investigation into theological methods and principles and their implications for education through an examination of the thought of selected individuals representative of the Catholic heritage. Attention to such theologians as St. Augustine, St. Thomas Aquinas, St. Bonaventure, Duns Scotus, Newman, Rahner, and Lonergan. Specific problems confronting Catholic education today. Offered occasionally.

Examination of current issues in higher education and the assumptions underlying various positions on those issues. Offered occasionally.

EDPL 259. Introduction to Student Affairs 3 sem. hrs.
Historical, philosophical and theoretical foundations of the field of student affairs in higher education in the United States. Roles and functions of various student affairs divisions and how they contribute to purposes of post-secondary education. Current issues in the field. Offered annually.

EDPL 260. Foundations of Instructional Technology 3 sem. hrs.
Historical and current theoretical perspectives on use of technologies in classrooms. Evaluation and use of various educational applications of technology in curricular design. Emerging technologies and current trends in online education. Ethical, legal, cultural and research issues in current uses of instructional technology.

Application of concepts, issues, processes, theories, and techniques of instructional design will be explored in a variety of electronic learning contexts including instructional modules, Web-based courses, computer graphics, and educational software.

EDPL 262. Facilitating a Web-Based Course 3 sem. hrs.
Research-based methods and techniques for building effective online learning communities, including facilitation of structured dialogue and interaction, reflection, critical thinking, collaboration, and active engagement in the learning process. Offered every other year.

EDPL 263. Theories and Research in Instructional Technology 3 sem. hrs.
Survey of recent research developments and theoretical frameworks in the field, focusing on current cognitive and social constructivist theories. Students design individual research projects in areas of interest. Offered every other year.

EDPL 265. Special Topics in Creative Education 2 sem. hrs.
A graduate-level course in selected areas of art, design and technology, with applications for K-12 or college classrooms. Offered at the Milwaukee Institute of Art and Design in a one-week residency. Topics vary and will be designated in the summer Schedule of Classes. Offered annually during the month of July.

EDPL 270. Faculty Roles in Higher Education 3 sem. hrs.
Seminar aimed at students planning academic careers in higher education. Focus on changes in traditional dimensions of teaching, research, and service in light of current research on teaching and learning; corporate influences on higher education; and current critiques of higher education.

EDPL 271. Designing and Teaching Effective Courses in Higher Education 3 sem. hrs.
Seminar aimed at students planning academic careers in higher education. Focus on planning, delivering, and evaluating courses in higher education that produce significant student learning in light of current advances in cognitive science relevant to teaching and learning.

EDPL 272. Diverse Students on the College Campus 3 sem. hrs.
Research and theoretical perspectives on multiculturalism and diversity issues in higher education. Course focuses on how race, ethnicity, gender, age, sexual orientation, disability, religion, socioeconomic status, and national origin impact the college setting. Offered every other year.

EDPL 283. Literacy and Children's Literature for the Primary Grades 3 sem. hrs.
Theory and practice in teaching reading, language arts, and children's literature from a developmental perspective to diverse lower elementary learners. Offered annually. Online only.

EDPL 284. Literacy and Children's Literature for the Intermediate Grades 3 sem. hrs.
Theory and practice in teaching reading, language arts, and children's literature from a developmental perspective to diverse upper elementary learners. Offered annually. Online only.

EDPL 285. Literature for Children and Adolescents 3 sem. hrs.
History and survey of literature for children and adolescents. Theoretical study and practical application of reader response, literary analysis, and current topics in the field of literature for children and young adults. Offered occasionally.
EDPL 286. Literacy Assessment and Instruction 3 sem. hrs.
Developmental theory of assessment and instruction with experience conducting assessment and planning of instruction to meet individual literacy needs of children and young adults. Offered annually. Prereq: EDUC 110 and EDUC 120.

EDPL 288. Practicum: Literacy Assessment and Instruction 3 sem. hrs.
A practicum involving assessment and instruction of K-12 students at varying stages of reading development. Offered annually. Prereq: EDPL 286 and cons. of dept.

EDPL 289. Supervision and Administration of Reading Programs 3 sem. hrs.

EDPL 290. Psychology of Reading Instruction 3 sem. hrs.
Theory and research in the psychological processes underlying word recognition and comprehension processes. Attention is also given to individual differences in readers abilities. Offered occasionally. Prereq: EDUC 110 and EDUC 120; or EDPL 286 or equiv. and EDUC 125.

EDPL 291. Practicum in the Supervision and Administration of K-12 Reading Programs 1-3 sem. hrs.
The practicum, based in school settings, will include experiences in the supervision and administration of K-12 reading programs, under the supervision of a school reading supervisor and a university supervisor. Experiences may include supervision of teachers of reading, coordination of components of reading programs (e.g., selection of materials, tests, etc.), and development of in-service programs. Offered occasionally. S/U grade assessment. Prereq: EDPL 289.

EDPL 294. Seminar on Topics in Educational Policy and Leadership 1-6 sem. hrs.
Graduate seminars on current topics in leadership and supervision of interest to the professional educator. Usually offered biannually. S/U grade assessment.

EDPL 295. Independent Study 1-3 sem. hrs.
Provides graduate students opportunities to investigate and study areas of interest through readings, research, field experience, projects, and/or other educational activities under the direction of a faculty adviser. Offered every term. Prereq: Cons. of instr. and cons. of dept. ch. It should be noted that graduate students seeking independent study opportunities must complete an approval form signed by the dept. ch. or her designated representative.

EDPL 298. Special Topics in Educational Policy and Leadership 1-3 sem. hrs.
In-depth study of educational concepts and theories in a broad area which, because of their topicality, are not the subject of a regular course. The special topics will be designated in the Schedule of Classes. Offered occasionally.

EDPL 299. Master’s Thesis 1-6 sem. hrs.

EDPL 300. Theory and Practice of Educational Leadership 3 sem. hrs.
Contemporary theories of organizational behavior and administration and their applications to schools. Educational governance and leadership. Offered annually. To be taken toward the beginning of program.

EDPL 301. Motivation and Human Relations in Educational Leadership 3 sem. hrs.
Theoretical and practical dimensions of human relations in educational organizations. Human motivation, communication, interpersonal, and group skills.

Advanced study of theoretical and practical dimensions of the sociocultural, economic and political forces affecting educational organizations and how educational leaders can respond and interact with them. Offered annually.

Study of school finance from theoretical, legal, and political perspectives.

EDPL 304. Advanced Program Planning and Evaluation in Educational Settings 3 sem. hrs.
Exploration of theories, models, and current practices in leadership, planning, and assessment within educational organizations.

EDPL 305. American Law and the Educational Organization 3 sem. hrs.
The legal basis for American education: constitutional interpretations; court decisions and legislation affecting schools and school systems; tort liability; contracts; civil rights; teacher and student rights and responsibilities; church/state issues; school property and finance; legal aspects of special education. Offered annually.

EDPL 306. The Superintendentcy 3 sem. hrs.
Leadership of the school district system. The roles played by the superintendent: board chief operating officer, visionary, motivator, risk-taker, communicator, lobbyist, etc. Offered alternate years. Prereq: Master’s degree and principal’s certification.

Comprehensive study of personnel services in the educational setting, including recruitment, selection, compensation, staff development, collective bargaining, and employee contract administration. Offered occasionally. Prereq: Cons. of dept.

EDPL 308. Advanced Practicum in Educational Leadership 3 sem. hrs.
Field application relating educational administrative theory to the applied practice of educational administration at the system or college level. Participants must be in a university-approved setting and must participate in an on-campus seminar. Offered annually. S/U grade assessment. Prereq: Cons. of dept.

EDPL 309. Leadership Foundations of Private Education 3 sem. hrs.
Historical, philosophical, sociological, political and theological foundations of education for both sectarian and non-sectarian schools. Implications for a variety of leadership models. Offered occasionally.

Guided research and discussion of significant issues confronting educational leaders. Offered occasionally.

EDPL 312. Multiple Paradigms in Educational Research 3 sem. hrs.
Situates educational research and knowledge within a philosophy of science framework. Students will examine a range of competing epistemologies, alternative ways of knowing the world, and explore how each, in turn, shapes and is shaped by the practice of education. The course is organized around three active paradigms: empirical-analytic, interpretive and critical. Students will explore the implications of these paradigms for critiquing, conceptualizing and conducting research in education.

EDPL 315. Interpretive and Critical Research in Education 1 3 sem. hrs.
Theory and rationale of qualitative research methods in the social sciences. Historical research, case studies, field studies, non-invasive approaches. Data gathering and analysis procedures. Offered alternate years. Prereq: EDPL 312 or equiv.

EDPL 318. Interpretive and Critical Research in Education 2 3 sem. hrs.
Building on the understanding and skills developed in EDPL 312 and interpret and present in written and oral forms, a course-long research project. The paradigmatic assumptions and practice of interpretive and critical work are explored to develop a holistic understanding and critique of educational settings. Students work-in-progress will structure the organization of the course. A range of research issues and problems are addressed as they emerge. Offered alternate years. Prereq: EDPL 312 and EDPL 315 or equiv.

Trains historical and sociological lenses on matters of race, class and culture in order to engender thinking about how curricular practices and supporting policies might contribute to equity in education. First course in the doctoral program.

EDPL 331. Seminar 2: Social Contexts and Educational Policy 3 sem. hrs.
With an emphasis on equity, examines competing conceptions of pedagogy and key contentions over what constitutes the proper cultural content of curriculum. Also considers curricular and instructional implications of alternative policies of school governance and demographics. Second course in the doctoral program.

Historical, philosophical, sociocultural, political, and economic forces which shape curriculum development and change. Theories of curriculum. Skill development in curricular planning and evaluation. Offered annually.

EDPL 335. Seminar: Research on Teacher Education 3 sem. hrs.
Study and analysis of current research on preparation and professional development of teachers. Prereq: EDPL 237 or EDPL 337.

EDPL 337. Theories of Learning Applied to Instruction 3 sem. hrs.
Survey of major theories of learning. Use of learning theory to analyze and critique curriculum and design
EDPL 338. Seminar: Analysis of Teaching 3 sem. hrs.
Use of current theories and research on teaching to examine and assess teaching practice. Offered annually. Prereq: EDPL 337.

EDPL 342. The Theory and Design of Curriculum 3 sem. hrs.
Exploration, applications and critique of current models of curriculum design. Emphasis on curricular decision-making and implementation at the school or district level. Offered alternate years. Prereq: EDPL 234 or EDPL 334.

Selected texts from a number of ancient and contemporary thinkers significant in the philosophical and educational tradition. Analysis of ramifications for current educational theory and practice. Offered every other year.

EDPL 349. History of Education in the United States 3 sem. hrs.
Examines the development of public education. Emphasizes contexts over the proper role of schools in promoting equity, diversity, and democracy. Pays particular attention to how different groups experienced and shaped schools over time. Considers the relationship between the expansion of schooling and equal educational opportunity.

Basic history of the American college and university. Colonial foundations, private and state-controlled institutions, professional, technical, and graduate studies. Recent trends and issues in higher education. Offered alternate years.

Contemporary philosophical approaches to educational problems and issues, including pragmatist, analytic, existentialist, phenomenological, critical, hermeneutic, post-modern, and feminist. Offered occasionally.

Those aspects of the science of sociology and social anthropology which help the student to understand the individual as a member of society. Education and the school in the social structure. Offered every other year.

EDPL 356. Catholic Theology and Education 3 sem. hrs.
History of philosophical theology in the Catholic tradition and its bearing upon educational theory and practice. Investigation into theological methods and principles and their implications for education through an examination of the thought of selected individuals representative of the Catholic heritage. Attention to such theologians as St. Augustine, St. Thomas Aquinas, St. Bonaventure, Duns Scotus, Newman, Rahner, and Lonergan. Specific problems confronting Catholic education today. Offered occasionally.

Examination of current issues in higher education and the assumptions underlying various positions on those issues. Offered occasionally.

Systematic exploration of the process and production of the dissertation proposal. Students refine their dissertation question(s), develop a focused literature review and draft a proposal text. The seminar creates a peer workshop where ideas can be tested and refined. Students close to the proposal or dissertation stage are eligible. Course may be repeated. S/U grade assessment. Prereq: Cons. of dept.

EDPL 399. Doctoral Dissertation 1-12 sem. hrs.

EDPL 867. Master’s Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 869. Master’s Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 870. Doctoral Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 872. Doctoral Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 874. Graduate Fellowship – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 875. Graduate Assistant Teaching – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 876. Graduate Assistant Research – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 877. Field Placement Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 878. Field Placement Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 879. Field Placement Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 883. Thesis Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 884. Professional Project Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 885. Professional Project Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 886. Professional Project Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 887. Doctoral Dissertation Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 888. Doctoral Dissertation Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDPL 889. Doctoral Dissertation Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.

EDUCATIONAL PSYCHOLOGY (EDPS)
See COUNSELING AND EDUCATIONAL PSYCHOLOGY (COEP)
Program Descriptions

Certificate Programs

The Department of Electrical and Computer Engineering offers four non-degree graduate certificate programs. The certificate programs are designed for practicing engineers and other qualified individuals with bachelor's degrees who wish to update and/or expand their knowledge in specific technical areas, but do not necessarily wish to pursue a master's or doctoral degree.

Degree Programs

The master of science and doctor of philosophy degree programs are designed to provide graduate students with both broad fundamental knowledge and up-to-date information on current and emerging technologies. Students may enroll on either a full-time or part-time basis (with the exception of the one-year residency requirement for doctoral students). Doctoral students and research-oriented master's students engage in research activities under the close supervision of their advisers, gradually learning to become independent researchers. Their projects often are supported by government and industry grants. Courses and research activities make significant use of the department's extensive laboratory and computer facilities. Graduates find employment in industry, research facilities, government, and academe.

Prerequisites for Admission

Applicants should have graduated with, or be about to graduate with, a baccalaureate degree in an appropriate area of study from an accredited institution.

Application Requirements

Applicants must submit, directly to the Graduate School:

1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation.
4. (For doctoral applicants only) a brief statement of purpose.
5. (For doctoral applicants only) a TOEFL score or other acceptable proof of English proficiency.
6. (For non-degree certificate applicants only) a certificate course work planning form, prepared in consultation with an adviser from the department.
7. (For doctoral and all international applicants) GRE scores (General Test only).
8. The GRE also is recommended for, and may be requested of, master's applicants with undergraduate grade point averages less than 3.00 out of 4.00.

General Information

All admitted students are required to obtain and read the department's Graduate Student Handbook, which contains complete details about the electrical and computer engineering programs and additional departmental degrees. This handbook is available through the Electrical and Computer Engineering Office, (414) 288-6820.

Bachelor's–Master's Program

This program allows students to earn both their master of science degree in electrical and computer engineering and a bachelor of science degree in just five years. Students currently enrolled in the undergraduate electrical and computer engineering program at Marquette University (with a GPA of 3.50 or above) may apply for admission to the five-year program during their junior year. Students must submit an application to the Graduate School, indicate their interest in the five-year program, and meet all other admission criteria as stated in the Application Requirements section.

Students may take master's level courses in their senior undergraduate year. These graduate courses count towards both the undergraduate and graduate degrees. A maximum of six credits will be allowed toward both degrees. The remaining courses are taken during the students' fifth year. For students following Plan A, work on the thesis research should ideally begin the summer between the junior and senior years. Students will continue to gain research experience during the summer between the senior and fifth year, culminating in preparation of a written thesis and defense. Master's degree programs following Plan B (course option) can also be completed in five years.

Certificate Requirements

Each graduate certificate program requires completion of four courses (12 credits) selected from a prescribed list of courses pertinent to the area of study. All courses taken must be approved for graduate credit, and at least two of the courses must be strictly graduate level (courses numbered 200 or above). Students must complete all courses within a three-year time period and must earn a grade point average of at least 3.00 with no grade below a C.

Digital Signal Processing (12 credits)

COEN 131, COEN 133, COEN 157, COEN 182, EECE 157, EECE 205, EECE 206, EECE 212, EECE 215, EECE 216, EECE 221, EECE 222, EECE 223, EECE 224, and/or EECE 226.

Electrical Machines, Drives, and Controls (12 credits)


Microwaves and Antennas (12 credits)

EECE 201, EECE 202, EECE 205, EECE 206, EECE 270, EECE 271, EECE 272, and/or EECE 273.

Sensors and Smart Sensor Systems (12 credits)

EECE 176, EECE 205, EECE 206, EECE 261, EECE 263, and/or EECE 264.

Master's Requirements

All master's students must successfully complete, early in their programs of study, two required courses: EECE 205 Advanced Engineering Mathematics, and EECE 206 Probability and Random Processes in Engineering.

A master's student may pursue either a thesis program or a non-thesis program. In Plan A (thesis option), a student must complete 24 credit hours of course work, plus six credit hours of thesis work, submit an approved thesis, and pass a final oral comprehensive examination (thesis defense). In Plan B, (course option), a student must complete 36 credit hours of course work. In both plans, at least one-half of the total course work requirement must be strictly
in 200-level courses. In Plan B at least 24 credit hours must be in electrical and computer engineering course work. The remaining 12 credits must be approved courses in either biomedical, civil, and/or mechanical engineering, or they must be an approved combination of at least one engineering course plus courses in chemistry, mathematics/statistics/computer science, and/or physics.

Master’s students are normally admitted into Plan B. They may transfer, or may be required to transfer as a condition of financial support, to the more research-oriented Plan A with permission from their advisers, the department chairperson, and the Graduate School.

DOCTORAL REQUIREMENTS

All doctoral students must successfully complete, early in their programs of study, two required courses: EECE 205 Advanced Engineering Mathematics, and EECE 206 Probability and Random Processes in Engineering.

A doctoral student must complete a program of study prepared in consultation with his or her doctoral adviser and outlined on an approved Doctoral Program Planning Form. This form must be submitted within the first year of the student’s doctoral studies. The program normally requires 48 credit hours of course work beyond the bachelor's degree, plus 12 dissertation credits. In cases in which the student enters the program with a master's degree in the same or closely related field, a total of 24 post-master's credits of course work is required for the doctoral program, plus 12 additional dissertation credits. The student also must pass the doctoral qualifying examination (DQE) and submit and successfully defend a dissertation. The doctoral dissertation must represent an original research contribution and must show high attainment and clear ability to do independent research.

COURSE DESCRIPTIONS

UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:

Computer Engineering (COEN)

COEN 130. Introduction to Intelligent Systems 3 sem. hrs.
COEN 131. Introduction to Neural Networks and Fuzzy Systems 3 sem. hrs.
COEN 133. Evolutionary Computation 3 sem. hrs.
COEN 150. Database Applications 3 sem. hrs.
COEN 164. Integrated Microelectronic Circuits 3 sem. hrs.
COEN 167. Topics in Computer Software 3 sem. hrs.
COEN 168. Topics in Computer Hardware 3 sem. hrs.

COEN 171. Computer Hardware 3 sem. hrs.
COEN 181. Object-Oriented Software Engineering 3 sem. hrs.
COEN 182. Introduction to Algorithms 3 sem. hrs.
COEN 183. Operating Systems and Networking 3 sem. hrs.
COEN 191. Software Testing 3 sem. hrs.

Electrical and Computer Engineering (EECE)

EECE 150. Control Systems 3 sem. hrs.
EECE 152. Introduction to Communication Systems 3 sem. hrs.
EECE 164. Integrated Microelectronic Circuits 3 sem. hrs.
EECE 166. Surface Acoustic Wave Devices 3 sem. hrs.
EECE 168. Topics in Electrical Engineering 3-4 sem. hrs.
EECE 173. Optical Fiber Communications 3 sem. hrs.
EECE 174. Antenna Theory and Design 3 sem. hrs.
EECE 175. Wireless Communications 3 sem. hrs.
EECE 181. Power Electronics 3 sem. hrs.
EECE 182. Power Systems 3 sem. hrs.
EECE 185. Design and Analysis of Electric Drives 3 sem. hrs.

GRADUATE COURSES:

Computer Science and Engineering (CSEN)

CSEN 298. Topics in Computing 1-3 sem. hrs.

Electrical and Computer Engineering (EECE)

EECE 201. Advanced Electromagnetic Fields 3 sem. hrs.

Probabilistic methods, random variables, statistics, and random processes, emphasizing both theoretical and numerical aspects as well as engineering applications. Offered every spring. Prereq: Math 83 or equiv.; proficiency in computer programming.

EECE 207. Advanced Course in Computers 1 3 sem. hrs.

Mathematics, image processing, signal processing, image reconstruction, and imaging systems in medical imaging applications. Offered every fall at the General Electric Medical Systems facility. Prereq: Cons. of instr.; GE employee.

EECE 208. Advanced Course in Computers 2 3 sem. hrs.

Problem solving methodology, software engineering tools and environment (typical topics: UNIX, C, data structures, object oriented paradigm, programming strategies), and hardware engineering tools (typical topics: analog and digital CAD, PALs, VME, applications). EECE 208 and EECE 211 may not both be used to meet degree requirements. Offered spring term at the General Electric Medical Systems facility. Prereq: Cons. of instr.; GE employee.
EECE 211. Algorithm Analysis and Applications 3 sem. hrs.
Introduction to the analysis of algorithms. Topics include: asymptotic complexity notation, recursion analysis, basic and advanced data structures, sorting methodologies, dynamic programming, and graph algorithms, including heuristic search techniques such as best-first and A-star algorithms. Advanced topics include NP-completeness theory and linear programming. Prereq: EECE 30 or equiv. and EECE 120 or equiv. or MATH 81 or equiv.; or EECE 30 or equiv. and COSC 154 or equiv. and MATH 81 or equiv.

EECE 212. Pattern Recognition 3 sem. hrs.

Introduction to a range of adaptive computer algorithms; that is, these algorithms learn models that are modified as new data is presented. Additionally, explores the theoretical foundations of machine learning. Examples of machine learning algorithms to be studied include: decision trees, artificial neural networks, Bayesian learners, evolutionary algorithm, and boosting and bagging techniques. Computational learning theory and PAC learnability are also studied. Prereq: EECE 216 or EECE 130 with cons. of instr.

EECE 214. Information and Coding Theory 3 sem. hrs.
Introduction to information measure, mutual information, self-information, entropy, encoding of information, discrete and continuous channels, channel capacity, error detection, error correcting codes, group codes, cyclic codes, BCH codes, convolution codes, and advanced codes. Offered alternate years.

EECE 215. Neural Networks and Neural Computing 3 sem. hrs.

EECE 216. Artificial Intelligence 3 sem. hrs.


EECE 220. Modern Control Theory 3 sem. hrs.
Review of linear algebra and matrices. State variable analysis of continuous-time and discrete-time systems. Controllability and observability of linear systems. Stability of linear and nonlinear systems. Design of feedback control systems. Introduction to optimal control theory. Offered alternate years. Prereq: EECE 205 which may be taken concurrently; or MEE 201 which may be taken concurrently.

EECE 221. Chaos and Nonlinear Signal Processing 3 sem. hrs.
Investigates recent research in nonlinear signal processing, temporal data mining, and chaos. Examines methods for finding hidden structures in signals and time series, which are found using techniques such as phase space reconstruction, clustering, neural networks, and genetic algorithms. Once discovered, these structures are useful for solving system classification problems and for predicting events in time series. Extrinsic application areas include: motor diagnostics, heart arrhythmia classification, speech recognition and financial time series prediction. Discusses topics mentioned above along with machine learning, time series analysis, adaptive signal processing, wavelets, and nonlinear dynamics. Prereq: EECE 157.

Optimal and adaptive digital signal processing techniques including spectral estimation, Wiener filters, linear prediction, Kalman filters, steepest descent and least mean square algorithms, and least squares and recursive least squares estimation. Offered occasionally. Prereq: EECE 157 and EECE 206.

EECE 223. Digital Processing of Speech Signals 3 sem. hrs.
Fundamentals of speech processing; models of the speech production system; and digital representations of the speech waveform. Time domain and frequency domain speech analysis. Other topics include homomorphic speech processing, linear predictive coding of speech, and digital speech processing for man-machine voice communications. Offered alternate years. Prereq: EECE 157; or cons. of instr.


EECE 225. Optimal Control 3 sem. hrs.
An in-depth understanding of the problems in optimal control theory and their applications are presented. Calculus of variations, linear quadratic regulator design, dynamic programming, time-optimal, and output feedback regulating and tracking optimal control techniques are presented for continuous-time systems. Discrete-time techniques are presented for calculus of variations, linear quadratic tracking, output feedback optimal control, and time-optimal control. Optimal observers are also presented. Offered occasionally. Prereq: EECE 205 and EECE 220.


EECE 229. Advanced Topics in Computers and Control 3 sem. hrs.
Course content announced prior to each offering. Students may enroll more than once because subject matter changes. Possible topics include: computer operating systems, multiprogramming and multiprocessing systems, computer architecture, optimal and adaptive control, stochastic control, estimation theory, and nonlinear analysis. Offered occasionally. Prereq: Cons. of instr.

EECE 249. Advanced Topics in Electrical Engineering 3 sem. hrs.
Course content announced prior to each offering. Students may enroll more than once because subject matter changes. Possible topics include, but are not limited to, communications, digital signal and speech processing, electric power, electromagnetic fields, materials science, and solid state devices. Offered occasionally. Prereq: Cons. of instr.

Theory of surface and other acoustic modes; design, analysis, and performance of interdigital devices; multipole couplers; SAW resonators; dispersive delay lines; system applications; current research areas. Offered occasionally. Prereq: EECE 113 and EECE 121.


Overview of microelectromechanical-MEMS-transducers and sensors. Basic engineering sciences and fundamental principles relevant to mechanical sensors and micromachined mechanical transducers. Mathematical models and design of microelectromechanical systems. Microfabrication techniques, materials and processes. Mechanical transduction
EECE 270. Microwave Theory and Techniques
3 sem. hrs.
Prereq: EECE 122.

EECE 271. Microwave Electronics
3 sem. hrs.
Basic theory of interaction between electron beams and electromagnetic fields and waves. Energy transfer in microwave tubes. Microwave oscillators and amplifiers, including masers, lasers, parametric, and other solid state devices. Noise in microwave electron devices. Offered alternate years.
Prereq: EECE 122.

EECE 272. Microwave Measurements
3 sem. hrs.
Detection and measurement of microwave power. Measurement and error analysis on microwave power, frequency, wave length, impedance, reflection coefficient, attenuation coefficient. Microwave resonator and filter characteristics and Q-factor measurements. Directional couplers and hybrid tees. Microwave noise figure measurement. Offered alternate years.
Prereq: EECE 122.

EECE 273. Microwave Solid-State Engineering
3 sem. hrs.
Prereq: EECE 122.

EECE 274. Topics in Microwave Engineering
3 sem. hrs.
Course content announced prior to each offering. Students may enroll more than once because subject matter changes. Possible topics: microwave communications, microwave antennas and propagation, and industrially-applied microwave power engineering. Offered occasionally.
Prereq: EECE 122.

EECE 281. Advanced Electric Machines and Drives
3 sem. hrs.
Machine construction and characterization. Development and application of transformation theory to synchronous and induction machines to predict machine performance under steady state and abnormal conditions. Modeling of permanent magnet and switched reluctance machines as well as other advanced machine systems. Dynamic performance prediction of electric machines and associated power electronics using equivalent network models and computer simulations.
Prereq: EECE 123 and MATH 83.

EECE 282. Finite Element Analysis
3 sem. hrs.
Basic field formulations using Maxwell’s electromagnetic field equations. General definitions and formulations of finite element discretization. Consideration of applications and method implementation.

Application of the finite element method to engineering design problems. Post processing, practical aspects and other considerations. Application of method will involve the use of commercially available software packages as well as computer code developed for this course. Prereq: MATH 83 and proficiency in computer programming.

3 sem. hrs.
Presents advanced concepts and methodologies in designing and modeling modern electric machines controlled and operated from electronically switched electric drives, which involves methods of analysis and computation of the adverse synergistic effects which occur between the space harmonics generated in electric machinery due to magnetic circuit topologies, and time harmonics generated by electronic switching in the controllers/drives, and the impact of this synergism on losses, efficiency, torque quality and other performance issues. Full and rigorous analysis and inclusion of such space harmonics, and time harmonics are included, as well as methods of mitigation or elimination of these effects are studied in detail using advanced modeling concepts and tools. Offered spring term of even years.
Prereq: EECE 123 or equiv.

EECE 294. Practicum for Research and Development in Computing
3 sem. hrs.
Provides students, who are enrolled in the M.S. in computing program, with an opportunity to participate in the practice of research and/or development in the area of computing. Students who plan to take this course must follow the Course Guidelines, which are available from EECE and MSCS Departments. Available only to full-time students. At most, six credits of EECE 294 or MSCS 294 may be counted toward graduation. Offered every term. S/U grade assessment.
Prereq: 3.00 MU GPA; must be enrolled in Plan B option of the M.S. in computing program and have completed at least 21 credit hours of course work, with 15 credit hours earned in the graduate (200-level) courses.

EECE 295. Independent Study
1-3 sem. hrs.
Offered every term. Prereq: Cons. of instr. and cons. of dept. ch.

EECE 297. Department Colloquium
0 sem. hrs.
Full-time and computer simulations.

EECE 298. Thesis Continuation – Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 299. Master’s Thesis
1-6 sem. hrs.
Offered every term. S/U grade assessment.
Prereq: Cons. of instr.

EECE 396. Seminar
0-3 sem. hrs.
Offered occasionally.
Prereq: Cons. of instr.

EECE 399. Doctoral Dissertation
1-12 sem. hrs.
Offered every term. S/U grade assessment.
Prereq: Cons. of instr.

EECE 867. Master’s Comprehensive Exam Preparation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 868. Master’s Comprehensive Exam Preparation – Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 869. Master’s Comprehensive Exam Preparation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 870. Doctoral Comprehensive Exam Preparation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 871. Doctoral Comprehensive Exam Preparation – Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 872. Doctoral Comprehensive Exam Preparation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 873. Graduate Standing Continuation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 874. Graduate Fellowship – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 875. Graduate Assistant Teaching – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 876. Graduate Assistant Research – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 881. Thesis Continuation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 882. Thesis Continuation – Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 883. Thesis Continuation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 887. Doctoral Dissertation Continuation – Less than Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 888. Doctoral Dissertation Continuation – Half-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.

EECE 889. Doctoral Dissertation Continuation – Full-Time
0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.
PREREQUISITES FOR ADMISSION

Admission decisions are based on a variety of criteria, each of which is intended to measure the applicant’s ability to succeed in the program. No application can be evaluated until all of the required official documents have been received.

An applicant must have completed or be in the process of completing a four-year bachelor’s degree (usually in engineering) from an accredited college or university. Students holding a bachelor’s degree in disciplines other than engineering may be admitted to the program but may be required to take additional courses.

APPLICATION REQUIREMENTS

Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Essay questions on the application form.
3. Official transcripts from all current and previous colleges/universities except Marquette.
4. Two letters of recommendation.
5. (For master’s applicants only) official GRE or GMAT test scores.
6. Resume or job profile.
7. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency. Waived for applicants whose native language is English and who have received a degree from an accredited academic institution in the United States.
8. (For international applicants only) a third letter of recommendation.

MASTER’S REQUIREMENTS

All students must complete a minimum of 33 credit hours of course work, of which 27 credit hours are considered core courses and 6 credit hours are electives. A minimum of 18 credit hours must be taken from the College of Engineering and a minimum of 15 credit hours must be taken from the Graduate School of Management.

Students who do not have an adequate undergraduate background in business may also be required to complete one or more M.B.A. foundation courses (BUAD 201–205) in preparation for the core business courses.

CORE COURSES

Nine core courses (27 credit hours) must be selected from a restricted set of classes in each of the following three areas: business administration, engineering management, and decision support. The list of approved core courses may change from time to time to maintain a state-of-the-art program. Currently, the core courses that are approved in each of the three required areas are as follows:

Business Courses (select at least three)
BUAD 210 Managerial Economics
BUAD 220 Operations and Supply Chain Management
BUAD 230 Managerial Accounting
BUAD 240 Marketing Management
BUAD 250 Financial Management
BUAD 262 Organizational Behavior
**Engineering Courses** (select at least four)
- ENMA 278 Lean Manufacturing Systems
- ENMA 279 Engineering Six Sigma Design and Development
- ENMA 281 Engineering Project Management
- ENMA 282 Reliability, Failure Analysis, and Risk Assessment
- ENMA 283 Innovation and Technology
- ENMA 286 New Product and Process Portfolio Management
- ENMA 287 Front-End Engineering Product Development
- ENMA 290 Management Issues in Engineering and Technology
- ENMA 295 Independent Study

**Decision Support Courses** (select at least two)
- ENMA 288 System Modeling, Simulation, and Analysis
- ENMA 291 Engineering Innovation and Entrepreneurship
- BUAD 224 Quantitative Decision Modeling and Analysis
- BUAD 249 Seminar in Marketing: Marketing Research
- ECON 201 Applied Econometrics

**Elective Courses**
- Students choose any two graduate-level engineering or business administration (200-level) beyond foundation elective courses that meet their individual needs. Students who wish to select courses from other departments must obtain approval from the Graduate Committee.

**Certificate Requirements**
- Each graduate certificate requires completion of four courses (12 credits) selected from the prescribed list of courses shown below. Students must complete all certificate courses within a three-year time period and must earn a grade point average of at least 3.00 with no grade below a C.

**Engineering Innovation Certificate (select four)**
- ENMA 283 Innovation and Technology
- ENMA 286 New Product and Process Portfolio Management
- ENMA 287 Front-End Engineering Product Development
- ENMA 288 System Design, Modeling, and Analysis
- ENMA 291 Engineering Innovation and Entrepreneurship

**New Product and Process Development Certificate (select four)**
- ENMA 278 Lean Manufacturing Systems
- ENMA 279 Engineering Six Sigma Design and Development
- ENMA 281 Engineering Project Management
- ENMA 282 Reliability and Failure Analysis
- ENMA 286 New Product and Process Portfolio Management
- ENMA 288 System Design, Modeling, and Analysis

The certificate programs are designed for practicing engineers and other qualified individuals with bachelor’s degrees who wish to update and/or expand their knowledge in specific areas, but do not necessarily wish to pursue a master’s degree. However, all certificate courses can be applied toward achievement of a master of science in engineering management degree.

**Course Descriptions**

**Graduate Courses:**

**ENMA 278. Lean Manufacturing Systems 3 sem. hrs.**
Focuses on designing, implementing, and optimizing high-performance cost-effective manufacturing systems. Lean, mass, and craft production paradigms will be compared, with emphasis placed on the benefits and implementation of the lean principles of value stream, flow, pull, and waste. Student teams prepare, analyze, and propose optimized value streams for real-world manufacturing systems.

**ENMA 279. Engineering Six Sigma Design and Development 3 sem. hrs.**
Focuses on designing and developing high-performance, high-reliability technology-based products, processes, and services through the application of six-sigma principles, tools, and processes. Student teams apply six-sigma approaches to real-world projects in preparation for six-sigma green belt certification. Prereq: MATH 184 or equiv.

**ENMA 281. Engineering Project Management 3 sem. hrs.**
Applies collaboration tools such as MS Project to organize and direct global virtual teams developing technology-based products and services. Focus is on optimizing projects under the triple constraints of time, resources, and quality. Student projects provide hands-on experience in applying tools and methods to balance multiple and varying constraints in a real-world environment.

**ENMA 282. Reliability, Failure Analysis, and Risk Assessment 3 sem. hrs.**
Provides current and perspective engineering managers with an overview of topics critical to providing products and services which meet cost and reliability requirements, including: qualitative and quantitative modeling of reliability, failure, and risk for hardware, software, and large complex systems. Student team projects provide an opportunity to apply these models to real-world systems. Prereq: MATH 184 or equiv.

**ENMA 283. Innovation and Technology 3 sem. hrs.**
Explores the use of technologies such as data mining, neural networks, genetic algorithms and public resource computing to improve and accelerate innovation, entrepreneurship, and general human decision making processes. Provides current and perspective managers with an overview of how these technologies can be applied to generate better, faster and cheaper products, processes, and decisions. Student projects apply these technologies to the development and/or improvement of real-world analysis and decision-making processes.

**ENMA 286. New Product and Process Portfolio Management 3 sem. hrs.**
Models technology-based product and process development lifecycles, including: valuation and prioritization of projects, pursuit of government contracts, outsourcing/offsetting criteria, and the challenges of R&D in a global environment. Student teams analyze and apply best practices from industry to the management of a portfolio of projects from sources such as the projects generated and executed by student teams in other ENMA courses.

**ENMA 287. Front-End Engineering Product Development 3 sem. hrs.**
Prepares students to fill the fuzzy front end of the new product/service pipeline with innovative and commercially-viable concepts. Includes voice-of-the-customer and ideation processes and techniques. Students facilitate “live” ideation sessions held with industry and university partners to generate a portfolio of innovative new product/process/service/technology opportunities.

**ENMA 288. System Modeling, Simulation, and Analysis 3 sem. hrs.**
Presents a range of qualitative and quantitative modeling, simulation, and analysis tools and processes that enable complete and concise specification, operating description, and performance and reliability analysis and modeling of complex products, processes, and services. Approaches include: process flow diagrams, data flow diagrams, state transition diagrams, Monte-Carlo simulation, and TRIZ problem/solution modeling. Student projects involve analysis of existing industrial systems. Prereq: MATH 184 or equiv.

**ENMA 290. Management Issues in Engineering and Technology 3 sem. hrs.**
Prepresents topics of special interest to current and perspective engineering managers. Facilitated by ENMA faculty, this course incorporates guest lectures by industry and academic experts. Course title varies; course content announced prior to each offering. Students may enroll more than once because subject matter changes. Offered occasionally.

**ENMA 291. Engineering Innovation and Entrepreneurship 3 sem. hrs.**
Student teams integrate ENMA course learning and experience with ENMA course projects to generate a technology commercialization prospectus that describes a viable channel to market for a particular innovative technology-based product, process, or service. Topics include technology roadmapping and intellectual property generation in a global environment.

**ENMA 294. Practicum for Research and Development in Engineering Management 1-6 sem. hrs.**
Provides students enrolled in the M.S. in engineering management program with significant educational and practical opportunities to participate in the practice of research and/or development in the area of engineering management as an integral part of the program curriculum. Students must follow the Course Purpose and Guidelines available from the practicum director. At most, six credits may be counted toward graduation. Offered every term. Prereq: 3.00 MU GPA; completed at least twenty one credits in M.S. engineering management program.

**ENMA 295. Independent Study 1-3 sem. hrs.**
Offered every term. Prereq: Cons. of instr. and cons. of dept. ch.

**ENMA 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.**
Fee. snc/unc grade assessment. Prereq: Cons. of dept. ch.; cons. of adviser.

**ENMA 874. Graduate Fellowship – Full-Time 0 sem. hrs.**
Fee. snc/unc grade assessment. Prereq: Cons. of dept. ch.; cons. of adviser.


ENGLISH (ENGL)

Chairperson and Professor: Machan
Professor: Bates, Block, Defalco (Emeritus), M. Gillespie, Hoeveler, Hribal, Jeffers, McCанles (Emeritus), Ratcliffe, Rivero
Associate Professor: Asp (Emerita), Boddon, Boly, Chappell, Curran, Duffy, Hathaway, Krueger, Sorby, Spargo, Su, Zürcher
Assistant Professor: Adams-Roberts, Blair, Karian, Keiser, Melamed, Nowacek, Wadsorth
Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREES OFFERED
Master of Arts, Plan B (non-thesis option) only; Doctor of Philosophy

SPECIALIZATIONS
Master’s: British and American Literature
Doctoral: American Literature, British Literature

PROGRAM DESCRIPTIONS
The master of arts program in English provides broad coverage of the texts of English and American literature. Through courses and seminars, students develop extensive knowledge of literature and demonstrate skill in writing. Students who complete the master’s program at Marquette normally find themselves well prepared for doctoral studies.

The doctorate in English is directed toward comprehensive and intensive knowledge of literature and language with specialization in one area of British or American literature; the textual, editorial, and critical problems and backgrounds of major texts and authors; the principles of literary criticism; the basic tools, methods, and application of literary and linguistic research; and pedagogical problems. The program provides practical experience in the teaching of literature, rhetoric, and composition to meet the needs of contemporary college education for creative scholars to teach and do research in English.

Teaching and research assistantships are available to candidates for both degrees on a competitive basis. Teaching assistants must successfully complete ENGL 290 (or its equivalent), an orientation program, and a weekly practicum. ENGL 290 will count towards the total degree requirements of both the master of arts and the doctorate.

PREREQUISITES FOR ADMISSION
Applicants are expected to have adequate preparation in English and related subjects. A well-rounded program of undergraduate English courses (26 to 30 semester hours) is required. An applicant for the doctoral program must have a master of arts in English.

APPLICATION REQUIREMENTS
Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation.
5. One or two writing samples.
6. GRE scores (General Test only).
7. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

MASTER’S REQUIREMENTS
A master’s student is admitted to the Plan B (non-thesis) program which requires 30 credit hours of course work beyond the bachelor’s degree. At least 24 credits must be taken in English Department courses, and at least 15 credits in graduate courses at the 200-level.

All master’s students must pass a written comprehensive examination to complete the program.

PROGRAM DETAILS
A master’s student is required to complete a combined undergraduate and graduate program that includes at least one upper-division or graduate course in each of the following groups. The Marquette courses listed form the models for courses taken elsewhere that will satisfy the program requirements.

Language and Linguistics
ENGL 101, 102, 103, 170, 202, 203 (also 201, 204, 205 when content is linguistic)
Chaucer and/or Medieval Literature
ENGL 114, 115, 204, 205
Shakespeare
ENGL 160, 217

Renaissance Literature
ENGL 117, 118, 119, 210, 215, 216

Restoration and Eighteenth-Century British Literature
ENGL 209, 121, 220, 225

Nineteenth-Century British Literature
ENGL 130, 131, 230, 235

American Literature Before 1900
ENGL 150, 151, 152, 250, 255

Twentieth-Century Literature, British or American
ENGL 145, 146, 155, 156, 240, 245, 290, 285

Introduction to Modern Critical Theory and Practice
ENGL 281

DOCTORAL REQUIREMENTS
A doctoral student will follow a program of study defined, in conjunction with an advisor, on an approved Doctoral Program Planning Form. A minimum of 54 credit hours of course work is required beyond the bachelor’s degree (24 credit hours beyond the master’s degree) plus 12 hours of dissertation credit. A doctoral student must show competence in one foreign language. The choice of language must be approved by the director of graduate studies. The student must complete all requirements listed on the Doctoral Program Planning Form, pass a qualifying examination, and successfully defend a dissertation to complete the program.

PROGRAM DETAILS
A doctoral student is expected to complete the requirements defined for the master’s program, but must include ENGL 282 and ENGL 300. Additional course work for the doctorate will be recommended or required according to the needs of the student and will be defined on the Doctoral Program Planning Form. Students are individually advised at each registration.

COURSE DESCRIPTIONS
UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:

ENGL 101. History of the English Language 3 sem. hrs.

ENGL 102. Structure of the English Language 3 sem. hrs.

ENGL 103. English Linguistics 3 sem. hrs.

ENGL 106. The Art of Rhetoric: Theory and Application 3 sem. hrs.

ENGL 114. Chaucer 3 sem. hrs.

ENGL 115. British Literature to 1500 3 sem. hrs.

ENGL 117. Renaissance Literature: The 16th Century 3 sem. hrs.

ENGL 118. Renaissance Literature: The 17th Century 3 sem. hrs.

ENGL 119. Milton 3 sem. hrs.

ENGL 120. The Ages of Dryden and Pope: 1660-1744 3 sem. hrs.

ENGL 121. The Age of Johnson: 1744-1790 3 sem. hrs.

ENGL 130. The Romantic Period: 1790-1837 3 sem. hrs.

ENGL 131. Victorian Literature 3 sem. hrs.

ENGL 145. The Modernist Period in British Literature 3 sem. hrs.

ENGL 146. The Postmodernist Period in British Literature 3 sem. hrs.

ENGL 147. Post-Colonial Literature 3 sem. hrs.

ENGL 148. British Drama from Shaw to the Present 3 sem. hrs.
ENGL 150. Colonial and American Literature from the Beginnings to 1798 3 sem. hrs.
ENGL 151. American Literature from 1798 to 1865 3 sem. hrs.
ENGL 152. American Literature from 1865 to 1914 3 sem. hrs.
ENGL 156. The Contemporary Period in American Literature: 1945 to Present 3 sem. hrs.
ENGL 157. African American Literature 3 sem. hrs.
ENGL 158. American Drama 3 sem. hrs.
ENGL 159. Race, Ethnicity, and Identity in American Literature and Culture 3 sem. hrs.
ENGL 160. Shakespeare’s Major Plays 3 sem. hrs.
ENGL 165. Studies of Individual Authors 3 sem. hrs.
ENGL 170. Studies in Language 3 sem. hrs.
ENGL 171. Studies in Literature and Culture 3 sem. hrs.
ENGL 173. Studies in Genre 3 sem. hrs.
ENGL 177. Studies in Race and/or Ethnic Literature 3 sem. hrs.
ENGL 185. Survey of Women’s Literature 3 sem. hrs.
ENGL 186. Studies in Women and Literature 3 sem. hrs.
ENGL 191. Creative Writing Workshop 3 sem. hrs.
ENGL 198. Special Topics in Literature or Writing 3 sem. hrs.

GRADUATE COURSES:
1. In the graduate groupings, those courses entitled “Studies in . . . .” are meant to give the graduate student the opportunity, under the guidance of lectures and personal conferences, for a thorough study of an area (a study of the literature and a generous share of scholarship concerning the literature). These courses are more limited in coverage than an equivalent 100-numbered course but broader than a seminar, designed specifically for the graduate student. The student will be expected to prepare substantial investigations and reports rather than a full-scale seminar paper. The maximum enrollment in such a course will be 15 students. In some cases, exceptions may be permitted. The specific topic of the “Studies in . . . .” course will be announced in the registration Schedule of Classes.
2. Seminars are meant to give graduate students an opportunity to work under guidance on a specific project within the subject matter area of the seminar and are meant to enable them to exchange views and discoveries with students working in the same area. A seminar paper will be required. The maximum enrollment in such a course will be 15 students.

The specific topic of the seminar will be announced in the registration Schedule of Classes. The grammar and syntax of Anglo-Saxon. Selected readings from the prose and poetry in the corpus of Anglo-Saxon literature. Offered occasionally.

ENGL 203. Seminar in Language and Linguistics 3 sem. hrs.
ENGL 204. Studies in English Literature, the Beginnings to 1500 3 sem. hrs.
ENGL 205. Seminar in English Literature, the Beginnings to 1500 3 sem. hrs.
ENGL 215. Seminar in Renaissance Literature 3 sem. hrs.
ENGL 216. Studies in Renaissance Drama, excluding Shakespeare 3 sem. hrs.
ENGL 217. Seminar in Shakespeare 3 sem. hrs.
ENGL 225. Seminar in the Literature of the Restoration and the Eighteenth Century 3 sem. hrs.
ENGL 235. Seminar in Nineteenth-Century British Literature 3 sem. hrs.
ENGL 245. Seminar in Twentieth-Century British Literature 3 sem. hrs.
ENGL 250. Studies in American Literature from the Beginnings to 1900 3 sem. hrs.
ENGL 255. Seminar in American Literature from the Beginnings to 1900 3 sem. hrs.
ENGL 265. Seminar in Twentieth-Century American Literature 3 sem. hrs.
ENGL 270. Studies in the Drama 3 sem. hrs.
ENGL 275. Seminar in the Drama 3 sem. hrs.

ENGL 280. History of Literary Criticism 3 sem. hrs.
ENGL 281. Introduction to Modern Critical Theory and Practice 3 sem. hrs.
ENGL 282. Seminar in Literary Criticism 3 sem. hrs.
ENGL 290. Studies in Rhetorical Theory 3 sem. hrs.
ENGL 291. Seminar in the Teaching of Literature 1 sem. hr.
ENGL 295. Independent Study 1-3 sem. hrs.
ENGL 298. Special Topics 3 sem. hrs.
ENGL 300. Advanced Study in British Literature 3 sem. hrs.
ENGL 320. Dissertation Seminar 3 sem. hrs.

ENGL 330. Dissertation Seminar 3 sem. hrs.
ENGL 350. Advanced Study in American Literature 3 sem. hrs.
Focuses on issues that inform readings across the spectrum of American literature. Provides a forum where students can share research on topics of mutual interest. Prereq: Completion of M.A.; enrollment is limited to Ph.D. students.

ENGL 370. Advanced Study of Genre 3 sem. hrs.
Examines theoretical issues that inform the construction and comprehension of specific literary genres. Takes interest both in traditional conceptions of genre and in efforts to redefine those traditional conceptions. Offered occasionally. Prereq: Completion of M.A.; enrollment is limited to Ph.D. students.

ENGL 398. Advanced Study in Selected Topics 3 sem. hrs.
Various issues covering genres, literary periods, criticism, or language will be examined in a fashion that emphasizes reading from particular critical perspectives while recognizing options for interpretation. Offered occasionally. Prereq: Completion of M.A.; enrollment is limited to Ph.D. students.

ENGL 399. Doctoral Dissertation 3, 6, 9, 12 sem. hrs.
Offered every term. S/U grade assessment. Prereq: Cons. of dept. ch.

ENGL 867. Master's Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

ENGL 869. Master's Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

ENGL 870. Doctoral Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

ENGL 871. Doctoral Comprehensive Exam Preparation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

ENGL 872. Doctoral Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

ENGL 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

ENGL 874. Graduate Fellowship – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

ENGL 875. Graduate Assistant Teaching – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

ENGL 876. Graduate Assistant Research – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

ENGL 887. Doctoral Dissertation Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

ENGL 888. Doctoral Dissertation Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

ENGL 889. Doctoral Dissertation Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

English as a Second Language Program (ESLP)
The Office of International Education (OIE) provides advanced English language courses for students of other language backgrounds whose academic success at Marquette requires additional formal instruction in spoken or written English. Departments that wish to have the English competency of their graduate students evaluated should contact OIE for information about the English Placement Test. The results of this test are used to recommend any appropriate English language (ESLP) courses. ESLP courses are offered in the fall and spring terms. Descriptions for the courses in Composition, Reading, and Listening Comprehension are described in the Undergraduate Bulletin. Additionally, all incoming international teaching assistants (TAs) are required to attend a special one-week International Teaching Assistant Program (ITAP) during the fall semester. This training program includes evaluations of each TA’s English language and classroom skills for possible placement into ESLP 203 American Language and Communication Skills for Teaching Assistants. Marquette University currently does not offer a graduate degree program in English as a Second Language. For information on degrees or certificates in education, see the sections of this Graduate Bulletin relevant to the intended major academic field of study.

COURSE DESCRIPTION
GRADUATE COURSE:
ESLP 203. American Language and Communication Skills for Teaching Assistants 2 sem. hrs.
Provides classroom instruction and practice with language, communication, and teaching skills required of teaching assistants in U.S. universities. Includes a language laboratory, which provides pronunciation instruction and hands-on practice with course concepts. May not register as audit or S/U option. Prereq: Placement by English as a Second Language Program dir.

EXECUTIVE MASTER OF BUSINESS ADMINISTRATION (EXBU)
See GRADUATE SCHOOL OF MANAGEMENT SECTION

FOREIGN LANGUAGES AND LITERATURES (FOLL)

FACULTY IN SPANISH
Chairperson and Associate Professor: Castañeda Vélez, Hernández, Meyer, Paulk
Associate Professor: Aguilú de Murphy, G. Carrillo, Dale, Pasero, Sánchez de la Calle
Assistant Professor: Afínoguénova, Beliver, Cortés-Vélez, Véliz
Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREES OFFERED
Master of Arts, students are admitted under Plan B (non-thesis option) but Plan A (thesis option) is also offered
Master of Arts in Teaching (Spanish), Plan B only

SPECIALIZATION
Spanish

PROGRAM DESCRIPTION
The Department of Foreign Languages and Literatures’ graduate program in Spanish is designed to provide students with a broad background in Spanish language, literature, culture, and language teaching methodology. The majority of the department’s graduates have entered teaching careers, continued on to doctoral studies, or secured a position in business or government. Students in the program form a small and relatively intimate group. Graduate seminars are kept small, averaging ten students, and students are given individual guidance throughout their course of study.
Teaching assistantships in Spanish are available to candidates on a competitive basis. Teaching assistants are required to take SPAN 252, Teaching College Spanish (3 sem. hrs.), their first fall semester in the program.

PREREQUISITES FOR ADMISSION
Applicants for the master of arts (M.A.) or the master of arts in teaching (M.A.T.) programs must have a bachelor’s degree, or the equivalent foreign degree, from an accredited institution.
Applicants with an undergraduate major in Spanish are expected to have completed 24 credit hours of course work beyond the intermediate level, including work in composition, conversation, and advanced work in literature. Applicants with an undergraduate minor in Spanish are expected to have completed 15 credit hours of course work beyond the intermediate level, including a survey course in literature and a course in composition and conversation. Applicants must have an undergraduate grade point average equivalent of B or above (3.00 on a 4.00 scale). Native speakers of the language, who have an undergraduate degree in the humanities, are also eligible.
APPLICATION DEADLINE
To be considered for admission, all application requirements must be completed and received in the Graduate School by December 15.

APPLICATION REQUIREMENTS
Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation.
4. A writing sample in Spanish. This can be a term paper from one of the applicant’s undergraduate Spanish courses.
5. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.
6. (For teaching assistantships in Spanish) a tape recording (no longer than 5 minutes) of their foreign speaking voice. The tape should include a reading from a prose passage and some free conversation. Foreign applicants should make a similar recording in English. The recording should be submitted directly to the director of graduate studies or the chair of the department.

MASTER OF ARTS (M.A.) REQUIREMENTS
Students may pursue either a Plan A or Plan B course of study. The student is assumed to be in Plan B unless a formal request to transfer to Plan A is approved by the department chair and the Graduate School.

Plan A students are required to complete 24 credit hours of course work, six hours of thesis work, and submit an approved thesis to complete the program. Students must also demonstrate a reading knowledge of an additional modern foreign language.

Plan B students are required to complete 30 credit hours of course work. A thesis is not required.

MASTER OF ARTS IN TEACHING (M.A.T.) REQUIREMENTS
For the master of arts in teaching degree, two Plan B (non-thesis) options are available. A thesis is not required for either option.

Plan I is designed for students who have a bachelor of arts degree with a major in Spanish and who are certified to teach. The course work requirement consists of thirty credit hours, 18-21 credit hours are in language and literature (nine credit hours must be in courses numbered 200 or above) and 9 to 12 credit hours of related education courses (six credit hours must be in courses numbered 200 or above).

Plan II is designed for students who have a bachelor of arts degree with a major in Spanish but are not certified to teach. A maximum of 46 credit hours of course work may be required, depending on the student's previous educational background.

Requirements for the master of arts in teaching program are subject to revision by the Wisconsin State Department of Public Instruction. Students in this program should consult with the director of field placements and licensure in the College of Education concerning the professional education sequence.

Required course work consists of 18-21 credit hours in Spanish language and literature (nine credit hours must be in courses numbered 200 or above) and 26 credit hours to satisfy the professional education sequence in the College of Education (EDUC 125 [3 credits for M.A.T.], EDPL 245, EDPL 295 [3 credits for M.A.T. for EDUC 126], EDUC 176 [5-6 credits], EDPL 234, EDPS 266, FOLA 262) and SPAN 252. Students who have not met the Human Relations requirement in their undergraduate program will need to complete a course in this area (EDUC 148 or EDPL 244).

For full-time students, Plan II of the master of arts in teaching program normally takes four semesters to complete. For graduate teaching assistants, six semesters are required. The Pre-Professional Skills Test (PPST) and the Praxis II Content Area Test are required from all prospective candidates seeking the master of arts in teaching degree.

GENERAL MASTER’S REQUIREMENTS

COURSE WORK FOR M.A. AND M.A.T.
At least half of the student's work as a graduate student must be in courses numbered 200 and above.

M.A. students are required to complete a total of 30 credit hours with one upper division or graduate-level course in each of the six areas listed below. The remaining 12 credits are to be chosen from the courses offered in each area and subfield on which the student decides to be tested for the M.A. comprehensive examination.

M.A.T. students must complete a total of 21 credit hours in Spanish, including one course in each of the six areas listed below, with the exception of “Language and Linguistics” in which students must complete two courses.

1. Early Hispanic Literature (SPAN 125, 175, 190, 211, 216)
   Subfields:
   a. Medieval Spanish Literature
   b. Golden Age Spanish Literature

2. Modern and Contemporary Peninsular Spanish Literature (SPAN 126, 150, 192, 219, 220, 298)
   Subfields:
   a. 18th and 19th Century Spanish Literature
   b. 20th and 21st Century Spanish Literature

3. Early Spanish-American Literature (SPAN 193, 270, 298)
   Subfields:
   a. 15th to 17th Centuries: Pre-Columbian to Baroque Period
   b. 18th and 19th Century Spanish-American

4. Modern and Contemporary Spanish-American Literature (SPAN 170, 194, 271, 298)
   Subfields:
   a. Modernismo and Vanguardismo (1886-1940)
   b. Boom to 21st Century (1940-today)

5. Language and Linguistics (SPAN 142, 165, 201, 242, 282)
   Subfields:
   a. Second Language Acquisition and Pedagogy
   b. Synchronic Linguistics
   c. Diachronic Linguistics

6. Hispanic Cultural Studies (SPAN 171, 172, 298)
   Subfields:
   a. Peninsular Spanish Culture and Cinematography
   b. Spanish-American Culture and Cinematography
   c. U.S. Latino(a) Literature, Culture and Cinematography

Note: A course may not be used to fulfill more than one area of study. Depending on the topic, SPAN 298 may be repeated, and can be used to fulfill the appropriate area of study. All 100-level courses taken for graduate credit will require additional work at the graduate level, such as: readings, writing assignments, and oral presentations.

COMPREHENSIVE EXAMINATIONS
Candidates for the master of arts degree or the master of arts in teaching degree must pass written and oral comprehensive examinations based on the material covered in the student’s course work and the master’s reading list to complete the program. Examinations are normally given in November and March. Exceptions must be approved by the director of graduate studies and the department chair.

M.A. candidates will select, in advance, a total of five subfields from three of the six areas listed above upon which to be tested. The exam must be written in Spanish.

M.A.T. candidates will be tested in both Spanish and education. For the Spanish portion, the student will select, in advance, a total of five subfields from three of the six areas listed above upon which to be tested. M.A.T. students must select “Language and Linguistics” as one of the three areas in which to be tested. The exam must be written in Spanish. The education portion of the examination is based on two education areas of the student’s choice. The answers to this portion must be written in English. The education examination usually takes place in the fall semester; the Spanish examination is given in the spring semester. The student must pass both of these areas to complete the program.

The oral portion of the comprehensive examination for the M.A. and the M.A.T. will take place approximately one week following the written exam. The student will be asked to elaborate upon, clarify and/or correct information given in the written exam (Spanish portion only for the M.A.T. candidates). No new material will be introduced during this session. The student’s overall performance will not be evaluated until after this session.

The examining committee will be composed of three to five faculty members chosen by the director of graduate studies in consultation with the student and the department chairperson. Details on examinations, the master’s reading list, and sample questions are available from the department office.

COURSE DESCRIPTIONS

Foreign Language (FOLA)

FOLA 262. Teaching World Languages and Cultures 3 sem. hrs.
Study and application of the fundamental principles of effective second language instruction through the exploration of second language acquisition theory, the development of skills for selecting, organizing, providing, and assessing effective second language learning opportunities; practice of instructional technique within clinical contexts; and reflection on teaching performance. Clinical Experience requirement: three hours per week for a total of forty hours. Required of all M.A.T. in Spanish students. Offered fall term. Prereq: Intermediate High Performance on an official Oral Proficiency Interview; admission to the Graduate School and the College of Education.
READING KNOWLEDGE COURSES:

Reading Knowledge Courses (numbered 204), preparatory to doctoral language examinations, are offered in the following languages: French (FREN), German (GERM), Greek (GREE), Latin (LATI), and Spanish (SPAN).

Students registered for 204 Reading Knowledge Courses and wishing to withdraw must do so formally in the Graduate School office.

FREN 204. French for Reading Knowledge
3 sem. hrs.
Provides an overview of French grammar, reading comprehension of basic texts and translation practice for graduate students who plan to use French in their field of research. Prereq: Students must be enrolled in the Graduate School.

GERM 204. German for Reading Knowledge
3 sem. hrs.
Provides an overview of German grammar, reading comprehension of basic texts and translation practice for graduate students who plan to use German in their field of research. Prereq: Students must be enrolled in the Graduate School.

GREE 204. Greek for Reading Knowledge
3 sem. hrs.
Provides an overview of Classical and New Testament Greek grammar, reading comprehension of basic texts and translation practice for graduate students who plan to use Greek in their field of research. Prereq: Students must be enrolled in the Graduate School.

LATI 204. Latin for Reading Knowledge
3 sem. hrs.
Provides an overview of Latin grammar, reading comprehension of basic texts and translation practice for graduate students who plan to use Latin in their field of research. Prereq: Students must be enrolled in the Graduate School.

SPAN 204. Spanish for Reading Knowledge
3 sem. hrs.
Provides an overview of Spanish grammar, reading comprehension of basic texts and translation practice for graduate students who plan to use Spanish in their field of research. Prereq: Students must be enrolled in the Graduate School.

UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:

Marquette University does not currently offer a graduate degree program in French or German. However, certain upper division undergraduate courses in French and German, offered through the Department of Foreign Languages and Literatures, have been approved for graduate credit and may be taken, as appropriate, by graduate students in other graduate programs. To earn graduate credit for an upper division course, students must have the approval of their major departments and must complete extra work in the course beyond that required for undergraduate credit.

French (FREN)

FREN 115. The Middle Ages (1050-1450)
3 sem. hrs.
FREN 116. Sixteenth Century Literature
3 sem. hrs.
FREN 117. Seventeenth Century Literature
3 sem. hrs.
FREN 118. Eighteenth Century Literature 3 sem. hrs.
FREN 119. Nineteenth Century Literature 3 sem. hrs.
FREN 120. Twentieth Century Literature 3 sem. hrs.
FREN 142. French Phonetics through Oral Expression and Practice 3 sem. hrs.
FREN 185. The Logic of Grammatical Analysis 3 sem. hrs.

German (GERM)

GERM 126. German Drama 3 sem. hrs.
GERM 135. The German Novelle 3 sem. hrs.
GERM 142. Phonetics and Advanced Speaking Practice 3 sem. hrs.
GERM 185. Advanced Grammar 3 sem. hrs.
GERM 190. German Literature from the Twelfth to the Eighteenth Centuries 3 sem. hrs.
GERM 191. Eighteenth Century Literature 3 sem. hrs.
GERM 192. Nineteenth Century Literature 3 sem. hrs.
GERM 193. Modern Literary Trends 1 3 sem. hrs.
GERM 194. Modern Literary Trends 2 3 sem. hrs.

Greek (GREE)

GREE 198. Topics in Language and Literature 1-3 sem. hrs.

Italian (ITAL)

ITAL 100. Italian Civilization 3 sem. hrs.
ITAL 198. Topics in Language or Literature 3 sem. hrs.

Latin (LATI)

LATI 105. Survey of Republican Latin Literature 3 sem. hrs.
LATI 106. Survey of Later Latin Literature 3 sem. hrs.
LATI 110. Vergil: Aeneid 3 sem. hrs.
LATI 113. Livy 3 sem. hrs.
LATI 121. Quintilian: Institutio Oratoria 3 sem. hrs.
LATI 133. Roman Letter Writers 3 sem. hrs.
LATI 134. Elegiac Poetry 3 sem. hrs.
LATI 150. Roman Comedy: Plautus and Terence 3 sem. hrs.
LATI 155. Roman Satire: Juvenal 3 sem. hrs.
LATI 160. Tacitus: Germania and Agricola 3 sem. hrs.
LATI 173. Ovid’s Metamophoses 3 sem. hrs.
LATI 174. Cicero: Political and Philosophical Writings 3 sem. hrs.
LATI 182. Composition 3 sem. hrs.
LATI 185. Medieval Latin 3 sem. hrs.
LATI 198. Topics in Language or Literature 1-3 sem. hrs.

Spanish (SPAN)

SPAN 100. Peoples and Cultures of Spain 3 sem. hrs.
SPAN 102. Peoples and Cultures of Spanish America 3 sem. hrs.
SPAN 103. Contemporary Issues in the Hispanic World 3 sem. hrs.
SPAN 125. The Spanish Renaissance 3 sem. hrs.
SPAN 126. Contemporary Spanish Theater 3 sem. hrs.
SPAN 150. Class, Gender, and Politics in Contemporary Spanish Literature 3 sem. hrs.
SPAN 170. Novels and Novelists in Spanish-America 3 sem. hrs.
SPAN 171. U.S. Latino/a Literature 3 sem. hrs.
SPAN 172. Hispanic Film and Literature 3 sem. hrs.
SPAN 175. Don Quijote 3 sem. hrs.
SPAN 180. Nobel Prize Winners of the Hispanic World 3 sem. hrs.
SPAN 185. Advanced Grammar and Syntax 3 sem. hrs.
SPAN 190. Medieval Spanish Literature 3 sem. hrs.
SPAN 192. Literature of the Eighteenth and Nineteenth Centuries 3 sem. hrs.
SPAN 193. Spanish-American Literature 1 3 sem. hrs.
SPAN 194. Spanish-American Literature 2 3 sem. hrs.
### GERONTOLOGY

#### GRADUATE COURSES:

**Greek (GREE)**

GREE 295. Independent Study 1-3 sem. hrs.  
Prereq: Cons. of dept. ch.

**Spanish (SPAN)**

SPAN 200. Bibliographical Materials and Research Techniques 3 sem. hrs.  
Bibliographical resources and methodology of literary and linguistic research. Offered occasionally.

SPAN 201. History of the Spanish Language 3 sem. hrs.  
Historical development of the Spanish language from its origins to the present in Spain and Spanish America. Offered occasionally.

SPAN 204. Spanish for Reading Knowledge 3 sem. hrs.  
Provides an overview of Spanish grammar, reading comprehension of basic texts and translation practice for graduate students who plan to use Spanish in their field of research. Prereq: Students must be enrolled in the Graduate School.

SPAN 205. Romance Linguistics 3 sem. hrs.  
Basic principles in the evolution of Vulgar Latin into French, Italian, and Spanish. Offered occasionally.

SPAN 211. Medieval Spanish Literature 3 sem. hrs.  
Literary texts of Spain prior to the 16th century. Offered alternate years.

SPAN 216. Spanish Renaissance Literature 3 sem. hrs.  
The major trends in Spanish literature during the 15th and 16th centuries. Offered alternate years.

SPAN 219. Seminar in Spanish Literature of the Eighteenth and Nineteenth Centuries 3 sem. hrs.  
Significant trends and authors of the eighteenth and nineteenth centuries in Spain. Offered alternate years.

Contemporary Spanish literature from the Generation of 98 to the present. Offered alternate years.

Systematic study of language aimed at the application of descriptive, comparative, and historical linguistics to the language teaching situation. Applied linguistics in phonology, morphology, syntax, and contrastive analysis. Offered occasionally.

SPAN 252. Teaching College Spanish 3 sem. hrs.  
Introduction to the principles of effective foreign language teaching. Readings in theories of second language learning and current pedagogical practices. Objectives include designing activities for the communicative classroom as well as appropriate assessment techniques. Offered fall term. Prereq: Required of all Spanish teaching assistants their first fall semester.

Study of major trends and genres in Latin American literature since the Pre-Columbian period, with particular emphasis on the Crónicas, baroque poetry and Romanticism. Offered occasionally.

Study of major trends and genres in Latin American literature since Modernismo, with particular emphasis on the representative poets, dramatists and prose writers of the modern period. Offered occasionally.

Spanish syntactical and stylistic problems, plus advanced oral-aural work based on topical material of a literary, artistic, or cultural nature. Offered occasionally.

SPAN 289. Special Topics in Language or Literature 3 sem. hrs.  
Topicsvary. Offered occasionally.

SPAN 299. Master's Thesis 3-6 sem. hrs.  
Offered every term. Prereq: Cons. of dept. ch.

SPAN 867. Master's Comprehensive Exam Preparation – Less than Half-Time 1-3 sem. hrs.  
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

SPAN 868. Master's Comprehensive Exam Preparation – Half-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

SPAN 869. Master's Comprehensive Exam Preparation – Full-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

SPAN 870. Graduate Standing Continuation–Less than Half-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

SPAN 873. Graduate Standing Continuation–Half-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

SPAN 874. Graduate Fellowship – Full-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

SPAN 875. Graduate Assistant Teaching – Full-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

SPAN 881. Thesis Continuation – Less than Half-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

SPAN 882. Thesis Continuation – Half-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

SPAN 883. Thesis Continuation – Full-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

**GERONTOLOGY (GERT)**

**FACULTY IN GERONTOLOGY**

Director and Assistant Professors: Hjertstedt, Barnes, Moore, Stein  
Associate Professor: Papanek  
Adjunct Instructor: Barnes, Moore, Stein  
Note: Faculty members and their ranks are for the 2007–2008 academic year.

**DEGREE OFFERED**

Graduate Certificate in Gerontology

**PROGRAM DESCRIPTION**

The certificate in gerontology provides students with an introduction to the field of aging. It is an interdisciplinary, non-degree graduate program leading to a certificate in gerontology. The program can be taken by itself or in conjunction with pursuit of a graduate degree in another field. Course work leading to the certificate in gerontology is designed to give students: 1) An understanding of the broad, interdisciplinary nature of issues which relate to and influence older adults, 2) An understanding of the processes of aging, 3) A background in existing theories and research in gerontology, 4) An understanding of the programs, policies, and services that exist for older Americans, and 5) A foundational background as preparatory for other graduate work, or professional practice where gerontological knowledge is required.

**PREREQUISITES FOR ADMISSION**

Admission decisions are based on a variety of criteria, each of which is intended to measure the applicant's ability to succeed in the program. Applicants to the certificate program must have graduated with a baccalaureate degree or its equivalent from an accredited college or university. They must also have a grade point average of B (3.00 on a 4.00 scale) or above in undergraduate course work. Students from any undergraduate field may be accepted into the program.

**APPLICATION REQUIREMENTS**

Applicants must submit, directly to the Graduate School:

1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation.
4. Test scores from a recognized graduate school entrance examination are recommended but not required, e.g., GRE, GMAT, LSAT, or MAT.
5. For international applicants only a TOEFL score or other acceptable proof of English proficiency.

Note: Upon acceptance to the Graduate School, applicants will be asked to complete a one-page registration form for the certificate program and submit it directly to the certificate director.

**CERTIFICATE REQUIREMENTS**

To earn the certificate in gerontology, a student must complete 3 required courses and 1 elective course (totaling a minimum of 12 credit hours). With appropriate approvals, these courses may be applied to other graduate programs at Marquette University.
Required courses are: GERT 200, 201, and 202. Elective courses include: GERT 203, DENT 296, 298, HEAL 144, 220, 222, 241, 245, 246, 248, 298; LAWG 761; NURS 261, 268, 298; PHTH 512; SOCI 122, 125.

COURSE DESCRIPTIONS

UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:

Health (HEAL)

HEAL 144. International Health
3 sem. hrs.

Sociology (SOCI)

SOCI 122. Sociology of the Life Course
3 sem. hrs.
SOCI 125. Sociology of Aging
3 sem. hrs.

GRADUATE COURSES:

Details for the following courses can be found in this bulletin within the course descriptions for each specific discipline, with the exception of GERT, LAW, and PHTH (descriptions below).

Courses with an asterisk (*) indicate that additional tuition and permissions are required.

Dentistry (DENT)

DENT 296. Principles of Geriatric Dentistry*
3 sem. hrs.
DENT 298. Advanced Topics in Geriatric Dentistry* 3 sem. hrs.

Gerontology (GERT)

GERT 200. Gerontology 3 sem. hrs.
Introduction to the history, paradigms, theories, and research of gerontology. Critical examination of age, aging, and the aged within various contexts. Offered occasionally.

GERT 201. Policy and Administration in the Study of Aging 3 sem. hrs.
Examination of public policies and administrative structures related to the field of aging. Explores how past, present and future policy impacts older adults, especially with regard to health care, income, long term care, and end of life decisions. Offered occasionally.

GERT 202. Physiology of Aging 4 sem. hrs.
Reviews anatomy and physiology of the human organism. Age-related and pathological changes which occur in the major physiological systems over time are compared and contrasted. Combines lecture, interaction with elderly people, and clinical visits. Offered occasionally.

GERT 203. Special Topics in Gerontology 1-3 sem. hrs.
In-depth examination of a selected topic in gerontology. May be taken more than once when topics vary. Offered occasionally. Prereq: Enrollment in gerontology certificate program.

Health (HEAL)

HEAL 220. Health Care Program Development 3 sem. hrs.

HEAL 222. Health Care Quality Improvement 3 sem. hrs.

HEAL 241. Health Care Finance 3 sem. hrs.

HEAL 245. Case Management 3 sem. hrs.

HEAL 246. Health Care Informatics 3 sem. hrs.

HEAL 248. Health Care Policy 3 sem. hrs.

HEAL 298. Selected Topics in Health 1-4 sem. hrs.

Law (LAW)

LAWG 761. Elder Law* 3 sem. hrs.
Explores the impact of an aging society on health care and social policy, including such topics as income maintenance and age discrimination, health and long-term care benefits and finance, decision-making and individual autonomy.

Nursing (NURS)


NURS 268. Issues in Long Term Care Administration* 3 sem. hrs.

NURS 298. Selected Topics in Nursing 1-4 sem. hrs.

Physical Therapy (PHTH)

PHTH 512. Culture and Disability 3 sem. hrs.
The culture of disability, as a product of intrinsic factors of the person (spiritual beliefs and cultural practices) and those extrinsic factors in society (prejudice, stigma and discrimination) and the environment (architectural barriers) will be examined. The human dignity and civil rights of persons with disability, especially for the ever-expanding population of persons aged 65 and older, will be emphasized. Students will reflect on their own values, beliefs, and guiding life principles (Vocational Discernment) which shape their interactions and behaviors as professional health-care providers. The role of positive emotions, having choices, hope, and spiritual resolve as a foundation for the developing field of rehabilitation medicine called “Cardio- Psycho-Neuro-Immunology” will be a focus in this course. Prereq: PHTH major; or cons. of instr.

GRADUATE SCHOOL (GRAD)

The courses listed in this section of the bulletin do not constitute a program or degree offering, but are placed under the Graduate School heading for convenience and because they do not belong to any one graduate program.

Students interested in taking any of the following courses must contact the assistant dean of the Graduate School in order to register.

COURSE DESCRIPTIONS

GRADUATE COURSES:

GRAD 201. Exchange/University of Wisconsin-Milwaukee 1-5 sem. hrs.
In conjunction with the exchange program established between Marquette University and the University of Wisconsin-Milwaukee, students may enroll in a graduate level course at the University of Wisconsin-Milwaukee while enrolled in the master’s or doctoral program at Marquette. The UWM course title and credits are identified by this GRAD exchange course. A maximum of two of these GRAD exchange courses may be included in the required minimum course work for the student's program of study at Marquette. Prereq: Cons. of dept ch.; writ- ten cons. of the dept. and the Graduate School.

GRAD 202. Exchange/Medical College of Wisconsin 1-5 sem. hrs.
In conjunction with the exchange program established between Marquette University and the Medical College of Wisconsin, students may enroll in a graduate level course at the Medical College of Wisconsin while enrolled in the master’s or doctoral program at Marquette. The Medical College course title and credits are identified by this GRAD exchange course. A maximum of two of these GRAD exchange courses may be included in the required minimum course work for the student's program of study at Marquette. Prereq: Cons. of dept ch.; written cons. of the dept. and the Graduate School.

GRAD 203. Exchange/University of Notre Dame 1-5 sem. hrs.
In conjunction with the exchange program established between Marquette University and the University of Notre Dame, students may enroll in a graduate level course at the University of Notre Dame while enrolled in the master’s or doctoral program at Marquette. The Notre Dame course title and credits are identified by this GRAD exchange course. A maximum of two of these GRAD exchange courses may be included in the required minimum course work for the student’s program of study at Marquette. Prereq: Cons. of dept ch.; written cons. of the dept. and the Graduate School.

GRAD 204. Exchange/Loyola University of Chicago 1-5 sem. hrs.
In conjunction with the exchange program established between Marquette University and Loyola University-Chicago, students may enroll in a graduate level course at Loyola University-Chicago while enrolled in the master’s or doctoral program at Marquette. The Loyola course title and credits are identified by this GRAD exchange course. A maximum of two of these GRAD exchange courses may be included in the required minimum course work for the student’s program of study at Marquette. Prereq: Cons. of dept ch.; written cons. of the dept. and the Graduate School.

GRAD 205. Exchange/Saint Louis University 1-5 sem. hrs.
In conjunction with the exchange program established between Marquette University and Saint Louis University, students may enroll in a graduate level course at Saint Louis University while enrolled in the master’s or doctoral program at Marquette. The Saint Louis course title and credits are identified by this GRAD exchange course. A maximum of two of these GRAD exchange courses may be included in the required minimum course work for the student’s program of study at Marquette. Prereq: Cons. of dept ch.; written cons. of the dept. and the Graduate School.
HEALTHCARE TECHNOLOGIES MANAGEMENT (HCTM)

Director and Associate Professor: Goldberg
Professor: Cotton
Associate Professor: Hill, Kosmoski-Goepfert, Wilson
Adjunct Instructor: Weinfurt
Note: Faculty members and their ranks are for the 2007-2008 academic year.

DEGREE OFFERED
Master of Science, Plan B only

PROGRAM DESCRIPTION
The healthcare technologies management program is a collaborative effort between Marquette University and the Medical College of Wisconsin that combines management, technology and health care. The objective of the program is to educate professionals capable of managing the design, development, commercialization, and regulatory compliance of diagnostic and therapeutic medical devices, and the implementation, utilization, and assessment of hospital-based healthcare technologies.

Healthcare institutions, medical device companies, and healthcare consulting firms have a growing need for skilled professionals with technical and managerial skills, and an understanding of healthcare delivery and regulatory environments. Graduates of the program will have the education and skills needed to pursue career opportunities in clinical, industrial, and consulting environments. The program meets the needs of recent undergraduates seeking an advanced degree as well as employed engineers interested in opportunities to prepare for career advancement.

Elective courses, independent study projects, and internship opportunities enable students to customize their training to meet individual needs, interests, and career goals. With the assistance of a faculty and industry/clinical adviser, students are required to design and complete an applied healthcare technology management project. This independent study/internship experience will help develop skills that will be useful in the clinical or industrial environment.

The course offerings and schedules are designed to allow working students to pursue this master of science degree on a part-time basis. Full-time students can complete the program in three terms (12 months). Course topics include: technology assessment, ethics of technology utilization, standards and regulations, product development, and the environment of healthcare delivery.

PREREQUISITES FOR ADMISSION
Applications are accepted from students who have already completed a bachelor's degree in engineering, physics or a related field from an accredited institution with a minimum GPA of 3.00 (on a 4.00 scale).

APPLICATION REQUIREMENTS
Applicants must submit, directly to the Marquette University Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation.
4. A statement of purpose stating career goals and how the program will help in reaching those goals.
5. GRE (General Test only) average score of 60% minimum, or Medical College Admission Test (MCAT), average of 9 on the individual scores. (Waived for individuals with a doctoral degree.)
6. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency. A minimum score of 580 on the paper-based version or 237 on the computer-based version is required. Minimum scoring for the Internet-based version is still being established for this program.

GENERAL INFORMATION
All admitted students are required to obtain and follow the department's Graduate Student Handbook, which contains complete details about the program and degree requirements. This handbook is available through the Biomedical Engineering Office, (414) 288-3375.

MASTER'S DEGREE PROGRAM REQUIREMENTS
The program consists of 37.5 credit hours. All students are required to take the following courses:

- BUAD 202 Accounting Foundations (2 sem. hrs.)
- BUAD 230 Managerial Accounting (3 sem. hrs.)
- BUAD 240 Marketing Management (3 sem. hrs.)
- BUAD 250 Financial Management (3 sem. hrs.)
- BUAD 262 Organizational Behavior (3 sem. hrs.)
- HCTM 200 Survey of Biomedical Engineering Technology (3 sem. hrs.)*
- HCTM 210 Healthcare Technology Assessment (3 sem. hrs.)
- HCTM 211 Biomedical Technology Standards and Regulations (2 sem. hrs.)*
- HCTM 212 Ethics of Technology Utilization (1.5 sem. hrs.)*
- HCTM 230 Product Development of Medical Devices (2 sem. hrs.)
- HCTM 295 Applied Healthcare Technology Management Project (1 sem. hr., taken three times, for a total of 3 sem. hrs.)
- HCTM 298 Special Topics in Healthcare Technologies Management (0.5 sem. hr., taken twice, for a total of 1 sem. hr.)
- HCTM 299 Analysis, sensitivity/specificity analysis, and business trade-off analysis. Case studies of present and developing medical technologies are extensively used as examples of applied assessment methodologies. Offered spring term.

Introduction to health care technology assessment methods for hospital systems and medical businesses encompassing technical, clinical, and business elements. Topics include: clinical results analysis, gold standard comparison, Bland-Altman analysis, sensitivity/specificity analysis, and business trade-off analysis. Case studies of present and developing medical technologies are extensively used as examples of applied assessment methodologies. Offered spring term.

HCTM 211. Biomedical Technology Standards and Regulations 2 sem. hrs.
Overview of standards and regulations that impact the development, acquisition, and management of health care technologies. Discusses international technical standards, consensus technical standards, and FDA regulations regarding the manufacture, distribution, and use of medical devices. Examines how standards and regulations affect medical technologies at all stages of maturation, from prototype development, through testing, marketing, customer use, and into obsolescence. Examines how these standards and regulations affect technology viewed from different perspectives based on what a technology is (e.g. physical device or drug, information, and knowledge) and what technology causes in the adopting organizations (e.g. change, new processes). Offered summer term.

HCTM 212. Ethics of Technology Utilization 1.5 sem. hrs.
Survey course on ethics applied to the utilization and management of technologies in a patient care setting, including topics such as: beneficence, nonmaleficence, quality-cost, resource allocation, and personal-public conflicts, technology diffusion models and controls, clinical research and research integrity, and patient rights and confidentiality. Offered summer term. HCTM 212 is a required course in the health care technologies management program. Taught online.

HCTM 220. Product Development of Medical Devices 2 sem. hrs.
Presents the activities required for the design, development, and commercialization of new medical devices. Design, testing, regulatory, and legal requirements will be presented along with project evaluation and management methods. Issues involving management of the product development will be presented and discussed. Offered summer term.

HCTM 225. Independent Study 1-3 sem. hrs.
Offered every term. Prereq: Cons. of prog. dir.

HCTM 298. Special Topics in Health Care Technologies Management 0.5 sem. hrs.
This seminar series acquaints HCTM students with current, relevant topics related to health care technology management. S/U grade assessment.

HCTM 398. Topics in Health Care Technologies Management 1-3 sem. hrs.
Registration for this course allows students in the joint Marquette University/Medical College of Wisconsin Healthcare Technologies Management Program to take courses at the Medical College of Wisconsin to fulfill the elective requirements of the program.

COURSE DESCRIPTIONS

GRADUATE COURSES:

HCTM 200. Survey of Biomedical Engineering Technology 3 sem. hrs.
Familiarizes the student with the fundamental operating principles of the technologies, their costs and purposes in medicine. Offered fall term.

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Familiarizes the student with the fundamental operating principles of the technologies, their costs and purposes in medicine. Offered fall term.
HISTORY (HIST)
Chairperson and Professor: Marten
Director of Graduate Studies and Professor: Ball
Professor: Avella, Bicha (Emeritus), Donnelly, Gardiner (Emeritus), Krugler, Phayer (Emeritus), Prucha (Emeritus), Ruff, Theoharis (Emeritus), Weber (Emeritus), Zupko (Emeritus)
Associate Professor: Burckel (Emeritus), C. Hay (Emeritus), Jablonsky, Meissner, Naylor, Zeps
Assistant Professor: Donohue, Foster, Guenther, Knox, Korieh, Matthew, McMahon, Wert
Visiting Assistant Professor: McDaniell
Note: Faculty members and their ranks are for the 2007-2008 academic year.

DEGREES OFFERED
Master of Arts, Plan B only; Doctor of Philosophy

SPECIALIZATIONS
Master’s: European History, United States History, Global Studies
Doctoral: European History, United States History

PROGRAM DESCRIPTION
Graduate study in history permits students to increase their knowledge of the past and the processes that have shaped the human experience. Such study may prepare students for careers in scholarship, teaching, or certain public service fields.

PREREQUISITES FOR ADMISSION
For admission to the master of arts program, an applicant must have an undergraduate major in history or its equivalent. An applicant for the doctoral program must possess a master of arts in history.

APPLICATION DEADLINE
To be considered for admission, all application requirements must be completed and received in the Graduate School by December 31.

APPLICATION REQUIREMENTS
Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. A one-page statement of purpose specifying proposed areas of study and activities, along with employment, since graduation.
4. Three letters of recommendation from former teachers.
5. GRE scores (General Test only).
6. (For doctoral applicants only) a writing sample.
   Ideally, the sample should be the master’s thesis, but, for graduates of non-thesis programs, it may consist of a formal seminar paper.
7. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

GENERAL INFORMATION
DIRECTION AND ADVISING
The director of graduate studies is charged with directing the department's graduate programs and with the general advising of all graduate students in matters of course selection, financial aid, and placement. In addition, each student chooses, in consultation with the director of graduate studies, a field adviser who will direct the student's field-specific work, including: the master's essay, the selection of post-master's course work, completion of the Doctoral Program Planning Form, and the doctoral dissertation.

MASTER'S REQUIREMENTS
The three major areas in the master of arts program with their fields are:
1. European History
   a. Medieval
   b. Early Modern
   c. Modern
2. United States History
   a. Early U.S.
   b. Modern U.S.
3. Global Studies
   A master's student must complete 30 credit hours of course work, a master's essay, and a comprehensive examination. At least 18 credit hours of course work must be in history courses numbered 200 or above, and at least six of those credits must be in research seminars. With the consent of the department chairperson, six hours of graduate work outside the department may be included in the master of arts program. Students in Medieval history will be examined only in that field but must take at least six credit hours of graduate work in another field. No foreign language is required for the master's degree.

COMPREHENSIVE EXAMINATION
The comprehensive written examination lasts eight hours. A committee of two examiners will assess the master of arts candidate's command of the fields of study and knowledge of historical literature. Each candidate will be examined in one major field and one minor field, except for students in Medieval history, who will be examined in the Medieval field alone. Students in European history will be examined in one major field in European history and one minor field in U.S. history, while students in United States history will be examined in one major U.S. field and one minor European field. Students in Global Studies will be examined in this broadly-focused major field. They must also select a minor field from among three options: Latin America, Asia, or Africa.

QUALIFYING EXAMINATION
After completing all formal course work and language study, the doctoral student must take the doctoral qualifying examinations (DQEs), written and oral. Written qualifying examinations are twelve hours in duration. Oral qualifying examinations, three hours in duration, are held about ten days after the written examinations.

The qualifying examinations will cover four fields: two major fields and two minor fields. Europeanists will be examined in two major fields in European history and in two minor fields in United States, Latin American, African, Asian, or European history. Students in United States history will be examined in both American fields, in a minor field in European history, and in a minor field in Latin American, African, Asian, or European history. Students may choose a minor in a topically-focused major field. The language appropriate to their research goals must be demonstrated prior to the qualifying examinations, and students in continental European history must demonstrate command of the language appropriate to their research goals no later than the end of their first term of doctoral study. Failure to do so will preclude further course work until the student demonstrates the appropriate language competency. The dissertation director may require a doctoral student to show competence in a second foreign language or in statistical methods when the dissertation topic requires it.

DOCTORAL REQUIREMENTS
The two major areas in the doctoral program with their fields are:
1. European History
   a. Early Modern
   b. Modern
2. United States History
   a. Early U.S.
   b. Modern U.S.
Possible examination fields also include medieval Europe, Asian, Latin American, or African history. A doctoral student must complete a program of study defined on an approved Doctoral Program Planning Form. The program includes course work, a reading knowledge of at least one foreign language, the qualifying examination, and a dissertation.

COURSE WORK
The department's normal course work requirement for the doctoral program is 60 credit hours beyond the bachelor's degree, including course work for the master of arts but not including the 12 credit hours required for the doctoral dissertation. In the 60 credits required, a student with a master of arts must include six credit hours of research seminar courses (HIST 310, 320) and a three-hour dissertation seminar. The academic progress of all students who hold non-Marquette master's degrees will be evaluated at the end of the first year of doctoral study. The programs of students making unsatisfactory progress may be terminated at that time.

FOREIGN LANGUAGE REQUIREMENT
The student must have knowledge of at least one foreign language pertinent to their area of research. Reading skills in foreign languages are assessed by the department. Satisfactory competence in the foreign language must be demonstrated prior to the qualifying examinations, and students in continental European history must demonstrate command of the language appropriate to their research goals no later than the end of their first term of doctoral study. Failure to do so will preclude further course work until the student demonstrates the appropriate language competency. The dissertation director may require a doctoral student to show competence in a second foreign language or in statistical methods when the dissertation topic requires it.

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HIST 113</td>
<td>American Foreign Relations 1</td>
<td>3</td>
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<tr>
<td>HIST 114</td>
<td>American Foreign Relations 2</td>
<td>3</td>
</tr>
<tr>
<td>HIST 115</td>
<td>Religion and American Life</td>
<td>3</td>
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<tr>
<td>HIST 119</td>
<td>Constitutional History of the United States</td>
<td>3</td>
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<td>HIST 120</td>
<td>African American History</td>
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<tr>
<td>HIST 121</td>
<td>American Urban History</td>
<td>3</td>
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<tr>
<td>HIST 122</td>
<td>A History of Women in America</td>
<td>3</td>
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<tr>
<td>HIST 123</td>
<td>Childhood in America</td>
<td>3</td>
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<tr>
<td>HIST 124</td>
<td>Cultural and Intellectual History of the United States</td>
<td>3</td>
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<tr>
<td>HIST 125</td>
<td>History of Rock and Roll</td>
<td>3</td>
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<tr>
<td>HIST 127</td>
<td>The Vietnam War Era</td>
<td>3</td>
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<tr>
<td>HIST 131</td>
<td>Ancient Greece and Rome</td>
<td>3</td>
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<td>HIST 134</td>
<td>The Crusades</td>
<td>3</td>
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<td>HIST 135</td>
<td>The Middle Ages</td>
<td>3</td>
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<td>HIST 136</td>
<td>Medieval England</td>
<td>3</td>
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<td>HIST 137</td>
<td>The Renaissance</td>
<td>3</td>
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<tr>
<td>HIST 138</td>
<td>History of the Catholic Church 1, 100-1500</td>
<td>3</td>
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<tr>
<td>HIST 139</td>
<td>History of the Catholic Church 2, 1500-Present</td>
<td>3</td>
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<tr>
<td>HIST 140</td>
<td>War and Religion in Early Modern Europe, 1500-1650</td>
<td>3</td>
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<tr>
<td>HIST 141</td>
<td>Pre-Revolutionary Europe, 1648 to 1789</td>
<td>3</td>
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<tr>
<td>HIST 142</td>
<td>The French Revolution and Napoleon, 1787 to 1815</td>
<td>3</td>
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<tr>
<td>HIST 143</td>
<td>Reaction, Revolution, and Nationalism, 1814 to 1914</td>
<td>3</td>
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<tr>
<td>HIST 145</td>
<td>Twentieth Century Europe</td>
<td>3</td>
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<td>HIST 149</td>
<td>Intellectual and Cultural History of Europe</td>
<td>3</td>
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<td>HIST 150</td>
<td>Intellectual History of Modern Europe</td>
<td>3</td>
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<td>HIST 151</td>
<td>History and Philosophy of Crime and Punishment</td>
<td>3</td>
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<td>HIST 152</td>
<td>Women in Western Civilization</td>
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<td>HIST 154</td>
<td>Tudor England 1485 to 1603</td>
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<td>HIST 155</td>
<td>War and Revolution in Britain, 1603-1815</td>
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<td>HIST 156</td>
<td>Modern Britain</td>
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<td>HIST 157</td>
<td>Constitutional and Legal History of England</td>
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<td>HIST 158</td>
<td>The British Empire</td>
<td>3</td>
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<td>HIST 160</td>
<td>Ireland Since 1780</td>
<td>3</td>
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<tr>
<td>HIST 162</td>
<td>Modern France</td>
<td>3</td>
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<tr>
<td>HIST 163</td>
<td>Germany, 1648-1870</td>
<td>3</td>
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<td>HIST 164</td>
<td>Modern Germany</td>
<td>3</td>
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<tr>
<td>HIST 165</td>
<td>&quot;The Great War&quot;: World War I, 1914-18</td>
<td>3</td>
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<td>HIST 166</td>
<td>World War II</td>
<td>3</td>
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<td>HIST 167</td>
<td>Russia to 1861</td>
<td>3</td>
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<td>HIST 168</td>
<td>The Russian Revolution and the Soviet Union</td>
<td>3</td>
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<td>HIST 170</td>
<td>The Cold War</td>
<td>3</td>
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<tr>
<td>HIST 173</td>
<td>The Caribbean</td>
<td>3</td>
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<tr>
<td>HIST 174</td>
<td>History of Mexico</td>
<td>3</td>
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<tr>
<td>HIST 179</td>
<td>North Africa</td>
<td>3</td>
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<tr>
<td>HIST 181</td>
<td>Modern Middle East Since 1500</td>
<td>3</td>
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<td>HIST 183</td>
<td>Modern Japan</td>
<td>3</td>
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<td>HIST 184</td>
<td>Modem China</td>
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<td>HIST 185</td>
<td>Medieval East Asia</td>
<td>3</td>
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<tr>
<td>HIST 192</td>
<td>Public History</td>
<td>3</td>
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<tr>
<td>HIST 193</td>
<td>Internship in Public History</td>
<td>3</td>
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<tr>
<td>HIST 197</td>
<td>Undergraduate Colloquium in History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 198</td>
<td>Special Topics in History</td>
<td>3</td>
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</tbody>
</table>

**GRADUATE COURSES:**

*Note: Specific topics for the reading courses and the seminars will be announced each term in the Schedule of Classes.*

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HIST 210</td>
<td>The Art and Craft of History</td>
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</table>

The nature and theories of history, principles and methodologies of historical research, specializations within the discipline, and the professional applications of history. Offered fall term.

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>HIST 211</td>
<td>Renaissance and Reformation</td>
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</tbody>
</table>

A guided reading program designed to acquaint graduate students with the major issues and historiography of Europe from the demise of the institutions and culture of the Medieval period through the end of the religious wars marked by the Peace of Westphalia of 1648. Offered in rotation with HIST 212, 213, and 214.

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<th>Course Code</th>
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<tr>
<td>HIST 212</td>
<td>Europe, 1648-1815</td>
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</table>

A guided reading program designed to acquaint graduate students with the major issues and historiography of Europe from the Peace of Westphalia to that of Vienna. Offered in rotation with HIST 211, 213, and 214.

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<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>HIST 213</td>
<td>Europe, 1815-1919</td>
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</tbody>
</table>

A guided reading program designed to acquaint graduate students with the major issues and historiography of Europe from the Treaty of Vienna through the Paris peace treaties of 1919. Offered in rotation with HIST 211, 212, and 214.

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>HIST 214</td>
<td>Europe, 1919-Present</td>
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</table>

A guided reading program designed to acquaint graduate students with the major issues and historiography of twentieth century Europe. Offered in rotation with HIST 211, 212, and 213.

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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HIST 215</td>
<td>The British Atlantic World to the American Revolution</td>
</tr>
</tbody>
</table>

An examination of the expansion of the English empire to North America. Topics include exploration; colony founding; the political, social and economic maturation of the colonies; the imperial system including resistance to Parliamentary laws; relations with native populations; the development of slavery; changing roles for women; and the inter-colonial wars between the English and French Empires. Offered in rotation with HIST 216, 217, and 218.

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>HIST 216</td>
<td>The American Revolution and the New Nation</td>
</tr>
</tbody>
</table>

An examination of the creation and development of the United States to the beginnings of the sectional conflict. Topics include the causes of the rebellion; conflicts between Americans; the war for independence; constitution making; foreign relations including the War of 1812; the roles of and the relations between the executive, legislative, and judicial branches under the constitution of 1787; westward expansion and Indian removal; the problem of slavery in national politics; and the political, social, and economic maturation of the new nation. Offered in rotation with HIST 215, 217, and 218.

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<tbody>
<tr>
<td>HIST 217</td>
<td>The Sectional Conflict, Civil War Era, and Gilded Age</td>
</tr>
</tbody>
</table>

An examination of the origins and conduct of the Civil War, Reconstruction, and the political, economic, and social transformation of the United States in the late nineteenth century. Topics include the political, constitutional, economic, and moral contexts of the institution of slavery; slave life and race relations; territorial expansion, the development of the West, and Native American policy; the political, social, and economic impact of the Civil War and reconstruction; the development of an American foreign policy; the evolution of political parties; industrialization, urbanization, and immigration. Offered in rotation with HIST 215, 216, and 218.
HIST 218. United States in the Twentieth Century 3 sem. hrs.
An examination of the political, economic, and social history of the twentieth century. Topics include the United States’ rise to global power; the Progressive Era; the Great Depression; the Cold War and its related conflicts; cultural, social, and intellectual currents; the expansion of the federal government; and the evolution of political parties. Offered in rotation with HIST 215, 216, and 217.

HIST 235. Global History 3 sem. hrs.
Guided reading program designed to acquaint graduate students with the major issues, methodologies, and historiography in global history. Offered occasionally.

HIST 236. Topics in Global History 3 sem. hrs.
Offered occasionally.

HIST 237. Research Seminar in Global History 3 sem. hrs.
Offered occasionally.

HIST 240. Topics in Medieval History 3 sem. hrs.
Offered occasionally.

HIST 245. Topics in Renaissance and Reformation History 3 sem. hrs.
Offered occasionally.

HIST 250. Topics in Modern European History 3 sem. hrs.
Offered every term.

HIST 255. Topics in American History 3 sem. hrs.
Offered every term.

HIST 265. Topics in Latin American History 3 sem. hrs.
Offered occasionally.

HIST 270. Topics in African History 3 sem. hrs.
Offered occasionally.

HIST 275. Readings in Asian History 3 sem. hrs.
Offered occasionally.

HIST 295. Independent Study 1-3 sem. hrs.
Offered every term. Prereq: Cons. of instr. and cons. of graduate prog. dir.

HIST 305. Seminar in Medieval History 3 sem. hrs.
Offered occasionally.

HIST 310. Seminar in European History 3 sem. hrs.
Offered every term.

HIST 320. Seminar in United States History 3 sem. hrs.
Offered every term.

Offered every term. Prereq: Doctoral stdng.

HIST 399. Doctoral Dissertation 3, 6, 9, 12 sem. hrs.
Offered every term. Prereq: Doctoral stdng.


HIST 874. Graduate Fellowship – Full-Time 0 sem. hrs. Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

HIST 875. Graduate Assistant Teaching – Full-Time 0 sem. hrs. Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

HIST 876. Graduate Assistant Research – Full-Time 0 sem. hrs. Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.


HUMAN RESOURCES (HURE)
See GRADUATE SCHOOL OF MANAGEMENT SECTION

INTERDISCIPLINARY PH.D. (INPR)

DEGREE OFFERED
Doctor of Philosophy

PROGRAM DESCRIPTION
This doctoral program provides students and faculty with opportunities for creative academic programming and research that cross the boundaries of traditional disciplines. Instead of being supported by an individual department, school or college, each student’s program is administered by an interdisciplinary faculty committee. The faculty committee shall be approved by the Graduate School. The interdisciplinary program itself shall be approved by, and under the oversight of, the University Board of Graduate Studies.

Each INPR program must combine the academic and intellectual assets, in terms of course work and faculty expertise, of two or more academic departments at Marquette. Faculty may serve on an INPR committee whether or not their departments offer doctoral degrees. The University Board of Graduate Studies serves to a great extent as a quasi department. Every program is unique in terms of course work, methodology, and research.

To gain admission into the interdisciplinary Ph.D. program, the student must:
1. Satisfy demanding academic entrance requirements.
2. Propose a faculty adviser/dissertation committee chair.
3. Propose an advisory committee.
4. Propose a dissertation research topic.
5. Present and defend a formal admission proposal to the University Board of Graduate Studies.

PREREQUISITES FOR ADMISSION
Due to the rigors of the interdisciplinary proposal and doctoral processes, only students who demonstrate a high degree of self-reliance and responsibility will be considered for admission. In addition, applicants must meet the following criteria:
1. The student must have completed a master’s degree or its equivalent at an accredited university.*
2. The student normally must have a graduate GPA of 3.50 or above, on a 4.00 scale, in their master’s degree (or equivalent graduate work). If the student has less than a 3.50 cumulative GPA, the results of a current (within five years) standardized examination such as the GRE, GMAT, or LSAT, will be required.*

* Students currently enrolled in professional programs who desire to enter an INPR Ph.D. program should consult with their adviser and read the addendum relating to integrating professional programs with an INPR program.

APPLICATION PROCESS
A student interested in gaining admission to the INPR program must submit a formal written proposal to the University Board of Graduate Studies (UBGS), and must appear before the UBGS with his/her
advisor/committee chair to defend that proposal. A detailed listing of the steps involved in this formal admission process is found below in the paragraph titled Formal Admission Process.

Because the formal admission process can be quite lengthy, it is possible for students who would like to begin course work in advance of gaining formal admission to obtain admission in non-degree status. The non-degree application process is described below in the paragraph titled Non-Degree Admission Process.

Students may apply for formal admission to degree status without going through the non-degree admission process. However, many students find it to their benefit to first apply as a non-degree student.

FORMAL ADMISSION PROCESS

The University Board of Graduate Studies (UBGS) oversees all INPR programs, and is the body that will grant formal admission in degree-status to any student that meets UBGS approval. All applicants must submit a formal written proposal to the UBGS and must appear before the UBGS with his/her advisor/committee chair to defend that proposal.

The formal admission process for entry into the INPR degree program begins with discussions with faculty in expectation of identifying those who will serve as the dissertation committee, including an advisor/committee chair with whom the student sketches out a tentative plan for earning a doctoral degree. Development of the plan will involve interaction with all committee members. The student should incorporate feedback received from committee members and produce a detailed proposal as described below.

Prior to scheduling the proposal defense before the University Board of Graduate Studies and prior to finalizing the formal written proposal, the student must request from the Graduate School approval for all dissertation committee members, including the chair of the committee. The INPR Dissertation Committee Form must be completed by each prospective member of the committee. His/her signature on the form attests to his/her commitment to be a fully-engaged member of the committee until the student has completed his/her INPR doctoral degree and also certifies that the faculty member meets the requirements for participation on the committee.

The committee chair and membership must be identified and approved, the remainder of the formal admission process consists of the following:

1. A detailed proposal must be submitted to the Graduate School.
2. The written proposal must be reviewed by a sub-committee of the University Board of Graduate Studies before the student and advisor will be invited to defend the proposal before the full Board.
3. A 30 minute presentation (with questions and answers) must be presented to the University Board of Graduate Studies.
4. The student and his or her committee must address any written comments that result from the presentation to the University Board of Graduate Studies.
5. Once completed satisfactorily, the University Board of Graduate Studies will provide formal admission into the INPR program.

The proposal must detail the entire doctoral program, including courses, satisfaction of residency requirements, qualifying examination, and detailed plans for the dissertation. The proposal document must be prepared in consultation with the applicant’s advisor/dissertation chair and the other members of the dissertation committee.

In addition, an application for admission to degree status in the INPR program requires that the student submit the following:

1. A completed application form and application fee.
2. Official transcripts from all colleges/universities except Marquette.
3. Proof of an earned master’s degree.
4. Three letters of recommendation.
5. The results of a standardized test (GRE, GMAT, LSAT, MCAT, etc., as appropriate) if required due to a graduate GPA of less than 3.50.

The University Board of Graduate Studies will typically review proposals twice each year, once during the fall term and once during the spring term. Applicants must submit written proposals to the UBGS by October 1 for a fall-term review, and by March 1 for a spring-term review.

Normally six credit hours of approved graduate work beyond the master’s degree from another university may be transferred with the consent of the vice provost and the dissertation committee chair. The request for transfer of credit is made by identifying the courses, dates, and grades on the Doctoral Program Planning Form, which is part of the formal written proposal. The University Board of Graduate Studies will approve or disapprove of any transfers of credit. Transfers of credit must be for appropriate course work, as agreed upon by the advisory committee, and the applicant must have earned a grade of B or above in each course to be transferred.

NON-DEGREE ADMISSION PROCESS

As noted above, formal admission to the INPR program requires that a student’s dissertation committee chair and membership be identified and secured, that the course work and research be refined, that a formal written proposal be developed and submitted to the UBGS, and that the student and the committee chair defend the proposal before the UBGS. This process can take up to nine months to complete.

In order to allow students to begin taking course work prior to completion of the formal admission process, students may apply for admission in a non-degree status. Admission in a non-degree status requires the following:

1. Submit a completed application form and application fee.
2. Secure written support from a Marquette faculty member, with whom the applicant has discussed his/her INPR ideas, that the proposal is viable. It is not required that the faculty member that submits this support ultimately become the chair or even a member of the committee, but it is expected that in most cases the faculty will be on the student’s dissertation committee. Furthermore, the student should select non-degree course work in consultation with the dissertation chair (if identified) or the faculty member providing written verification.
3. Submit official transcripts from all current and previous colleges/universities except Marquette.
4. Submit proof of an earned master’s degree with a minimum GPA of 3.50.

5. If the applicant has a cumulative GPA of less than 3.50 in his/her master’s degree (or equivalent post-baccalaureate work), the results of a current (within five years) standardized test (GRE, GMAT, MAT, LSAT, MCAT, as appropriate) must be submitted.

6. (For international students only) submit a TOEFL score or other acceptable proof of English proficiency (waived if the student’s undergraduate or graduate education was conducted in an English-speaking college or university).

7. Applicants in non-degree status must submit the formal proposal to the UBGS prior to completing nine credits, and must receive UBGS approval for admission in degree status before completion of twelve credits.

Non-Degree Course Work

Once the Graduate School has approved the student’s admission in a non-degree status, he/she may begin taking course work. Students who have taken doctoral courses under non-degree status at Marquette may request that a maximum of twelve credits be accepted by the Interdisciplinary Ph.D. program. These courses may contribute toward completion of the INPR program as long as the courses are appropriate, they are acceptable to the student’s dissertation committee (once composed), and the student earns a grade of B or above in each course. There is no obligation by the dissertation committee to accept courses taken in a non-degree status. Credits taken in a non-degree status beyond the limit of 12 may be taken to provide foundation or prerequisite background.

Students who have begun doctoral studies, whether at Marquette or another university, may apply for transfer into the interdisciplinary Ph.D. program by submitting documents required of all applicants. In such cases, the student may request that a maximum of 12 credits be transferred from previous course work into the interdisciplinary Ph.D. program at Marquette. The University Board of Graduate Studies will approve or disapprove of any transfer credit. Transfer credits must be for appropriate course work, as agreed upon by the advisory committee, and the applicant must have earned a grade of B or above in each course to be transferred.

DOCTORAL REQUIREMENTS

An interdisciplinary doctoral student completes a minimum of 30 credit hours of course work beyond the master’s degree and meets all other requirements as stated in the section on doctoral study. Because no individual department administers an interdisciplinary doctorate, certain understandings, commitments, and restrictions beyond those required in regular degree programs are necessary. Additional details can be obtained from the vice provost for research and dean of the Graduate School, or at the Graduate School’s Web site www.grad.mu.edu/programs/interdis.shtml.

COURSE DESCRIPTIONS

GRADUATE COURSES:

Each interdisciplinary degree proposal specifies the disciplines to be incorporated into the doctoral program. Students select course work from the departments that support those disciplines as well as the courses listed below.

INPR 295. Independent Study 1-3 sem. hrs. Offered every term. Prereq: Cons. of dept. ch.; cons. of graduate prog. dir.
INPR 399. Doctoral Dissertation  1-12 sem. hrs.
Doctoral dissertation for doctoral candidates pursu-
ing an approved interdisciplinary doctoral program.
Offered every term. S/U grade assessment.
Prereq: Cons. of dept. ch.; cons. of prog. dir. and
admitted to INPR program; Ph.D. candidates pursu-
ing an approved interdisciplinary Ph.D. program.

INPR 870. Doctoral Comprehensive Exam
Preparation – Less than Half-Time
0 sem. hrs.
Fee: SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.; cons. of prog. dir. and
admitted to INPR program.

INPR 871. Doctoral Comprehensive Exam
Preparation – Half-Time
0 sem. hrs.
Fee: SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.; cons. of prog. dir. and
admitted to INPR program.

INPR 872. Doctoral Comprehensive Exam
Preparation – Full-Time
0 sem. hrs.
Fee: SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.; cons. of prog. dir. and
admitted to INPR program.

INPR 873. Graduate Standing Continuation –
Less than Half-Time
0 sem. hrs.
Fee: SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.; cons. of prog. dir. and
admitted to INPR program.

INPR 874. Graduate Fellowship – Full-Time
0 sem. hrs.
Fee: SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.; cons. of prog. dir. and
admitted to INPR program.

INPR 875. Graduate Assistant Teaching –
Full-Time
0 sem. hrs.
Fee: SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.; cons. of prog. dir. and
admitted to INPR program.

INPR 876. Graduate Assistant Research –
Full-Time
0 sem. hrs.
Fee: SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.; cons. of prog. dir. and
admitted to INPR program.

INPR 887. Doctoral Dissertation Continuation –
Less than Half-Time
0 sem. hrs.
Fee: SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.; cons. of prog. dir. and
admitted to INPR program.

INPR 888. Doctoral Dissertation
Continuation – Half-Time
0 sem. hrs.
Fee: SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.; cons. of prog. dir. and
admitted to INPR program.

INPR 889. Doctoral Dissertation
Continuation – Full-Time
0 sem. hrs.
Fee: SNC/UNC grade assessment.
Prereq: Cons. of dept. ch.; cons. of prog. dir. and
admitted to INPR program.

INTERNATIONAL AFFAIRS (INAF)
See POLITICAL SCIENCE (POSC)

LAW ENFORCEMENT LEADERSHIP AND
MANAGEMENT (LELM)
Graduate Program Coordinator and Assistant
Professor: Caufield
Dean of the College of Professional Studies: Caufield
Adjunct Professor: Caufield

DEGREE OFFERED
Certificate

PROGRAM DESCRIPTION
The College of Professional Studies offers a
degree program leading to a certificate
in law enforcement leadership and manage-
ment. The program offers law enforcement officers
an opportunity to strengthen their leadership and
management skills in order to better serve their
departments and their communities while putting
themselves in a good position for promotion.
Several objectives underlie the scope and con-
tent of the program:
1. Apply ethical frameworks to the frequently expe-
rienced ethical dilemmas, which will result in
socially responsible policing.
2. Collaborate with communities in solving socially
complex problems that are frequently linked to
criminal behavior.
3. Achieve understanding of resource management and
resource allocation in law enforcement in
order to operate and evaluate the efficiency and
effectiveness of a law enforcement agency.
4. Practice risk management principles to mini-
mize civil liabilities by knowing the current legal
responsibilities of law enforcement administrators.

PREREQUISITES FOR
ADMISSION
Applicants must have a baccalaureate degree from a
college or university of recognized standing and
must be an active law enforcement officer.

APPLICATION REQUIREMENTS
Applicants must submit, directly to the Graduate
School:
1. A completed application form and fee.
2. Official transcripts from all current and previous
colleges/universities except Marquette.
3. Three letters of recommendation.
4. (For international applicants only) a TOEFL score
or other acceptable proof of English proficiency.

CERTIFICATE REQUIREMENTS
The certificate program requires completion of
courses in law enforcement leadership and man-
gement.

LEADERSHIP STUDIES (LEDR)
Graduate Program Coordinator and Assistant
Professor: Caufield
Dean of the College of Professional Studies: Deahl
Associate Professor: Krejci, Soeka
Adjunct Assistant Professor and CPS Chaplain: Class
Adjunct Instructor: Benner, Braaksma, Coan, Dugan,
Egdorf, Essuman, Goergen, Kammholz, Kendrigan,
Krueger, Lotz, Lucey, McAvoy, O’Neill, Perlman,
Rondini, Ruscitti, Waters
Note: Faculty members and their ranks are for the
2007-2008 academic year.

DEGREES OFFERED
Master in Leadership Studies, Plan B only;
Certificate

SPECIALIZATIONS
Master’s: Criminal Justice Administration, Dispute
Resolution, Engineering, Health Care
Administration, Non-profit Sector,
Public Service
A general track, requiring no specializa-
tion, is also available.
Certificate: None

PROGRAM DESCRIPTIONS

MASTER’S DEGREE PROGRAM
The College of Professional Studies offers a
professional degree program leading to the mas-
ter in leadership studies (M.L.S.), where students
may choose either a general track or one of six
specializations.

CRIMINAL JUSTICE ADMINISTRATION
The criminal justice administration specializa-
tion seeks to produce broadly-educated, highly-
motivated, thoroughly-trained professionals and
scholars to meet the challenges of urban society.
Several objectives underlie the scope and content
of the program: 1) to provide urban stewards with
an ethical and scholarly understanding of the issues
and ramifications of current and anticipated policies
in criminal justice; 2) to develop persons capable of
exercising independent, analytical thought consis-
tent with the needs of a democratic society; and 3)
to provide a core of leaders familiar with the issues
of criminal justice management and policy analysis.

DISPUTE RESOLUTION
The dispute resolution specialization attempts
to combine the fields of law, business, psychol-
ogy, sociology, political science, health sciences,
education, and communication in dealing with
today’s multi-faceted issues in resolving disputes.
The program seeks to train professionals, primarily
those in the fields of law, health care, education, and
business, to practice as third party neutrals in the
field of dispute resolution, or to be knowledgeable
participants in dispute resolution processes.
Marquette University also offers master’s and
certificate programs in dispute resolution. (See the
program section on Dispute Resolution for descrip-
tion and details.)

ENGINEERING
The engineering specialization offers students
the opportunity to deepen an understanding of
their own technical area of expertise or to gain an
understanding of a technical area of engineering
other than their own. This added technical expertise coupled with the leadership core will assist engineers in working more effectively as cross function engineering teams. Students will learn to serve as skilled leaders in an engineering environment, as well as integrate their leadership and technical skills when introducing new technology into their functional groups.

HEALTH CARE ADMINISTRATION

The health care administration specialization seeks to prepare working professionals to meet the leadership challenges of today's health care system. As managed care and the integration of health care delivery continue to evolve, new skills and knowledge are needed to keep pace with current health care demands. The program provides a foundation in finance, economics, policy, leadership, systems, and outcome planning and evaluation, specifically related to the changing health care system. Through the many elective offerings (informatics, case management, marketing, program development, administrative practice, conflict resolution, long-term care and more), students may explore a wide range of special interests.

NON-PROFIT SECTOR

The non-profit sector specialization seeks to provide training for individuals who plan a career in the third sector. Administrative and leadership preparation are particularly central to this training as executives handle budgets, board memberships, personnel oversight, corporate statutes, and program development.

PUBLIC SERVICE

The public service specialization prepares students to apply public service principals that encourage community engagement in urban environments and to apply frameworks to ethical dilemmas resulting in socially responsible public policy. Several objectives underlie the scope and content of this specialization: 1) to develop persons who can demonstrate the cultural and communication skills necessary to interact in a reciprocal exchange that honors the human dignity of all persons; 2) to develop persons who can apply theory and principals of group dynamics when assuming multiple group roles and responsibilities; and 3) to provide urban stewards with the necessary skills to collaborate with community leaders in solving complex urban problems.

Marquette University also offers a master’s program in public service. (See the program section on Public Service for description and details.)

CERTIFICATE PROGRAM

The College of Professional Studies offers a 15 credit non-degree graduate program leading to the certificate in leadership studies. With a heavy emphasis on ethics and leadership, the program objective is to increase the leadership competency of working professionals in our community.

PREREQUISITES FOR ADMISSION

Applicants to leadership studies must hold a baccalaureate degree, or its academic equivalent, from a college or university of recognized standing. The undergraduate background must be appropriate to the chosen course of study. Generally, applicants should have a minimum cumulative grade point average of 3.00 (on a scale of 4.00) in their undergraduate course work. Minimally two years of work experience is preferred.

APPLICATION REQUIREMENTS

Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation.
4. (For master’s applicants only) a statement of purpose.
5. (For master’s applicants to criminal justice administration, health care administration, non-profit sector, and public service only) GRE (preferred), GMAT or LSAT scores, which are required only from applicants with a cumulative undergraduate GPA of less than 3.20 on a 4.00 scale. Waived if the applicant has completed any advanced degree from any school — M.A., M.S., M.B.A., Ph.D., J.D., or M.D.
6. (For master’s applicants to dispute resolution only) official test scores from the GRE, GMAT, LSAT, or MAT. Waived if the applicant has completed any advanced degree from any school — M.A., M.S., M.B.A., Ph.D., J.D., or M.D.
7. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

Additional application requirements may be required for particular specializations. Students should contact the program coordinator for details.

MASTER’S REQUIREMENTS

Students must complete a total of thirty-six (36) credit hours of coursework for the master in leadership studies. Either the general track or one of the six specializations (criminal justice administration, dispute resolution, engineering, health care administration, non-profit sector, public service) must be chosen.

Students must complete prescribed combinations of core leadership studies (LEDR) courses, plus specialization credits or elective credits for the general track. Students must also choose one of three integrative learning options:
1) 6 credits of a professional project (capstone courses LEDR 296 and 297),
2) 6 credits of a research article of publishable quality (capstone courses LEDR 296 and 297), or
3) 6 credits of additional coursework followed by a comprehensive examination.

For options 1 and 2 above, students must submit the project outline to be approved by their program adviser and by the Graduate School.

Students must complete the program within six years. Students are expected to earn a B or above in all courses and must maintain a 3.00 cumulative grade point average to earn the degree of master in leadership studies.

GENERAL TRACK

Students that choose the leadership studies general track must complete 36 graduate-level credits: 18 credits of core course work (LEDR 210, LEDR 220, LEDR 230 or LEDR 240, LEDR 250 or LEDR 260, LEDR 270, and LEDR 280), 12 credits in the area of specialization, and 6 credits for completing one of the three integrative learning options outlined above.

Students that choose the engineering specialization must complete 36 graduate-level credits: 15 credits of core course work (LEDR 210, LEDR 220, LEDR 230 or LEDR 240, LEDR 250 or 260, and LEDR 270), 15 credits in one of two engineering tracks (electrical or mechanical), and 6 credits for completing one of the three integrative learning options outlined above. Students completing the electrical engineering track must complete ECEE 165, ECEE 176, ECEE 211, ECEE 284, and either ENMA 278 or ENMA 281. Students completing the mechanical engineering track must complete MEEN 172, MEEN 173, MEEN 148, MEEN 271, and either ENMA 278 or ENMA 281.

CERTIFICATE REQUIREMENTS

The certificate program requires completion of five courses (15 credits) selected from a prescribed list of LEDR courses. Of these five courses, four are required. The remaining course is an elective course that may be selected from the LEDR course listings.

The required courses are LEDR 210, LEDR 220, LEDR 230 or LEDR 240, and LEDR 270.

Students must complete the certificate program within three years. Students are expected to earn a B or above in all courses and must maintain a 3.00 cumulative grade point average to earn the certificate in leadership studies.

COURSE DESCRIPTIONS

GRADUATE COURSES:

LEDR 200. Introduction to Business Processes 3 sem. hrs.

Presents an overview of fundamental business processes that will benefit leaders in multiple environments.


Presents analysis of historical concepts regarding leadership with a special focus on leadership ethics. Developmental processes related to ethical leadership behavior will be studied. Introduces quantitative and qualitative research methodologies appropriate for leadership issues.


Based on audience and situation, content focuses on teaching leaders to be effective in modifying their method and style of communication.

LEDR 220. Self-leadership 3 sem. hrs.

Studies aspects of the self that directly impact leadership. Includes the study of intellectual, emotional, spiritual, and physical aspects. Arenas of self-leadership that are foci include: time and money usage, attitude and mood management, daily routines and stress management. Explores the ethics of self-leadership. Highly applications-focused. Includes qualitative and quantitative methodologies appropriate for measuring the self.

LEDR 230. Conflict Resolution, Negotiation and Team Leadership 3 sem. hrs.

Conflict resolution methods are studied and applied to leadership situations. Learning activities include in-class and online negotiation. Team leadership theory and concepts are applied by participating in a service learning experience.
Using qualitative research methods, students will examine aspects of diversity such as age, gender, race, political affiliation, religious beliefs and sexual orientation. Particular attention is paid to the critical analysis of the use of qualitative research to inform leadership decision-making and the social impact of that decision-making on the diverse groups studied. Prereq: LEDR 210.

LEDR 250. Influence of Leadership on Behavior in Organizations 3 sem. hrs.
Studies the influence of leadership on the behavior within and toward an organization, especially as related to organizational culture, governing bodies, strategic planning, succession planning, diversity and globalization. Prereq: LEDR 210.

LEDR 260. Leaders as Worldly Citizens 3 sem. hrs.
Studies leadership and organizational leadership behavior in the context of the external culture within which the organization is embedded. Studies the interaction between world religions, world history, world monetary systems, with leadership and ethics. Issues include: nationalism, education, democracy, economic development, distribution of resources, trade vs. aid, the plight of vulnerable peoples of the world, information technology issues. Simple analyses of databases with worldwide data will be conducted. Prereq: LEDR 210.

LEDR 270. Research Methods 3 sem. hrs.
Focuses on ethical principles of engaging human subjects for research purposes; applying concepts of validity, reliability and basic research design; survey construction; interpreting research findings; evaluating the quality of leadership research conducted based on identified criteria; formulating a research question and hypotheses; and writing a research proposal. Methods applied in the context of leadership research. Prereq: LEDR 210 and one semester of undergraduate statistics.

Statistical methods applied and interpreted include: Chi-Square, t-tests, ANOVA, ANCOVA and regression. Methods studied in the context of leadership studies. Access to SPSS required. Undergraduate course in basic statistics recommended. Prereq: Score of 50th percentile or above in the quantitative reasoning portion of the GRE or a statistics course with a grade of B or better within the past five years. Students who do not meet one of these two conditions are required to complete a foundational statistics course prior to registration.

LEDR 290. Practicum in Leadership 3 sem. hrs.
Prereq: LEDR 210, 220, and 230 or 240.

LEDR 295. Independent Study 1-3 sem. hrs.
Prereq: Cons. of dept. ch.; cons. of prog. dir.

LEDR 296. Capstone Integrative Project 1 3 sem. hrs.
Capstone Integrative Project 1 is the initial semester of the integrative learning experience. Students must complete both LEDR 296 and 297 for a total of 6 credits. S/U grade assessment. Prereq: Fifteen credits of core and nine credits of specialization course work completed. For those students doing general track leadership studies, 24 credits of course work completed.

LEDR 297. Capstone Integrative Project 2 3 sem. hrs.
The second semester of the integrating learning experience. Students must complete both LEDR 296 and 297 for a total of 6 credits. S/U grade assessment. Prereq: LEDR 296.

LEDR 298. Special Topics in Leadership 1-3 sem. hrs.
Examination of topics related to contemporary issues in leadership studies. Prereq: LEDR 210, 220, and 230 or 240.

LEDR 299. Master’s Thesis 3-6 sem. hrs.
Offered every term. S/U grade assessment. Prereq: Cons. of dept. ch.


LEDR 876. Graduate Assistant Research – Full-Time 0 sem. hrs. Fee. SNC/UNC grade assessment. Prereq: Cons. of dept.


MATHEMATICS, STATISTICS AND COMPUTER SCIENCE (MSCS)

Chairperson and Professor: Jones
Assistant Chairperson: Manyo
Professor: Bankston, Bansal, Braunschweiger (Emeritus), Clough, Corliss, Hamedani, Hanneken (Emeritus), Harris, Krenz, Lawrence (Emeritus), Merrill, Moyer, Pastijn, Ziegler (Emeritus)
Associate Professor: Brookskeat (Emeritus), Byleen, Kaiser, Rutenburg, Shattery, Simms
Research Associate Professor: Toneilato
Assistant Professor: Ahamed, Bajournalie, Brylow, J. Factor, K. Factor, Madiraju, Sanders, Scott, Struble
Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREES OFFERED
Master of Science, students are admitted under Plan B (non-thesis option) but Plan A (thesis option) is also offered: Doctor of Philosophy

SPECIALIZATIONS
Master’s: Computer Science, Mathematics, Mathematics Education
Doctoral: Algebra, Biomathematics, Logic and Foundations, Statistics

Information on the master’s degree program in bioinformatics can be found in the Bioinformatics section of this bulletin. Similarly, information on the master’s degree program in computing can be found in the Computing section.

PROGRAM DESCRIPTIONS
The master’s program in computer science or mathematics in the Department of Mathematics, Statistics and Computer Science accommodates students whose objectives are either master’s degrees or preparation for doctoral study. The master’s degree program for the specialization in computer science is designed to develop the student’s understanding of the mathematical and scientific principles and techniques underlying today’s computer applications so that the student is well prepared to lead rather than follow the developments in the field. The program provides a unique blend of computer science and applications. This specialization will extend the student’s depth of knowledge for a long-term career in the computing profession or for further graduate study and research.

The master’s degree program for the specialization in mathematics offers study in pure or applied mathematics to both master’s and aspiring doctoral candidates. Some master’s students have enhanced their mathematics study with course work in computer science, statistics or bioinformatics to pursue such diverse careers as higher education, operations research or actuarial science. A specialization in mathematics with primary focus in statistics provides excellent background for further graduate study in statistics.

The department also offers a master of science degree in computing. Details about this program can be found in the Computing section of this bulletin. The Special Program for Secondary School Teachers (SPSST) is designed for teachers who wish to do graduate work in the mathematical sciences but do not anticipate graduate study in mathematics beyond the master’s level.

The doctoral program is designed for individuals of outstanding ability who are skilled at indepen-
A master’s student is admitted to the non-thesis program (Plan B) which requires at least 30 credit hours of course work and a non-thesis essay that reflects the student’s ability to synthesize source materials relating to a particular area of research or professional practice. All master’s students are assumed to be on Plan B unless a formal request to pursue Plan A is approved by the department’s Graduate Committee and the Graduate School. Plan A requires submission of a thesis, which must be an original contribution to the student’s field of study. Normally, the Plan A student must complete at least 24 credit hours of course work and six credit hours of thesis work.

The computer science and mathematics master’s degree programs require completion of at least two full-year graduate level courses chosen from at least two of the following areas: algebra, analysis, discrete mathematics, topology, statistics, operations research, and computer science. The Special Program for Secondary School Teachers (SPSST) requires successful completion of MATH 101 and either MSSC 278 or 279. Courses numbered MSSC 270–279 count toward the degree credit requirements only for SPSST students.

**DOCTORAL REQUIREMENTS**

A doctoral student must complete a program of study defined, in conjunction with an adviser, on an approved Doctoral Program Planning Form. Normally, the total program, exclusive of dissertation, will include approximately 60 credit hours of course work beyond the bachelor’s degree. Twelve credit hours of dissertation work is also required. Advancement to candidacy for the doctoral degree is considered after successful completion of all requirements specified on the Doctoral Program Planning Form, after passing a qualifying examination, and upon completion of the language requirement. The student’s doctoral committee may require reading proficiency in mathematics in a foreign language. Typically, the doctoral committee also serves as the dissertation committee and conducts the final public oral examination, which is primarily a defense of the dissertation.

A doctoral student must complete four full-year courses, including one in analysis and one in algebra, and must pass a three-part written preliminary examination.

**COURSE DESCRIPTIONS**

**UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:**

For graduate students in the MATH department, COSC 154, MATH 121, 137, 144, and 164 count toward degree credit requirements for SPSST students only.

**Computer Science (COSC)**

COSC 125. Operating Systems 3 sem. hrs.
COSC 126. Data Structures and Algorithms 2 3 sem. hrs.
COSC 146. Numerical Analysis 3 sem. hrs.
COSC 152. Programming Languages 3 sem. hrs.
COSC 154. Data Structures for Engineers 3 sem. hrs.
COSC 157. Formal Languages and Computability 3 sem. hrs.
COSC 158. Software Design and Analysis 3 sem. hrs.
COSC 159. Fundamentals of Artificial Intelligence 3 sem. hrs.
COSC 162. Component-Based Software Construction 3 sem. hrs.
COSC 170. Compiler Construction 3 sem. hrs.
COSC 172. Networks and Internets 3 sem. hrs.
COSC 176. Data Mining 3 sem. hrs.
COSC 198. Topics in Computer Science 1-3 sem. hrs.

**Mathematics (MATH)**

MATH 101. History of Mathematical Ideas 3 sem. hrs.
MATH 112. Topology 3 sem. hrs.
MATH 120. Theory of Numbers 3 sem. hrs.
MATH 121. Linear Algebra and Matrix Theory 3 sem. hrs.
MATH 124. Abstract Algebra 1 3 sem. hrs.
MATH 125. Abstract Algebra 2 3 sem. hrs.
MATH 136. Geometric Transformations 3 sem. hrs.
MATH 137. The Teaching of Mathematics 3 sem. hrs.
MATH 138. Topics in Algebra and Number Theory from an Advanced Standpoint 3 sem. hrs.
MATH 139. Topics in Geometry and Calculus from an Advanced Standpoint 3 sem. hrs.
MATH 140. Theory of Differential Equations 3 sem. hrs.
MATH 144. Operational Methods in Physics and Engineering 3 sem. hrs.
MATH 146. Numerical Analysis 3 sem. hrs.
MATH 147. Mathematical Modeling and Analysis 3 sem. hrs.
MATH 150. Applied Combinatorial Mathematics 3 sem. hrs.
MATH 162. Time Series Analysis 3 sem. hrs.
MATH 163. Regression Analysis 3 sem. hrs.
MATH 164. Statistical Methods 3 sem. hrs.
MATH 166. Biostatistical Methods and Models 3 sem. hrs.
MATH 168. Computational Statistics 3 sem. hrs.
MATH 180. Intermediate Analysis 1 3 sem. hrs.
MATH 181. Intermediate Analysis 2 3 sem. hrs.
MATH 182. Complex Variables 3 sem. hrs.
MATH 198. Topics in Mathematics or Statistics 1-3 sem. hrs.

GRADUATE COURSES:

Mathematics, Statistics and Computer Science (MSCS)

MSCS 200. Real and Complex Analysis 1 3 sem. hrs.
Involves study of algebraic structures of real analysis, function spaces, introduction to linear operators, measure and integration theory, convergence theorems, limits, continuity, derivatives. Offered alternate years. Prereq: MATH 180.

MSCS 201. Real and Complex Analysis 2 3 sem. hrs.
Involves study of algebraic structures of complex analysis, function spaces, convergence theorems, complex number system, limits, continuity, derivatives, Cauchy integral theory, residues, analytic functions, Riemann surfaces, conformal mapping. Offered alternate years. Prereq: MATH 182.

MSCS 209. Computer Networks 1 3 sem. hrs.
An intensive study of computer networking and networking standards with hands-on experience. Following the ISO-OSI model, the first term concentrates on the lower four layers (physical, datalink, networking, and transport) and the second on the upper four (transport, session, presentation, and application). Offered regularly. Prereq: COSC 125.

An intensive study of computer networking and networking standards with hands-on experience. Following the ISO-OSI model, the first term concentrates on the lower four layers (physical, datalink, networking, and transport) and the second on the upper four (transport, session, presentation, and application). Offered regularly. Prereq: COSC 125.

MSCS 212. Algebra 1 3 sem. hrs.
Topics in groups, rings, fields and vector spaces including Sylow's theorems, field of quotients of an integral domain, structure of finitely generated modules over a principal ideal domain, Galois theory of equations, ordered fields, classical groups. Offered alternate years. Prereq: MATH 124 or equiv.

MSCS 213. Algebra 2 3 sem. hrs.
Continuation of the MSCS 212-213 course sequence. Offered alternate years. Prereq: MSCS 212.

MSCS 215. Advanced Linear Algebra 3 sem. hrs.
Linear systems of equations, linear transformations, polynomial algebras, polynomial ideals, direct sum decomposition, canonical forms, inner product spaces, linear functionals, adjoint operators, spectral theory. Offered spring term. Prereq: MATH 121 or equiv.

MSCS 216. Logic and Set Theory 1 3 sem. hrs.
Naive set theory, first-order logic, elementary model theory, non-standard analysis, Gödel's incompleteness theorems for elementary arithmetic, axioms for set theory, ordinal and cardinal arithmetic, the continuum hypothesis, methods of inner models and forcing for proving consistency and independence results. Offered occasionally. Prereq: MATH 124 or equiv.

MSCS 217. Logic and Set Theory 2 3 sem. hrs.
Continuation of the MSCS 216-217 course sequence. Offered occasionally. Prereq: MSCS 216 or cons. of instr.

MSCS 218. Universal Algebra and Semigroups 1 3 sem. hrs.
Algebras, subalgebras, homomorphisms and direct products. Fundamentals of lattice theory. Isomorphism theorems, the subdirect representation theorem, class operators and varieties, free algebras. Basic notions of semigroup theory including congruence relations, Green's relations, 0-simple semigroups; regular semigroups, in particular inverse semigroups and completely regular semigroups. Offered alternate years. Prereq: MATH 124 or equiv.

MSCS 219. Universal Algebra and Semigroups 2 3 sem. hrs.
Continuation of the MSCS 218-219 course sequence. Offered alternate years. Prereq: MSCS 218 and cons. of instr.

MSCS 220. Topology 1 3 sem. hrs.
Metric spaces, fundamental topology notions, subspace topology, product spaces, quotient spaces, separation axioms, Tietze's theorem, compactness, metrization, uniform spaces, function spaces, homotopy relation, fundamental group, computing manifold groups. Offered occasionally. Prereq: MATH 180 or equiv.

MSCS 221. Topology 2 3 sem. hrs.
Continuation of the MSCS 220-221 course sequence. Offered occasionally. Prereq: MSCS 220.

Applied discrete mathematics for the mathematics, engineering and computer science graduate student. Emphasis on graph theory and counting problems that serve as a foundation for research areas in the second semester. Theory and applications are covered for topics including trees, graph coloring, chromatic polynomials, generating functions, recurrence relations, distinct colorings and Polya's Theorem. Offered alternate years. Prereq: COSC 61 and MATH 80 or equiv.; MATH 81 and MATH 90 or equiv.

Applied discrete mathematics for the mathematics, engineering, and computer science graduate student. Existence and optimization problems in combinatorics. Initial work centers on experimental design, coding theory and some existence problems in graph theory. Emphasis on using tools from MSCS 222 to do primary research centering on existence and optimization in a combinatorial area. Offered alternate years. Prereq: MSCS 222.

MSCS 224. Design and Analysis of Algorithms 3 sem. hrs.
Approaches for creating solutions to problems and determining the space and time efficiency of those solutions. Design techniques are covered, such as divide and conquer, heuristic, randomized, and approximation. Analysis of time and space complexity may include applications of the Master Theorem, amortized analysis, probabilistic arguments, etc. Complexity theory such as NP and PSPACE completeness is also considered. Offered yearly. Prereq: MSCS 222 or equiv.

MSCS 226. Paradigms for Software Development 1 3 sem. hrs.
The imperative and object-oriented programming approaches to software design and development are experienced using software engineering principles appropriate for each paradigm. These two paradigms are four of the main paradigms used in software development. Offered occasionally. Prereq: COSC 61 and COSC 66 or equiv.'s and two terms of upper division computer science courses.

MSCS 227. Paradigms for Software Development 2 3 sem. hrs.
The functional and declarative programming approaches to software design and development are experienced using software engineering principles appropriate for each paradigm. These two paradigms are four of the main paradigms used in software development. Offered occasionally. Prereq: COSC 61 and COSC 66 or equiv.'s and two terms of upper division computer science courses.

MSCS 228. Data Mining 3 sem. hrs.
Techniques for extracting "interesting" relationships and knowledge hidden in data, such as decision trees, association rules, clustering, neural networks, Bayesian classifiers, feature selection, pattern assessment, inductive logic programming, outlier analysis, data imputation, and data integration. Offered occasionally. Prereq: COSC 66 and COSC 153; or COSC 66 and COSC 159; or COSC 66 and MATH 164; or equiv.

MSCS 236. Component Architecture 3 sem. hrs.
Focuses on designing and implementing software components, and ways of specifying their interconnection and interaction. The primary technology is Java Beans, although other approaches such as ActiveX are also considered. General notions relating to specifying and identifying components and the general distribution of resources are examined.
MSCS 237. Distributed Computing 3 sem. hrs.
Focuses primarily on the interconnection of software components, both in the way they communicate with one another, and in the way they are themselves distributed. The concentration is not as much on the technical detail of standards such as Corba, Java RMI, and Distributed Network Architecture, but on the ways these technologies can be used to construct dynamic infrastructures for welding diverse local environments into one community of cooperating parts. The emphasis is very much upon allowing heterogeneity, and on solving business problems related to distributed concentrations of data.

MSCS 238. Enterprise Architecture 3 sem. hrs.
Focuses totally on the server side of communications, and on the ways of using software components as wrappers of all kinds of objects, so they can participate in highly distributed environments involving security and transactions. Attention is paid to establishing universal environments for naming resources and finding them, and to ways of managing the life cycle of both data and program components. The main technology considered is Enterprise Java Beans.

MSCS 239. Information Representation 3 sem. hrs.
Focuses on using special grammars and their associated language for communicating business information universally amongst very diverse systems. The attention is not on the formalities of the grammars, but on the ways one can take advantage of knowing that documents are valid with respect to those grammars. The particular technology primarily considered is XML, and many current standards from the XML community are considered and used. Offered regularly.

Basic theory concerning existence, uniqueness, continuation, asymptotic behavior, and stability of solutions of linear and non-linear systems of ordinary differential equations. Offered alternate years. Prereq: MATH 180 or equiv.

Theory of discrete and continuous dynamical systems. Periodic solutions, bifurcations, chaotic systems, attractors, fractal dimension, and simulation of these systems. Offered alternate years. Prereq: MATH 180 or equiv.

MSCS 250. Functional Analysis 1 3 sem. hrs.
Fundamental concepts in the theory of Hilbert, Banach, normed linear, and general topological linear spaces. Offered occasionally. Prereq: MSCS 121 or equiv. and MSCS 180 or equiv.

MSCS 251. Functional Analysis 2 3 sem. hrs.
Continuation of the MSCS 250-251 course sequence. Offered occasionally. Prereq: MSCS 250.

Principles of deterministic model building in operations research. Linear programming and duality, dynamic and integer programming, nonlinear optimization and parameter estimation. Offered occasionally. Prereq: MATH 121 or equiv.

Principles of stochastic model building in operations research. Queuing theory, renewal processes, continuous Markov chains and simulation techniques. Offered alternate years. Prereq: MATH 180 or equiv.

Counting techniques, sample spaces, random variables (discrete, continuous and mixed), probability functions for discrete random variables, cumulative distribution functions, probability density functions for continuous random variables, special discrete and continuous distributions, random vectors and their distributions, sampling distributions, characteristic functions, Central Limit Theorem, Law of Large Numbers. Offered alternate years. Prereq: MATH 180 or equiv. or cons. of instr.

Brief review of sampling distributions, Central Limit Theorem and Law of Large Numbers. Estimation, testing hypotheses, regression and correlation analysis, non-parametric methods. Offered alternate years. Prereq: MSCS 260.

MSCS 262. Analysis of Variance and Covariance 3 sem. hrs.

Basic properties of random vectors, multivariate normal distribution, estimations of mean vector and covariance matrix, Wishart distribution, hypothesis testing, Hotelling’s T2, multivariate analysis of variance, principal component analysis, factor analysis, canonical correlation analysis, classification and discriminant analysis. Offered occasionally. Prereq: MATH 121 and MATH 161.

MSCS 270. Advanced Geometry 1 3 sem. hrs.
Mathematical logic; historical development of geometry; critique of Euclidean geometry; development of several postulational systems such as incidence, affine and finite geometries; emphasis on geometric proof. Offered fall term. Prereq: Only SPSS/ST students may receive graduate credit.

MSCS 271. Advanced Geometry 2 3 sem. hrs.
Riemannian and hyperbolic geometries; geometric transformations; projective geometry. Offered occasionally. Prereq: MSCS 270; only SPSS/ST students may receive graduate credit.

MSCS 272. Algebraic Structures 1 3 sem. hrs.
Sets, relations, mappings (functions), operations; postulational approach to algebraic systems including groups, rings and the number system. Offered fall term. Prereq: Only SPSS/ST students may receive graduate credit.

MSCS 273. Algebraic Structures 2 3 sem. hrs.
Polynomial rings, vector spaces, bases, and coordinate systems; linear transformation and matrices; characteristic values; applications to geometry and analysis. Offered occasionally. Prereq: MSCS 272; only SPSS/ST students may receive graduate credit.

MSCS 274. Mathematical Analysis 1 3 sem. hrs.
The real and complex fields. Euclidean spaces; functions; limits, continuity, differentiation. Offered annually. Prereq: Only SPSS/ST students may receive graduate credit.

MSCS 275. Mathematical Analysis 2 3 sem. hrs.
Integration; series; elements of complex analysis. Offered occasionally. Prereq: MSCS 274; only SPSS/ST students may receive graduate credit.

Probability, discrete and continuous distributions. Treatment of data, point and interval estimate, hypothesis testing. Large and small sample methods, regression, non-parametric methods. Analysis of variance, multiple comparison methods. Offered occasionally. Prereq: Only SPSS/ST students may receive graduate credit.

Online course designed for teachers of secondary mathematics. Relevant NCTM standards are emphasized through discussion, projects, and implementation in a secondary mathematics classroom. Mathematics content amplifies and extends selected topics of secondary mathematics, title and content vary. Credit may be earned multiple times once for each title. Offered occasionally. Prereq: Cons. of dept. ch.; one semester of calculus and access to an algebra or geometry class of secondary students; or cons. of course coordinator. Only SPSS/ST and College of Education students may receive graduate credit.

MSCS 278. Seminar in Mathematics Curriculum Development and Material 1 3 sem. hrs.
Psychology of learning as it correlates with the ability to grasp mathematics concepts; tests and measurements in relationship to programming and scheduling of students; selection of curriculum and materials for various ability levels; classroom learning activities in mathematics curriculum and an in-depth study of experimental programs. Offered occasionally. Prereq: Teaching experience in secondary mathematics. Only SPSS/ST students may receive graduate credit.

MSCS 279. Seminar in Mathematics Curriculum Development and Material 2 3 sem. hrs.
Philosophy of education with particular attention to mathematics education; development by students of useful curricula in the form of teaching units, evaluation materials, and student and teacher bibliographies for specific topics, grade levels, and ability groups; aspects of supervision as related to the role of department chairperson. Offered occasionally. Prereq: MSCS 278; only SPSS/ST students may receive graduate credit.

MSCS 280. Topics in Analysis 3 sem. hrs.
Offered occasionally.

MSCS 281. Topics in Applied Mathematics 1-3 sem. hrs.
Offered occasionally. Prereq: Cons. of instr.

MSCS 282. Topics in Computer Science 3 sem. hrs.
Offered occasionally.

MSCS 284. Topics in Algebra 3 sem. hrs.
Offered occasionally.

MSCS 285. Topics in Foundations 1-3 sem. hrs.
Offered occasionally. Prereq: Cons. of instr.

MSCS 288. Topics in Geometry and Topology 3 sem. hrs. Offered fall term.

MSCS 289. Topics in Mathematics Education 3 sem. hrs. Offered occasionally.


MSCS 295. Independent Study 1-3 sem. hrs. Offered every term. Prereq: Consent of dept. ch.

MSCS 296. Seminar 1-3 sem. hrs.


MECHANICAL ENGINEERING (MEEN)

Chairperson and Professor: Kim
Associate Chairperson, Director of Graduate Studies and Professor: Fournelle
Director of Graduate Studies and Associate Professor: Rice
Professor: Blumenthal (Emeritus), Brebrick (Emeritus), Brower (Emeritus), Cartz (Emeritus), Craig, Harris, Heinrich, Marklin, Matar (Emeritus), Negri (Emeritus), Reid (Emeritus), Schimmels, Seitz, Tiano, Widera
Associate Professor: Cariapa, Domblesky, Jensen, Nagurka, Silver-Thorn, Weber
Assistant Professor: Borg, Goldsborough, Koch, Vogelweide
Adjunct Professor: Bishop, Janc, Stilp
Adjunct Associate Professor: Hoffman, Shana, Toth
Research Professor: Gaggioli
Research Associate Professor: Park
Research Assistant Professor: Bowman, Huang
Note: Faculty members and their ranks are for the 2007–2008 academic year.

MECHANICAL ENGINEERING (MEEN)

Mission Statement
In embracing the mission of the university and the College of Engineering, it is the mission of the Department of Mechanical Engineering to offer high quality, up-to-date, nationally recognized engineering programs that prepare students for successful careers. This success is marked by the graduates’ commitment to lifelong learning, a deep concern for the impact of their work on others, research that advances technical and scientific knowledge, and service to professional and civic communities. The department also strives to develop students and faculty who will be recognized as exceptional in their pursuit of excellence, sense of community, spirit of collaboration, and ability to define problems and accomplish goals.

Specializations
Energy Systems, Manufacturing Systems, Mechanical Systems

Program Description
The Department of Mechanical Engineering offers a master’s and a doctoral program in mechanical engineering.

Course work and research in the mechanical engineering program may involve the broad fundamentals of mechanical engineering or may concentrate on one or more of the following fields: energy systems, manufacturing systems, and mechanical systems. In these fields, engineering principles are applied not only to traditional equipment and methods but also to modern and emerging technologies. Typically, the engineering course work and research are augmented by laboratory studies. Although the study of advanced engineering mathematics and, often, basic science is necessary in all programs of study, the selection of subjects may vary depending upon the field of specialization and the student’s professional objectives.

Energy Systems
A concentration in energy systems typically entails advanced study of a) thermodynamics, fluid mechanics, heat and mass transfer, and combustion; b) the application of these principles to phenomena and devices that constitute energy-conversion systems; and c) the analysis, simulation, and design of such systems as well as plants; e.g., chemical, metallurgical, food, etc., which are energy-intensive. Current research topics include: plant optimization, fuel cells, cogeneration systems, fluid mechanics and heat transfer in surface mount technology, engine emissions/process effluents, and jet engine propulsion systems.

Manufacturing Systems
A concentration in manufacturing systems engineering allows students to focus on a broad range of topics. These topics range from micro issues, such as material-related issues and cutting mechanisms in material removal processes, to macro analysis of complex manufacturing systems from either a process or ergonomics perspective. The focus of this concentration may be computer integrated manufacturing, material processing, mechanical behavior of materials, manufacturing processes, quality systems, or ergonomics within manufacturing. Normally, each of these multi-disciplinary areas requires certain core courses along with specialized studies, which may include advanced courses in other engineering disciplines, courses in mathematics and statistics, and/or courses in business administration. Current research topics include: cellular manufacturing,
polishing and mass finishing processes, rapid prototyping, robotic systems, production integration (JIT, TOC, CIM), ergonomics of assembly operations, reliability/quality estimation, human performance and safety evaluation, and materials forming and joining processes.

MECHANICAL SYSTEMS
A concentration in mechanical systems typically entails advanced study of all mechanical system design and analysis and b) modeling, simulation, and control. Mechanical design and analysis focuses on the use of physical and mathematical principles to understand the behavior of mechanical systems. It includes computer-aided optimal design, such as the design of multi-body, multi-degree-of-freedom mechanical systems. Modeling, simulation, and control involve the study of theoretical mechanics in conjunction with computational applications including advanced dynamics, kinematics, and stress analysis. Other applications include the modeling and control of manufacturing processes, including robotics and automated deformation processing. Current research areas include: surface mount technology, composite and polymeric materials, control in automated assembly, surface finishing processes, design of compliant machine tools, metal cutting/forming mechanics, finite element methods, and pressure vessels comprised of multi-layered composites.

PREREQUISITES FOR ADMISSION
Adequate preparation in engineering, mathematics, and science is required. If an applicant does not have an adequate undergraduate background, some remedial studies may be necessary, depending upon the graduate field of specialization the applicant selects.

An applicant for the doctoral program must possess a master of science degree in an appropriate field.

APPLICATION REQUIREMENTS
Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation.
4. (For doctoral applicants only) a brief statement of purpose and copies of any published work, including master's theses and essays.
5. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.
6. (For doctoral and all international applicants) GRE scores (General Test only).
7. The GRE also is recommended for, and may be requested of, master's applicants with undergraduate grade point averages less than 3.00 out of 4.00.

BACHELOR'S–MASTER'S PROGRAM
This program enables students to earn both their master of science degree in mechanical engineering and a bachelor of science degree from the College of Engineering in the span of five years. Only the thesis option is available with this program. Qualified students (3.50/4.00 GPA) who are enrolled in the Mechanical Engineering Department at Marquette University may apply for admission to this program during their undergraduate junior year. Students must submit an application to the Graduate School, indicate their interest in the five year program, and meet all other admission criteria as stated in the Application requirements section. (GRE test scores are not required.)

Students select graduate level courses in their senior undergraduate year as their electives; these elective courses double-count toward the undergraduate and graduate degrees. However, only a maximum of 6 credit hours will apply toward the graduate degree. Upon completion of the first term as a master's candidate, the student must petition the Graduate School to transfer courses taken as an undergraduate to the master's degree.

Students begin their research for the thesis during the summer between their junior and senior years. Their research is continued the summer between their senior and fifth years and throughout their fifth year, culminating in the preparation of a written thesis and defense.

MASTER'S REQUIREMENTS
A master's student may pursue a thesis program (Plan A) or a non-thesis program (Plan B). However, students who intend to continue for the doctoral degree and those students who are receiving financial aid in the form of assistantships must select the thesis option. In Plan A, the student must complete 24 credit hours of course work, 6 credit hours of thesis work, and submit an approved thesis. In Plan B, the student must complete 33 credit hours of course work. A student in either the Plan A or the Plan B option must take a minimum of 3 credit hours of an approved math course. A minimum of one-half of the total course work requirement in both plans must be 200-level. All students are required to take at least one-half of their total course work from the Department of Mechanical Engineering course offerings. A maximum of 6 credit hours of graduate level credit from other accredited institutions may be accepted toward the requirements of the degree. Independent study course work can account for a maximum of 3 credit hours. The student must also attend and participate in the departmental seminar.

DOCTORAL REQUIREMENTS
A doctoral student must complete a program of study prepared in collaboration with his or her permanent adviser and outlined in an approved Doctoral Program Planning Form. This form must be submitted within the first year of the student's doctoral studies. The program normally requires 48 credit hours of course work beyond the baccalaureate degree, plus 12 credit hours of dissertation work. In cases in which the student enters the program with a master's degree in mechanical engineering or a closely related field, the student may request that the department and the Graduate School allow credits from the master's degree to satisfy up to 24 credit hours of the required course work. At least one-half of the total course work requirement must be from designated graduate-level courses. Students are required to take at least one-half of their total course work from the Department of Mechanical Engineering course offerings. A maximum of 6 credit hours of graduate-level credit from other accredited institutions may be accepted toward the requirements of the degree. Independent study course work can account for a maximum of 3 credit hours. All doctoral students are required to participate in the department graduate seminar activities.

A doctoral student must complete a departmental written proficiency exam prior to completion of the Marquette University doctoral residency requirement. This exam will be comprised of two components, one component being engineering mathematics and the other representing the student's declared area of specialization: energy systems, manufacturing systems, or mechanical systems. This examination is based upon material presented in the advanced undergraduate and master's degree level course work.

A student must pass a doctoral qualifying examination (DQE) administered by his/her doctoral committee within one academic year after completing course work requirements. This exam must be passed at least one year prior to the submission and successful public defense of the dissertation. The dissertation must represent an original research contribution and demonstrate both high scholarly achievement and the ability to conduct independent research.

COURSE DESCRIPTIONS
UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:

MEEN 133. Internal Combustion Engines 3 sem. hrs.
MEEN 135. Transport Phenomena 3 sem. hrs.
MEEN 136. Intermediate Thermodynamics 3 sem. hrs.
MEEN 150. Applied Stress Analysis 1 3 sem. hrs.
MEEN 152. Mechanical Systems Vibration 3 sem. hrs.
MEEN 153. Finite Element Method 3 sem. hrs.
MEEN 154. Introduction to Polymers and Polymer Composites in Design 3 sem. hrs.
MEEN 155. Fatigue and Fracture in Mechanical Design 3 sem. hrs.
MEEN 158. Mechatronics 3 sem. hrs.
MEEN 159. Topics in Mechanical Engineering 3 sem. hrs.
MEEN 161. Failure Analysis 3 sem. hrs.
MEEN 163. Powder Metallurgy 3 sem. hrs.
MEEN 167. Mechanical Behavior of Materials 3 sem. hrs.
MEEN 168. Processing and Forming of Materials 3 sem. hrs.
MEEN 170. Introduction to Biomaterials Science and Engineering 3 sem. hrs.
MEEN 185. Welding Engineering 3 sem. hrs.

MEEN 173. Industrial Simulation 3 sem. hrs.

MEEN 176. Ergonomics 3 sem. hrs.

MEEN 180. Metal Forming 1 3 sem. hrs.

MEEN 185. Welding Engineering 3 sem. hrs.

MEEN 202. Advanced Engineering Analysis 2 3 sem. hrs.


MEEN 204. Advanced Fluid Mechanics 1 3 sem. hrs.


MEEN 211. Fundamentals of Combustion 3 sem. hrs.

MEEN 212. Advanced Dynamics 3 sem. hrs.

MEEN 213. Advanced Manufacturing 3 sem. hrs.


MEEN 216. Advanced Thermodynamics 3 sem. hrs.


MEEN 218. Design and Manufacture of Composite Materials 3 sem. hrs.

MEEN 219. Fundamentals of ergonomics/human factors engineering (HFE) with emphasis on the application of basic principles to advances in engineering applications, research, and development. The following topics are included: engineering anthropometry, cumulative trauma disorders, low back disorders, electromyography, biomechanical modeling, and ergonomic guidelines. Students will write research papers in the above areas or in a related ergonomics/HFE field. Offered occasionally.


MEEN 221. Advanced Thermodynamics 3 sem. hrs.

MEEN 222. Advanced Vibrations 3 sem. hrs.

MEEN 223. Advanced Manufacturing 3 sem. hrs.

MEEN 224. Design and Manufacture of Composite Materials 3 sem. hrs.


MEEN 226. Statistical Models in Engineering 3 sem. hrs.


MEEN 228. Advanced Topics in Mechanical Engineering 3 sem. hrs.

MEEN 229. Advanced Topics in Mechanical Engineering 3 sem. hrs.

MEEN 230. Advanced Topics in Mechanical Engineering 3 sem. hrs.

MEEN 231. Advanced Manufacturing 3 sem. hrs.

MEEN 232. Advanced Manufacturing 3 sem. hrs.

MEEN 233. Advanced Manufacturing 3 sem. hrs.

MEEN 234. Design and Manufacture of Composite Materials 3 sem. hrs.

MEEN 235. Advanced Manufacturing 3 sem. hrs.

MEEN 236. Advanced Manufacturing 3 sem. hrs.

MEEN 237. Advanced Manufacturing 3 sem. hrs.

MEEN 238. Advanced Topics in Mechanical Engineering 3 sem. hrs.

MEEN 239. Advanced Topics in Mechanical Engineering 3 sem. hrs.

MEEN 240. Applied Stress Analysis 2 3 sem. hrs.

MEEN 241. Advanced Manufacturing 3 sem. hrs.

MEEN 242. Advanced Manufacturing 3 sem. hrs.

MEEN 243. Advanced Manufacturing 3 sem. hrs.

MEEN 244. Advanced Topics in Mechanical Engineering 3 sem. hrs.

MEEN 245. Advanced Manufacturing 3 sem. hrs.

MEEN 246. Advanced Manufacturing 3 sem. hrs.

MEEN 247. Advanced Manufacturing 3 sem. hrs.

MEEN 248. Advanced Topics in Mechanical Engineering 3 sem. hrs.

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MEEN 344. Advanced Thermodynamics 3 sem. hrs.

MEEN 345. Advanced Thermodynamics 3 sem. hrs.

MEEN 346. Advanced Thermodynamics 3 sem. hrs.
NURSING (NURS)

Interim Dean, Associate Dean for Graduate Programs and Research, and Professor: Miller Dean Emeritus: Klein
Associate Dean for Undergraduate Programs and Clinical Associate Professor: Kosmoski-Goepfert Professor and Provost: Wake
Professor: Accord, Bull, Fehring, McLane (Emeritus), Schank (Emeritus), Siegel (Emeritus)
Associate Professor: Frenn, Hanson, Krejci, Theis (Emeritus), VandeVusse, Wallenborn (Emeritus), Weiss (Emeritus), Weiss, Wilson, Winters
Assistant Professor: Belknap, Bobay, Pratt, Haglund, Laabs, Lough, Sebern
Adjunct Associate Professor: Malin
Clinical Associate Professor: Hanke, Murphy, O’Brien, Shaw
Clinical Assistant Professor: Anderson, Dressler, Harrod
Clinical Instructor: Culhane, Festge, Jensen, Lacey, Mowers, Salentine, Schroeter, Stauber
Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREES OFFERED

Master of Science in Nursing, students are admitted under Plan B (non-thesis option) but Plan A (thesis option) is also offered; Post-master’s Certificate, Doctor of Nursing Practice, Doctor of Philosophy

SPECILIZATIONS

M.S.N.: Advanced Practice Nursing:
Acute Care, Adults, Nurse-Midwifery, Older Adults, Pediatrics Primary Care, Pediatrics Acute Care;
Clinical Nurse Leader;
Health Care Systems Leadership
Post-master’s Certificate:
Acute Care Nurse Practitioner, Gerontologic Nurse Practitioner, Health Care Systems Leadership,
Nurse-Midwifery, Pediatrics Primary Care, Pediatrics Acute Care
D.N.P.: Advanced Practice Nursing:
Acute Care, Adults, Nurse-Midwifery (available fall 2009), Older Adults, Pediatrics Primary Care, Pediatrics Acute Care,
Health Care Systems Leadership
Ph.D.: None

PROGRAM DESCRIPTIONS

MARTEN SCIENCE IN NURSING

The master of science in nursing program prepares nurses for roles in advanced practice nursing or nursing administration. Graduates are academically eligible to seek formal professional certification in such areas as: nurse practitioner, clinical nurse specialist, nurse-midwife, nurse administrator or clinical nurse leader.

Advanced Practice Nursing: Acute Care Nurse Practitioner
This specialization prepares the student to apply advanced clinical assessment skills to complex health problems commonly encountered by acutely ill adults across the health care continuum. Graduates will be academically eligible to take the national certification examination for the Acute Care Nurse Practitioner.

Advanced Practice Nursing: Adults
This specialization prepares the student for the care of adults, including knowledge of human responses, health promotion and disease prevention, advanced physical assessment, diagnosis, and management of health problems. Graduates will be academically eligible to take the national certification exam for either Clinical Nurse Specialist or as an Adult Nurse Practitioner.

Advanced Practice Nursing: Nurse-Midwifery
This specialization prepares the student for independent management of essentially normal newborns and women during the antepartum, intrapartum, and postpartum periods and for gynecologic care throughout the life span. Graduates will be academically eligible to take the national certification examination of the American Midwifery Certification Board, Inc.

Advanced Practice Nursing: Older Adults
This specialization prepares the student for primary care and complex management of older adults with simple to complex health problems. Graduates will be academically eligible to take the national certification examination for Geriatric Nurse Practitioner or Clinical Nurse Specialist.

Advanced Practice Nursing: Pediatrics
This specialization prepares the student for independent management of children and families seeking health care for simple to complex health problems (primary care) and acute to critically ill problems (acute care pediatric nurse practitioner). Graduates will be academically eligible to take the national certification examination for Pediatric Nurse Practitioner/Clinical Nurse Specialist in Pediatrics (Primary Care) or Acute Care Pediatric Nurse Practitioner.

Clinical Nurse Leader
This specialization prepares the student to have competence in clinical outcomes management and health care environment management. Students complete core M.S.N. courses and a combination of illness management and health care systems leadership courses. These graduates remain at the point of care and assure patients receive health care in a safe, cost effective, timely manner by implementing lateral integration of care services.

Health Care Systems Leadership
This specialization prepares the student for the administration of nursing services in a variety of health care organizations. Graduates will be academically eligible to take the national certification examination for Nursing Administration. Subspecialty areas are offered using six elective credits. They are: Care Management Systems, Community Health Leadership, Informatics, Staff Development, Long Term Care Administration, and Conflict Resolution.

POST-MASTER’S GRADUATE CERTIFICATE
This program prepares the nurse who already has a master of science in nursing to become academically eligible for certification as an Advanced Practice Nurse or to practice as a Doctor of Nursing Practice.
DOCTOR OF NURSING PRACTICE

The doctor of nursing practice will emphasize development of nursing practice expertise at the highest level. The curriculum includes translational research, epidemiology, informatics, statistics, advanced clinical practice, health policy and professional issues. Specializations include health care systems leadership and advanced practice in acute care adults, adults, nurse-midwifery, older adults, or pediatrics (primary care or acute care).

DOCTOR OF PHILOSOPHY

The doctor of philosophy program in nursing prepares teacher-scholars. The curriculum focuses on vulnerable populations, which include persons at high risk for adverse health outcomes. Persons who are vulnerable may include such groups as the unborn, chronically ill, frail elders, impoverished children and the marginalized. The graduate of this doctoral program will have the ability to advance health care through teaching, research and health care leadership.

Doctoral education in nursing is built on the master’s level nursing foundation. It is characterized by the acquisition of research skills necessary for the discovery and use of new nursing knowledge and for preparation for teaching roles.

MASTER OF SCIENCE IN NURSING — SECOND DEGREE DIRECT ENTRY FOR NON-NURSES

The master’s program for non-nursing graduates is designed for those individuals who hold baccalaureate degrees in fields other than nursing and who wish to become nurses. The program builds upon the student’s broad educational preparation and provides an intense, accelerated, and specializ ed nursing curriculum to meet the student’s career goals. Students complete the nursing requirements and meet the bachelor of science in nursing program objectives in an intense 15 month pre-M.S.N. phase and progress to graduate study. Students are then prepared in the M.S.N. program for nursing administration or advanced nursing practice roles in: acute care, adults, children, nurse-midwifery, or older adults. Students may select the D.N.P. program. Note: Entry into the master’s phase of the program is conditional. See #5 below.

Admission Requirements for M.S.N. — Second Degree Direct Entry for A.D.N. Nurses

1. Baccalaureate degree in a discipline other than nursing with a GPA of 3.00 or above, using a 4.00 system.
2. Associate’s degree in nursing with a GPA of 3.00 or above, using a 4.00 system.
3. GRE scores (General Test only). Waived if applicant already has a master’s degree or if under graduate GPA is 3.20 or above.
4. Completion of three recommendation forms.
5. Resume and written statement of professional goals.
6. Official transcripts from all current and previous colleges/universities except Marquette.
7. Completion of the following prerequisite courses with grade of C or above:
   - Anatomy and physiology: 5-6 credits
   - Chemistry or biochemistry or biology or microbiology: 5-6 credits total
   - Behavioral sciences (e.g., psychology, sociology): 3 credits
   - Statistics (including inferential): 3 credits.

PREREQUISITES FOR ADMISSION

Applicants to the master of science in nursing (M.S.N.) program or the doctor of nursing practice (D.N.P.) program should have graduated with, or be about to graduate with, a bachelor’s degree in nursing from a nationally accredited program with an upper division major in nursing. A cumulative undergraduate GPA of 3.00 on a 4.00 scale is required.

Prior to or during the first term of study, all master of science in nursing applicants must have taken prerequisite courses in nursing research and a statistics course which included inferential analysis (preferably within the past 5 years).

Applicants that select an advanced practice nursing specialization must have taken an undergraduate course in health assessment. It is recommended that applicants to the health care systems leadership or to the advanced practice nursing specializations in acute care, nurse-midwifery, or pediatrics have a minimum of one year related professional experience.

Applicants to the doctor of philosophy (Ph.D.) program in nursing should have graduated with, or be about to graduate with, a bachelor’s degree in nursing from a nationally accredited program or a master’s degree in nursing from a nationally accredited program. For a bachelor’s applicant, the requirements are: RN licensure, a GPA of 3.00 on a 4.00 scale, a statistics course within the last 5 years, acceptable GRE scores, three letters of reference, a goal statement, and a personal interview. Generally, for a master’s applicant, a cumulative graduate GPA of 3.30 on a 4.00 scale is recommended. A graduate level research course is a required prerequisite.

MASTER OF SCIENCE IN NURSING — SECOND DEGREE DIRECT ENTRY FOR A.D.N. NURSES

This program facilitates students who have an associate’s degree in nursing and also have a bachelor’s degree in a discipline other than nursing to complete a master of science in nursing degree. Prior to completing courses in the option of choice, students must complete NURS 162, NURS 173, NURS 178 and NURS 179.

Admission Requirements for M.S.N. — Second Degree Direct Entry for A.D.N. Nurses

1. Baccalaureate degree in a discipline other than nursing with a GPA of 3.00 or above, using a 4.00 system.
2. Associate’s degree in nursing with a GPA of 3.00 or above, using a 4.00 system.
3. GRE scores (General Test only). Waived if applicant already has a master’s degree or if under graduate GPA is 3.20 or above.
4. Completion of three recommendation forms.
5. Resume and written statement of professional goals.
6. Official transcripts from all current and previous colleges/universities except Marquette.
7. Completion of the following prerequisite courses with grade of C or above:
   - Anatomy and physiology: 5-6 credits
   - Chemistry or biochemistry or biology or microbiology: 5-6 credits total
   - Behavioral sciences (e.g., psychology, sociology): 3 credits
   - Statistics (including inferential): 3 credits.

APPLICATION DEADLINE

The application deadline for the master of science in nursing direct entry program for non-nurses is January 5, 2009. For other graduate nursing programs, no official deadline exists; however, preference will be given to applications received before March 15 for fall 2009 financial aid consideration.

APPLICATION REQUIREMENTS

Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. (For master’s and D.N.P. applicants only) three completed recommendation forms prepared by previous or present employers and teachers familiar with graduate education in nursing.
4. (For Ph.D. applicants only) three letters of recommendation.
5. (For master’s and D.N.P. applicants only) GRE scores (General Test only). Waived if undergraduate GPA is 3.20 or above. Waived for applicants who have a master’s degree and the master’s GPA is 3.20 or above.
6. (For Ph.D. applicants only) GRE scores (General Test only). Waived if applicant is Marquette M.S.N. graduate with GPA of 3.70 or above.
7. A resume and written statement of professional goals, including reasons for pursuing graduate study. For Ph.D. applicants, a curriculum vitae and objectives/career intentions, including research interests.
8. (For Ph.D. applicants only) sample of scholarly writing.
9. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency. An interview is required for applicants to the advanced practice nursing specializations in acute care nurse practitioner, nurse-midwifery, and pediatrics.

With the exception of Second Degree Direct Entry M.S.N. applicants, an applicant must be registered in the United States as a professional nurse. Graduates of nursing schools in foreign countries must successfully complete the examination administered by the Commission on Graduates of Foreign Nursing Schools and must be licensed in Wisconsin. Upon acceptance to the graduate program, students must complete and submit the Graduate Student Health Status Report form, information on CPR certification, and the criminal background check form, along with evidence of professional licensure and HIPAA training to the Office for Graduate Nursing Programs in the College of Nursing. Results of a T.B. skin test must be provided annually. The information is required for participation in the practice experiences and progression within the program.

Acute care nurse practitioner students must demonstrate evidence of current Advanced Cardiac Life Support certification and have experience working with acutely ill adults before commencing with the first clinical practicum course.

JOINT PROGRAM OF STUDY

M.S.N.-M.B.A. DEGREE

The College of Nursing, in conjunction with the Graduate School of Management, offers a program...
NURSING

ACCREDITATION
Marquette University College of Nursing is accredited by the Commission on Collegiate Nursing Education (One Dupont Circle, NW, Suite 530, Washington, D.C. 20036-1120; [202] 877-6789) and the American College of Nurse-Midwives, Division of Accreditation (ACNM DOA, 8403 Colesville Rd, Suite 1550, Silver Spring, MD 20910-6734; [240] 485-1800).

MASTER’S REQUIREMENTS
The following requirements are in effect for academic year 2008-2009. Requirements may change due to changes in national standards.

1. Advance Practice Nursing:
   - Adults — Nurse Practitioner
   - Adults — Clinical Nurse Specialist

SPECIAL FEES
1. $40 - Diagnostic Assessment Test for License Examination for the M.S. program for Non-Nursing Graduates, after 15-month Pre-M.S.N. phase (Approximate fee. Exact amount based upon vendor costs in effect at time of registration.)
2. $85 - Health Assessment Equipment (Approx. fee.)
3. $85 - Stethoscope (Approx. fee. Exact amt. based upon vendor costs in effect at time of registration. Must be purchased through a private vendor.)
4. $30 - Sphygmomanometer (Approx. fee. Exact amt. based upon vendor costs in effect at time of registration. Must be purchased through a private vendor.)

1. General Information
   - Clinical courses in the College of Nursing are restricted to students in the degree program. Various clinical facilities in the greater Milwaukee area throughout Wisconsin, and in northern Illinois are utilized for practica.

   While Marquette University is concerned about the professional advancement of its students, facilitates the process of certification, and provides excellent educational opportunities, it cautions that professional success in a chosen field requires, above all else, constant development of individual abilities, personal initiative, and a professional sense of commitment to fulfill all appropriate legal and technical responsibilities. Hence, the university assumes no responsibility for the success of the student in obtaining educational certification or other types of professional licensure.

   Licensure in Wisconsin is mandatory for employment with compensation.

   The academic performance of all graduate students is evaluated at the end of each term. Students must maintain a grade point average of at least 3.00 in all course work. Unsatisfactory work includes the student’s GPA falling below 3.00.

   SPECIAL FEES

   1. $40 - Diagnostic Assessment Test for License Examination for the M.S. program for Non-Nursing Graduates, after 15-month Pre-M.S.N. phase (Approximate fee. Exact amount based upon vendor costs in effect at time of registration.)

   2. $85 - Health Assessment Equipment (Approx. fee.)

   3. $85 - Stethoscope (Approx. fee. Exact amt. based upon vendor costs in effect at time of registration. Must be purchased through a private vendor.)

   4. $30 - Sphygmomanometer (Approx. fee. Exact amt. based upon vendor costs in effect at time of registration. Must be purchased through a private vendor.)
3. Analyze and apply models, theories, and scientific evidence to improve health care of diverse populations.
4. Demonstrate advanced levels of scholarship, clinical judgment, systems thinking, and accountability in nursing practice.
5. Employ consultative and leadership skills within and interdisciplinary healthcare teams to transform health care and complex healthcare delivery systems to improve health.

**Curriculum**

The doctor of nursing practice (D.N.P.) is a post baccalaureate degree requiring 66 credits for the advanced practice options and 57 credits for the health care systems leadership option to be completed in three years by full-time students. In addition, a “bridge” program was created for advanced practice nurses already holding an M.S.N. who want to pursue the D.N.P. For those with an M.S.N., programs will be tailored according to previous course work.

The specific domains of content for this program include: core courses for all options; health promotion; illness/management for advanced practice options; research and statistics for all options; practica courses for all options; nurse-midwifery courses; and health care systems courses such as finance, outcomes management, human resources, program evaluation and mediation for the health care systems leadership option. Specializations in acute care, adult and older adult nursing will share course work with the specialized client care focus in the practica courses.

Contact the College of Nursing for more information.

**DOCTOR OF PHILOSOPHY**

The doctor of philosophy (Ph.D.) program in nursing is designed to prepare teachers of nursing and scholars who will contribute to the body of knowledge related to vulnerable populations. Graduates of the program will be prepared to:

1. Teach students to be nurses and advanced practitioners to be able to improve the health status of vulnerable populations.
2. Design and conduct independent research that will impact the health of vulnerable populations.
3. Develop, test, and refine theories as a basis for nursing science.
4. Analyze patterns of health and illness among vulnerable populations.
5. Synthesize research findings to provide leadership in health care.

**Curriculum**

The doctoral program is a 51 credit post-master of science in nursing program with course work in the following five categories:

- **Nursing Science (12 credits)**
  - NURS 300, NURS 201, PHIL 258, and NURS 304
- **Research and Statistics (12 credits)**
  - HEAL 302, HEAL 303, and either:
    - EDPS 321 and EDPS 322 OR PSYC 224 and PSYC 225
- **Teaching (9 credits)**
  - NURS 332 and NURS 334, and one of the following:
    - EDPS 362 OR EDPL 337
- **Cognates (6 credits)**
  - Six credits supportive of dissertation.
- **Dissertation (12 credits)**
  - A doctoral student will follow a program of study defined, in conjunction with an adviser, on

  an approved Doctoral Program Planning Form. The student must complete all requirements listed on the Doctoral Program Planning Form, pass a qualifying examination, and successfully defend a dissertation to complete the program. The doctoral dissertation must represent an original research contribution and show high attainment and clear ability to do independent research.

**COURSE DESCRIPTIONS**

**UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:**

**Health (HEAL)**

- **HEAL 144. International Health** 3 sem. hrs.
- **HEAL 160. Epidemiology** 3 sem. hrs.
- **HEAL 164. Natural Family Planning** 3 sem. hrs.
- **HEAL 165. Natural Family Planning Practicum** 3 sem. hrs.

**Nursing (NURS)**

- **NURS 124. Special Institute** 1-3 sem. hrs.
- **NURS 162. Health Assessment for Registered Nurses** 3 sem. hrs.

**GRADUATE COURSES:**

**Health (HEAL)**

- **HEAL 201. Epidemiology** 3 sem. hrs.
- **HEAL 208. Individual Study and Practice** 1-3 sem. hrs.
  - Individual study and development of in-depth knowledge and skill in a selected area of health care. Experience and activities planned in an area for specialization, based on aptitude and interests of the student. May be repeated for credit.
  - Prereq: Cons. of instr.
- **HEAL 214. Seminar in Moral and Legal Implications of Health Care** 3 sem. hrs.
  - The field of moral decision-making in health care and the legal implications. Open to all graduate students. Offered occasionally.
- **HEAL 220. Health Care Program Development** 3 sem. hrs.
  - Principles of population assessment, critical analysis of data, program development, implementation and evaluation. Includes one credit of practicum. Offered occasionally.
  - Prereq: NURS 209; or cons. of instr.
- **HEAL 222. Health Care Quality Improvement** 3 sem. hrs.
  - Explores health care applications of quality improvement, including government and regulatory influences, standards and guidelines, quality programs and methods, and process redesign. Offered occasionally.
- **HEAL 240. The Environment of Health Care Delivery** 2-3 sem. hrs.
  - Overview of U.S. health care system, environmental influences, and current models for health care delivery (e.g., fee for service, modified fee for service, managed care, capitated care, PPOs, HMOs), and the ascendancy/descendency of various models in different geographic regions and in response to economic incentives. Offered annually.
  - Prereq: Enrolled in Graduate School.
- **HEAL 241. Health Care Finance** 3 sem. hrs.
  - Examination of financial principles, budgeting and reimbursement issues in health care.
  - Prereq: NURS 209, or cons. of instr.
- **HEAL 245. Case Management** 3 sem. hrs.
  - Care services coordination of individuals and families to maximize resources for optimal health outcomes. Emphasis on integration of clinical and management processes. Includes one credit of practicum. Offered occasionally.
  - Prereq: Health profession experience or cons. of instr.
- **HEAL 246. Health Care Informatics** 3 sem. hrs.
  - Study of informatics in health care with emphasis in information systems and use of communication technology. Includes evaluation of actual and potential applications of informatics in health care administration, clinical practice, research and education.
  - Offered occasionally.
- **HEAL 248. Health Care Policy** 3 sem. hrs.
  - Concepts of public policy including the political process. Analysis of health care issues using a variety of policy models.
- **HEAL 249. Outcomes Management** 3 sem. hrs.
  - Evolution of outcomes management. Exploration of methodologies, assessment instruments and issues that guide outcomes research.
  - Prereq: NURS 291 or cons. of instr.
- **HEAL 252. Death and Dying** 3 sem. hrs.
  - Multidisciplinary perspective on death and dying. Includes historical, sociocultural, legal, and ethical dimensions, the dying process, grief and bereavement, and communities of care.
  - Offered annually.
- **HEAL 291. Translational Research** 3 sem. hrs.
  - Evaluation, translation, and integration of published research for clinical practice.
  - Prereq: NURS 291, EDPS 321 or equiv.
- **HEAL 295. Independent Study** 1-3 sem. hrs.
  - Offered every term.
  - Prereq: Cons. of instr.
- **HEAL 298. Selected Topics in Health** 1-4 sem. hrs.
  - In-depth study of current issues in health care. Course content will be announced by term. Offered occasionally.
- **HEAL 302. Qualitative Research** 3 sem. hrs.
  - Analysis of key qualitative research methods, issues related to these approaches, and the nature of knowledge generated.
- **HEAL 303. Quantitative Research** 3 sem. hrs.
  - Exploration and analysis of advanced quantitative methodologies and issues related to these approaches.
  - Prereq: PSYC 224 which may be taken concurrently and PSYC 225 which may be taken concurrently.
NURS 200. Theoretical Foundations of Nursing 3 sem. hrs.
The study of knowledge paradigms, theory analysis, and theory development. Includes examination of exemplar nursing theories. Offered annually. Prereq: Admitted to NURS program.

NURS 207. Ethics in Health Care 3 sem. hrs.
Ethical frameworks are used to explore a variety of moral issues impacting nursing and health care. Offered annually.

NURS 208. Individual Study and Practice 1-3 sem. hrs.
Individual study and development of in-depth knowledge and skill in a selected area of nursing. Experience and activities planned in an area for specialization, based on aptitude and interests of the student. May be repeated for credit. Offered every term. Prereq: Cons. of instr. and admitted to NURS program.

NURS 209. Creating Nursing Care Systems 3 sem. hrs.
Study of systems and organizations. Application to health care delivery, analysis and development of innovative models, including entrepreneurial practices with emphasis on maximizing leverage of advanced practice nursing and its impact on health care delivery systems. Offered annually. Prereq: Admitted to NURS program.

Investigation of normal physiologic and pathologic mechanisms of disease as a foundation for clinical assessment, decision making and management. Establishment of knowledge base necessary for the provision of health care in an advanced nursing specialty. Offered annually. Prereq: Admitted to NURS program.

NURS 211. Pharmacology for Advanced Nursing Practice 3 sem. hrs.
Pharmacodynamics, major drug categories, and prescribing responsibilities, including case studies of clients with specific health problems. Offered annually. Prereq: Admitted to NURS program.

NURS 215. Advanced Assessment and Management of Episodic Health Problems 3 sem. hrs.
Assessment, differential diagnoses, interventions and evaluation of adults and older adults with acute, episodic, self-limiting conditions. Offered annually. Prereq: NURS 211 which may be taken concurrently.

NURS 216. Complex Health Problems 3 sem. hrs.
Analysis of patterns of common health problems and select treatment modalities common to adults and older adults. Offered annually. Prereq: Admitted to NURS program and NURS 211.

NURS 217. Differential Diagnosis and Advanced Skills for the Acutely Ill Adult 3 sem. hrs.
Advanced nursing knowledge and skills for assessment of acutely ill adults using technology. Differential diagnoses, selection and interpretation of appropriate diagnostic tests. Includes 40 hours of clinical practice. Prereq: NURS 211 and NURS 215, both which may be taken concurrently, and cons. of acute care option coordinator.

NURS 223. Curriculum and Instructional Strategies for Nursing 3 sem. hrs.
Provides knowledge base in curriculum development, including philosophical foundations and educational theories. Examines teaching/learning strategies specific to implementation of the instructional process; design and use of evaluation tools for classroom and clinical education. Offered annually. Prereq: Admitted to NURS program.

NURS 236. Curriculum and Instruction in Associate Degree Nursing 2 sem. hrs.
Designed for faculty in associate degree nursing program. Exploration of associate degree curriculum development including conceptual framework and competencies; related concepts of instruction including organization of learning opportunities, teaching strategies and performance evaluation. Offered occasionally. Prereq: Admitted to NURS program.

NURS 237. Clinical Nurse Leader Practicum 3-6 sem. hrs.
Clinical immersion to implement the role components of the clinical nurse leader including clinical outcomes and care environment management. Offered annually. Prereq: NURS 200, NURS 207, NURS 209, NURS 216, NURS 250, NURS 291, HEAL 245, HEAL 246.

Evolution and application of concepts and systems related to organizations, management and nursing. Prereq: Admitted to NURS program and NURS 209.

NURS 244. Health Care Systems Leadership 2 2-3 sem. hrs.
Human resource management and development. Focus on system interactions and interrelationships. Includes legal and ethical dimensions, quality improvement, and risk management. Includes 1 credit of practicum. Prereq: Admitted to NURS program and NURS 243.

Advanced practicum in a selected administrative role and setting. Offered annually. Includes one credit of seminar, two credits practicum. Prereq: Admitted to NURS program and NURS 244 which may be taken concurrently.

NURS 250. Complex Acute Care Problems 3 sem. hrs.
Analysis of complex pathophysiologic conditions commonly encountered among acutely ill adults with selection of appropriate treatment modalities. Emphasis on recognizing patterns of acute illness and on developing clinical reasoning. Offered annually. Prereq: NURS 211 and NURS 215 which may be taken concurrently and NURS 216 which may be taken concurrently; NURS 210 may be taken concurrently.

NURS 251. Advanced Nursing Care of the Acutely Ill 1 – Practicum 3 sem. hrs.
Development of the clinical judgment process and advanced skills for collaborative care of adults experiencing acute illness in the hospital-based/tertiary care environment. Emphasis on systematic data gathering, documentation, health promotion, and primary, secondary, and tertiary risk reduction strategies. Prereq: NURS 210 which may be taken concurrently and NURS 211 and NURS 215 and NURS 216 which may be taken concurrently and NURS 260 which may be taken concurrently.

NURS 252. Advanced Nursing Care of the Acutely Ill 2 – Practicum 3 sem. hrs.
Application of clinical judgment to advanced nursing care of complex adults and families experiencing acute illness in the hospital-based/tertiary care environment. Focus on diagnosis and treatment of complex health problems. Prereq: NURS 251 and NURS 254 which may be taken concurrently.

NURS 253. Advanced Nursing Care of the Acutely Ill 3 – Practicum 3 sem. hrs.
Implementation of the acute care advanced practice role in providing nursing care to complex acutely ill adults. Emphasis on case management and coordination within and between systems. Prereq: NURS 252.

Analysis of concepts and issues in the advanced management of acute and critically ill adults, including therapeutic nursing interventions. Prereq: NURS 251.

NURS 255. Advanced Nursing of Adults 1 – Practicum 3 sem. hrs.
Application of the clinical judgment process to advanced nursing of adults. Emphasis on systematic data gathering, documentation, health promotion, and risk assessment of adults across the life cycle. Offered annually. Prereq: NURS 211 and NURS 215 and NURS 216 which may be taken concurrently and NURS 259 which may be taken concurrently.

NURS 256. Advanced Nursing of Adults 2 – Practicum 3 sem. hrs.
Illness management in adults in the context of the family and environment. Emphasis on diagnosis and therapeutic interventions. Prereq: NURS 216 and NURS 258 which may be taken concurrently.

NURS 257. Advanced Nursing of Adults 3 – Practicum 3 sem. hrs.
Care of select populations with emphasis on management of complex illness processes. Focus on care coordination and aggregate interventions. Prereq: Admitted to NURS program and NURS 256 and NURS 258.

NURS 258. Concepts and Interventions for Health Promotion Across the Lifespan 3 sem. hrs.
Theories, models, and management of health related problems across the lifespan. Evaluation of therapeutic nursing interventions. Prereq: Admitted to NURS program and NURS 291 which may be taken concurrently.

NURS 259. Health Promotion Across the Lifespan 3 sem. hrs.
Theories and models of health promotion, wellness, and risk reduction. Designing therapeutic interventions to promote the health of individuals and aggregates across the lifespan.

Theory development in advanced gerontological nursing with emphasis on age-related changes, cultural dimensions, socioeconomic stressors, vulnerability, maturational crises and care at the end of life.
NURS 262. Health Promotion and Illness Prevention of Older Adults – Practicum
Analysis of factors to promote optimal functioning in the elderly and research based health promotion strategies. Advanced assessment and differential diagnosis. Implementation of nursing strategies for salubrogenesis. Prereq: Admitted to NURS program and NURS 215 which may be taken concurrently and NURS 261 which may be taken concurrently.

NURS 263. Illness Management and Nursing Therapeutics of Older Adults-Theory
Advanced study of hardy and frail elders experiencing health deviations with emphasis on prevention, restoration, palliation, and related interventions. Prereq: Admitted to NURS program and NURS 211 and NURS 215 and NURS 216 which may be taken concurrently and NURS 261 which may be taken concurrently.

NURS 264. Illness Management and Nursing Therapeutics of Older Adults – Practicum
Analysis of health problems and research-based interventions for hardy and frail elders. Continued skill development in advanced assessment and differential diagnosis. Implementation of advanced nursing strategies. Prereq: Admitted to NURS program and NURS 262 which may be taken concurrently.

NURS 267. Advanced Practicum: Care of Older Adults 3 sem. hrs.
Case management of aggregates of older adults with complex needs. Implementation of specialized knowledge and skills. Offered annually. Prereq: Admitted to NURS program and NURS 264.

NURS 268. Issues in Long Term Care Administration 3 sem. hrs.
Focus on long term care quality outcome management, rules and regulations, and reimbursement issues in a changing health care environment. Offered occasionally.

NURS 270. Seminar in Child and Family Health 3 sem. hrs.
Exploration of advanced concepts related to the physical, psychosocial and developmental dimensions of child and adolescent health. Analysis of family theories and models relevant to advanced practice nursing of children. Prereq: Admitted to NURS program.

Focus on differential diagnosis, clinical management, and nursing therapeutics for hospitalized children and adolescents with acute or critical illness. Prereq: NURS 274.

Study of the theoretical basis for the diagnosis and case management of children and adolescents with common age-related acute or epidemic illness. Focus on differential diagnosis and nursing therapeutics. Prereq: Admitted to NURS program.

NURS 274. Advanced Assessment in Parent/ Child Nursing 3 sem. hrs.
Comprehensive health assessment of infants, children, and adolescents. Includes 1 credit practicum. Offered annually. Prereq: Admitted to NURS program.

NURS 275. Advanced Practice Nursing of Children: Role and Specialization 3 sem. hrs.
Study of the theoretical and empirical bases for management of children with complex and chronic health conditions. Theoretical foundation for the analysis and design of health care programs for children and their families. Analysis of pediatric advanced practice role in health systems. Prereq: Admitted to NURS program and NURS 272.

NURS 276. Advanced Nursing Care of Children and Families 1 – Practicum 3 sem. hrs.
Assessment and intervention for children and families regarding common health concerns, with an emphasis on well child care. Prereq: NURS 210 which may be taken concurrently and NURS 211 and NURS 270 which may be taken concurrently and NURS 274.

NURS 277. Advanced Nursing Care of Children and Families 2 – Practicum 3 sem. hrs.
Assessment and intervention for children and families with common to complex health concerns. Beginning development of indirect care skills. Prereq: NURS 276.

NURS 278. Advanced Nursing Care of Children and Families 3 – Practicum 3 sem. hrs.
Assessment and intervention for children and families with common to complex health concerns. Refinement of direct and indirect care skills. Prereq: NURS 269 and NURS 277.

Strategies to promote health and wellness across the life span in the provision of primary care for women, emphasizing nurse-midwifery management. Sociocultural implications are examined in the environment impacting upon clients and providers. Prereq: Admitted to NURS program and NURS 211 which may be taken concurrently; or cons. of instr.; (Non-nurse-midwifery students take theory-only portion for 2 credits; student nurse-midwives must enroll for 3 credits, including practicum.)

Study and application of nurse-midwifery process strategies to promote biopsychosocial and spiritual health in women and families experiencing pregnancy. Includes families with potential health deviations. Prereq: NURS 280; or cons. of instr.; (Non-nurse-midwifery students take theory-only portion for 2 credits; student nurse-midwives must enroll for 3 credits including practicum.)

Postpartum nurse-midwifery management of mothers, neonates, and families, including those with potential health deviations. Prereq: NURS 280; or cons. of instr.; (Non-nurse-midwifery students take theory-only portion for 2 credits; student nurse-midwives must enroll for 3 credits, including practicum.)

NURS 286. Nurse-midwifery Care During Labor and Birth 5 sem. hrs.
Nurse-midwifery management of women during the intrapartal period. Assessment of maternal-fetal status, with appropriate interventions and non-technologic approaches, in the context of family-centered care. Includes theory and practicum. Offered annually. Prereq: Admitted to NURS program and NURS 215 and NURS 260 and NURS 283; or cons. of instr.

Development of nurse-midwifery practice role through intensive clinical experience. Strengthening clinical practice and leadership for professional challenges in nurse-midwifery. Practicum hours to be determined by individual student’s progression through program experience requirements. Prereq: Admitted to NURS program and NURS 286.

History of midwifery and dynamic social forces affecting education regulation, growth, and development of the nurse-midwifery profession. Examination of nurse-midwifery’s research, legislation, and leadership in quality care for diverse populations of women and families across the life span. Prereq: Admitted to NURS program.

NURS 290. Acutely Ill Children Practicum 3 sem. hrs.
Assessment and intervention for children and families regarding common acute health concerns. Includes clinical hours that focus on the health care needs of the well child/child with illness not requiring hospitalization, as well as clinical practice with acutely ill hospitalized children. Prereq: NURS 210, NURS 211, NURS 270, and NURS 271 which may be taken concurrently.

NURS 291. Nursing Research Design and Methodology 3 sem. hrs.

NURS 294. Advanced Clinical Nursing Research 3 sem. hrs.
Development of research designs and statistical evaluation appropriate for advanced clinical nursing. Includes instrumentation, measurement issues, multivariate designs, evaluation research, and qualitative methods. Prereq: Admitted to NURS program and NURS 291.

NURS 295. Independent Study 1-3 sem. hrs.
Offered every term. Prereq: Cons. of instr.; and admitted to NURS program.

NURS 296. Acutely/Chronically Ill Children Practicum 3 sem. hrs.
Assessment, intervention, and clinical management of acute/chronic illness in children. Collaboration with physicians and other health care providers and agencies to provide and coordinate services. Prereq: NURS 290.

NURS 297. Critically Ill Children Practicum 3 sem. hrs.
NURS 298. Selected Topics in Nursing 1-4 sem. hrs.
In-depth study of current trends in nursing. Course content will be announced each term. Offered occasionally. Prereq: Admitted to NURS program.

NURS 299. Master’s Thesis 1-6 sem. hrs.
Offered every term. S/U grade assessment. Prereq: Admitted to NURS program; approved thesis proposal; cons. of associate dean.

NURS 300. Nursing Knowledge Development 3 sem. hrs.
Examination of paradigmatic, theoretical, and conceptual dimensions of the nursing discipline with an emphasis on strategies for knowledge generation. Prereq: PHIL 258 which may be taken concurrently.

NURS 301. Vulnerable Populations 3 sem. hrs.
Concepts, theories, and research relevant to vulnerable populations, with emphasis on the multiple contextual influences on health and illness.

NURS 304. Nursing Research Seminar and Practicum 1-3 sem. hrs.
Guided individual research experience. Directs students to develop skills related to grant writing, dissertation, and the conduct of research projects. Prereq: NEAL 382 or NEAL 383 or concurrent. Offered every term.

NURS 332. Nursing Education Research, Policy, and Leadership 3 sem. hrs.
Philosophical foundations, theories, nursing education research and policy. Strategies to improve nursing education for the care of vulnerable populations.

NURS 334. Residency in Nursing Education 1-3 sem. hrs.
Application of knowledge, theories, and skills to academically teaching in nursing. Offered every term. Prereq: Cons. of associate dean for graduate programs and research.

NURS 399. Doctoral Dissertation 1-12 sem. hrs.

NURS 400. D.N.P. Capstone 1 3 sem. hrs.
Identification and development of an evidence-based capstone project that focuses on the scholarship of practice. Integration of knowledge obtained in prior D.N.P. course work. Prereq: HEAL 281 or concurrent; final year of program.

NURS 401. D.N.P. Capstone 2 3 sem. hrs.
Implementation, evaluation and dissemination of an evidence-based capstone project that focuses on the scholarship of practice. Prereq: NURS 400.

NURS 454. Residency for D.N.P. with Acutely Ill Adults 3 sem. hrs.

NURS 457. Residency for D.N.P. with Adults 3 sem. hrs.

NURS 467. Residency for D.N.P. with Older Adults 3 sem. hrs.

NURS 478. Residency for D.N.P. with Children and Families 3 sem. hrs.

NURS 479. Residency for D.N.P. with III Children/Adolescents 3 sem. hrs.

NURS 867. Master’s Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 869. Master’s Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 870. Doctoral Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 872. Doctoral Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 874. Graduate Fellowship – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 875. Graduate Assistant Teaching – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 876. Graduate Assistant Research – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 877. Field Placement Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 878. Field Placement Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 879. Field Placement Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 881. Thesis Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 882. Thesis Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 883. Thesis Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 884. Professional Project Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 885. Professional Project Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 886. Professional Project Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 887. Doctoral Dissertation Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 888. Doctoral Dissertation Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

NURS 889. Doctoral Dissertation Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.; and admitted to NURS program.

PHILOSOPHY (PHIL)
Chairperson and Associate Professor: South Assistant Chairperson and Associate Professor: Foster
Professor: Anderson (Emeritus), Ashmore (Emeritus), Carter, Jones, Kainz (Emeritus), O’Malley (Emeritus), Tallon, Teske (Donald J. Schuenke Chair), Vanderwede, Wreen
Associate Professor: P. Coffey (Emeritus), Gibson, Goldin, Harrison, Ibañez-Noé, Krettek, Naus, Nolan, Peressini, Prendergast (Emeritus), Rice (Emeritus), Rousseau (Emeritus), Schmidt, Snow, Starr, R. Taylor, Twetten
Assistant Professor: Adams, Bauer, Crockett, Flaherty, Luft, Monahan, Tobin, Trivigno
Note: Faculty members and their ranks are for the 2007–2008 academic year.
DEGREES OFFERED
Master of Arts, students are admitted under Plan B (non-thesis option) but Plan A (thesis option) is also offered; Doctor of Philosophy

Note: Students in the social and applied philosophy specialization are admitted under Plan B only.

SPECIALIZATIONS
Master’s: History of Philosophy, Social and Applied Philosophy
Doctoral: Ancient Philosophy, British Empiricism/Analytical Philosophy, Christian Philosophy, Early Modern European Philosophy, Ethics, German Philosophy, Medieval Philosophy, Phenomenology-Existentialism, Philosophy of Religion

PROGRAM DESCRIPTION
The Philosophy Department’s master’s program in the history of philosophy and the doctoral program are based on the history of philosophy, ancient through contemporary, as a necessary experience for a mind critically able to face contemporary philosophical issues. The master’s program in social and applied philosophy provides rigorous philosophical training for individuals who are interested in working in a variety of non-academic contexts or for pursuing further graduate studies.

PREREQUISITES FOR ADMISSION
Applicants are expected to have 18 semester hours of undergraduate philosophy course work, six hours of which should be in survey courses (history of philosophy) for admission to the doctoral program or the master of arts program with a specialization in history of philosophy.

APPLICATION DEADLINE
Applicants file must be completed by February 15 for admission consideration. Applications for admission received after this date will be considered as space permits.

APPLICATION REQUIREMENTS
Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. A statement of purpose outlining applicant’s achievements and intentions in philosophy.
4. Letters of recommendation from at least three professors or professionals familiar with applicant’s academic work and/or academic background.
5. GRE scores (General Test only).
6. A sample of philosophical writing.
7. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

JOINT PROGRAM OF STUDY
M.A.-J.D. DEGREE
The Department of Philosophy, in conjunction with the Law School, offers a program of joint study leading to a master’s degree in philosophy and a juris doctor degree. Students seeking admission to the joint program must apply to both the Graduate School and the Law School and must meet the admission requirements for each. Students start this joint program as a law student. Upon completion of the law program, students will be officially admitted to the philosophy program for completion of the remainder of the joint program.

Joint program students complete 81 credit hours in the Law School, 21 credit hours in philosophy, and nine credit hours in joint program courses.

To participate in the M.A.-J.D. program in social and applied philosophy or in history of philosophy, the law student must receive the prior written approval of the associate dean for academic affairs in the Law School and must comply with the regulations of the Graduate School. The student must have completed 27 credit hours at the Law School with a cumulative average of 3.00 before entering either master of arts program in philosophy. Students may seek admission to the joint program at any time, but must complete both programs in four years (six years for part-time students), in accord with Law School academic regulations.

In general, joint program students will pay tuition at the full-time (flat tuition) Law School rate while a full-time law student, regardless of whether or not they are taking additional graduate courses. Upon receiving the juris doctor degree, joint program students will pay Graduate School tuition at the per credit rate for graduate courses. Part-time law students will pay the per credit Law School rate for all courses.

Additional details about the M.A.-J.D. program are available on the Philosophy Department Web site, at the Philosophy Department office, or from the Law School Admissions office.

MASTER’S REQUIREMENTS
The Department of Philosophy offers two master’s of arts specializations in the philosophy program: history of philosophy, and social and applied philosophy.

History of philosophy: All master’s students must complete the following core courses: PHIL 201, 202, 217, and 222.

A master’s student may choose to be in either Plan A (thesis option) or Plan B (course option). Students are assumed to be in Plan B unless a formal request is made to and approved by the Graduate School.

In Plan A, the student must complete 24 credit hours of graduate-level course work and six credit hours of thesis work, pass a comprehensive examination, and submit an approved thesis. Also, the student must have reading knowledge of French or German, or another foreign language approved by the department. At least 18 credits of the course work requirement must be in philosophy and must include the four core courses. The comprehensive examination requires a critical knowledge of the philosophical classics and of contemporary philosophical literature.

In Plan B, the student must complete 30 credit hours of course work and pass a comprehensive examination. No essay or foreign language is required for the Plan B master’s program. At least 18 credits of the course work requirement must be in graduate-level philosophy courses, including one course in ethics and the four core courses. Up to six credit hours of upper division undergraduate courses approved for graduate credit may be counted toward this degree. Courses must be individually approved by the director of the graduate program. Plan B master’s degrees are considered terminal degrees by the Department of Philosophy.

Social and applied philosophy (Plan B master’s only): This program requires 30 hours consisting of the following: PHIL 286 and 302; one course from PHIL 201, 202, 210 or 217; one course from PHIL 226, 227, 231, 232 or 233; two electives from the graduate philosophy course offerings; PHIL 302 (Internship–6 credits) or PHIL 303 (3 credits) plus an additional philosophy elective; and two graduate-level cognate courses from a area outside philosophy. The cognate courses are to be approved by the student’s adviser and the coordinator of the master of arts program.

No comprehensive exam or foreign language is required for the Plan B master’s program. Plan B master’s degrees are considered terminal degrees by the Philosophy Department.

DOCTORAL REQUIREMENTS
A doctoral student in the philosophy program must complete a program of study defined on an approved Doctoral Program Planning Form. Normally, the student must complete 60 credit hours of graduate-level course work beyond the baccalaureate degree, plus 12 credit hours of dissertation work. The student also must complete the foreign language requirements, pass qualifying examinations (written and oral), and submit and successfully defend a dissertation.

Course work must include the four core courses: PHIL 201, 202, 217, and 232. With written approval from the department chair, up to 12 credit hours of required course work may be taken in other fields.

The doctoral candidate is expected to make use of research and reflection available in languages other than English. Two foreign languages are required. The program requires French or German and either French, German, Latin, or Greek for the second foreign language. In exceptional circumstances, an alternative foreign language may be substituted for the above list.

COURSE DESCRIPTIONS

GRADUATE COURSES:

PHIL 201. Plato 3 sem. hrs.
A study of Plato’s thought, especially his ethics, epistemology, psychology and metaphysics. Offered fall term. Prereq: Cons. of dept. ch.

A study of Aristotle’s thought, especially his metaphysics, epistemology and psychology. Offered every fall term. Prereq: Cons. of dept. ch.

PHIL 209. Text/Seminar on Ancient Philosophy 3 sem. hrs.
Either (a) study of a specific period within Ancient Philosophy, such as Pre-Socratic thought or Roman moral philosophy, or (b) the intensive reading of a major work such as Plato’s Sophist or Theaetetus or Aristotle’s Metaphysics or Nicomachean Ethics, or (c) the investigation of a theme running through Ancient Philosophy such as problems with the veracity of perception, the ontological status of ideas, or Aristotle and the Peripatetics. Offered every fourth term. Prereq: Cons. of dept. ch.

PHIL 210. Augustine 3 sem. hrs.
The early philosophical dialogues and the Confessions, The City of God, and The Trinity, considered in their significance as sources of Christian thought. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 212. Plotinus and Early Christian Neo-Platonists 3 sem. hrs.
A study of the origin and character of neoplatonic thought, especially its metaphysics, epistemology and psychology, and its appropriation by Christian...
PHIL 214. Medieval Islamic Thought
3 sem. hrs.
Islamic philosophical thought of the medieval period. Some or all of the following figures will be treated, and others may also be covered: al-Kindi, al-Farabi, Ibn Sina (Avicenna), al-Ghazali, Ibn Rushd (Averroes) including Greek philosophical and Islamic theological foundations as well as the influence of Islamic philosophy on Christian and Jewish thought in the Middle Ages. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 217. St. Thomas Aquinas
3 sem. hrs.
A study of St. Thomas Aquinas’ philosophy, especially his metaphysics, epistemology, and psychology. Offered every spring term. Prereq: Cons. of dept. ch.

PHIL 220. Text/Seminar on Early or High Medieval Philosophy
3 sem. hrs.
Courses will be offered on individual thinkers, such as St. Anselm, St. Bonaventure, St. Albert the Great; or on specific texts; such as St. Thomas’ Treatise On Spiritual Substances; or on problems, such as the nature of man according to St. Bonaventure or doctrines on Divine Illumination in the 13th century. Offered every fourth term. Prereq: Cons. of dept. ch.

PHIL 222. Text/Seminar on Later Medieval or Renaissance Philosophy
3 sem. hrs.
Courses will be offered on individual thinkers such as William of Ockham, Duns Scotus, Nicholas of Cusa, Giordano Bruno, Niccolo Machiavelli; or on themes running through these periods, such as the nature of man, or theories of knowledge, or the Platonism of the 15th and 16th centuries. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 223. Text/Seminar on Post-Cartesian Rationalism
3 sem. hrs.
A study of major works of the post-Cartesian rationalists: Spinoza and Leibniz. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 230. Locke/ Berkeley
3 sem. hrs.
A study of the major works of Locke and Berkeley, including Locke’s An Essay Concerning Human Understanding, and Berkeley’s Principles of Human Knowledge and Three Dialogues Between Hylas and Philonous. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 231. Hume
3 sem. hrs.
A study of some of Hume’s major works, including either The Treatise of Human Nature or the Enquiry Concerning Human Understanding, the Enquiry Concerning the Principles of Morals and/or the Dialogues Concerning Natural Religion. Offered every fourth term. Prereq: Cons. of dept. ch.

PHIL 232. Kant
3 sem. hrs.
A study of some principal works of Kant including the Critique of Pure Reason. Offered every spring term. Prereq: Cons. of dept. ch.

PHIL 233. Hegel
3 sem. hrs.
Hegel’s system as found in the Phenomenology of Spirit or the Logic. Offered every fourth term. Prereq: Cons. of dept. ch.

PHIL 240. Philosophy of Process
3 sem. hrs.
An introduction to the metaphysical thought of process philosophers such as Bergson and Whitehead. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 242. Husserl
3 sem. hrs.
A textual study of some principal works. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 245. Classical American Philosophy
3 sem. hrs.
A textual study of the principal works of American philosophers, such as Peirce, James, Dewey. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 250. Early Analytic Philosophy
3 sem. hrs.
A study of the early development of the Vienna Circle and of the principal works of Moore, Russell and Austin. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 251. Contemporary Analytic Philosophy
3 sem. hrs.
A study of major post-positivist developments in the analytic tradition including the thought of figures such as Quine and Sellars. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 252. The Philosophy of Law
3 sem. hrs.
A study of the various philosophical approaches to the basic problems and values in law. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 253. Political Philosophy
3 sem. hrs.
Consideration of the genesis and justification of the state, questions concerning the best form of government, problems especially germane to democracy, such as the nature and justification of equality and liberty, and of the balance of power and the majority rule. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 254. Text/Seminar on Nineteenth-Century Philosophy
3 sem. hrs.
Courses will be offered on major philosophers, such as Marx, Fichte, or Peirce; or on major texts, such as Hegel’s Logic, or Kierkegaard’s Concluding Unscientific Postscript; or on philosophical problems, such as the individual and the social order, or pragmatic views of knowledge and truth. Offered annually. Prereq: Cons. of dept. ch.

PHIL 255. Problems in Logic
3 sem. hrs.
An investigation into logical and meta-logical problems of perennial and contemporary relevance. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 256. Philosophy of Language
3 sem. hrs.
Topics such as the structure and function of language, philosophy and linguistics, and language and mind will be studied. Philosophers such as Austin, Morris and Chomsky will be considered. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 258. The Philosophy of Knowledge
3 sem. hrs.
A study of major epistemological problems and theories of knowledge. Offered every fourth term. Prereq: Cons. of dept. ch.

PHIL 259. The Philosophy of Science
3 sem. hrs.
A survey of basic problems and methods in contemporary philosophy of science. Problems arising from current space-time theory, quantum mechanics, and the use of variant models and methodologies in the exact sciences are emphasized. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 260. Philosophy of Mind
3 sem. hrs.
A study of what mind is and its relation to the body; various concepts related to the mental and to human action. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 265. Problems in Ethics
3 sem. hrs.
Various metaethical and normative problems will be considered, such as: values; the justification and nature of ethical norms; moral responsibility; moral failure; the relation of morality to religion, law, and aesthetics. Offered every fourth term. Prereq: Cons. of dept. ch.

PHIL 266. History and Theory of Ethics
3 sem. hrs.
A theoretical investigation into the moral dimensions of human life. The course will cover the principal traditions in Western moral philosophy as well as significant work in contemporary moral philosophy. Offered fall term. Prereq: Cons. of dept. ch.

PHIL 267. Philosophy of Freedom
3 sem. hrs.
A systematic investigation of problems involved in the assertion of human freedom. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 269. Natural-Law Ethics
3 sem. hrs.
Classical and/or contemporary theories of natural law. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 272. Aesthetics
3 sem. hrs.
Considers one or more of the following problems in aesthetic theory: expression, representation, art and knowledge, aesthetics and society, method. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 278. Problems in Metaphysics
3 sem. hrs.
The study of doctrines on the nature of ultimate reality; of associated topics such as substance, relation, process or change, causality, universals, particulars, space, time, eternity, freedom, necessity; and of the meaning of metaphysics as a philosophical discipline. Offered every fourth term. Prereq: Cons. of dept. ch.

PHIL 281. Philosophy of Religion
3 sem. hrs.
Inquiry into the religious dimensions of human existence and into divine reality. Topics such as the following: religion as a cultural institution, religious experience, the existence and nature of God, the problem of evil, faith and reason, religious language, and the rationality of religious belief. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 284. Philosophy of History
3 sem. hrs.
Study of both critical and speculative philosophy of history. Problems such as the nature of the historian’s inquiry, types of historical understanding, theories of historical explanation, the possibility of pattern and purpose or value in history. Offered every sixth term. Prereq: Cons. of dept. ch.

PHIL 285. Recent Christian Metaphysics
3 sem. hrs.
A study of recent Christian metaphysical thought through one or more major figures, such as Marechal, Lonergan, Gilson, Tillich, or through thematic problems. Offered every sixth term. Prereq: Cons. of dept. ch.
PHIL 289. German Phenomenology-Existentialism 3 sem. hrs.  
Reading and discussion of the works of such thinkers as Kierkegaard, Nietzsche, Heidegger, Jaspers and Scheler. Offered every sixth term.  
Prereq: Cons. of dept. ch.

PHIL 290. French Phenomenology-Existentialism 3 sem. hrs.  
A study of problems, such as meaning vs. absurdity, theism vs. atheism, and intersubjectivity vs. solipsism, in such thinkers as Sartre, Marcel, Camus and Merleau-Ponty. Offered every sixth term.  
Prereq: Cons. of dept. ch.

PHIL 291. Text/Seminar on Twentieth-Century Philosophy 3 sem. hrs.  
A study of philosophical movements, such as existentialism, phenomenology, analysis, or pragmatism; or of specific philosophers, such as Sartre or Russell; or of major philosophical works, such as *Philosophical Investigations*, or *Being and Time*. Offered annually.  
Prereq: Cons. of dept. ch.

PHIL 294. Inter-University Visitation 1-3 sem. hrs.  
Prereq: Cons. of dept. ch.

PHIL 295. Independent Study 1-3 sem. hrs.  
Offered every term.  
Prereq: Cons. of dept. ch.

PHIL 299. Master’s Thesis 1-6 sem. hrs.  
Subjects and credits according to arrangement.  
Offered annually.  
Prereq: Cons. of dept. ch.

PHIL 301. Seminar 1-3 sem. hrs.  
Subjects and credits according to arrangement.  
Offered annually.  
Prereq: Cons. of dept. ch.

PHIL 302. Seminar in Applied/Professional Philosophy 3 sem. hrs.  
Study of ethical issues which cut across professions and disciplines. Consideration given to issues such as human rights, allocation of social resources, confidentiality, informed ethics, truth telling, etc. Offered spring term.  
Prereq: PHIL 268 and cons. of dept. ch.

PHIL 303. Practicum in Philosophy 3-6 sem. hrs.  
Internship designed to develop a student’s ability to use philosophical thinking and concepts in dealing with problems which arise in the context of a specific job, vocation, or institutional setting. Students arrange placement on an individual basis. Offered fall, spring and summer terms. S/U grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 399. Doctoral Dissertation 1-12 sem. hrs.  
Offered every term.  
S/U grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 867. Master’s Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 869. Master’s Comprehensive Exam Preparation – Full-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 870. Doctoral Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 872. Doctoral Comprehensive Exam Preparation – Full-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 874. Graduate Fellowship – Full-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 875. Graduate Assistant Teaching – Full-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 876. Graduate Assistant Research – Full-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 879. Field Placement Continuation – Full-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 881. Thesis Continuation – Less than Half-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 882. Thesis Continuation – Half-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 883. Thesis Continuation – Full-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 886. Professional Project Continuation – Full-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 887. Doctoral Dissertation Continuation – Less than Half-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 888. Doctoral Dissertation Continuation – Half-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

PHIL 889. Doctoral Dissertation Continuation – Full-Time 0 sem. hrs.  
Fee. SNC/UNC grade assessment.  
Prereq: Cons. of dept. ch.

**PHYSICAL THERAPY**

The College of Health Sciences offers a three-year professional program that leads to a doctor of physical therapy degree. Both current Marquette undergraduate students and transfer students with undergraduate degrees from other institutions are encouraged to apply for 10 to 20 spaces in the program.

Current Marquette students should contact the Department of Physical Therapy and complete an application through the Registrar. Deadline is February 1.

The Department of Physical Therapy will also admit a number of new-to-Marquette individuals to the fourth year (external transfers to the first professional year) of the program. The minimal requirements are as follows:

1. Candidates must possess a bachelor’s degree.
2. Candidates must have completed the 22 credits of prerequisite course work. No applicant will be accepted with a GPA below 2.40 and depending on the applicant pool, a higher GPA may be required to successfully gain entry into the program. All prerequisite course work must have been taken at an accredited four-year institution.
3. Twelve credits of social sciences and/or humanities must have been completed as a liberal arts core.
4. Candidates must have completed 80 hours of validated experience in a physical therapy clinic as a volunteer or as an employee under the supervision of a physical therapist.
5. Official transcripts.
6. Official Graduate Record Examination scores.

An application may be obtained from the Department of Physical Therapy or the Physical Therapy Web site at www.marquette.edu/chs/pt/apply/index.shtml. The deadline for submitting a complete application is February 1. The best candidates will be selected from the pool of applicants.

For more information about the doctor of physical therapy, contact the Department of Physical Therapy by phone at (414) 288-7161 or by mail at Marquette University, Department of Physical Therapy, P.O. Box 1881, Milwaukee, WI 53201-1881.

**COURSE DESCRIPTIONS**

**UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:**

**Clinical Laboratory Science (CLLS)**

CLLS 198. Topics in Clinical Laboratory Science 1-4 sem. hrs.

**Exercise Science (EXSC)**

EXSC 192. Advanced Exercise Physiology 4 sem. hrs.

**Physical Therapy (PHTH)**

PHTH 515. Pathophysiology and Aging 4 sem. hrs.

PHTH 518. Physiology of Activity 3 sem. hrs.
PHYSICS (PHYS)
Chairperson and Professor: Howes
Professor: Burch, Karkheck, Matthys, Mendelson
(Emeritus), Tani (Emeritus)
Associate Professor: J. Collins
Assistant Professor: Kunz, Politano, Stockdale Research Associate Professor: Sorbian
Visiting Assistant Professor: Meeves
Note: Faculty members and their ranks are for the 2007–2008 academic year.
Marquette University currently does not offer a graduate degree program in physics. However, certain upper division undergraduate courses in the Department of Physics have been approved for graduate credit and may be taken, as appropriate, by graduate students in other graduate programs. To earn graduate credit for an upper division course, students must have the approval of their major departments and must complete extra work in the course beyond that required for undergraduate credit.

COURSE DESCRIPTIONS

UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:

PHYS 112. Quantum Mechanics 3 sem. hrs.

PHYS 124. Modern Optics 3 sem. hrs.

PHYS 131. Electricity and Magnetism 1 3 sem. hrs.

PHYS 122. Electricity and Magnetism 2 3 sem. hrs.

PHYS 146. The Physical Basis of the Environmental 3 sem. hrs.


PHYS 149. Computational Physics 3 sem. hrs.

PHYS 162. Introduction to Thermodynamics 3 sem. hrs.

PHYS 165. Introduction to Molecular Biophysics 3 sem. hrs.

PHYS 171. Atomic Physics 3 sem. hrs.

PHYS 172. Introduction to Nuclear and Elementary Particle Physics 3 sem. hrs.

PHYS 175. Introduction to Solid State Physics 3 sem. hrs.

PHYS 198. Topics of Special Interest in Contemporary Physics 3 sem. hrs.

PHYS 525. Kinesiology 1: The Upper Extremity 3 sem. hrs.


PHYS 558. Neuroanatomy 4 sem. hrs.

PHYS 560. Integrated Medical Neuroscience 2 sem. hrs.

PHYS 570. Advanced Topics in Biomechanics and Kinesiology 4 sem. hrs.


PHYS 595. Computational Physics 3 sem. hrs.

PHYS 622. Introduction to Thermodynamics 3 sem. hrs.

PHYS 655. Introduction to Molecular Biophysics 3 sem. hrs.

PHYS 671. Atomic Physics 3 sem. hrs.

PHYS 672. Introduction to Nuclear and Elementary Particle Physics 3 sem. hrs.

PHYS 675. Introduction to Solid State Physics 3 sem. hrs.

PHYS 698. Topics of Special Interest in Contemporary Physics 3 sem. hrs.

PHYS 725. The Physical Basis of the Environment 3 sem. hrs.

PHYS 745. Mathematical Methods for Physicists 3 sem. hrs.


PHYS 762. Introduction to Thermodynamics 3 sem. hrs.

PHYS 765. Introduction to Molecular Biophysics 3 sem. hrs.

PHYS 771. Atomic Physics 3 sem. hrs.

PHYS 772. Introduction to Nuclear and Elementary Particle Physics 3 sem. hrs.

PHYS 775. Introduction to Solid State Physics 3 sem. hrs.

POLITICAL SCIENCE (POSC) / INTERNATIONAL AFFAIRS (INAF)

Chairperson and Professor: LeBlanc
Assistant Chairperson and Associate Professor: Barrington
Professor: Boles, Dobbs, Fleet, Friman, McCormick, Swank, Wolfe
Associate Professor: McAdams
Assistant Professor: Azari, Droepe, Hanley, Young
Adjunct Professor of American Government: O’Brien
Emeritus Professor of Political Philosophy: Rhodes
Emeritus Professor of International Politics: Thomas
Visiting Assistant Professor: Armstrong, Giamo
Note: Faculty members and their ranks are the 2007–2008 academic year.

DEGREES OFFERED

POLITICAL SCIENCE
Master of Arts, students are admitted under Plan B (non-thesis option) but may request Plan A (thesis option)

INTERNATIONAL AFFAIRS
Master of Arts, students are admitted under Plan B (non-thesis option) but may request Plan A (thesis option)

PROGRAM DESCRIPTION
The Department of Political Science at Marquette University offers master’s programs aimed at preparing students for doctoral study in political science and international affairs and for careers in related fields. Programs are offered in the following two specialties: political science and international affairs. The department offers a joint bachelor’s and master’s degree program that enables students to earn a bachelor’s and a master’s degree in five years. In conjunction with the Law School, students also can pursue a joint master of arts-juris doctor (M.A.-J.D) program in political science or in international affairs. Through the combined program, full-time students can complete the juris doctor and master of arts degrees in only four years. Furthermore, law school graduates can pursue an accelerated master of arts degree through awards of transfer credit for work completed as part of the juris doctor degree. Joint degree programs are also available in conjunction with the communication and the business administration graduate programs.

PREREQUISITES FOR ADMISSION
An applicant to the Department of Political Science should have graduated with, or be about to graduate with, a bachelor’s degree from an accredited institution in an undergraduate program sufficient in quality and scope to prepare the individual for specialized work in his or her chosen field.

APPLICATION DEADLINE
No official deadline exists for the political science or international affairs master’s programs. However, applications submitted after the Graduate School’s official financial aid deadlines will be considered only as space permits, even if the applicant is not requesting financial aid. The deadlines for financial aid consideration are February 15 for the following fall term and November 15 for the following spring term.

APPLICATION REQUIREMENTS
Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation.
4. GRE scores (General Test only). Not required for five-year B.A.-M.A. applicants; M.A.-J.D. applicants may substitute LSAT scores for GRE scores; M.A.-M.B.A. applicants may substitute GMAT scores for GRE scores.
5. [(For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

BACHELOR’S-MASTER’S PROGRAM
The joint bachelor’s and master’s program allows students to earn both a bachelor’s degree with a major in political science or international affairs and a master’s degree in political science or international affairs in five years.

Students will complete 6-9 hours of graduate credit in political science or international affairs during their senior undergraduate year. These graduate courses double-count toward the undergraduate and graduate degrees. Should a student be denied admission to the master’s program of choice (political science or international affairs), the courses will be counted toward the undergraduate degree. Upon completion of the first term as a master’s candidate, the student must petition the Graduate School to transfer the courses taken as an undergraduate to the master’s degree. Students may also request that appropriate upper division undergraduate courses completed during their senior year, which are in addition to those required by their major or by Arts and Sciences, be counted toward their master’s degree. All remaining master’s degree requirements may be completed during the subsequent summer, fall, and spring semesters.
Candidates for admission should have undergradu-
ate junior status, have completed at least 3 upper
division political science courses, and should have
a political science GPA of at least 3.50. Candidates for
admission should submit transcripts and three letters
of recommendation, but need not submit GRE scores.
Candidates for admission to this program should notify
the assistant chair of their intentions.

JOINT PROGRAMS OF STUDY

M.A.-J.D. DEGREE
The Department of Political Science, in conjunc-
tion with the Law School, offers a program of
joint study leading to a master’s degree in political
science or in international affairs and a juris doctor
degree.

Students seeking admission to the joint program
must indicate which program they intend to pursue
and complete first, although once accepted for
admission to both programs, students may take
courses from both departments. Upon completion of
the first program, the student will be officially admit-
ted to the second program for completion of the
remainder of the joint program.

Joint degree students count 9 credits of course
work in each program toward the required course
work credits of the other program. Thus, 9 of the 40
credits required for the master of business admin-
istration degree will come from POSC courses, and
9 of the 30 credits required for the master of arts
degree in political science or in international affairs
will come from BUAD courses.

M.A. IN POLITICAL SCIENCE OR IN
INTERNATIONAL AFFAIRS AND IN
COMMUNICATION
The Department of Political Science, in conjunc-
tion with the J. William and Mary Diederich College
of Communication, offers a program of joint study
leading to a master of arts degree in political sci-
ence or in international affairs and a master of arts
degree in communication. The program is designed
for students whose interests overlap politics and
aspects of communication such as advertising, jour-
nalism, or broadcasting. Joint degree students are
able to complete both degree programs in less time
than if both degrees were pursued separately.

Students seeking admission into the joint degree
program must submit to the graduate school sepa-
rate applications for admission to both programs,
including two sets of required documentation, and
must meet the admission requirements of each
program. Acceptance into one program does not
guarantee acceptance into the other. If a student is
accepted into one program and not the other, the
student can still choose to accept the admission
offer from the first program but would not be consid-
ered a joint degree student. Because students are
officially admitted into only one Marquette University
graduate program at a time, applicants must indicate which program they intend to pursue
and complete first, although once accepted for
admission to both programs, students may take
courses from both departments. Upon completion of
the first program, the student will be officially admit-
ted to the second program for completion of the
remainder of the joint program.

Joint degree students count 9 credits of course
work in each program toward the required course
work credits of the other program. Thus, 9 of the 40
credits required for the master of arts degree in
communication will come from POSC courses, and
9 of the 30 credits required for the master of arts
degree in political science or in international affairs
will come from COMM courses.

MASTER’S REQUIREMENTS
A student in either political science or interna-
tional affairs is admitted to a non-thesis program
(Plan B) which requires 30 credit hours of course and
seminar work. The Plan B student must pass written
and oral comprehensive examinations to complete
the program.

Students are presumed to be in Plan B unless a
formal request to transfer to a thesis program (Plan
A) is approved by the department chairperson and
the Graduate School. Plan A requires 24 credit hours
course and seminar work and six credit hours of
thesis work. The Plan A student must pass written
and oral comprehensive examinations and submit an
approved thesis to complete the program.

At least 18 credits of the 30 credit hour require-
ment for Plan B students (15 credits of the 24 credit
hours toward the master of arts degree in cognate
courses taken outside the department. Cognate
fields for the international affairs program include
other areas of political science.

CORE SEMINARS
Students in the political science program must
complete POSC 209 and three of the following core
seminars: POSC 200, 202, 204 and 206.

Students in the international affairs program must
also complete POSC 209, and the following two
core seminars: POSC 204 and 206. Students in the
international affairs program will concentrate their
remaining work in comparative and international
politics courses.

RESEARCH PAPERS
Students in either program, political science or
international affairs, must complete at least two sem-
in-course research papers. These papers must deal
with significant questions and demonstrate rigorous
analytical and, as appropriate, methodological skills.
The instructors in whose courses the papers are
written must certify that the student has fulfilled this
requirement. Specific details and certification forms
are available from the department office.

COMPREHENSIVE EXAMINATIONS
A candidate for the master of arts degree in
political science must pass written and oral compre-
hensive examinations covering two of the following
fields: political philosophy, American politics, com-
parative politics, international politics.

A candidate for the master of arts degree in
international affairs must pass written and oral com-
prehensive examinations in the fields of comparative
politics and international politics. The examinations
normally are taken after the student has completed
24 credit hours of course work.

The written examination is based on comprehensive reading lists for each subfield, the student’s course work, and sample questions
provided in advance. The oral examination supple-
ments the written examination and is based on the
comprehensive reading lists and the student’s course
work. The examining committee is normally composed
of three faculty members chosen by the department
assistant chairperson in consultation with the student
and his or her adviser. Details on the examinations, the
reading lists, and the sample questions are available
from the department office.

COURSE DESCRIPTIONS

UPPER DIVISION COURSES THAT MAY
CARRY GRADUATE CREDIT:

POSC 100. Citizens, Beasts, or Gods?
3 sem. hrs.

POSC 101. The Best Constitution
3 sem. hrs.

POSC 102. Democracy and Its Problems
3 sem. hrs.
POSC 104. Enlightenment Political Thought 3 sem. hrs.
POSC 105. Karl Marx 3 sem. hrs.
POSC 106. The Political Philosophy of Capitalism 3 sem. hrs.
POSC 107. Politics and Literature 3 sem. hrs.
POSC 108. Postmodern Politics 3 sem. hrs.
POSC 109. Gender and Politics 3 sem. hrs.
POSC 110. Business and Politics 3 sem. hrs.
POSC 111. Politics and Regulation 3 sem. hrs.
POSC 114. Civil Liberties 3 sem. hrs.
POSC 115. American Public Policy 3 sem. hrs.
POSC 117. Problems in Civil Liberties: Privacy 3 sem. hrs.
POSC 118. Urban Politics 3 sem. hrs.
POSC 119. Politics of Race, Ethnicity, and Gender 3 sem. hrs.
POSC 120. Interest Group Politics 3 sem. hrs.
POSC 121. Religion and Politics 3 sem. hrs.
POSC 122. Political Organizations 3 sem. hrs.
POSC 123. Elections, Parties, and Political Opinion 3 sem. hrs.
POSC 124. Media and Politics in the U.S. 3 sem. hrs.
POSC 125. The United States Congress 3 sem. hrs.
POSC 126. The American Presidency 3 sem. hrs.
POSC 127. Constitutional Law 3 sem. hrs.
POSC 128. Public Policy in Industrial Democracies 3 sem. hrs.
POSC 129. European Politics 3 sem. hrs.
POSC 130. Politics, Economics, and Democracy 3 sem. hrs.
POSC 131. Democracy, Authoritarianism, and Totalitarianism 3 sem. hrs.
POSC 133. Comparative Politics: The Developing World 3 sem. hrs.
POSC 134. Comparative Politics: The Developing World 3 sem. hrs.
POSC 136. Problems in Civil Liberties: Political Aspects 3 sem. hrs.
POSC 137. Problems in Civil Liberties: International Aspects 3 sem. hrs.
POSC 139. Problems in Civil Liberties: Comparative Aspects 3 sem. hrs.
POSC 140. Problems in Civil Liberties: Historical Aspects 3 sem. hrs.
POSC 141. Problems in Civil Liberties: Theoretical Aspects 3 sem. hrs.
POSC 142. Problems in Civil Liberties: Practical Aspects 3 sem. hrs.
POSC 143. Problems in Civil Liberties: Philosophical Aspects 3 sem. hrs.
POSC 144. Problems in Civil Liberties: Legal Aspects 3 sem. hrs.

GRADUATE COURSES:
POSC 200. Political Philosophy 3 sem. hrs.
POSC 201. Russian and Post-Soviet Politics 3 sem. hrs.
POSC 204. Latin American Politics 3 sem. hrs.
POSC 207. International Law 3 sem. hrs.
POSC 208. International Organization 3 sem. hrs.
POSC 209. United States Foreign Policy 3 sem. hrs.
POSC 211. World Conflict and Security 3 sem. hrs.
POSC 213. Politics of the Internet 3 sem. hrs.

The development of public policies to advance the status of women throughout U.S. history, with an emphasis on 1981-date. The role of women’s groups and social movements. Offered occasionally. Prereq: Cons. of dept. ch., cons. of grad. prog. dir., or cons. of adviser.

POSC 241. Women and Public Policy 3 sem. hrs.

Student research in a broad area of American politics. Potential topics include, but are not limited to, Metropolitan Politics, The American Political Economy in Comparative Perspective, Problems in Civil Liberties. May be taken more than once. Offered occasionally. Prereq: Cons. of dept. ch., cons. of grad. prog. dir., or cons. of adviser.

POSC 249. Research Seminar in American Politics 3 sem. hrs.

Student research in a broad area of American politics. The development of the field of American politics. Currently used concepts and approaches. Extensive reading, short papers, and discussion. Offered alternate years. Prereq: Cons. of dept. ch., cons. of grad. prog. dir., or cons. of adviser.

POSC 299. Contemporary Political Research 3 sem. hrs.

Approaches to the scientific study of politics; data-collection techniques; case studies, the comparative method, statistical analysis. Offered alternate years. Prereq: Cons. of dept. ch., cons. of grad. prog. dir., or cons. of adviser.

POSC 299. Research Seminar in Political Philosophy 3 sem. hrs.

Student research in a broad area of political philosophy. Seminars will focus on individual thinkers (e.g., Plato, Aristotle, Machiavelli, Rousseau) or on contemporary problems. May be taken more than once. Offered alternate years. Prereq: Cons. of dept. ch., cons. of grad. prog. dir., or cons. of adviser.

POSC 231. Elections and Voters 3 sem. hrs.

Why voters vote the way they do, including policy preferences, partisanship, and retrospective assessments. The dynamics of elections including the role of media, other elites, money, and interest groups. Offered occasionally. Prereq: Cons. of dept. ch., cons. of grad. prog. dir., or cons. of adviser.

POSC 233. Interests Groups 3 sem. hrs.

How various kinds of organizations attempt to exercise political influence, including the use of incentives to attract members, lobbying, attempts to influence public opinion, involvement in electoral politics, and litigation. Offered occasionally. Prereq: Cons. of dept. ch., cons. of grad. prog. dir., or cons. of adviser.

POSC 237. Congress and the Presidency 3 sem. hrs.

Examination of major literature, theories and concepts used to understand the relationship between the Congress and the presidency. Offered alternative years. Prereq: Cons. of dept. ch., cons. of grad. prog. dir., or cons. of adviser.

POSC 148. Modern Revolutions 3 sem. hrs.

POSC 152. Russian and Post-Soviet Politics 3 sem. hrs.

POSC 154. Chinese Politics 3 sem. hrs.


POSC 156. Latin American Politics 3 sem. hrs.


POSC 165. International Law 3 sem. hrs.


POSC 170. United States Foreign Policy 3 sem. hrs.

POSC 173. International Politics of Europe 3 sem. hrs.

POSC 174. International Politics of the Middle East 3 sem. hrs.

POSC 175. International Politics of Asia 3 sem. hrs.

POSC 176. United States-Latin American Relations 3 sem. hrs.

POSC 177. Politics of the World Economy 3 sem. hrs.

POSC 178. World Conflict and Security 3 sem. hrs.


POSC 182. Politics of the Internet 3 sem. hrs.


POSC 198. Topics in Political Science 2-3 sem. hrs.

POSC 200. Political Philosophy 3 sem. hrs.

Explores the differentiation of justice and power with special reference to the authority of a higher law or principle of right; selections from the works of Thucydides, Plato, Aristotle, Machiavelli, and others. Offered alternate years. Prereq: Cons. of dept. ch., cons. of grad. prog. dir., or cons. of adviser.


The development of the field of American politics. Currently used concepts and approaches. Extensive reading, short papers, and discussion. Offered alternate years. Prereq: Cons. of dept. ch., cons. of grad. prog. dir., or cons. of adviser.

POSC 204. Comparative Politics 3 sem. hrs.

The development of the field of comparative politics. Currently used concepts and approaches. Extensive reading, short papers, and discussion. Offered alternate years. Prereq: Cons. of dept. ch., cons. of grad. prog. dir., or cons. of adviser.

POSC 206. International Politics 3 sem. hrs.

The development of the field of international politics. Currently used concepts and approaches. Extensive reading, short papers, and discussion. Offered alternate years. Prereq: Cons. of dept. ch., cons. of grad. prog. dir., or cons. of adviser.

POSC 299. Contemporary Political Research 3 sem. hrs.

Approaches to the scientific study of politics; data-collection techniques; case studies, the comparative method, statistical analysis. Offered alternate years. Prereq: Cons. of dept. ch., cons. of grad. prog. dir., or cons. of adviser.

Graduate School
and the relationship between East Asian economies. The origins of capitalism and their impacts on politics. The evolution and contemporary politics of European integration. Globalization and European political economies. Offered alternate years.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 256. Chinese Politics 3 sem. hrs.

China’s problems and prospects. Economic and political reforms. International relations. An overview and history of relevant literature. Offered occasionally.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 260. Comparative Democratization 3 sem. hrs.

Definitions of democracy and democratization; causes of regime transition and consolidation; market economies and democracy. Offered occasionally.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 261. Comparative Political Economy of Advanced Industrial Societies 3 sem. hrs.
The relationships between capitalism and democracy. The impact of economics on the development and operation of democratic institutions, political behavior, and public policy. The impact of politics on economic development, performance and policy. The political economy of the welfare state. The transition to post-industrial society. Globalization and the democratic nation state. Offered alternative years.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 262. Politics of Development 3 sem. hrs.
The interplay between economic growth and the development of political institutions and practices, looking at both the historical experiences of advanced industrial societies and those of developing countries currently attempting to expand the capabilities of their economies and their political institutions. Emphasis on the political factors and conditions on which economic development depends, and on how such growth and expansion in turn affect the political order. Offered occasionally.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 263. Political Economy of East Asia 3 sem. hrs.
Considers topics in the Political Economy of East Asia such as the rise of Japan and the Four Tigers, the Japanese economy in the 1990s, the East Asian Financial Crisis, the reform of the Chinese economy, economic relations among the East Asian countries, and the relationship between East Asian economies and the world economy. These topics are considered in light of various theories of political economy and theories of political economy are evaluated in light of developments in East Asia. Offered occasionally.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 264. Comparative Nationalism 3 sem. hrs.
Definitions of nation and nationalism; causes of nationalism; nationalism and democracy; modern nationalism in Europe, Asia and Africa. Offered occasionally.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 269. Research Seminar in Comparative Politics 3 sem. hrs.
Student research in comparative politics. Seminars will focus on traditional comparative politics or contemporary problems. May be taken more than once. Offered occasionally.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 271. U.S. Foreign Policy 3 sem. hrs.
Policies of the United States toward other nations; policy formation. Offered occasionally.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 272. International Politics of Asia 3 sem. hrs.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 278. Nations, States, and Nationalism 3 sem. hrs.
Explores the origins and nature of nations, states, nationalism and violent secessionist movements. Addresses differing concepts of the ethnic and civic nations, the rationale for nation-states as against multiethnic states, and the sources of violent nationalism. The core of this research seminar will address the conflicting principles of the right of national self-determination as demanded by various ethnic groups, as against the territorial integrity and sovereignty of states as invoked by national governments. Students will be expected to write a research paper on a selected topic that relates to the above issues. Offered occasionally.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

Theories of globalization, state sovereignty, and transnational organized crime; politics of gray and black markets; spatial dimensions of transshipment, global cities, organized crime and state power; intersection of public and private authority in managing transborder flows; drug trafficking, money laundering, and migrant smuggling and trafficking are among the subjects explored. Offered occasionally.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

The development of the study of international political economy. Currently used concepts and approaches. Extensive reading, short papers, discussion, and a final research paper. Offered occasionally.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 294. Internship in Political Science – Full-Time 0 sem. hrs.
Practical learning experience in politics. Requires appropriate written work relating the experience to appropriately broad academic literature on the subject. Arrangements to be worked out by student, faculty member and agency concerned. Normally may be taken only once. Offered every semester. S/U grade assessment.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 295. Independent Study – Less than Half-Time 0 sem. hrs.
Offered every term. S/U grade assessment.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 296. Master’s Thesis 1-6 sem. hrs.
Offered every term. S/U grade assessment.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 297. Master’s Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 298. Master’s Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 299. Master’s Thesis 1-6 sem. hrs.
Offered every term. S/U grade assessment.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 306. Graduate Assistant Research – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 314. Comparative Politics – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 315. Comparative Politics – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 327. International Human Rights 3 sem. hrs.
The development of international human rights; measures to promote and protect human rights at the global and regional levels. Offered occasionally.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POSC 350. Comparative Political Economy 3 sem. hrs.

Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.
POS 877. Field Placement Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POS 878. Field Placement Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POS 879. Field Placement Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POS 881. Thesis Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POS 882. Thesis Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POS 883. Thesis Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POS 884. Professional Project Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POS 885. Professional Project Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

POS 886. Professional Project Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch., cons. of graduate prog. dir., or cons. of adviser.

PUBLIC SERVICE (PUBS)
Graduate Program Coordinator and Assistant Professor: Caulfield
Dean of the College of Professional Studies: Deahl
Associate Professor: Krejci, Soeka
Adjunct Assistant Professor and CPS Chaplain: Class
Adjunct Instructor: Benner, Braaksma, Coan, O’Neel, Perlman, Randini, Recchi, Waters
Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREE OFFERED
Master of Arts in Public Service, Plan B only

SPECIALIZATIONS
Criminal Justice Administration, Dispute Resolution, Health Care Administration, Leadership Studies, Non-profit Sector

PROGRAM DESCRIPTION
Public Service is an interdisciplinary program administered by Marquette University’s College of Professional Studies. Within the program, students may pursue focused study in one of the five specializations described below.

CRIMINAL JUSTICE ADMINISTRATION
The criminal justice administration specialization seeks to provide broadly-educated, highly-motivated, thoroughly-trained professionals and scholars to meet the challenges of urban society. Several objectives underlie the scope and content of the program: 1) to provide urban stewards with an ethical and scholarly understanding of the issues and ramifications of current and anticipated policies in criminal justice; 2) to develop persons capable of exercising independent, analytical thought consistent with the needs of a democratic society; 3) to provide a core of leaders familiar with the issues of criminal justice management and policy analysis.

DISPUTE RESOLUTION
The dispute resolution specialization attempts to combine the fields of law, business, psychology, sociology, political science, health sciences, education, and communication in dealing with today’s multi-faceted issues in resolving disputes. The program seeks to train professionals, primarily those in the fields of law, health care, education, and business, to practice as third party neutrals in the field of dispute resolution, or to be knowledgeable participants in dispute resolution processes. Marquette University also offers master’s and certificate programs in dispute resolution. (See the program section on Dispute Resolution for description and details.)

HEALTH CARE ADMINISTRATION
The health care administration specialization seeks to prepare working professionals to meet the leadership challenges of today’s health care system. As managed care and the integration of health care delivery continue to evolve, new skills and knowledge are needed to keep pace with current health care demands. The program provides a foundation in finance, economics, policy, leadership, systems, and outcome planning and evaluation, specifically related to the changing health care system. Through the many elective offerings (informatics, case management, marketing, program development, administrative practice, conflict resolution, long-term care and more), students may explore a wide range of special interests.

LEADERSHIP STUDIES
The leadership studies specialization prepares students to meet the challenges of leadership on multiple levels, including self-leadership, leadership in the context of interpersonal relationships, leadership where diversity is the norm, and leadership in organizations. This specialization prepares students to be ethical leaders who are skilled at: leading themselves, leading and managing relationships, leading in organizations, leading and managing change, and leading within a variety of contexts. Marquette University also offers master’s and certificate programs in leadership studies. (See the program section on Leadership Studies for description and details.)

NON-PROFIT SECTOR
The non-profit sector specialization seeks to provide training for individuals who plan a career in the third sector. Administrative and leadership preparation are particularly central to this training as executives handle budgets, board memberships, personnel oversight, corporate statutes, and program development.

PREREQUISITES FOR ADMISSION
Applicants to the public service specializations must hold a baccalaureate degree, or its academic equivalent, from a college or university of recognized standing. The undergraduate background must be appropriate to the chosen course of study. Generally, applicants should have a minimum cumulative grade point average of 3.00 (on a scale of 4.00) in their undergraduate course work. Previous professional experience will be a serious consideration in the admission decision.

APPLICATION REQUIREMENTS
Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation from academic or professional sources.
4. (For criminal justice administration, health care administration, and non-profit sector) official test scores from the GRE, LSAT, or MAT are required only for students whose cumulative undergraduate GPA is less than 3.20 on a 4.00 scale. Waived if the applicant has completed any advanced degree from any school – M.A., M.S., M.B.A., Ph.D., J.D., or M.D.
5. (For dispute resolution) official test scores from the GRE, GMAT, LSAT, or MAT. Waived if the applicant has completed any advanced degree from any school – M.A., M.S., M.B.A., Ph.D., J.D., or M.D.
6. (For leadership studies) official test scores from the GRE, LSAT or GMAT are required only for students whose cumulative undergraduate GPA is less than 3.20 on a 4.00 scale. Waived if the applicant has completed any advanced degree from any school – M.A., M.S., M.B.A., Ph.D., J.D., or M.D.
7. A statement of purpose.
8. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

This is the program section on Leadership Studies for description and details.)

THE GRADUATE SCHOOL
MASTER’S REQUIREMENTS

Students must complete a total of thirty-six (36) credit hours of course work for the master of arts in public service. One of the five specializations (criminal justice administration, dispute resolution, health care administration, leadership studies, non-profit sector) must be chosen.

Students must complete 12 credits of required core course work, 3 credits of elective core course work, plus 15 specialization credits of course work. Students must also choose one of three integrative learning options:
1) 6 credits of a professional project (capstone courses PUBS 296 and 297),
2) 6 credits of a research article of publishable quality (capstone courses PUBS 296 and 297), or
3) 6 credits of additional course work followed by a comprehensive examination.

For options 1 and 2 above, students must submit the project outline to be approved by their program adviser and by the Graduate School.

Students must complete the program within six years. Students are expected to earn a B or above in all courses and must maintain a 3.00 cumulative grade point average to earn the degree of master of arts in public service.

CRIMINAL JUSTICE ADMINISTRATION

Students must complete a total of 36 credit hours of course work: 12 credits of required core course work (PUBS 205, 210, 230, and 290), 3 credits of elective core course work (chosen from PUBS 200, 235, 240, 260, 270, 294, 295, and/or 298), 6 credits of required specialization course work (CJAD 200 and 220), and 9 credits of elective specialization course work (any CJAD course not yet chosen). For the final 6 credits, students must choose one of the three integrative learning options outlined above.

Students enrolled in the law enforcement leadership and management (LELM) certificate program may take PUBS 271 in lieu of PUBS 270 and may take PUBS 281 in lieu of PUBS 205. The two final courses that make up the LELM certificate (CJAD 210 and 211) will go toward CJAD elective specialization requirements for this degree.

DISPUTE RESOLUTION

Students must complete a total of 36 credit hours of course work: 12 credits of required core course work (PUBS 205, 210, 230, and 290), 3 credits of elective core course work (chosen from PUBS 200, 235, 240, 260, 270, 294, 295, and/or 298), and 15 credits of required specialization course work (DIRS 200, 201, 203, 207, and 210). For the final 6 credits, students must choose one of the three integrative learning options outlined above.

HEALTH CARE ADMINISTRATION

Students must complete a total of 36 credit hours of course work: 12 credits of required core course work (PUBS 205, PUBS 210, PUBS 230 or NURS 207, and PUBS 290), 3 credits of elective core course work (chosen from PUBS 200, 235, 240, 260, 270, 294, 295, and/or 298), 12 credits of required specialization course work (HEAL 220, HEAL 241, HEAL 242, and NURS 200), and 3 credits of elective specialization course work (chosen from PUBS 200, 235, 240, 260, 270, 294, 295, and/or 298). For the final 6 credits, students must choose one of the three integrative learning options outlined above.

LEADERSHIP STUDIES

Students must complete a total of 36 credit hours of course work: 12 credits of required core course work (PUBS 205, 210, 230, and 290), 3 credits of elective core course work (chosen from PUBS 200, 235, 240, 260, 270, 294, 295, and/or 298), 12 credits of required specialization course work (LEDR 210, 220, 230, and LEDR 240 or 280), and 3 credits of elective specialization course work (any LEDR course not yet chosen). For the final 6 credits, students must choose one of the three integrative learning options outlined above.

NON-PROFIT SECTOR

Students must complete a total of 36 credit hours of course work: 12 credits of required core course work (PUBS 205, 210, 230, and 290), 3 credits of elective core course work (chosen from PUBS 200, 235, 240, 260, 270, 294, 295, and/or 298), 12 credits of required specialization course work (NPSE 220, 222, 226, 228), and 3 credits of elective specialization course work (any NPSE course other than NPSE 238). For the final 6 credits, students must choose one of the three integrative learning options outlined above.

 COURSE DESCRIPTIONS

GRADUATE COURSES:

Criminal Justice Administration (CJAD)


The study of criminological theories which inform the construction and operation of criminal justice administration and policy. Offered annually.


Examines contemporary policy making processes adopted by federal, state, and local police agencies. In-depth analysis of the most critical policies police administrators must consider. Policies include: recruitment, selection, and promotion of personnel, use of force, emergency vehicle operation, accreditation, discretion and training.

CJAD 211. Legal Issues in Law Enforcement 3 sem. hrs.

Focuses on risk management principles and legal responsibilities of law enforcement administrators with the intent of minimizing civil liabilities. Examines constitutional issues, Supreme Court case decisions, Fair Labor Standards Act, Family Leave and Medical Act, workplace harassment issues, management rights, contracts, internal investigations and the disciplinary process. Prereq: Acceptance to the graduate certificate program for law enforcement leadership and management.

CJAD 220. Courts and the Legal System 3 sem. hrs.

In-depth analysis of the criminal adjudication process to include an examination of the criminal justice system (police, courts, and corrections) with particular concern for complex organizations and organizational systems. Offered occasionally.


Provides students with a practical understanding of juvenile justice through an in-depth analysis of the components of the current system, the perspectives of the participants and the successes and failures of the process. Examines the theory and practice of juvenile law, constitutional and national trends and current legislative efforts in the juvenile justice arena.

CJAD 230. Victims and Victims Policy 3 sem. hrs.

Overview of issues facing victims in modern society and society’s efforts to make the victim whole. Offered occasionally.


Critical study of selected areas of correctional management such as organization theory, management philosophy and leadership, human resource management, labor relations, and current issues in the administration of institutional and community corrections. Offered occasionally.

CJAD 245. Women, Crime, and the Criminal Justice System 3 sem. hrs.

Focuses on current status of women and girls in both the study of crime and the process of decision-making about women victims and offenders in the criminal justice system. Examines status of women workers and their access to employment within the criminal justice system.


Investigation of the clinical issues impacting criminal justice policy, including mental illness and criminal behavior, legal insanity, post-traumatic stress disorder and crime, civic and criminal commitment, prisoner’s rights, and the treatment of juveniles and adult offenders. Offered occasionally.

CJAD 255. Forensic Psychology in Criminal Justice 3 sem. hrs.

Explores the interface between psychology and the legal process. Examines the role of psychology in addressing a wide range of legal issues, including: evaluations regarding competency to stand trial, criminal responsibility, risk of dangerousness, child custody and placement, fitness for duty, etc. Looks at issues associated with providing psychological service.


Analysis of key issues affecting the complex processes of criminal justice at every stage of the criminal justice system. Offered occasionally.

CJAD 280. Internship in Criminal Justice 1-3 sem. hrs.

Supervised experiences in criminal justice. Each intern must negotiate an appropriate internship plan and location with the graduate criminal justice faculty and the criminal justice internship coordinator. Offered every term. S/U grade assessment. Prereq: Cons. of dept. ch. and cons. of CJAD dir.

CJAD 295. Independent Study 1-3 sem. hrs.

Offered every term. Prereq: Cons. of dept. ch. and cons. of CJAD dir.

CJAD 298. Selected Topics in Criminal Justice 1-3 sem. hrs.

Examination of topics related to contemporary issues in criminal justice.
Dispute Resolution (DIRS)

DIRS 200. Theory of Conflict 3 sem. hrs.
The development of conflict between and among individual, organizations, and governmental units; various models for conflict and types of conflict resolution will also be surveyed. Prereq: DIRS 203.

DIRS 201. Advanced Issues in Dispute Resolution 3 sem. hrs.
Explores current theoretical and applied issues in mediation. These issues may include: communication theories and models, legislative enactments, dispute resolution systems design, and court-connected dispute resolution systems. Case studies provide an opportunity to examine the theory through an applied approach. Prereq: DIRS 203.

DIRS 203. Mediation 3 sem. hrs.
Mediation as facilitated negotiation, three-party processes vs. two-party processes, interest-based bargaining vs. positional or adversarial bargaining. Concepts will be explored through the use of class role plays, which will be videotaped and critiqued as a part of mediation training. Prereq: DIRS 203.

DIRS 205. Dispute Resolution and the Family 3 sem. hrs.
Explores the many ways that dispute resolution processes are used in the family dynamic, including the division of marital property, the resolution of child custody issues, the resolution of parent-child behavioral issues, the resolution of contested adult guardianships, the resolution of issues involving the termination of parental rights, and the placement of adult family members in institutional settings. Includes an analysis of the roles of unique stakeholders, such as guardian ad litem, medical personnel, and extended family members. Uses a significant number of role plays to allow students to apply and refine their skills. Prereq: DIRS 203.

DIRS 206. Dispute Resolution and Education 3 sem. hrs.
Explores the many ways dispute resolution processes are used in the educational context, including: collective bargaining agreements, student peer mediation programs, student-teacher disputes, ombuds programs in higher education, and the mediation of special education disputes. The problem-solving skills helpful to any teacher or school administrator in dealing with parents, students, and colleagues are addressed. Uses a significant number of role plays to allow students to apply and refine their skills. Prereq: DIRS 203.

DIRS 207. Advanced Mediation 3 sem. hrs.
An exploration of more advanced issues in the practice of mediation, including brokering, emotions in mediation, agenda, joint session, caucuses, agreements and multi-party/multi issue cases. Prereq: DIRS 203.

DIRS 208. Dispute Resolution and the Workplace 3 sem. hrs.
Explores the many ways that dispute resolution processes are used in the workplace, including interest arbitration, grievance arbitration, the negotiation of collective bargaining agreements, ombuds systems, peer review panels, mediation systems in unionized and non-unionized environments, and the use of processes to address issues of sexual discrimination, sexual harassment, and the lack of retention and promotion of minority workers. Uses a significant number of role plays to allow students to apply and refine their skills. Prereq: DIRS 203.

DIRS 209. Arbitration 3 sem. hrs.
Explores the adjudicative process of arbitration or private-judging in commonly used contexts, such as labor, construction, securities, and consumer disputes. Examines the United States Supreme Court’s line of precedent regarding the enforceability of arbitration clauses in contracts. The common techniques used in the arbitration process are addressed. Prereq: DIRS 203.

DIRS 210. Practicum in Dispute Resolution 1-3 sem. hrs.
Required of all students; for example, an internship may be established with a community mediation center, a court system, a hospital peer review committee, or a public school teachers’ collective bargaining unit. Placements will be arranged on an individual basis. S/U grade assessment. Prereq: DIRS 203 and DIRS 207.

DIRS 211. Negotiation 3 sem. hrs.
Explores a variety of styles of negotiation, focusing primarily on interest-based bargaining. Addresses criticisms of the efficacy of interest-based bargaining in some depth. Uses a significant number of role plays for instructional purposes, utilizing scenarios from two-party single issue negotiations to multi-party multi-issue negotiations. Prereq: DIRS 203.

DIRS 212. Dispute Resolution Systems Design 3 sem. hrs.
Explores the process by which you design, implement, and administer a dispute resolution system. Methods of stakeholder investment, intake, screening, referral, record keeping, data collection and evaluation are analyzed. Methods used in a variety of dispute resolution systems, including internal and external mediation systems, arbitration, and ombuds programs are compared. Ethical standards applicable to system administration are emphasized. Students will be required to design and document a system. Prereq: DIRS 203.

DIRS 213. Dispute Resolution and Health Care 3 sem. hrs.
Explores the many ways dispute resolution processes are used in health care, including the resolution of patient payment disputes with hospitals, health care providers, and health maintenance organizations (HMOs); disputes regarding treatment options; disputes among professionals treating the same patient; lifestyle issues (smoking and alcoholic beverages) in long term care facilities; health care provider malpractice; and end-of-life issues among providers, family members, and hospital ethics committees. Prereq: DIRS 203.

DIRS 295. Independent Study 3 sem. hrs.
Project that consists of a 6 credit course divided over two semesters. Includes facilitated research meetings to explore research topics and methods. S/U grade assessment.

DIRS 296. Capstone 1 3 sem. hrs.
Project that consists of a 6 credit course divided over two semesters. Includes individual research and the completion of the written Capstone paper. S/U grade assessment.

DIRS 297. Capstone 2 3 sem. hrs.
Project that consists of a 6 credit course divided over two semesters. Includes individual research and the completion of the written Capstone paper. S/U grade assessment.

DIRS 298. Special Topics in Dispute Resolution 1-3 sem. hrs.
Examination of selected issues in dispute resolution that go beyond the scope of regular course offerings. Offered occasionally.

DIRS 299. Master’s Thesis 6 sem. hrs.
Offered every term. S/U grade assessment. Prereq: Cons. of dept. ch.

DIRS 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

DIRS 881. Thesis Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

DIRS 883. Thesis Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

Non-Profit Sector (NPSE)

Introduction to the development, challenges, and opportunities in the non-profit sector. Includes case studies of governance, business practices, social entrepreneurship, and grant writing.

NPSE 222. Financial Matters in the Non-Profit Sector 3 sem. hrs.
Examination of various financial issues affecting the non-profit sector including: fund-raising from donors and foundations, grant proposals, budgeting, and personnel/program costs. Prereq: NPSE 220.

NPSE 226. Social Justice and Social Activism 3 sem. hrs.
Examines the meaning and implications of social justice; considers the history of social activism from both religious and non-sectarian traditions. Prereq: NPSE 220.

NPSE 228. Legal Aspects of the Non-Profit Sector 3 sem. hrs.
Examines a range of legal issues that confront non-profits including: articles and by-laws, fiduciary obligations, governance and boards of directors, charitable solicitations, and for-profit ventures. Prereq: NPSE 220.
Public Service (PUBS)

An interdisciplinary examination of the individual, group, and institutional aspects of everyday life in urban America. Addresses both historical and contemporary contexts. Offered occasionally.

PUBS 205. Leadership in Public Service 3 sem. hrs.
Focuses on the importance of applied ethical frameworks and on contemporary leadership practice and civic engagement in the public service and non-profit environments. Learning activities include: case studies of current events, online and in-class discussion and discussions with a number of guests who are in leadership positions in public and non-profit organizations.

PUBS 210. Urban Policy and Public Service Administration 3 sem. hrs.
Examination of the role of governmental and nongovernmental agencies in the development and application of public policy. Special attention devoted to the interplay between the government and everyday society. Offered occasionally.

PUBS 230. Ethics in Public Service 3 sem. hrs.
Normative concepts and issues within a public service setting. Consideration of ethical principles and standards for urban professionals. Historical, philosophical, and theological roots and their relationship to contemporary applications. Offered occasionally.

PUBS 235. Organizational Behavior in Public Service 3 sem. hrs.
Application of organizational behavior theory, concepts and models in public service and non-profit environments. Studies socially responsible behavior as related to global issues. Learning activities include: in-class and online discussion, case analysis, group work and a final project.

PUBS 240. Legal Issues in Public Service 3 sem. hrs.
Survey of the common law, statutory law, and constitutional law affecting individuals and organizations in public service. Topics may include: basic tort and contract law, administrative law, employment law, open meetings law, free speech and association rights, collective bargaining, and disability issues. Offered occasionally.

Communication challenges in the public service sector whether in institutional or community settings. Explores the communication process, including perception, attribution, and verbal and nonverbal communication. Additional considerations will be given to cross-cultural decision-making, and conflict resolution in both interpersonal and group settings. Offered occasionally.

PUBS 270. Urban Public Sector Economics 3 sem. hrs.
Examination of municipal finance and budgetary concerns, economics of land development, and fiscal oversight in the public sector. Offered occasionally.

PUBS 271. Economics and Budgeting of Policing 3 sem. hrs.
Examination of finance and budgeting concerns, economics and fiscal oversight in a law enforcement agency. Great emphasis on the role of a chief executive of a law enforcement agency as related to budget preparation, submission, operation and tracking. Prereq: Acceptance to the graduate certificate in law enforcement leadership and management.

PUBS 281. Police Leadership and Ethics 3 sem. hrs.
Analyzes contemporary theories of law enforcement leadership with an emphasis on the application of those leadership concepts through the use of case studies and by the analysis of current leadership situations in a law enforcement agency. Strongly focuses on ethics, as the ethical conduct of police leaders greatly determines the ethical conduct of the agency as a whole. Prereq: Acceptance to the graduate certificate in law enforcement leadership and management.

PUBS 290. Urban Research Methods 3 sem. hrs.
Strategies for conducting research in urban settings. Includes the conceptualization, execution, evaluation, and presentation of research projects. Offered occasionally.

PUBS 294. Practicum in Public Service 3 sem. hrs.
Offers the opportunity to gain experience in a community organization. Must be directed by a faculty member.

PUBS 295. Independent Study 1-3 sem. hrs.
Offered every term. Prereq: Cons. of dept. ch. and cons. of prog. dir.

PUBS 296. Capstone Integrative Project 1 3 sem. hrs.
Initial semester of the integrative learning experience. Students must complete both PUBS 296 and PUBS 297 for a total of 6 credits. Students have two options: 1) work on professional project or 2) begin creation of a research article of publishable quality. S/U grade assessment.

PUBS 297. Capstone Integrative Project 2 3 sem. hrs.
Continuation of the integrative learning experience. Students must complete both PUBS 296 and PUBS 297 for a total of 6 credits. Students complete the option they began within PUBS 296: 1) complete a professional project or 2) complete a research article of publishable quality. S/U grade assessment.

PUBS 298. Special Topics in Public Service 1-3 sem. hrs.
Examination of selected urban issues that go beyond the scope of regular course offerings. Offered occasionally.

PUBS 867. Master’s Comprehensive Exam Preparation-Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

PUBS 869. Master’s Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

PUBS 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

PUBS 874. Graduate Fellowship – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

PUBS 876. Graduate Assistant Research – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

PUBS 881. Thesis Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

PUBS 883. Thesis Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

PUBS 884. Professional Project Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

PUBS 885. Professional Project Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

PUBS 886. Professional Project Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

RELIGIOUS STUDIES (REST)
See THEOLOGY (THEO)

SOCIAL AND CULTURAL SCIENCES (SOCs)

Chair and Associate Professor: Jones Professor: Buckholtz, Holstein, Kehoe (Emeritus), Miller, Moberg (Emeritus) Associate Professor: Coles, Farkas, Metz (Emeritus), Peterson, Sullivan, Zevitz Assistant Professor: Caiin, Hinojosa, Moon, Stroshain, Wheelock Adjunct Assistant Professor: Crane Note: Faculty members and their ranks are for the 2007–2008 academic year.

The Department of Social and Cultural Sciences does not offer graduate degree programs. Faculty members do participate in some graduate degree programs offered under other administrative auspices. In addition, certain upper division undergraduate courses in the Department of Social and Cultural Sciences have been approved for graduate credit and may be taken, as appropriate, by graduate students in other graduate programs. To earn graduate credit for an upper division course, students must have the approval of their major departments and must complete extra work in the course beyond that required for undergraduate credit.
COURSE DESCRIPTIONS

UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:

**Anthropology (ANTH)**

- **ANTH 105.** Archaeology and Prehistoric Cultures 3 sem. hrs.
- **ANTH 109.** Language and Culture 3 sem. hrs.
- **ANTH 110.** Human Geography 3 sem. hrs.
- **ANTH 111.** Economic Anthropology 3 sem. hrs.
- **ANTH 112.** Anthropology of Religion 3 sem. hrs.
- **ANTH 116.** Culture Change and Development 3 sem. hrs.
- **ANTH 121.** Native Peoples of North America 3 sem. hrs.
- **ANTH 122.** Contemporary Latin America 3 sem. hrs.
- **ANTH 125.** People and Cultures of the Middle East 3 sem. hrs.
- **ANTH 126.** European Cultures and Peoples 3 sem. hrs.
- **ANTH 129.** Urban Anthropology 3 sem. hrs.
- **ANTH 130.** Women and Men in Cross-Cultural Perspective 3 sem. hrs.
- **ANTH 141.** Prehistory of North America 3 sem. hrs.
- **ANTH 142.** Prehistory of South America 3 sem. hrs.
- **ANTH 145.** Archaeology of Complex Societies 3 sem. hrs.
- **ANTH 148.** Archaeological Fieldwork 3 sem. hrs.
- **ANTH 151.** Human Osteology and Odontology 3 sem. hrs.
- **ANTH 191.** Theory and Practice in Anthropology 3 sem. hrs.
- **ANTH 196.** Seminar in Anthropology 3 sem. hrs.
- **ANTH 198.** Special Topics in Anthropology 3 sem. hrs.

**Criminology and Law Studies (CRLS)**

- **CRLS 104.** Methods of Criminological Research 3 sem. hrs.
- **CRLS 133.** Constitutional Law 3 sem. hrs.
- **CRLS 151.** History and Philosophy of Crime and Punishment 3 sem. hrs.
- **CRLS 152.** Juvenile Delinquency/Juvenile Justice 3 sem. hrs.
- **CRLS 155.** Criminological Theory 3 sem. hrs.
- **CRLS 156.** Corrections: Prisons, Probation, and Parole 3 sem. hrs.
- **CRLS 157.** Police and Society 3 sem. hrs.
- **CRLS 158.** Victimology 3 sem. hrs.
- **CRLS 159.** Police Organization and Administration 3 sem. hrs.
- **CRLS 160.** Ultimate Penalties in the Criminal Justice System 3 sem. hrs.
- **CRLS 161.** Victim Services and Policies 3 sem. hrs.
- **CRLS 162.** White Collar Crime 3 sem. hrs.
- **CRLS 163.** Criminal Violence in America 3 sem. hrs.
- **CRLS 164.** Organized Crime 3 sem. hrs.
- **CRLS 165.** Comparative Justice Systems 3 sem. hrs.
- **CRLS 166.** Clinical Criminology 3 sem. hrs.
- **CRLS 167.** Women, Crime, and Criminal Justice 3 sem. hrs.
- **CRLS 182.** Criminal Court Process 3 sem. hrs.
- **CRLS 185.** Financial Crime Investigation 3 sem. hrs.
- **CRLS 188.** Criminal Investigation 3 sem. hrs.
- **CRLS 189.** Evidence 3 sem. hrs.
- **CRLS 198.** Special Topics in Criminology and Law 3 sem. hrs.

**Sociology (SOCI)**

- **SOCI 122.** Sociology of the Life Course 3 sem. hrs.
- **SOCI 123.** Self, Language, and Social Interaction 3 sem. hrs.
- **SOCI 124.** Behavior Patterns of Youth 3 sem. hrs.
- **SOCI 125.** Sociology of Aging 3 sem. hrs.
- **SOCI 127.** Sociology of Community 3 sem. hrs.
- **SOCI 128.** Sociology of Human Values 3 sem. hrs.
- **SOCI 131.** Urban Sociology 3 sem. hrs.
- **SOCI 133.** Culture, Health, and Illness 3 sem. hrs.
- **SOCI 134.** Sociology of Religion 3 sem. hrs.
- **SOCI 135.** Sociology of Work and Occupations 3 sem. hrs.
- **SOCI 136.** Sociology of Education 3 sem. hrs.
- **SOCI 137.** Complex Organizations 3 sem. hrs.
- **SOCI 151.** Sociology of Mental Illness 3 sem. hrs.
- **SOCI 152.** Juvenile Delinquency/Juvenile Justice 3 sem. hrs.
- **SOCI 154.** Law and Society 3 sem. hrs.
- **SOCI 156.** Social Inequality 3 sem. hrs.
- **SOCI 167.** Women, Crime, and Criminal Justice 3 sem. hrs.
- **SOCI 168.** Political Sociology 3 sem. hrs.
- **SOCI 182.** Comparative Sociology 3 sem. hrs.
- **SOCI 183.** Population 3 sem. hrs.
- **SOCI 186.** Social Change 3 sem. hrs.
- **SOCI 188.** Topics in Sociological Theory 3 sem. hrs.
- **SOCI 189.** Sociological Practice 3 sem. hrs.
- **SOCI 196.** Seminar in Sociology 3 sem. hrs.
- **SOCI 198.** Topics in Sociology 3 sem. hrs.
Social Welfare and Justice (SOWJ)

SOWJ 170. Family Counseling and Therapy 3 sem. hrs.
SOWJ 178. Faith, Justice, and Social Change 3 sem. hrs.

SPEECH-LANGUAGE PATHOLOGY (SPLA)
Chair and Associate Professor: Korabic
Director of M.S. Program and Associate Professor: Long
Professor: W. Trotter (Emeritus)
Associate Professor: Bhatnagar, Moller (Emerita)
Assistant Professor: Berry, Gorman, Moyle
Clinical Coordinator: Podewils
Clinical Instructor: Berman, Erdman, Hallen, Krueger, Puglisi-Dregnan
Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREES OFFERED
Master of Science, students are admitted under Plan B (non-thesis option) but may request Plan A (thesis option); Certificate

SPECIALIZATIONS
Master’s: None
Certificate: Bilingual English-Spanish

PROGRAM DESCRIPTIONS

MASTER’S DEGREE PROGRAM
The speech-language pathology program, leading to the master of science degree, is offered through the Department of Speech Pathology and Audiology and is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association (CAA-ASHA). The program’s mission is dedicated to preparing students for the field of communication disorders. Since voice, fluency, articulation, language or hearing impairments may interfere with a clinician’s ability to effectively treat persons with communication impairments, we encourage students in our program with such impairments to seek treatment.

ENGLISH PROFICIENCY
Our department supports the position of the American Speech-Language-Hearing Association in encouraging persons of diverse backgrounds to enter the field of communication disorders. All students in the Department of Speech Pathology and Audiology must provide evidence of adequate written and verbal communication skills in Standard American English necessary to meet academic and clinical requirements. Non-native speakers of English will work closely with their advisers throughout the course of their study toward establishing this proficiency prior to enrollment in clinical practicums. Students who speak with accents and/or dialects may seek assistance in improving these skills at the recommendation of department instructional staff.

BACHELOR’S-MASTER’S PROGRAM
The Department of Speech Pathology and Audiology offers early admission into its master of science degree program in speech-language pathology to Marquette University students majoring in speech pathology and audiology. Students can apply for admission to this program in the second semester of their undergraduate junior year. Students accepted into the undergraduate program are eligible to enroll in up to 12 credits of speech pathology and audiology (SPPA) course work that carry graduate credit during their senior year. Credits obtained for these courses can be used to fulfill both undergraduate and graduate degree requirements. Once students inform the Graduate School of their completion of their undergraduate degree requirements, their graduate admission as a regular degree status student is activated. Students interested in this program can obtain further information and an application from the Speech Pathology and Audiology Department office.

MASTERS’ REQUIREMENTS
Students are admitted to the program in Plan B, but may transfer to Plan A with approval from the Graduate School and the SPLA program.

FOR BOTH PLAN A AND PLAN B, ONE HALF OF THE COMPLETED COURSE WORK MUST BE IN 200-LEVEL COURSES ACCEPTABLE FOR GRADUATE CREDIT ONLY.

THESIS PROGRAM (PLAN A)
A student must complete a minimum of 40 credit hours of course work, plus six credit hours of thesis work, pass a written comprehensive examination, and submit an approved thesis.

NON-THESIS PROGRAM (PLAN B)
A student must complete a minimum of 46 credit hours of course work and pass a written comprehensive examination.

REQUIRED COURSE WORK
A student seeking the master of science degree in speech-language pathology must complete the following courses, or their equivalents, at the graduate or undergraduate level:

SPPA 143 Stuttering and Other Fluency Disorders
SPPA 152 Procedures in Medical and School Settings
SPPA 158 Diagnostic Methods in Speech-Language Pathology
SPPA 244 Voice Disorders I

In addition, the following courses are required at the graduate level:

SPPA 241 Child Language Intervention Issues
GRADUATE COURSES:

Speech Pathology and Audiology (SPPA)

Includes basic information pertaining to current theories of language impairment in children. A detailed examination of the linguistic characteristics typical of children with primary and secondary language impairments is provided along with issues concerning the differential diagnosis of children with language disorders. Information pertaining to both theoretical and applied aspects of language intervention from infancy through adolescence is provided. Issues pertinent to assessment and intervention with multicultural populations are embedded in the lecture material throughout the semester. Offered fall term.

SPPA 242. Traumatic Brain Injuries 3 sem. hrs.
Surveys communicative/cognitive disorders subsequent to head trauma. Topics include: neurophysiology of brain functions, linguistic and cognitive deficits, assessment and management of patients with closed-head injuries. Offered summer term.
Prereq: SPPA 247 and SPPA 249.

SPPA 243. Dysphagia 3 sem. hrs.
Anatomy and physiology of the normal swallow in adults; anatomic and physiologic disorders affecting the process of swallowing (dysphagia) with emphasis on radiographic and bedside diagnostic and treatment procedures. The class will include a lab experience and analysis of videofluoroscopic studies of the swallowing process. Offered summer term.

SPPA 244. Voice Disorders 1-3 sem. hrs.
An in-depth examination of normal and pathological voice. Topics considered include: forces producing phonation, measures of glottal function, and the effect of pitch, intensity and other variables on vocal function. Emphasis on the diagnosis and treatment of voice disorders using clinical instrumentation. Offered fall term.

SPPA 245. Aging Voice and Speech: Implications for Medical Speech Pathology 3 sem. hrs.
An examination of rehabilitative techniques for laryngectomized individuals including esophageal voice production, artificial laryngeal devices, surgical-prosthetic speech rehabilitation techniques, psychosocial intervention, surgical procedures for subtotal and total laryngectomy, and research in alaryngeal communication. Clinical practicum experience with laryngectomy clients is included. In addition, special topics related to laryngeal voice disorders are addressed via in-depth discussion of current research. Offered spring term.

SPPA 246. Craniofacial Speech Disorders 3 sem. hrs.
Intended to provide a background in craniofacial speech disorders. Will begin with a review of embryological development of the head/face, craniofacial syndromes and their etiologies, and the anatomy and physiology of the velopharyngeal mechanism. The importance of “team care” and the role of the various disciplines on the craniofacial team will be discussed. Both instrumental and non-instrumental assessment techniques will be presented. Intervention will focus primarily on adapting traditional and phonological approaches to the treatment of craniofacial speech disorders. Offered spring term. Prereq: SPPA 142 or equiv.

SPPA 247. Neurological Bases of Speech and Language Disorders 3 sem. hrs.
Focuses on fundamentals of neuroscience as it relates to human behavior. Areas discussed include: clinical neurology, neuroanatomy and physiology, neuroembryology, neuroradiology, neurosurgical principles, sensorimotor systems and their applications in the assessment and management of neurogenic communicative disorders. Offered fall term.

SPPA 248. Neuromuscular Disorders 3 sem. hrs.
A survey of the etiology, symptomatology and clinical management of major neuromuscular and organic articulation disorders. Topics discussed include dysarthria and apraxia. Offered spring term.
Prereq: SPPA 247.

SPPA 249. Aphasia 3 sem. hrs.
A comprehensive review of neurogenic disorders of adult language. Topics discussed include: differential diagnosis of aphasia, linguistic analysis of different aphasic syndromes, clinical testing, and rehabilitation. Differential diagnosis of language disturbances associated with dementia and right/left hemispheric pathologies will also be discussed. Offered fall term.
Prereq: SPPA 247, which can be taken concurrently.

SPPA 252. Student Teaching-Speech Pathology 3 sem. hrs.
Speech pathology practicum in a school setting. Offered every term. S/U grade assessment.
Prereq: SPPA 152 and SPPA 158. Fee. Use of private car possibly required for student teaching affiliations inaccessible to public transportation. Student is responsible for transportation costs.

SPPA 253. Practicum in Speech Pathology in the Campus Clinic 1 sem. hr.
Prereq: Regular degree status.

SPPA 254. Practicum in Speech Pathology at Affiliated Centers 3 sem. hrs.

Presentation of challenging cases in communication/swallowing disorders. Participation in the campus Diagnostic Clinic in speech and language disorders. Additional credit (1 credit) available for students doing additional diagnostic work off-campus and on campus in the Speech and Hearing Clinic. S/U grade assessment.
Prereq: SPPA 158.
Deals with certain problems met when attempting to habilitate or rehabilitate children and adults who have essentially normal hearing for whom speech is unlikely to be adequate for at least some communicative purposes (either temporarily or permanently). Intended to acquaint participants with the gestural and instrumental augmentative communication strategies that have been developed to provide them with the information necessary to both select the most advantageous strategy for a particular client and teach him or her how to use it. Offered spring term.

Methodologies involved in identifying, formulating, and answering questions relevant to the impacts of diagnostic and therapeutic programs on persons who have communicative disorders. Offered spring term.

SPPA 265. Intervention Issues with the term.
who have communicative disorders. offered spring and answering questions relevant to the impacts advantageous strategy for a particular client and the information necessary to both select the most instrumental augmentative communication strat-
cative purposes (either temporarily or permanently). unlikely to be adequate for at least some communi-
have essentially normal hearing for whom speech is
to habilitate or rehabilitate children and adults who
deals with certain problems met when attempting
screening, assessment and family-based interven-
tion issues specific to P .l. development,
of the birth-to-three child. emphasizes identification
Prereq: sPPa 142 or equiv.

SPPA 294. Special Institute/Workshop/
Project 3 sem. hrs.
Offered occasionally.

SPPA 295. Independent Study 1-3 sem. hrs.
Offered every term.
Prereq: Cons. of dept. ch. and cons. of SPPA M.S. dir.

SPPA 299. Master’s Thesis 1-6 sem. hrs.
Offered every term. S/U grade assessment.
Prereq: Cons. of dept. ch., cons. of SPPA M.S. dir., and approved thesis outline and establishment of a thesis committee.

SPPA 867. Master’s Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch. and cons. of SPPA M.S. dir.

Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch. and cons. of SPPA M.S. dir.

SPPA 869. Master’s Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch. and cons. of SPPA M.S. dir.

SPPA 878. Field Placement Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch. and cons. of SPPA M.S. dir.

SPPA 879. Field Placement Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch. and cons. of SPPA M.S. dir.

SPPA 882. Thesis Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch. and cons. of SPPA M.S. dir.

SPPA 883. Thesis Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of dept. ch. and cons. of SPPA M.S. dir.

THEOLOGY (THEO)/REligious Studies (REST)

Chairperson and Associate Professor: Laurence Assistant Chairperson and Associate Professor: Dempsey
Professor: Carey (William J. Kelly, S.J., Chair), Coffey (Emeritus), Doran (Doert Chair), Fahey (Emeritus), Galtzyn, Hagen (Emeritus), Kurs, Long, Maquire, Muenster (Emeritus), Schultenover, Wood Associate Professor: M. Barnes, Dabney, Del Colle, Duffey, Hills, Hughson, W. J. Kelly (Emeritus), Lysaught, Massingale, Masson, Mattix, Pace, Schmitz, Zemler-Czewski Assistant Professor: Lehnert, Morales, Mueller, Nussberger, Orman, Orme, Richaefler Visiting Professor: Wriedt Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREES OFFERED

THEOLOGY
Master of Arts in Christian Doctrine (M.A.C.D.)
Master of Arts in Theology (M.A.) students are admitted under Plan B (non-thesis option) but Plan A (thesis option) is also offered

RELIGIOUS STUDIES
Doctor of Philosophy

SPECIALIZATIONS
M.A.C.D.: None
M.A.: Biblical Theology, Historical Theology, Systematic Theology
Ph.D.: Biblical Theology, Historical Theology, Systematic Theology, Theological Ethics, Theology and Society

PROGRAM DESCRIPTIONS

The Theology Department offers master’s and doctoral programs aimed at giving students an inte-
grated approach to theological studies, emphasizing, within theological specialties, the interaction of bibli-
cal, historical, systematic, and ethical approaches to theology. The programs seek to develop scholars who can make significant contributions to theologi-
cal research and writing and college teachers who can teach a broad range of courses. This broad theological background has enabled program gradu-
ates to enjoy enviable success in securing teaching positions in over 200 colleges and universities, in church work and ministry, and in a variety of other educationally related institutions.

The master of arts in Christian doctrine (M.A.C.D.) focuses on an eccumenical appropria-
tion and communication of Christian doctrine for those teaching in Catholic high schools, for those interested in other religious education or formation programs, and for persons interested in theological enrichment or in serving various other needs in the religious communities.

The master of arts in theology (M.A.) is intended primarily, but not exclusively, for those who intend to pursue a doctoral degree in theology or religious studies. The degree provides professional
competence in the field of theological studies.

The doctor of philosophy in religious studies (Ph.D.) is a terminal academic degree pro-
ducing professional specialists in one of the areas of biblical studies, historical theology, systematics,
and theological ethics, while providing supporting competence in the others as well.

PREREQUISITES FOR ADMISSION

Master of arts in theology (M.A.) applicants should have an undergraduate major in theology (religion, religious studies) or other background (e.g., classics, philosophy) appropriate for graduate study in theology. A minor in philosophy is recommended for those planning to study systematic theology. Ideally, all applicants should have some familiarity with Scripture and basic Christian doctrine. The program offers ample opportunities for making up undergraduate deficiencies. Doctoral applicants should have a master’s degree or its equivalent in theology.

APPLICATION DEADLINES

December 15 Doctoral application files must be complete by this date, including all supporting documents, for fall
admission and financial aid consideration. Applicants will be notified by March 31. Doctoral students may only begin their program (religious studies) in fall.

February 1

Master of arts (M.A.) application files must be complete by this date for fall admission and financial aid consideration. Applicants not competing for financial aid may apply up to May 15. Master's students may only begin their program in fall.

Note: No official deadline exists for the master of arts in Christian doctrine (M.A.C.D.). Applications are reviewed on a rolling basis.

APPLICATION REQUIREMENTS

Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation.
   (Note: For doctoral applicants who are continuing their degree at Marquette, three new letters of recommendation are required.)
4. A short personal statement that includes: reasons for wanting to enter the program, vocational objectives, special areas of interest, and reasons for selecting Marquette's program.
5. GRE scores (General Test only).
6. (For doctoral applicants only) an academic writing sample of no longer than 20 pages.
7. A list of languages spoken or read, with a personal estimate of proficiency in each.
8. (For applicants without a graduate degree) a list of theology courses taken as an undergraduate, including names of teachers, if possible.
9. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

GENERAL INFORMATION

PROFICIENCY EXAMINATION

All students entering the doctoral program are required to take the master's Proficiency Examination approximately two weeks before beginning their program. Students receiving a master's degree in theology from Marquette University take the Proficiency Examination as part of their master's degree requirements.

Passing the examination demonstrates a broad, master's level competency — the equivalent of material covered in Marquette's graduate core courses — in each of the three major theological disciplines: Bible, historical theology, and systematic/ethics. The examination helps students and advisers to identify those areas which require additional preparation before beginning doctoral-level course work. This is in keeping with the character of the Marquette doctoral program in which specialization builds upon a sound knowledge of the history of the theological tradition.

The examination is in three parts, each of which has two sections.
2. Historical: Origins to Late Medieval, Late Medieval to Early Modern
3. Systematics and Theological Ethics

The three parts, each two hours in duration, are taken at the same examination session. Each part of the Proficiency Examination consists of at least six questions, from which the student must answer three including at least one from each section. All questions are based on the current master's bibliography and questions. Hence, the master's bibliography comprises the core reading for all master's and prospective doctoral students. The bibliography and questions are included in the information sent to prospective doctoral students upon their admittance to the program and are also available upon request. Additional information is available on the department's Web site at www.theo.mu.edu, upon request from the Theology Department or in the department's Procedures and Policies handbook.

Any student who does not demonstrate competency in one or more of the sections on the examination, or after a second examination during the first term, is required to take the related master's level course. These courses do not count toward the final 30 hours required for doctoral-level course work.

MASTER OF ARTS IN CHRISTIAN DOCTRINE (M.A.C.D.) REQUIREMENTS

The M.A.C.D. degree requires 30 credit hours of course work, half of which must be taken at the graduate level (courses numbered 200 or above). Up to 15 credit hours of 100-level courses are acceptable for graduate credit if additional readings and writing assignments are arranged with the respective professor and completed satisfactorily. After successfully completing all course work, students will be required to write a comprehensive examination paper that integrates what they have learned in their courses and applies what they have learned to their career goals. M.A.C.D. candidates have no foreign language requirements.

CORE COURSES AND ELECTIONS

Of the 30 total credit hours of course work, 21 credit hours must be taken from the core courses (THEO 200 [those without a B.A. in theology may take THEO 101 in lieu of THEO 200], THEO 201 [those without a B.A. in theology may take THEO 101 in lieu of THEO 201], THEO 202, 203, 295, 206, and 207), or, in certain circumstances and in consultation with a student's academic adviser, an equivalent from the 100-level courses. For the 9 credit hours of electives (three courses), the student must choose one course in each of the principal theological disciplines: biblical, historical, and systematic.

With the permission of a student's academic adviser, the elective courses can be chosen from the following course ranges:

- One from any of the following biblical courses: THEO 120 to THEO 134;
- One from any of the following historical courses: THEO 135 to THEO 149; and
- One from any of the following systematic courses: THEO 150 to THEO 186.

MASTER OF ARTS IN THEOLOGY (M.A.) REQUIREMENTS

A master's student must complete 30 credit hours of course work, fulfill the department's foreign language requirement, pass a comprehensive examination, and submit an approved research project. After all other requirements have been met, the Proficiency Examination is administered by the Master of Arts Examination Committee. The exam is offered in March, July, and November. A description of the exam is located in the General Information section.

The student may pursue either a Plan A or Plan B course of study. The student is assumed to be in Plan B unless a formal request to transfer to Plan A is approved by the department chairperson and the Graduate School.

The course work requirement for Plan A consists of 18 credit hours of core courses, six credit hours of electives, and six credit hours of work on the research project.

Course work for Plan B consists of 18 credit hours of core courses and 12 credit hours of electives, in addition to completing a non-credit research project.

FOREIGN LANGUAGE REQUIREMENTS

All students in the master of arts program in theology are required to pass a competency examination in German, French, or other modern foreign language recognized as essential to the student's research.

CORE COURSES AND ELECTIONS

For the master's program, a student must take 18 credit hours of required core courses: THEO 200, 201, 202, 203, 204, and 205.

In consultation with an adviser, and not later than the end of the first year of study, each student will choose a specialization (biblical, historical, or systematic). A student in Plan A must complete three credit hours of elective course work in each of the areas not chosen for specialization and six credit hours of work on a research project in the area of specialization. A student in Plan B must complete six credit hours of elective course work in the area of specialization and three credit hours in each of the other two areas.

DOCTORAL REQUIREMENTS

All students entering the doctoral program are required to take the master's Proficiency Examination. For more information, see the General Information section.

A doctoral student must complete a program of study defined on an approved Doctoral Program Planning Form. Within the program of study, the student must take a minimum of 60 credit hours of graduate theology course work, plus 12 credit hours of dissertation work, fulfill the department's foreign language requirement, pass qualifying examinations, and submit and successfully defend a dissertation.

FOREIGN LANGUAGE REQUIREMENTS

All doctoral candidates are required to pass a competency examination in German and either in French or in another modern foreign language recognized as essential to the student's research. Students with a master's degree from an institution other than Marquette are urged to pass their first foreign language examination before course work begins and must do so by the end of their first year in the program. Students must pass both the German and the French or other accepted modern language examinations by the end of their second year in the program. Examinations are administered by the Department of Foreign Languages and Literatures which also offers courses in preparation for the examination.

Candidates who specialize in Old Testament/Hebrew Bible studies must also pass examinations in Hebrew at the advanced level and Greek at the intermediate level of competence. Candidates who specialize in New Testament studies must also pass examinations in Greek at the advanced level and Hebrew at the intermediate level of competence.
Candidates in Historical Theology and in Systematics/Ethics within the Western theological traditions must also pass a competency examination in Latin, Greek, or another ancient language recognized as essential to the student's research. Graduate theology students may use 3 or 6 of their program credits for designated language courses utilizing theological texts at each graduate level (master's and doctoral), with not more than 9 total credits for the course requirements at both levels combined, i.e., 9 of 60 credits of total course work. Language courses for graduate theology students will be taught either in the Department of Theology or in the Foreign Language and Literatures Department utilizing theological texts approved by the Department of Theology in the teaching and in the testing. The Department of Theology will determine the needed levels of competency for each language appropriate to a student's particular area of theological concentration.

CORE COURSES AND ELECTIVES

The doctoral program in religious studies offers five areas of specialization. The doctoral qualifying examination (DQE) will emphasize the student's chosen area of specialization.

A student specializing in biblical theology, historical theology, systematic theology, or theological ethics must complete 36 credit hours of course work in the area of specialization and approximately 12 credit hours of course work in each of two other areas.

A student in the theology and society specialization must complete at least 30 credit hours of theology course work (primarily in one area of specialization: biblical, historical or systematics/ethics) selected around the theology and society theme, a total of at least 18 credit hours in two other areas of theology, and 12 credit hours in one or more related human sciences (anthropology, economics, education, English, history, philosophy, political science, psychology, sociology). These students may be required to take additional course work, beyond the 60-credit-hour requirement, to certify their qualifications in both theology and the allied discipline. Qualifying examinations and dissertation topics for doctoral students in the theology and society specialization are expected to reflect the cross-disciplinary nature of the course work.

THEOLOgy / RELIGIOUS STUDIES

THEO 122. The Bible in Its Interpretive Communities 3 sem. hrs.
THEO 126. The Bible in the Jewish Community 3 sem. hrs.
THEO 129. Women in the Bible 3 sem. hrs.
THEO 134. Special Topics in Biblical Theology 3 sem. hrs.
THEO 135. Theology in the Early Church 3 sem. hrs.
THEO 137. History and Theology of the Christian East 3 sem. hrs.
THEO 140. Theology in the Middle Ages 3 sem. hrs.
THEO 142. Theology in the Reformation Era 3 sem. hrs.
THEO 143. Martin Luther 3 sem. hrs.
THEO 146. Theology in America 3 sem. hrs.
THEO 148. American Catholic Life and Thought 3 sem. hrs.
THEO 149. Special Topics in Historical Theology 3 sem. hrs.
THEO 150. Contemporary Atheism and Theism 3 sem. hrs.
THEO 155. Jesus the Christ 3 sem. hrs.
THEO 157. Theology of the Church 3 sem. hrs.
THEO 158. Sacraments and Christian Life 3 sem. hrs.
THEO 159. The Eucharist 3 sem. hrs.
THEO 163. Protestant Thought and Practice 3 sem. hrs.
THEO 164. Special Topics in Systematic Theology 3 sem. hrs.
THEO 165. Christian Faith and Justice 3 sem. hrs.
THEO 166. Christian Theology in Global Contexts 3 sem. hrs.
THEO 167. Family, Church, and Society 3 sem. hrs.
THEO 168. Theology, Violence, and Nonviolence 3 sem. hrs.
THEO 170. Theology and the Natural Sciences 3 sem. hrs.
THEO 171. Foundations of Ecological Ethics 3 sem. hrs.
THEO 175. Medical Ethics 3 sem. hrs.
THEO 179. Special Topics in Moral Theology 3 sem. hrs.
THEO 182. Survey of World Religions 3 sem. hrs.
THEO 184. Jewish Thought and Practice 3 sem. hrs.
THEO 186. Hinduism, Yoga, and Buddhism 3 sem. hrs.

GRADUATE COURSES:

THEO 202. Origen to Late Medieval 3 sem. hrs.
THEO 203. Late Medieval to Early Modern 3 sem. hrs.
THEO 205. Introduction to Theological Ethics 3 sem. hrs.
THEO 216. Christian Theology in Global Contexts 3 sem. hrs.
THEO 217. Family, Church, and Society 3 sem. hrs.
THEO 218. Theology, Violence, and Nonviolence 3 sem. hrs.
THEO 220. Theology and the Natural Sciences 3 sem. hrs.
THEO 221. Foundations of Ecological Ethics 3 sem. hrs.

GRADUATE COURSES:

THEO 202. Origen to Late Medieval 3 sem. hrs.
THEO 203. Late Medieval to Early Modern 3 sem. hrs.
THEO 205. Introduction to Theological Ethics 3 sem. hrs.

Graduate theology students may use 3 or 6 of their program credits for designated language courses utilizing theological texts at each graduate level (master's and doctoral), with not more than 9 total credits for the course requirements at both levels combined, i.e., 9 of 60 credits of total course work. Language courses for graduate theology students will be taught either in the Department of Theology or in the Foreign Language and Literatures Department utilizing theological texts approved by the Department of Theology in the teaching and in the testing. The Department of Theology will determine the needed levels of competency for each language appropriate to a student's particular area of theological concentration.

Core Courses and Electives

The doctoral program in religious studies offers five areas of specialization. The doctoral qualifying examination (DQE) will emphasize the student's chosen area of specialization.

A student specializing in biblical theology, historical theology, systematic theology, or theological ethics must complete 36 credit hours of course work in the area of specialization and approximately 12 credit hours of course work in each of two other areas.

A student in the theology and society specialization must complete at least 30 credit hours of theology course work (primarily in one area of specialization: biblical, historical or systematics/ethics) selected around the theology and society theme, a total of at least 18 credit hours in two other areas of theology, and 12 credit hours in one or more related human sciences (anthropology, economics, education, English, history, philosophy, political science, psychology, sociology). These students may be required to take additional course work, beyond the 60-credit-hour requirement, to certify their qualifications in both theology and the allied discipline. Qualifying examinations and dissertation topics for doctoral students in the theology and society specialization are expected to reflect the cross-disciplinary nature of the course work.

Course Descriptions

For master's and doctoral students who have not demonstrated adequate competency on the Proficiency Examination, the core courses in each area are prerequisites for all other courses in that area.

All courses have the prerequisite of consent of department chairperson.

Upper Division Courses that May Carry Graduate Credit for M.A.C.D. Students:

THEO 100. Hebrew Scriptures/Old Testament Overview 3 sem. hrs.
THEO 120. Digging the Bible: Archeology and Biblical Studies 3 sem. hrs.

**THEO 206. Christian Doctrine 1** 3 sem. hrs.
A historical and theological introduction to the formation and development of the Christian doctrines of the Trinity, Christology, and Pneumatology. Focuses on the interrelationships of these doctrines.

**THEO 207. Christian Doctrine 2** 3 sem. hrs.
A historical and theological introduction to the Christian doctrines of Church, sacraments, and eschatology. Focuses on the interrelationships of these doctrines with one another and with those in Christian Doctrine 1.

**THEO 208. Intensive Hebrew Grammar** 3 sem. hrs.
Introduction to Biblical Hebrew. Emphasis will be placed on grammar, verb syntax, and vocabulary acquisition.

**THEO 209. Advanced Hebrew** 3 sem. hrs.
Reading of selected narrative and poetic books. Advanced grammar. Offered occasionally.

**THEO 210. Sources of Pentateuchal Thought** 3 sem. hrs.
Detailed study of the first five books of the Old Testament. Exegesis of selected passages. Offered occasionally.

**THEO 211. The Prophetic Movement in Israel** 3 sem. hrs.
Key themes in the prophetic movement. Relation of the prophets to the cult, society, and history of ancient Israel. Offered occasionally.

**THEO 212. Psalms and the Cult of Israel** 3 sem. hrs.
A study of the literary, theological, and historical dimensions of the book of Psalms. Relationship between the psalms and cultic life. Offered occasionally.

**THEO 213. The Deuteronomistic History** 3 sem. hrs.
Formation, structure, and style of the Deuteronomistic History of Israel as it produced them. Questions of Christian origins. Exegesis of selected passages. Greek text used. Offered occasionally.

**THEO 214. The Wisdom of Israel** 3 sem. hrs.
Study of the place of Wisdom Literature in the development of Hebrew thought. Exegesis of selected passages.

**THEO 215. Intertestamental Literature** 3 sem. hrs.
Study of the books of the Old Testament Apocrypha and Pseudepigrapha. Other developments of the period. Exegesis of selected passages. Offered occasionally.

**THEO 216. Advanced Hellenistic Greek Grammar** 3 sem. hrs.
Advanced grammar; readings in texts from 300 BC to AD 300. Emphasis on the language of the New Testament as reflective of continuity and change in Greek vocabulary, morphology, syntax, style, and the historical context and theology of these texts.

**THEO 217. Judaism in the Hellenistic Era** 3 sem. hrs.
Jewish history, institutions, movements, and writings of this period, including Qumran, as they pertain to biblical studies. Jewish interpretation of scripture; midrash; haggadah and halakah; targums; Hellenistic influences on Judaism in Palestine and the diaspora; other related topics. Offered occasionally.

**THEO 218. Apocalyptic Literature 3 sem. hrs.
Origin and development of prophetic and apocalyptic eschatology. The social and religious phenomenon of apocalypticism. The genre “apocalypse” in Jewish and early Christian tradition. Offered occasionally.


**THEO 220. Matthew 3 sem. hrs.
Formation, structure, and style of the Gospel of Matthew. Redactional and literary analysis of the Gospel to reconstruct the theology and the situation which produced it. Exegesis of selected passages. Greek text used. Offered occasionally.

**THEO 221. Intertestamental Literature 3 sem. hrs.
Study of the books of the Old Testament Apocrypha and Pseudepigrapha. Other developments of the period. Exegesis of selected passages. Offered occasionally.

**THEO 222. Intensive Hellenistic Greek Grammar 3 sem. hrs.

**THEO 223. The Johannine Tradition 3 sem. hrs.

**THEO 224. Letter to the Romans 3 sem. hrs.
Background and purpose of this letter. Examination of important Pauline themes, issues, and methods of argumentation. Exegesis of selected passages. Greek text used. Offered occasionally.

**THEO 225. Advanced Hellenistic Greek 3 sem. hrs.
Advanced grammar; readings in texts from 300 BC to AD 300. Emphasis on the language of the New Testament as reflective of continuity and change in Greek vocabulary, morphology, syntax, style, and the historical context and theology of these texts.

Introduction to various Greek-Roman issues and movements which influenced the development of New Testament writings. Study of traditional religion, mystery cults, philosophical schools, astrology and magic, literary genres and tendencies, and other related topics. Offered occasionally.

**THEO 227. Judaism in the Hellenistic Era 3 sem. hrs.
Jewish history, institutions, movements, and writings of this period, including Qumran, as they pertain to biblical studies. Jewish interpretation of scripture; midrash; haggadah and halakah; targums; Hellenistic influences on Judaism in Palestine and the diaspora; other related topics. Offered occasionally.

**THEO 228. Apocalyptic Literature 3 sem. hrs.
Origin and development of prophetic and apocalyptic eschatology. The social and religious phenomenon of apocalypticism. The genre “apocalypse” in Jewish and early Christian tradition. Offered occasionally.


**THEO 230. Matthew 3 sem. hrs.
Formation, structure, and style of the Gospel of Matthew. Redactional and literary analysis of the Gospel to reconstruct the theology and the situation which produced it. Exegesis of selected passages. Greek text used. Offered occasionally.

**THEO 231. Mark 3 sem. hrs.
Formation, structure, and style of the Gospel of Mark. Redactional and literary analysis of the Gospel to reconstruct the theology and the situation which produced it. Exegesis of selected passages. Greek text used. Offered occasionally.


**THEO 233. The Johannine Tradition 3 sem. hrs.

A study of the development of Christian beliefs and doctrines in the patristic age. The following themes are treated: the authority of Scripture and tradition; Father, Word, Spirit, and the divine Triad; the person of Jesus the Christ; sin, redemption and grace; the Church and the sacraments. Offered in cycle with THEO 252-256.

**THEO 235. The Corinthian Correspondence 3 sem. hrs.
Study of I and II Corinthians in the context of Paul’s pastoral relationship to Corinth. Integrity, background and purpose of the letters. Examination of important themes, issues, and methods of argumentation. Exegesis of selected passages. Greek text used. Offered occasionally.

**THEO 236. Shorter Pauline Letters 3 sem. hrs.
Study of one or more of the following letters: Galatians, Philippians, I and II Thessalonians, and Philemon. Background and purpose of these writings. Examination of important Pauline themes, issues, and methods of argumentation. Exegesis of selected passages. Greek text used. Offered occasionally.

**THEO 237. Colossians and Ephesians 3 sem. hrs.
Authorship, milieu, and purpose of these letters. Their relationship to one another and to other Pauline traditions. Review of critical issues and examination of theological themes and methods of argumentation. Exegesis of selected passages. Greek text used. Offered occasionally.

Study of one or more of the following New Testament texts: I and II Timothy; Titus; Hebrews; James; I and II Peter; I, II, and III John; Jude; and Revelation 1-3. Background, purpose, and theology of these writings. Exegesis of key passages. Relationship of these works to selected non-canonical writings. Greek text used. Offered occasionally.

**THEO 239. Aramaic Dialects 3 sem. hrs.
Provides the student who already has a background in Biblical Hebrew with a survey of Aramaic dialects, ranging from Ancient Aramaic to Syriac. Includes biblical Aramaic and Qumran Aramaic. Emphasis on providing the student with the tools to use these dialects in other biblical courses.

**THEO 240. Ecclesiastical Historiography 3 sem. hrs.
The interpretation of the history of the Church and of doctrine as seen by ecclesiastical historians from Eusebius to Harnack; their characteristic approaches and concerns. Recent trends in historiography and historical theology. Offered occasionally.
Survey of theology from Nicea (325 A.D.) to the fall of Constantinople (1453). Particular attention to the most important writers following the Council of Chalcedon, beginning with Dionysius Areopagita and concluding with Gregory Palamas and Nicholas Cabasilas. Focus on the abiding Greek preoccupa-
tion with salvation as delification and its contribu-
tion to the evolution of Eastern Christian thought.
Offered in cycle with THEO 251 and 252-256.
Prereq: Cons. of dept. ch.

A study of the development of Christian theology from Augustine to Thomas Aquinas. Includes the following themes: the character and method of the-
ology after Augustine; monastic theology; the early Eucharistic controversies; reason, logic, and the origins of Scholasticism; 12th century humanism and theology; Scholasticism; and Thomism. Offered in cycle with THEO 251, 252, and 254-256.
Prereq: Cons. of dept. ch.


THEO 256. History of Christian Thought 6: Theology in America 3 sem. hrs.
An analysis of developments in American theol-
ology from Puritanism to the present. Representative theologians of Puritanism, revivalism, enlightenment, progressive orthodoxy, social gospel, modernism, Americanism, and neo-orthodoxy will be examined within the context of American political and social movements. Themes considered: the church, grace, religious liberty, church and state, voluntarism, per-
son of Jesus, tradition, adaptation. Offered in cycle with THEO 251-255. Prereq: Cons. of dept. ch.

THEO 257. The Apostolic Fathers and the Apologists 3 sem. hrs.
A study of the Christian writings of the Second Century, especially Clement of Rome, Ignatius of Antioch, the Epistle of Barnabas, the Didache, the Greek apologists, and Irenaeus, with particular attention to their relation to the Old and New Testaments, the doctrine of the Logos, Church order, and the emerging understanding of orthodoxy and heresy. Offered occasionally. Prereq: Cons. of dept. ch.; may not be taken for credit by students who have taken the same course as THEO 255.

THEO 258. Clement, Origen and the Alexandrian Tradition 3 sem. hrs.
Against the background of Clement's attempt to incorporate Greek modes of thought into Christianity, an extensive study of Origen as a biblical com-
mentator and the first systematic theologian, with some consideration of the neoplatonic tradition in Christianity, Origen's influence on later theology, and the Origenist controversies. Offered occasionally. Prereq: Cons. of dept. ch.; may not be taken for credit by students who have taken the same course as THEO 257.

THEO 259. The Greek Fathers of the Fourth Century 3 sem. hrs.
Reading and study of some of the writings of Athanasius, Basil the Great, Gregory of Nazianzus, Gregory of Nyssa and others, with attention given to the Trinitarian controversies of the Fourth Century, the councils of Nicea and Constantinople, and the rise and fall of Arismism. Offered occasionally. Prereq: Cons. of dept. ch.; may not be taken for credit by students who have taken the same course as THEO 258.

The Septuagint as the first Christian Bible; author-
ity for religious truth in the Apostolic Fathers and the Apologists; evidence for the liturgical use of Christian writings; the apocryphal New Testament; the canon of four gospels; the collection of the Apostles' letters; lists of canonical books; the begin-
ings of exegesis; modern theological speculation on the canon. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 261. Augustine of Hippo 3 sem. hrs.
An intensive study of Augustine's life, writings and thought. Topics include: the influence of neopla-
tonism on Augustine, the stages of his conversion, the implications of the Donatist controversy for his views on the Church and the sacraments, and the controversy with Pelagius on grace and predestina-
tion. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 262. Monastic Theology 3 sem. hrs.
Proposes a reading of the classical "canonical" or early monastic literature. Beginning with a few sess-
sions devoted to sources, the course moves to the early Syrians, notably Aphrahat of Persia and Ephrem Syrus, and then to the better-known and enormously influential "Vita Antonii," the several "Vitae" of Pachomius, the "History of the Monks of Egypt," Basil the Great's "Longer and Shorter Rules," Gregory of Nyssa, Evagrius of Pontus, the "Macarian Homilies," such early fifth-century works as Palladius of Hierapolis' "Lausiac History," John Cassian's "Institutes" and "Conferences," Theodoret of Cyrhys' "History religiosa," and the "Sayings of the Desert Fathers." Concludes with an examination of Benedict of Nursia's "Life" (by Gregory the Great) and "Rule." Offered occasionally. Prereq: Cons. of dept. ch.

THEO 263. Theology in the 12th Century 3 sem. hrs.
Survey of theology in monasteries and cathedral schools, from the Gregorian Reform to Alan of Lille, including: e.g., Anselm of Canterbury, Peter Abelard, Bernard of Clairvaux, the Victorines, Peter Lombard. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 264. The Theology of Thomas Aquinas 3 sem. hrs.
The critical reading of the texts of Aquinas in devel-
opmental sequence with emphasis on the character of the "Summa theologica." Offered occasionally. Prereq: Cons. of dept. ch.

THEO 265. Theology of Bonaventure 3 sem. hrs.
Readings and study of both the academic and the mystical writings of Bonaventure, with special emphasis on the Brevisloquium. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 266. The Study of the Bible in the Middle Ages 3 sem. hrs.
Medieval exegesis from the Carolingian renaissance to the 13th century, with special attention to the rela-
tionship between scripture commentaries and sys-
tematic theologies; the multiple senses of Scripture in theory and practice; authors include; e.g., Rupert of Deutz, Bernard of Clairvaux, the Victorines, Aquinas and his teachers. Offered occasionally. Prereq: Cons. of dept. ch.

Intended to be primarily a close reading of (Pseudo-) Dionysius the Areopagite (ca. 500), whose small corpus of works profoundly influenced subsequent Christian thought. Analyzes his background, his treas-
tises and "epistles," noting his sources and parallels in preceding and contemporary Christian, pagan Neoplatonist, and Jewish mystical literature. Also traces out the Dionysian "trajectory" in selected later Eastern Christian writers. Prereq: THEO 262 and cons. of dept. ch.; or a passing grade on the relevant section of the M.A. Exam.

THEO 268. Symeon the New Theologian — Sources and Heirs 3 sem. hrs.
Examines Symeon the New Theologian (949-1022), the most striking and attractive of the Byzantine spiritual writers. Too often, however, he is treated somewhat in isolation from the sources and currents which feed him. Proposes to spend much time on those sources, beginning with fifth-century writers such as Diodochus of Photiki and Mark the Monk, running through Dionysius, Maximus, and John of the Ladder in the sixth-seventh centuries (with perhaps a look at the "Gaza School" and Palestinian monasticism), and continuing through Symeon, to whom several weeks will be devoted, to the Hesychasts of the fourteenth and fifteenth centuries, notably Gregory of Sinai and Gregory Palamas. Prereq: THEO 250 and cons. of dept. ch.; or a passing grade on the relevant section of the M.A. Exam.

THEO 269. Late Medieval Augustinianism 3 sem. hrs.

THEO 270. Interpretation of the Bible in the Renaissance and Reformation 3 sem. hrs.
Hermeneutical developments from the Victorines. Sources and methods for interpreting historical exegesis. Humanist work on Scripture. The place of the Bible in theology. Luther as doctor of Scripture. Trent and Bible study. Offered occasionally. Prereq: Cons. of dept. ch.
THEO 271. Erasmus 3 sem. hrs.

THEO 272. Luther 3 sem. hrs.

THEO 273. Calvin 3 sem. hrs.

THEO 274. Council of Trent 3 sem. hrs.
The positive contribution of Trent to the history of Christian thought. The “medieval” and “modern” character of the council. Trent’s understanding of the reformers, and the question of “Counter-Reformation.” Trent’s position on Scripture and tradition, and its justification. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 275. PreNicene Ascetical and Mystical Literature 3 sem. hrs.

THEO 276. Theological Thought of the Enlightenment and the Nineteenth Century 3 sem. hrs.
Important theological developments, including movements and thinkers, in both the Catholic and Protestant traditions, in both Europe and America from the beginning of the Modern Era. Possible movements to be covered in this order: Deism, Rational Supernaturalism, Pietism, Romanticism, Speculative Idealism, French Catholic Thought (Traditionalism, Fideism), Oxford Movement, Tübingen School, Protestant Liberalism, Biblical Criticism and Darwinism, Ultramontanism and Neo-Thomism, Roman Catholic Thought and Modernism, Existentialism, and Atheism. Possible figures to be covered more or less in this order: Herbert of Cherbury, Tillotson, Locke, Toland, Tindal, Voltaire, Wolff, Semler, Reimarus, Lessing, Rousseau, Butler, Hume, Kant, Jacoby, Hamann, Herder, Coleridge, Schleiermacher, Busnelli, Hegel, F. C. Baur, Biedermann, John and Edward Caird, Chateaubriand, Maistre, Lamennais, Bautain, Keble, Newman, Williams, Pusey, Dray, Mühler, Strauss, Feuerbach, Marx, Williams, Goodwin, Jowett, Darwin, Moore, Hodge, Abbott, Ritschl, Herrmann, Harnack, Rauschenbusch, Hodge, Warfield, Leo XIII, Mercier, Garrigou-Lagrange, Ollé-Laprunge, Blondel, Labertthonnérié, Loisy, Le Roy, Tyrell, Kierkegaard, Nietzsche. Not all significant movements and thinkers can be covered in one semester. Prereq: THEO 202, THEO 203, and THEO 204, or their equiv.’s (i.e., the master’s-level introductory courses), unless the student has passed out of this material on the M.A. Exam.

THEO 277. Schleiermacher 3 sem. hrs.
A close reading of the most important theological works of F. D. E. Schleiermacher (1788-1834), the “father of modern theology,” with a view to understanding the basic concepts and historical development of Schleiermacher’s thought within the context of post-Enlightenment European philosophical-theological ideas and movements. Prereq: THEO 202 and THEO 203, or their equiv.’s (i.e., the master’s-level introductory courses on the history of theology), unless the student has passed out of this material on the M.A. Exam.

THEO 278. The Development of Roman Catholic Theology from the Enlightenment to the Present 3 sem. hrs.
Focuses on the development of Roman Catholic theology from the Enlightenment to the present. Treats movements such as Romanticism, Gallicanism, Ultramontanism, Newmanism, Modernism, New Theology and Transcendental Thomism, Vatican II and post-Vatican II developments. Despite its historical emphasis, the course treats the thought of selected Roman Catholic theologians: In the 19th century: French theologians Chateaubriand, de Maistre, Lamennais, Bautain; the Tübingen theologians (e.g., Drey, Mohler); Newman and the Oxford Movement; the New Apologitiques (e.g., Blondel, Labertthonnerié); the “Modernists” (e.g., Loisy, Tyrell). In the 20th century: New Theology and Transcendental Thomism (e.g., Roussetol, Marechal, de Lubac, Karl Rahner, Lonergan, Schillebeeckx); Liturgical Movement (e.g., Jungmann, Casel, Dix); Vatican II and aggiornamento (e.g., Congar, Kung, Courtney Murray, Balthasar, Ratzinger); Political and Liberation Theologies (e.g., Matz, Gutierrez, Segundo, Leonard Boff); Feminist Theology (e.g., Schussler Fiorenza, Radford Ruthier, Pilar Aquino). Prereq: THEO 202, THEO 203, and THEO 204, or equiv.’s (i.e., the master’s-level introductory courses), unless the student has passed out of this material on the M.A. Exam.

Possible schools/movements and figures to be covered: Exegetical school (J. Weiss, Schweitzer), Religiousgeschichtliche Schule (Troeltsch), American Empiricism and Naturalism (William James, D.C. Macintosh, Dewey, Wieman), Dialectical Theology (Barth, Brunner, Gogarten, Bonhoeffer), Christian Existentialism (Marcel, Tillich, Butler), Christian Realism (H.R. Niebuhr, Reinhold Niebuhr), the Nouvelle Theologie and Transcendental Thomism (Roussetol, Marechal, de Lubac, K. Rahner, Lonergan, Schillebeeckx), Vatican II and renewed Roman Catholic Theology (Congar, John XXIII), Kung, John Courtney Murray, Balthasar, Ratzinger), Political Theology and Liberation Theologies (Metz, Moltmann, Gutierrez, Segundo, L. Boff, Sobrino). Not all of these movements and figures can be covered in one semester. Prereq: THEO 202, THEO 203, and THEO 204, or equiv.’s (i.e., the master’s-level introductory courses), unless the student has passed out of this material on the M.A. Exam.

THEO 280. Images of the Church through the Ages 3 sem. hrs.
Cover the historical journey of the Christian church as it began and developed through its leading images/symbols/models. Prereq: THEO 202, THEO 203, and THEO 204, or equiv.’s (i.e., the master’s-level introductory courses), unless the student has passed out of this material on the M.A. Exam.

THEO 281. The Roman Catholic Modernist Crisis 3 sem. hrs.
Modernist controversies as the explosion of tensions long building between liberalism and orthodoxy, immanentist and extrinsicist religious thought, and the modernization of the critical history before and after 1870. An interpretation of the episodes in Roman Catholic theology (concerning Loisy, Blondel, von Hugel, Tyrell) that formed the backdrop to the generation of Vatican II. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 283. Theology of Jonathan Edwards 3 sem. hrs.
Examines Edwards’ major theological works and analyzes his chief contributions to American theology. Particular focus on Edwards’ understanding of God, original sin, the atonement, freedom, religious experience, true virtue, providence, and the millennium. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 284. Theology in the American Enlightenment 3 sem. hrs.
Reason has played a significant role in the American understanding of Christianity. Examines how the Enlightenment influenced Christian thought in the United States between 1700 and 1830, paying special attention to the issues raised by critical reason relative to the understanding of revelation, Christ, the supernatural, church and state, and Christians; e.g., the Unitarian W. E. Channing, the Princetonian Presbyterian C. Hodge, and the Catholic J. England. Offered occasionally. Prereq. Cons. of dept. ch.

THEO 285. Theology and Romanticism in the United States 3 sem. hrs.
Examines representative American Protestant and Catholic theologies that were most directly influenced by Romanticism; e.g., the Transcendentalism of R. W. Emerson and T. Parker; the Progressive Orthodoxies of H. Bushnell, the Mercersbury Theology of W. Nevin and P. Schaff, the Ontologism and moderate traditionalism of O. Brownson and I. Hecker, the Confessionalism of P. K. Krauth. Concentration upon the roles these theologians assigned to revelation, divine immensity in history, church and society, religious intuition, ecclesiastical and confessional authority. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 286. American Catholic Theology 3 sem. hrs.
A historical examination of the theologies of American Catholics from John Carroll to John Courtney Murray. Analysis of major pastoral and systematic theologians (e.g., John England, Francis P. Kenrick, Orestes Brownson, Isaac Hecker, John Ireland, John A. Ryan, Gustave Weigel) within the context of American and European theological developments. Examination of American Catholic perceptions of Christology, grace, ecclesiology, church-state relations, social thought, the Bible, and modern sciences with a focus upon the relationship of religion and republicanism. Offered occasionally. Prereq: Cons. of dept. ch.
THEO 287. The Social Gospel in American Theologies 3 sem. hrs. Examinations of the social thought of representa-

THEO 289. Special Institute in Theology 2-6 sem. hrs. Different institutes offered during summer sessions, with the specific topic announced in the Summer Studies Bulletin each time. These are designed to cover various special topics, particularly in Religious Education, but not restricted to that. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 290. Independent Study 1-3 sem. hrs. Offered every term. Prereq: Cons. of dept. ch.

THEO 298. Topics in Biblical Languages 3 sem. hrs. A graduate-level course offered at St. Francis Seminary covering the grammar and vocabulary of Biblical Hebrew or Greek. Prereq: Cons. of dept. ch. May be taken for credit by students enrolled in degree programs in the Theology Department at Marquette University. May not be counted toward the required minimum hours of M.A. or Ph.D. course work.

THEO 299. Master’s Thesis 3-6 sem. hrs. Offered every term. 5/0 grade assessment. Prereq: Cons. of dept. ch.


THEO 302. Atheism and Theism 3 sem. hrs. Exploration of the basic theistic and atheistic options regarding the ultimate meaning and value of human life. Socio-cultural and religious roots of these options. Criteria of truth for determining validity. Examination of representative writings, classical and modern, which discuss these options. Offered occasionally. Prereq: Cons. of dept. ch.


THEO 304. The Structure of Religious Experience 3 sem. hrs. Analysis of the structure of religious experience and related phenomena as explored through a variety of perspectives such as philosophy, sociology, psychology, and theology. The nature and function of religion in human life in relation to the individual and social development of the human person. Offered occasionally. Prereq: Cons. of dept. ch.


THEO 306. Philosophy as Source and Resource for Theology 3 sem. hrs. Critical examination of philosophical texts which have played an important role in framing theological questions and discussions; of representative theological texts for how philosophical issues and presuppositions bear on their interpretation; of representative accounts (historical and contemporary) of the relationship between theology and philosophy. Offered occasionally. Prereq: Cons. of dept. ch.


THEO 311. Christian Theism: The Trinity 3 sem. hrs. Historical and systematic presentation of the doctrine of the Trinity. The development of this doctrine in early Christian history. The notions of substance, person, procession, relation, and communion as they occur in patristic tradition and in later Scholastic theology. Other approaches to this doctrine in the light of contemporary philosophy and theology. Role of this doctrine in contemporary Christian experience. Offered occasionally. Prereq: Cons. of dept. ch.


THEO 316. Soteriology: The Redemption 3 sem. hrs. Specific redemptive function of Jesus Christ and then of the Christian community, the sacraments and the world in which one lives. Grace and human development. Salvation as a personal and societal reality; redemption of the social order. Salvation of the nonbeliever, in particular the relationship between salvation and revelation. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 320. Theology of Bernard Lonergan 3 sem. hrs. Study of major texts of Bernard Lonergan. Themes vary: grace, Trinity, Christology, method. Developments by other authors are also considered. Prereq: Cons. of dept. ch.

THEO 333. Theological Method: Interdisciplinary Implications 3 sem. hrs.
Exploration of methodological interrelations between theology and other academic disciplines in terms of a single theme or related set of themes to be chosen by the instructor. Offered occasionally. Prereq: Cons. of dept. ch.

General outlines of the development and exposition of Catholic moral theology through an examination of historical studies of Christian Ethics written in the 20th century and of selected original texts. Moral teaching in early Christianity; development of systems of moral teaching; the history of casuistry; moral theology as a separate theological discipline; the understanding of the love commandment as found in different periods. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 344. The Protestant Tradition in Christian Ethics 3 sem. hrs.
Study of selected writings of the Reformers on ethical subjects and of selected ethical writings from important Protestant schools of theology. Representatives of sectarian Protestant thought on ethical topics. Contemporary developments in Christian ethics found in the writings of outstanding Protestant thinkers in this century. Offered occasionally. Prereq: Cons. of dept. ch.


THEO 346. Authority, Law, Community, and Church 3 sem. hrs.
Survey of classical and contemporary treatments of the function of law and authority in providing moral guidance for the Christian community. The relation between law and love. The teaching authority of the Church in morals. Offered occasionally. Prereq: Cons. of dept. ch.

Social teaching of the Christian churches. A systematic treatment of issues such as the relation between love and justice. The teachings of the Christian churches on matters such as war and peace; the rights and duties of states and citizens; the rights, duties, and obligations of members of a family; the rights, duties, and obligations of parents with respect to their children. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 381. Special Questions in Old Testament Studies 3 sem. hrs.
Specialized research on topics or problems within and/or related to the Old Testament writings. Offered occasionally. Prereq: Cons. of dept. ch.

Specialized research on topics or problems within and/or related to the New Testament writings. Greek text used. Offered occasionally. Prereq: THEO 201 and cons. of dept. ch.

Specialized research in one area or problem in the history of Christian thought. Specific topic(s) announced. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 384. Special Questions in Systematic Theology 3 sem. hrs.
Specialized research in one area or problem in systematic theology. Specific topic(s) announced. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 385. Special Questions in Moral Theology 3 sem. hrs.
Specialized research in one area or problem in moral theology. Specific topic(s) announced. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 386. Special Questions in Interdisciplinary Studies 3 sem. hrs.
Specialized research in one area or problem in interdisciplinary studies. Specific topic(s) announced. Offered occasionally. Prereq: Cons. of dept. ch.

THEO 390. Teaching Theology at the College Level 1 sem. hr.
Explores effective means of teaching religious knowledge in the liberal arts setting and addresses teaching models and learning styles, design of lesson plans, syllabi, conducting student discussions, and testing methods. Provides opportunities to practice classroom techniques and receive student evaluation. Offered every fall term. S/U grade assessment. Prereq: Cons. of dept. ch. Students with M.A. may enroll in the course after completing one year of graduate course work. Students without M.A. may enroll in the course after two years of graduate course work.

THEO 398. Special Topics in Liturgy and Spirituality 3 sem. hrs.
A graduate level course in selected areas of biblical, historical, or systematic theology offered at St. Francis Seminary. Prereq: Cons. of dept. ch. May be taken for credit by students enrolled in degree programs in the Theology Department at Marquette University. No more than two 398 courses may be included in the required minimum course work in M.A. or Ph.D. programs.

THEO 399. Doctoral Dissertation 0 sem. hrs.
Offered every term. S/U grade assessment. Prereq: Cons. of dept. ch.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

THEO 872. Doctoral Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

THEO 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

THEO 874. Graduate Fellowship – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

THEO 875. Graduate Assistant Teaching – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

THEO 876. Graduate Assistant Research – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

THEO 881. Thesis Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

THEO 883. Thesis Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

THEO 884. Professional Project Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

THEO 885. Professional Project Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

THEO 886. Professional Project Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

THEO 887. Doctoral Dissertation Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

THEO 888. Doctoral Dissertation Continuation – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.

THEO 889. Doctoral Dissertation Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of dept. ch.
TRANSFUSION MEDICINE
(TrME)

Director and Adjunct Associate Professor: Johnson
Adjunct Professor: Aster
Adjunct Associate Professor: Friedman, Gottschall, Puca
Adjunct Assistant Professor: LeMense, Sauer
Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREE OFFERED
Master of Science in Transfusion Medicine. Students are admitted under Plan B (non-thesis option) but Plan A (thesis option) may be requested.

SPECIALIZATIONS
Business Administration, Education, Science

PROGRAM DESCRIPTION
The Transfusion Medicine program is an ongoing collaboration between Marquette University and BloodCenter of Wisconsin. The first 18 credits must be completed at BloodCenter within two and a half years of starting the program. Additional credits are completed exclusively at Marquette University. Students have the option to enroll at Marquette if it does not interfere with course work at BloodCenter.

APPLICATION REQUIREMENTS
Applicants must submit, directly to the Graduate School:
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation.
4. (for international applicants only) GRE scores.
5. (for international applicants only) a TOEFL score or other acceptable proof of English proficiency. 
Note: Applicants must currently be enrolled in the BloodCenter’s independent course of study, the Specialist in Blood Banking program, in order to be eligible to apply for the master of science program in transfusion medicine at Marquette University.

MASTER’S REQUIREMENTS
For Plan B (non-thesis option - default), students must complete 38 or 40 total graduate-level credit hours depending on subspecialty: 18 credit hours in transfusion medicine (TrME) courses, 19 credit hours in the business administration subspecialty or 18 credits in the education or science subspecialties, plus 3 capstone essay credit hours. When the 18 TrME credits are completed at BloodCenter, the student is required to take a national examination.

Students may request Plan A (thesis option) after admission and, if selected, should secure co-direction on their thesis from a member of their subspecialty faculty. The student is required to take at least four core courses and fulfill the requirements for one of the three subspecialties.

CORE COURSES
TrME students are required to take eight core courses and fulfill the requirements for one of the three subspecialties.
TrME 201 Immunohematology (4 cr.)
TrME 202 Infectious Disease in Transfusion Medicine (1 cr.)
TrME 203 Pathophysiology and Transfusion Therapy (4 cr.)
TrME 204 Clinical Investigation: Transfusion Medicine 1 (3 cr.)
TrME 205 Clinical Investigation: Transfusion Medicine 2 (3 cr.)
TrME 206 Topics in Management and Education (3 cr.)
TrME 297 Department Colloquium (0 cr.)
TrME 296 Capstone Integrative Project (3 cr.)

SUBSPECIALTY REQUIREMENTS
1. BUSINESS ADMINISTRATION
   Students are required to take three core courses, four electives, and must meet all prerequisite requirements for the master of business administration classes. Students must also select an area of specialization from the following: organizational management, operations and supply chain management, accounting and finance, marketing, or management information systems. Those students who have academic backgrounds sufficient to waive any of the required courses will be allowed to complete additional elective course work.

   Required Courses (7 credits)
   The required courses ensure a fundamental understanding of the basics of accounting, human resources, and organizational issues in the work place. In addition, the environmental influences courses place a strong emphasis on Marquette’s traditional focus on societal concerns and the social responsibilities of today’s working professional.
   BUAD 201 Economics Foundations (2 cr.),
   BUAD 202 Accounting Foundations (2 cr.),
   BUAD 260 Ethical Issues, Regulatory Environment and Human Resource Management (3 cr.)
   BUAD 263 Variable Topics in the Global Environment of Business (3 cr.)

   Elective Courses (12 credits)
   At least four courses must be completed within a student’s area of specialization from the classes listed below. Note required and elective lists within each area.
   Organizational Management
   Required Course (3 credits)
   BUAD 262 Organizational Behavior
   Elective Course List (9 credits)
   BUAD 264 International Management
   BUAD 266 Leadership, Motivation, and Organizational Change
   BUAD 267 Understanding Entrepreneurship
   BUAD 268 Topics in Human Resource Management
   BUAD 269 Seminar in Organizational Management

   Operations and Supply Chain Management
   Required Course (3 credits)
   BUAD 220 Operations and Supply Chain Management
   Elective Course List (9 credits)
   BUAD 222 Service Operations Management
   BUAD 223 Quality and Process Management
   BUAD 229 Seminar in Operations and Supply Chain Management

   Accounting and Finance
   Required Courses (6 credits)
   BUAD 230 Managerial Accounting
   BUAD 250 Financial Management
   Elective Course List (6 credits)
   BUAD 239 Seminar in Accounting
   BUAD 251 Investments
   BUAD 252 Cases in Financial Policy
   BUAD 253 Fixed Income Markets and Securities
   BUAD 254 Security Analysis and Asset Valuation
   BUAD 255 Financial Derivatives
   BUAD 256 Bank Management
   BUAD 257 Financial Markets
   BUAD 258 International Financial Management
   BUAD 259 Seminar in Finance

   Marketing
   Required Course (3 credits)
   BUAD 240 Marketing Management
   Elective Course List (9 credits)
   BUAD 241 Consumer Behavior
   BUAD 242 Global Marketing Strategy
   BUAD 243 Advanced Multivariate Data Analysis
   BUAD 244 Direct Marketing & e-Commerce
   BUAD 245 Strategic Marketing
   BUAD 246 Customer Relationship Management
   BUAD 247 Marketing and Public Policy
   BUAD 249 Seminar in Marketing

   Management Information Systems
   Required Course (3 credits)
   BUAD 270 Information Technology Strategy
   Elective Course List (9 credits)
   BUAD 272 Decision Support Systems
   BUAD 273 Telecommunications
   BUAD 274 Database Management
   BUAD 279 Seminar in Information Technology

   2. EDUCATION
   Students in this subspecialty are required to take three core courses and three electives. Those students who have academic backgrounds sufficient to waive any of the required courses will be allowed to complete additional elective course work.

   Required Courses (9 credits)
   EDPL 220 Introduction to Educational Inquiry
   OR
   EDPS 261 Introduction to Research Methods,
   EDPL 237 Theories of Learning Applied to Instruction, and
   EDPL 238 Seminar: Analysis of Teaching
elective courses (9 credits)
edPL 215 Introduction to Learning, Assessment, and Technology
edPL 234 Foundations of Curriculum
edPL 240 Supervision of Instruction
edPL 242 The Theory and Design of Curriculum
EDPS 321 Intermediate Research and Statistics
EDPS 322 Measurement and Evaluation
EDPS 362 Educational Psychology of Motivation

3. science
Students in this subspecialty are required to take three core courses and three electives. Those students who have academic backgrounds sufficient to waive any of the required courses will be allowed to complete additional elective course work.

required courses (9 credits)
BIOL 185 Immunobiology (taken for graduate credit),
BIOL 211 Structure and Function of Proteins, and
BIOL 212 Biochemistry and Function of Nucleic Acids

elective courses (9 credits)
BIOL 137 Experimental Cell Biology
(taken for graduate credit)
BIOL 201 Radioisotope Safety
BIOL 213 Signaling, Structure, and Motility of Eukaryotic Cells
BIOL 214 Protein Trafficking and Cellular Homeostasis
BIOL 232 Bacterial Physiology
BIOL 235 Microbiology in the Environment
BIOL 244 Developmental Genetics and Epigenetics
BIOL 255 Eukaryotic Genetics and Chromosome Structure
BIOL 263 Cell and Molecular Biology of Early Development
BIOL 275 Advanced Physiology
BIOL 281 Systems Physiology
BIOL 320 Special Topics in Cell and Developmental Biology
BIOL 323 Special Topics in Biochemistry and Genetics
BIOL 380 Special Topics in Physiology
CHEM 246 Physical Methods of Analysis
CHEM 252 Analytical Separations
CHEM 255 Spectrochemical Methods of Analysis
EDPS 261 Introduction to Research Methods

course descriptions

GRADUATE COURSES:

TRME 201. Immunohematology 4 sem. hrs.
The principles of genetics, biochemistry, and immunology are investigated and applied to blood group serology. Human blood group systems and their relationships to transfusion therapy and disease epidemiology are studied. In addition, the histocompatibility antigens and nomenclature are discussed in relationship to transfusion and transplantation. Offered annually. Prereq: Cons. of prog. dir.

TRME 202. Infectious Disease in Transfusion Medicine 1 sem. hr.
The study of the biologic and physical manifestations of infectious disease as they correlate with the underlying abnormalities and physiologic disturbances. Emphasis will be placed on infectious blood disease identification as well as the FDA, AABB, and CLIA regulation policies and procedures. Offered annually. Prereq: Cons. of prog. dir.

TRME 203. Pathophysiology and Transfusion Therapy 4 sem. hrs.
An advanced course in the pathological mechanisms underlying the production of human disease involving anemias, leukemias, and hemostasis. Transfusion therapy discussions include the proper use of blood products detailing the correct preparation of blood components and the calculation of doses and mechanisms by which the components correct clinical abnormalities. Bone marrow collection and transplantation procedures are analyzed. Offered annually. Prereq: Cons. of prog. dir.

TRME 204. Clinical Investigation: Transfusion Medicine 1 3 sem. hrs.
A comprehensive investigation into the theoretical basis involving the selection process of donors for blood and bone marrow. A thorough understanding of the physiological aspects of blood and bone marrow collection will be gained. Emphasis will be placed on the therapeutic indications and counterindications of transfusion practice. Offered annually. Prereq: Cons. of prog. dir.

A study of the procedures performed as well as a complete understanding of disease process as it relates to serological detection. An in-depth look at the immune system as it relates to transplantation and transfusion medicine. A formal study of the aspects of histocompatibility, red cell serology, platelet immunity, hemostasis, and DNA diagnostics. Offered annually. Prereq: Cons. of prog. dir.

TRME 206. Topics in Management and Education 3 sem. hrs.
A systematic approach in acquiring the fundamentals and principles of planning and implementing an educational program in the clinical setting. Also, preparation of the transfusion medicine practitioner to manage operational and fiscal affairs in a collection facility or transfusion service. Quality management and quality improvement processes will be evaluated. Offered annually. Prereq: Cons. of prog. dir.

TRME 295. Independent Study 1-3 sem. hrs. Offered every term. Prereq: Cons. of prog. dir.

TRME 296. Capstone Integrative Project 3 sem. hrs.
Project and concluding paper that integrates the subspecialty course work with transfusion medicine. Prereq: Cons. of prog. dir.

TRME 297. Department Colloquium 0 sem. hrs.
Scholarly reports on selected topics in transfusion medicine/immunohematology by graduate students. Attendance required of all full-time students. Offered annually. SNC/UNC grade assessment. Prereq: Cons. of prog. dir.

TRME 298. Special Topics in Transfusion Medicine 3 sem. hrs.
In-depth study of concepts, theories, and laboratory techniques in the broad area of transfusion medicine which are not covered in regular courses. Offered every term. Prereq: Cons. of prog. dir.


TRME 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of prog. dir.

TRME 881. Thesis Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of prog. dir.

Fee. SNC/UNC grade assessment. Prereq: Cons. of prog. dir.

TRME 883. Thesis Continuation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of prog. dir.
The Graduate School of Management

INTRODUCTION

LOCATION

The Graduate School of Management is located in David A. Straz, Jr., Hall; Executive Center, Suite 275; 606 N 13th Street; Milwaukee, WI 53233. Mail should be sent to Graduate School of Management, David A. Straz, Jr., Hall; Executive Center, Suite 275; Marquette University; P.O. Box 1881; Milwaukee, WI 53201-1881. The Graduate School of Management's telephone number is (414) 288-7145, the fax number is (414) 288-8078, the electronic mail address is mba@marquette.edu, and the Web site is www.marquette.edu/gsm.

The Academic Calendar for 2008–2009 is located on the inside front and back cover of this bulletin. Deadlines are also posted on the Graduate School of Management's Web site at www.marquette.edu/gsm.

PUBLICATIONS

GRADUATE BULLETIN

The Graduate Bulletin contains information regarding the academic calendar, admissions, degree requirements, fees, regulations, and course offerings. Prospective and current graduate students are responsible for all information contained in this bulletin that is pertinent to graduate study and their specific field. Academic policy and course changes will apply to all students as of the date they become effective, regardless of whether they were in effect at the time the student initially enrolled at Marquette. Graduate students may follow the program requirements of the bulletin that are in effect at the time they submit their application, or any other bulletin used during their enrollment. However, students must abide by only one bulletin's rules. If any exceptions to this policy are required due to length of time between submitting an application and beginning the program, the student will be notified in writing of the applicable bulletin to follow. In order to properly audit a student's academic record for graduation, the student must notify the Graduate School of Management in writing if any bulletin other than the one in effect at the time of application is to be used.

Graduate School of Management students must assume full responsibility for knowledge of the rules and regulations of the Graduate School of Management and the special requirements of their individual degree programs. It is the responsibility of each graduate student to verify and meet the deadlines listed in the Academic Calendar (e.g., for submitting financial aid forms, etc.)

CHANGES TO THE GRADUATE BULLETIN

Marquette University reserves the right to make changes of any nature in its programs, calendar, or academic schedule whenever in its sole judgement it is deemed necessary or desirable. Certain provisions in the bulletin may be in the process of amendment or change. Accordingly, the bulletin is not intended to be relied upon as a statement of the university's contractual
undertakings. The decision of Marquette University as to the interpretation and method of implementation of its rules, regulations, program requirements, schedules, and calendars shall be conclusive and final.

The information in this bulletin and other university bulletins, publications, or announcements may change without notice. Current information is available from the Graduate School of Management.

**SCHEDULE OF CLASSES AND SNAPSHOT**

The Schedule of Classes is published on CheckMarq, the online registration system, found at https://checkmarq.mu.edu/ or www.marquette.edu/registrar/snapshot. All available classes are listed for any term specified. Instructions for using CheckMarq may be found at www.marquette.edu/pdfs/checkmarq/registration_tutorial.pdf. The Graduate School of Management also posts their course offerings on their Web site at www.marquette.edu/gsm.

**FINANCIAL AID INFORMATION GUIDE**

The publication Award Information Guide provides an overview of the available financial aid, debt management, student rights and responsibilities, and federal loan programs. Copies are available at the Office of Student Financial Aid. Information about different types of financial aid available to graduate students may be found in this bulletin under Financial Aid.

**ACCREDITATION**

An educational institution is only as strong as the level of excellence which it demands of itself as well as of its faculty and students. As an institution, Marquette University is accredited by the Higher Learning Commission, a commission of the North Central Association of Colleges and Schools. Marquette University has set consistently high standards for itself which have resulted in accreditation and approval of its academic programs from these additional organizations and associations.

The Graduate School of Management is accredited by The Association to Advance Collegiate Schools of Business International (AACSB-international). This is the highest accreditation level afforded to business programs.

**APPLICATION PROCEDURES**

**APPLICATION PROCESS AND REQUIREMENTS:**

We highly suggest you apply on-line for programs in the Graduate School of Management (GSM). This is the fastest, most efficient method of applying. Effective Fall 2007, on-line applications are required. Paper applications will be accepted only on a need-based, pre-approved basis. Apply on-line at www.marquette.edu/gsm. Click on Apply now.

If you have transcripts from multiple schools and multiple letters of recommendation, you are very strongly encouraged to collect all application materials and mail them together, along with a copy of your online application in one envelope, with the exception of any required standardized test scores. If you have a copy of the test scores, you are encouraged to submit them as well. However, these will be considered unofficial until we receive the official scores from the testing agency. Each letter of recommendation and transcript must be enclosed in its own sealed envelope and signed across the back seal by the issuing party. Applications will not be reviewed for admission until all materials have been received. Submit all application materials by mail to: Graduate School of Management; David A. Straz, Jr., Hall; Executive Center, Suite 275; P.O. Box 1881; Marquette University; Milwaukee, WI 53201-1881 or by courier to Marquette University Graduate School of Management, David A. Straz, Jr., Hall; Executive Center, Suite 275; 606 N 13th Street, Milwaukee, WI 53233.

Students may apply for **Regular Degree**, **Temporary Degree**, or **Non-degree** status. It is recommended that students apply for Regular Degree Status when possible.

Applicants for degree status must submit all materials directly to the Graduate School of Management:

* A completed on-line application form and $50 fee (US currency only).

  **Note:** Application fee is waived for Marquette University alumni.

* Official transcripts from all current and previous colleges except Marquette.
• A letter notifying the Graduate School of Management if the last name (family name) on the transcripts or test scores is different from the name on the Graduate School of Management application.

• Official test scores from the Graduate Management Admission Test (GMAT)

• Either the GMAT or GRE is accepted for the Human Resources and Economics graduate program.

• Essay questions on page 2 of the application form (not required for Economics).

• Resume or job profile.

• Three letters of recommendation for Economics and Executive MBA graduate applicants.

(Additional requirements for international applicants only):

• Three letters of recommendation for Accounting, Business Administration, Engineering Management and Human Resources graduate programs.

• Certified English translation of international transcripts, diploma, etc.

• Official TOEFL score or other acceptable proof of English Proficiency.

For applicants for Temporary (which is valid for one semester only), or Non-degree Status:

• A completed application form and $50 fee.

• Official transcripts from all current and previous colleges except Marquette.

• Essay questions on page 2 of the application form.

• Resume or job profile.

(International applicants on an F-1 visa are not eligible for this status.)

• OFFICIAL TRANSCRIPTS:

Official transcripts detailing previous academic study from all universities or colleges attended, embossed with the school seal, must be sent directly from the issuing institution to the Graduate School of Management. Applicants with course work in progress toward the fulfillment of a degree are required to submit an official final transcript verifying receipt of their degree after completing the course work. All applicants who have transcripts in a language other than English must provide official transcripts accompanied by certified English translations.

Applicants who previously attended Marquette University need not request Marquette transcripts but are required to furnish transcripts from other schools they attended, if applicable.

• LETTERS OF RECOMMENDATION:

Applicants should check their programs section of this bulletin for information about the number of letters of recommendation needed, if any. Letters of recommendation should comment on the applicant's past academic record and potential for future success. Most programs do not require special forms or format. Letters of recommendation must be sent directly to the Graduate School of Management by the author or institution, or be delivered in sealed envelopes with the author's signature across the back flap.

Applicants applying for financial aid through the university (Assistantship and Scholarship awards) must submit three letters of recommendation and check the financial aid area on the application (see the Financial Aid section of this bulletin).

International students must submit three letters of recommendation even if they are not applying for financial aid. These letters should be sent directly to the Graduate School of Management by the author or institution, or be delivered in sealed envelopes with the author's signature across the flap. Letters from former professors or administrators of their former institutions are preferred.

PERMISSION TO DISCUSS THE APPLICANT'S FILE WITH A THIRD PARTY (OPTIONAL):

Applicants who are unable to speak directly with an admissions counselor (due to distance, expense, etc.) may give the Graduate School of Management permission to communicate with a third party. Marquette University requires that this request be made in writing, be signed by the applicant, and specify the name(s) of the third party.

• Additional application materials as requested by the program:

It is the applicant's responsibility to obtain information about these requirements from their Graduate Programs portion of this bulletin or from the director of graduate studies for the proposed program.
TEST DATA:
One or more of the following tests may be required as part of the admission process. Consult the Graduate Programs section of this bulletin or the program requirements at www.marquette.edu/gsm for information specific to the applicant's proposed program. Regardless of the test, all scores must be sent directly from the issuing source to the Graduate School of Management.
Preparation books for these tests can be found at the public library and various bookstores. Free downloads of preparation materials are also available at www.mba.com for the GMAT and at www.gre.org for the GRE.
The Graduate School of Management urges applicants to take tests well in advance of the date the scores are needed. It can take up to six weeks for scores to reach the Graduate School of Management office after the exam. Test scores should be relatively recent; scores more than five years old (two years for TOEFL) may not be accepted.

Graduate Management Admission Test (GMAT)
All Graduate School of Management programs accept the GMAT for admission to the master's programs. The GMAT is a program requirement for business administration, executive business administration, and accounting. For information about this test, contact the Graduate Management Admission Council®, 1600 Tysons Blvd., Ste. 1400, McLean, VA 22102 or visit www.mba.com or call (800) 717-GMAT (4628) for more information.
Test takers must enter the code 1448 in the Score Report Recipient section of the GMAT registration form. It is not sufficient to list Marquette as the undergraduate institution. Failure to enter the correct code will delay the admission decision.

Graduate Record Examination (GRE)
Economics and Human Resources accept GRE (General Test) scores. Applicants are urged to complete this test either in the senior year of undergraduate work or before filing an application for admission. For information about this test, contact the Educational Testing Service, P.O. Box 6000, Princeton, NJ 08541-6000. Visit the Web site www.gre.org or call (609) 771-7670 or (866) 473-4373 for more information.
Test takers must enter the code 5786 in the Score Report Recipient section of the GRE registration form. It is not sufficient to list Marquette as the undergraduate institution. Failure to enter the correct code will delay the admission decision.

Test of English as a Foreign Language (TOEFL)—International Students Only
International students whose language of instruction for their bachelor's degree education (or master's, if applicable) was not English must take the TOEFL. International students should have an adequate command of both written and spoken English, usually evidenced by a TOEFL score of at least 550 on the paper-based version, 213 on the computer-based version. The Internet-based, or iBT, version of TOEFL tests students in four areas: reading, writing, speaking and listening. In general, a minimum score of 20 is required for each of the four sections with an overall minimum score of 80. Applicants for some programs must test with higher minimums and should consult the Graduate Programs section of this bulletin for specific information.
Test takers must enter the code 1448 in the Score Report Recipient section of the TOEFL registration form. Test scores may not be more than two years old. For information about this test, contact TOEFL Services, Educational Testing Service, P.O. Box 6151, Princeton, NJ 08541-6151. Visit www.toefl.org or call (609) 771-7100 for more information.

IMMUNIZATION AND TUBERCULOSIS SCREENING POLICY
In the interests of keeping individual students and the campus community healthy, effective with the fall 2006 term, all newly admitted or readmitted students (after a two or more year absence from the university) at Marquette University — undergraduate, graduate and professional — are required to provide proof of certain immunizations and to complete a screening instrument for tuberculosis.
Proof of immunization, and/or disease as applicable, is required for MMR (measles, mumps, rubella), Varicella (chicken pox) and Tetanus/Diphtheria. The information should be provided in advance of coming to campus by completing a Health History Form and a Tuberculosis Questionnaire that will be sent under a separate mailing by the Student Health Service. The forms are also available on the Student Health Service Web site at www.marquette.edu/shs. The information must be submitted to the Student Health Service, where it will be retained in confidence.
If a student fails to submit the required documentation within 30 days of the start of the student's first term at Marquette, a registration hold will be placed on future registrations. The hold will be removed once the Health History Form and Tuberculosis Questionnaire have been received by the Student Health Service and the immunization requirements have been met.
INACTIVE FILES
Incomplete and inactive admission files are discarded after one year.

INTERNATIONAL STUDENT REQUIREMENTS

DEFINITION OF AN INTERNATIONAL STUDENT
An international student is defined as an applicant who is not a U.S. citizen or permanent resident.

APPLICATION INSTRUCTIONS
As described in the Application Instructions section in this bulletin, international applicants are required to submit an application form, a non-refundable application fee, official transcripts with certified English translations, three letters of recommendation, test data (including the TOEFL), and other materials as required by the program to which they are applying.

ENGLISH LANGUAGE ASSISTANCE
All non-native English speaking graduate assistants will be required to take a language placement examination upon their arrival on campus. Based on the results of the exam, students may be required to enroll in one or more English as a Second Language (ESL) courses in addition to their required course work. ESL courses in writing, reading, listening comprehension, and speaking/pronunciation are offered during the fall and spring terms. (This requirement is in addition to the TOEFL requirement.)

FINANCIAL VERIFICATION AND VISAC REGULATIONS
Upon acceptance to the Graduate School of Management, F-1 students must adequately document their financial resources for the duration of the academic program before a visa will be issued. Financial verification, in the form of an appropriate sponsorship statement and an advance deposit (in U.S. currency) equal to the amount of the first term’s tuition, must be sent to Marquette before the certificate of eligibility for a visa will be issued. Students wishing to have their I-20 express mailed to them must put their request in writing and submit it along with the required advance deposits and financial verification paperwork. The added cost for express mail requests will be subtracted from the advance deposit. The express mail charge is non-refundable. The premium for the first term of health and repatriation insurance required of all F-1 and J-1 students will be deducted from the advance deposit. Students must be prepared to pay any remaining balance of the first term’s tuition when they arrive on campus. The advance deposit will be waived if the student receives a scholarship or other academic award that covers the cost of the first term’s tuition. If a student chooses not to attend Marquette University after the I-20 has been issued, all but $10 (U.S. currency) will be refunded. A written request for a refund must be sent back to the Graduate School of Management with the original I-20.

International students must abide by the regulations of their legal status in the United States regarding their defined educational objectives, academic load, and employment. Most international applicants are eligible only for regular degree status. Those seeking admission for non-degree status must obtain a statement of their legal eligibility from Marquette’s Office of International Education.

MASTER’S DEGREE PROGRAM

ADMISSION REQUIREMENTS
Only applicants whose total record indicates that they can make independent, original and high quality contributions to knowledge will be admitted. Departments reserve the right to limit the number of students accepted within a given time period.

APPLICATION PROCEDURES
Applicants must follow the Graduate School of Management’s application for admission procedures. It is the applicant’s responsibility to obtain information about additional application requirements from the Graduate Programs section found in this bulletin or from the director of graduate studies for the proposed program.
MASTER’S DEGREE REQUIREMENTS

All Graduate School of Management students are admitted to a non-thesis option. Accounting, Business Administration, Executive MBA and Human Resources are all course work based. In addition to required course work, Economics requires a comprehensive examination and master's essay. The minimum credits required to receive a graduate degree within the Graduate School of Management is 30 credits. See program information for specific requirements for each degree.

COMPREHENSIVE EXAMINATIONS (ECONOMICS)

Candidates for a master's degree in Economics must successfully pass a comprehensive examination on their total graduate program of studies and final research essay. If a student fails a major section of the examination, the entire examination is considered to be a failure. This will cause the department to review the student's record, and, if warranted, a second and final examination will be given.

Economics administers its own comprehensive exams. Students are encouraged to contact their program for specific information including deadlines and procedures.

ESSAY

The Economics graduate program requires a master's essay. No formal credit is given for it and no outline is required. Students should confer with their advisers about topics and guidelines for producing an acceptable paper, including requirements for length and references. The final copy of the essay and Essay Approval Form with appropriate signatures must be submitted to the Graduate School of Management office on or before the date listed in the Academic Calendar. Essays must also be acceptable in style and composition. See the Director of Graduate Studies in Economics for details. An essay that does not conform to the directives, including format specifications, will not be accepted by the Graduate School of Management. The university or its departments retain final approved copies of essays for use by the public as reference or instructional materials.

EARNING A SECOND MASTER’S DEGREE

Students already holding a Marquette master's degree may earn a second Marquette master's degree in another discipline following the application procedures stated in this bulletin.

During the first term of study for a second master's degree within the Graduate School of Management, students must plan with their adviser, a program of study to successfully complete the second master's degree. A minimum of 18 credits beyond the potential 12 transfer credits must be taken at Marquette University within the Graduate School of Management program curriculum. All program requirements for the second master's degree must be successfully completed for the second master's degree.

RESEARCH INVOLVING HUMANS OR ANIMALS

A student whose research either on or with humans or animals must receive written approval before undertaking such research. The approval forms for human or animal research may be obtained through the Office of Research Compliance. This approval form and any additional paperwork must be submitted to the Graduate School of Management. Additional information may be found at www.marquette.edu/researchcompliance.

POLICIES OF THE
GRADUATE SCHOOL OF MANAGEMENT

ACADEMIC COURSE LOAD

The maximum academic course load for a graduate student is thirteen semester hours of course work for fall or spring term. Seven hours are the maximum permitted for each of the summer sessions but no more than 13 credits for the entire summer term. Assistants may register for a maximum of ten semester hours each fall or spring term and seven hours for each of the summer sessions. Overloads must have the approval of the Graduate School of Management. Overload requests must be in writing indicating all courses anticipated for the semester and brief rationale for the overload along with your name and student MUID number.
ACADEMIC STATUS

Every graduate student, except those with non-degree status, must be enrolled as a full-time, half-time or less than half-time student each fall and spring term to maintain his or her status. All degree graduate students must enroll in either adviser-approved course work or one of the continuation courses; or a combination of the above. Degree students who fail to enroll for every fall and spring term must contact the Graduate School of Management and may have to apply for readmission to their program. (See Readmission)

A full-time graduate student is defined as one who: a) registers for seven or more credit hours of cumulative* course work in one or more sessions of a fall term, spring term or summer term, or b) registers in the departmental continuation course.

A half-time graduate student is defined as one who: a) registers for four or more but fewer than seven credit hours of cumulative* course work in one or more sessions of a fall term, spring term or summer term, or b) registers in the departmental continuation course.

A less than half-time graduate student is defined as one who: a) registers for fewer than four credit hours of cumulative* course work in one or more sessions of a fall term, spring term or summer term, or b) registers in the departmental continuation course.

* “Cumulative” means adding all credits taken in all sessions within any one term.

Note: During fall and spring terms, if a student takes credits only during part of the term, the status is effective only for the period that the student is registered, not for the entire term. For the summer term, the status attained applies to the entire term regardless of the session(s) in which the credits are taken.

ADMISSION STATUS

Marquette University admits graduate students under four different categories: degree, non-degree, temporary and visiting scholar status.

DEGREE STATUS

When applicants are admitted to a program leading to a master's or doctoral degree, they are said to be in “degree status.” This designation is made after the department and the Graduate School of Management have accepted an application. An applicant may be admitted into one of two categories.

Regular degree status — Designates a student who is admitted to the Graduate School of Management and is working towards a master's degree in a particular program. Students are eligible for tuition scholarships, graduate assistantships and fellowships.

Probationary degree status — This status is awarded to master's degree students only by the applicant's department or the Graduate of Management. Probationary status is assigned when an applicant's academic performance falls below Graduate School of Management standards but there is other evidence to suggest the potential for successful graduate level study. Students admitted on probation are not eligible to receive financial aid from the Graduate School of Management but may apply for financial assistance from the Office of Student Financial Aid. Probationary status is typically removed upon completion of nine semester hours of work with a 3.00 overall GPA or better, no grade lower than a BC and all credits taken at the graduate level. Students failing to have their probationary status removed after completing nine semester hours are not permitted to remain in the Graduate School of Management.

NON-DEGREE STATUS

Non-degree status is seldom utilized in the Graduate School of Management. This status designates any student taking graduate-level classes who is not seeking a master's degree. Two types of non-degree status utilized by the Graduate School of Management are: Temporary admission and Visiting Scholars admission. Students are not eligible to receive financial aid from the Graduate School of Management or from the Office of Student Financial Aid except for Catholic Schools Personnel Scholarships and the Milwaukee Area Teachers Scholarships.

All applicants are required to submit an application, the application fee, certified copies of transcripts and other information as requested by the department. Non-degree applicants seeking admission to degree status must meet the same admission standards as other applicants to a degree program.

Completion of any number of non-degree credits does not guarantee acceptance into a degree program, and, if a non-degree student is subsequently admitted to a degree program, there is no guarantee that credits earned while in non-degree status will count toward the degree. Most
degree programs accept no more than six credits taken as a non-degree student. Grades below B will not transfer to degree programs.

Credits earned as a non-degree student may be considered as graduate credits and certified as such to school boards or other authorities. Non-degree students may register for Graduate School of Management courses if they have met the prerequisites and have department permission. Permission numbers are required for non-degree registrations. The Graduate School of Management typically limits non-degree status to one term.

Probationary status — This status is awarded by the applicant’s department or the Graduate School of Management. Probationary status is assigned when an applicant’s academic performance falls below Graduate School of Management standards but there is other evidence to suggest the potential for successful graduate level study. Probationary status is typically removed upon completion of nine semester hours of work with a 3.00 overall GPA or better, no grade lower than a BC, and all credits taken at the graduate level. Students failing to have their probationary status removed after completing nine semester hours are not permitted to remain in the Graduate School of Management.

TEMPORARY ADMISSION STATUS

Applicants who have applied to a degree or a non-degree program, and meet the minimum admission requirements but have not submitted all the necessary documents may be admitted under temporary status. This admission is valid for only one term. Students must apply for and be admitted as a degree student before being allowed to register for additional courses. There is no guarantee that credits earned while in temporary status will count toward the degree. Grades below B will not transfer to the degree program. Exceptions are rarely made to this policy.

VISITING SCHOLAR STATUS

This status designates a student, seeking a master’s degree at another institution, who takes one or more classes at Marquette University with the intention of transferring the earned credits. Evidence of the student’s status and academic performance at the other institution will be required. Submission of official transcripts is required.

Visiting scholars may apply for federal financial aid through the student’s home school or through Marquette. Students applying for aid through Marquette must request a Consortium Agreement from the Office of Student Financial Aid. When the completed form is returned to Marquette, the student will become eligible for federal financial aid and the Office of Student Financial Aid will process the student’s FAFSA. Students applying for federal aid through their home institutions should consult their home institutions for their application policies and procedures.

ADVISING

The Graduate School of Management sends the name and telephone number of an academic adviser to each student in the letter of admission. A student is required to meet or talk with the adviser before their first registration for classes. The Graduate School of Management strongly recommends that students meet regularly with their advisers; an adviser plays an important role in the graduate student’s course of study. Non-degree and temporary non-degree student must seek advising and permission numbers prior to registration. Students who register for course work without adviser approval assume full responsibility for their registration. Courses that do not satisfy the requirements of their plan of study will not be applied toward the degree.

No classes may be attended for which a student is not properly registered. Proper registration includes the payment of all tuition and fees.

APPEALS

In the Graduate School of Management, the final responsibility to resolve student appeals rests with the dean of the Graduate School of Management (or, when delegated, the executive associate dean). Possible matters of appeal include, but are not limited to, terminations from programs, disenrollments, graduation decisions, and accusations of academic dishonesty. Before an appeal is made to the Graduate School of Management, every effort must have been made to resolve the matter informally, and appeal procedures at the program level must have been exhausted.

Appeals to the Graduate School of Management must be made in writing to the dean of the Graduate School of Management within 15 days of notification of the action being appealed. The appeal must be specific and substantiated. The dean of the Graduate School of Management
reserves the right to appoint a committee to hear the appeal. During an appeal, the student may maintain graduate status. This status is maintained through either course work or continuous enrollment at the discretion of the Graduate School of Management or the student's graduate program. See specific process at www.marquette.edu/gsm.

GRADE APPEALS

Students should make every attempt to resolve grade appeals directly with the faculty member involved. Within the GSM, students unable to resolve the issue with the faculty member should make a formal, written appeal to the Department Chairperson of the department in which the course was taught. If unable to resolve the issue, the student has the right to appeal in writing to the executive associate dean. If still unresolved, the student may appeal to the dean of the Graduate School of Management in writing. The dean's decision is final. All grade appeals shall be heard for the Graduate School of Management by the school or college that teaches the course, following the rules of that school or college. Their decision is final, and no further appeal is available. In schools or colleges with a departmental structure, the appeal procedure usually begins with the department chairperson.

CONTINUATION ENROLLMENT COURSE PROCEDURES

Students enrolling in a continuation course must register to activate their desired status. All continuation classes, which are graded on the SNC/UNC basis, require the consent of the student's department which must be secured prior to registering. The Graduate School of Management offers continuation courses to secure less-than-half-time status for all Graduate School of Management programs, course number 873.

Graduate Assistants may utilize course number 876 RA Continuation if approved by their adviser and associate dean, Graduate School of Management. Follow these procedures:
1. The student and his/her adviser must complete the Graduate School of Management's Continuation Course Enrollment Registration Form and request the section that is most appropriate to the student's needs. An explanation of the student's involvement in non-credit academic work is required. The form is available via our Web site at www.marquette.edu/gsm under Forms.
2. Submit completed and signed form to the Graduate School of Management for review.
3. If approved by the Graduate School of Management, the student will be given a permission number to be used during the registration process.
4. Students are billed by the Office of the Bursar for the continuation enrollment fee.

DEADLINES

All graduate students are responsible for ascertaining and meeting all deadlines listed in the Academic Calendar. This includes, but is not limited to, deadlines for registration, withdrawing from courses, financial aid applications, graduation applications, comprehensive exams, essays, etc.

DISMISSAL

Students that earn an F will be recommended for dismissal. Students placed on probation who fail to earn at least a 3.00 grade point average in the subsequent enrollment period, or who fail to achieve a 3.00 cumulative grade point average in a designated time frame, will be dismissed from the university. Upon receiving a dismissal notice based upon academic grades, a student may appeal the decision directly to his or her program director. Appeals of the program decision should be made in writing to the associate dean of the Graduate School of Management. If unresolved, the student may appeal in writing to the dean of the Graduate School of Management. The dean's decision is final. (See appeals process.)

Dismissed students may apply for readmission through the normal admission process. A period of one semester may be required by the academic department before readmission will be considered. If so required, the department may specify conditions that must be met during this period.

The student must send a written request for readmission to the associate dean of the Graduate School of Management who will, in turn, forward the student's file to the academic program for review and a recommendation on readmission. The request for readmission must include a statement by the student addressing previous weaknesses, steps taken to correct the weaknesses, and an explanation of why the student feels he or she has the ability to succeed in graduate studies.
The student's transcript will indicate dismissal if such should occur. If the student is subsequently granted readmission, the grade point average will continue from the previous calculation and the student must achieve and maintain a 3.00 grade point average within a designated time frame.

**ENROLLMENT CHANGES**

Changes in a graduate student's enrollment are under the jurisdiction of the Graduate School of Management. Most enrollment changes, i.e., adding and withdrawing from courses, can be done using the online registration system. Instructions for adding or withdrawing from courses are available at www.marquette.edu/registrar.

After registration each term, the student must notify the Graduate School of Management directly and complete appropriate forms before any enrollment change will become effective. It is not sufficient for a student to notify the course instructor or someone in the department office. The Course Drop or Withdrawal Form is available via our Web site at www.marquette.edu/gsm under Forms.

**ADDCING COURSES**

Students who wish to add one or more courses after the close of registration must contact the Graduate School of Management at (414) 288-7145 or mba@marquette.edu to 'request to add a course'. Courses are not routinely added. Normally, if a student has missed the first class or the class was otherwise not available to the student, including an existing wait list, the course will not be added to a student record.

**WITHDRAWING FROM (DROPPING) COURSES**

Students who, after the close of registration, decide to withdraw from one or more, but not all, courses in a particular term or summer session must complete the Graduate School of Management’s Course Drop or Withdrawal form available on our Web site at www.marquette.edu/gsm (See also Withdrawing From All Courses, below.) It is extremely important that the student contact the Graduate School of Management as soon as the decision to withdraw is made. Tuition refunds (refer to Refunds and Adjustments) and W (Withdrawal) grades will be based on the date that the student notifies the Graduate School of Management, not on the date that the student last attended classes.

A student who wishes to withdraw from a course with a W (Withdrawal) grade must do so before the deadline date listed in the Academic Calendar. Due to excessive absences or other reasons, including failure to formally withdraw before the deadline, a student may be administratively withdrawn from a course and incur a grade of either ADW (Administrative Withdrawal), UW (Unexcused Withdrawal) or F (Failure).

Students are urged to contact the Graduate School of Management at (414) 288-7145 or mba@marquette.edu if there are questions regarding course withdrawal. When withdrawing from any portion of a course load, students must carefully consider the ability of their remaining enrollment to satisfy any enrollment requirements to which they might be subject due to applications for student loans, loan repayment deferments, visas, etc.

**WITHDRAWING FROM ALL COURSES**

Students enrolled for one or more classes who, after the close of registration, decide to discontinue study for the term must notify the Graduate School of Management via the Course Drop or Withdrawal form available on our Web site at www.marquette.edu/gsm, and request a complete withdrawal from all courses. The same rules, procedures, and cautions for partial withdrawals also apply to complete withdrawals. Withdrawing from all courses will not automatically withdraw a student from a graduate program, but it might affect the student's eligibility to register in subsequent terms.

**GRADING SYSTEM**

The following letter grades and their achievement equivalents are used by instructors in the Graduate School of Management to evaluate a student's performance in a course. Grade points corresponding to each letter grade determine a student's academic average and eligibility to graduate. Each grade, A through F, has a specific grade point value. The grade points earned in any course equal the grade point value of the grade multiplied by the number of semester hours credited. The grade point average (GPA) is found by dividing the total grade points earned by the total number of semester hours credited in those courses for which grade points have been
 assigned. Determination of the cumulative GPA will be based on all courses taken during the
student's graduate career, including prerequisite and repeated courses, if any. Note: Credits that
are accepted for a Marquette degree, if transferred from another university, will not be included
when calculating the student's grade point average.

All graduate students must maintain a grade point average of at least 3.00 to graduate. (For
the effect of BC, C, F, UW and U grades, refer to Academic Review.) Graduate students may
not be assigned a CD or a D grade in any course whatsoever, including undergraduate courses.
Graduate courses are not repeated for a higher grade.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Achievement</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Superior</td>
<td>4.00</td>
</tr>
<tr>
<td>AB</td>
<td></td>
<td>3.50</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3.00</td>
</tr>
<tr>
<td>BC</td>
<td></td>
<td>2.50</td>
</tr>
<tr>
<td>C</td>
<td>Minimally acceptable on a limited basis for graduate credit</td>
<td>2.00</td>
</tr>
<tr>
<td>CD</td>
<td>Not approved for graduate students</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Not approved for graduate students</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>0</td>
</tr>
</tbody>
</table>

Grade points are not affected by the following grades:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Circumstance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADW</td>
<td>Administrative Withdrawal; student was withdrawn from the course for administrative reasons, as determined by the university via a dean's decision, a formal hearing and/or appeal process.</td>
</tr>
<tr>
<td>AU*</td>
<td>Audit.</td>
</tr>
<tr>
<td>CR</td>
<td>Credit; equivalent of C work or better.</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete; assigned on a pre-arranged basis, to allow completion of course assignments other than the final examination; the student's performance in the course must merit this exception otherwise, the instructor will assign either a grade of F; or a passing grade that reflects both the quality of the work completed and the significance of the work which has not been completed.</td>
</tr>
<tr>
<td>IC</td>
<td>Course Incomplete; assigned to all students enrolled in a course, clinical, independent study/research, capstone, etc. that will not be completed by the grading deadline for the term in which the course is scheduled; changed to a letter grade by the faculty at the time of completion (no initiation needed by the student).</td>
</tr>
<tr>
<td>IE</td>
<td>Incomplete Extension; assigned by the college office to those students who are granted an extension to the deadline for removal of an I, IX or X grade.</td>
</tr>
<tr>
<td>IX</td>
<td>Incomplete course work and final exam not taken; assigned to a student who has incomplete course work and is absent from the final examination; must meet the criteria for both the I grade and the X grade; a student not qualifying for the IX will be assigned the grade of F.</td>
</tr>
<tr>
<td>NC</td>
<td>No Credit; equivalent of less than C work.</td>
</tr>
<tr>
<td>SNC</td>
<td>Satisfactory completion in a course bearing no credit; mandatory grade for all zero credit bearing courses.</td>
</tr>
<tr>
<td>UNC</td>
<td>Unsatisfactory completion in a course bearing no credit; mandatory grade for all zero credit bearing courses.</td>
</tr>
<tr>
<td>S</td>
<td>Satisfactory completion in a credit bearing competency-based course; equivalent of C work or better.</td>
</tr>
<tr>
<td>SY</td>
<td>A permanent grade indicating satisfactory work completed in the first term of a series of year-long courses, where grades are assigned only in the final course in the series.</td>
</tr>
<tr>
<td>U</td>
<td>Unsatisfactory completion of a credit bearing, competency-based course; equivalent of less than C work.</td>
</tr>
<tr>
<td>UW</td>
<td>Unexcused withdrawal; withdrawal initiated by the faculty or college office when a student registered for a course, never attended and failed to officially withdraw.</td>
</tr>
<tr>
<td>W**</td>
<td>Official withdrawal; withdrawal initiated by the student, with approval of the college office.</td>
</tr>
</tbody>
</table>
WA Withdrawn-Excessive Absences; withdrawal initiated by the faculty or college office due to excessive absences in the course or student is found to be in violation of the “Undergraduate Attendance Policy” section of the Undergraduate Bulletin.

X Completed coursework and final exam not taken; assigned to a student who is absent from the final examination and who might earn a passing grade in the course were he/she to take a delayed examination; both conditions must exist, or the student is assigned the grade of F; student receiving the grade of X must file a written explanation for the absence with his/her college office.

*Carries no graduate credit. Students must register for the course as auditors, attend class meetings regularly, and fulfill such other requirements as may be assigned in writing by the course instructor no later than the second meeting of the class after registering for audit.

**Signifies an official withdrawal with the approval of the dean of the Graduate School of Management.

Note that grades of CD and D are not approved for graduate students, including those in undergraduate courses.

**ADW GRADING**

This grade is assigned by the college office offering the course, and will take precedence over the W, WA or UW grade, should the student withdraw or be withdrawn from a course after the faculty or other university personnel initiated the administrative action which ultimately results in this grade.

**S/U GRADING**

Under no circumstances may the undergraduate S/U option be exercised by a graduate student taking an undergraduate course for graduate credit. Further, graduate students required to take undergraduate courses as prerequisites or to remedy deficiencies may not take those courses for S/U grades, as this option is not available.

However, a few select graduate courses are offered for S/U grades only. S/U graded courses are different than S/U option. Courses of this type usually are limited to special seminar courses. Students should check the individual course descriptions in this bulletin and the grading basis when conducting a class search in CheckMarq to determine whether a course is offered on this basis.

For the effect of U grades, refer to Academic Review.

**GRADE CHANGES**

There are two types of grade adjustments: changing a temporary grade (X, I, IC, IE or IX) to a permanent grade, and correcting a permanent grade.

**TEMPORARY GRADES — I, IC, IE, IX OR X**

Graduate students who do not complete course requirements during the term in which the class is offered may be given one of the following temporary grades after consultation with their instructor: X, when one or more examinations are missed; I, when the course work has not been completed; or IX, a combination of missed examinations and incomplete course work.

The faculty member must submit a grade change form to change an I, IC, IX or X to a permanent grade, or the student must submit the Request for Extension of I Grade Deadline form, found at www.marquette.edu/gsm. Whichever path is chosen, the applicable form must be submitted to the Graduate School of Management before the grade change deadline listed in the Academic Calendar, which is approximately four weeks into the next fall or spring term. For I, IC, IX or X grades accrued during the summer session, they must be changed before the deadline date which is approximately four weeks into the next fall term.

A student unable to complete the outstanding course work by the deadline must request an Extension of Time to complete the course. This is done in writing prior to the deadline, and must be endorsed by the course instructor and submitted to the associate dean of the Graduate School of Management. The letter must include a brief explanation and agenda to complete the course.

It is the responsibility of the student to be aware of the deadline and to submit outstanding academic work to the instructor in time to allow the work to be graded and the grade to be changed. However, it is the responsibility of the faculty member to initiate the grade change procedure once all remaining academic work has been submitted. Grades of I, IC, IE, IX or X that are not resolved by the deadline will become permanent grades on the student’s record. A permanent grade of I will be reflected as a grade of PI on the student’s record.
CORRECTING A PERMANENT GRADE

Changing a permanent grade because of miscalculation on the part of the instructor or a misunderstanding between the instructor and the student, may be initiated by either the student or the instructor. Changing a permanent grade should be done within six months of the end of the term.

GRADUATE CREDIT

A student can earn graduate credit for a course only if a) the course has been approved for graduate credit and b) he or she has been accepted, through an official letter of admission, into the Graduate School of Management. Students taking courses while in non-degree status may request the transfer of credits to their degree program (see Transfer of Credit).

Graduate credit may be earned for undergraduate 100-level courses identified as “upper division courses” in this bulletin (and denoted in Class Attributes when conducting a class search in CheckMarq). Extra work beyond that expected for undergraduate credit is required of students wishing to earn graduate credit for these 100-level courses. Graduate students who take an upper division course but do not want to receive graduate credit for it must advise the Graduate School of Management office, in writing, before beginning the course.

No student may register for a 200-level course unless he or she has been admitted to the Graduate School of Management or has the approval of the student’s home college and the department offering the course. There are no 100-level upper division BUAD courses.

INDEPENDENT STUDY

Independent Study (295) courses provide students the opportunity to study and investigate areas of interest not available through normal course offerings. A 295 course is taken on the recommendation of the student’s adviser and with the approval of the department chairperson and assistant dean of the Graduate School of Management. The approval form and outline, which must be completed for each 295 course, is available in the via the Graduate School of Management’s Web site at www.marquette.edu/gsm. Normally, no more than six credits of 295 course work can be included in a master’s degree program.

INTER-UNIVERSITY VISITATION

Marquette University participates in two programs, detailed below, by which its students may take courses at another university or college in order to expand the breadth of their education.

MARQUETTE-UWM AND MARQUETTE-MEDICAL COLLEGE OF WISCONSIN

Marquette University has agreements with both the University of Wisconsin–Milwaukee and with the Medical College of Wisconsin. The course being taken at the host institution must not be available at Marquette. In no case will more than six credits taken at UWM or MCW be counted toward degree completion at Marquette, unless the courses are taken as part of a joint program. The students must apply for admission to the host institution as a special student; the application fee is waived. A Marquette student must complete an Inter-University Exchange Course Approval and Manual Registration Form, found online at www.grad.mu.edu/future/MUandUWM.shtml (for UWM) or www.grad.mu.edu/future/test1.shtml (for MCW), then get their adviser’s approval, and finally submit the completed form to the Graduate School. This will register the student for the course GRAD 201 (UWM course) or GRAD 202 (MCW course), both of which are variable title and variable credit courses that reflect the title and number of credits of the course at the host institution. The student must also register for the courses at the host institution. Tuition is paid at the home institution for the GRAD 201 or GRAD 202 course. The course at the host institution is tuition-free. Only degree-seeking graduate students in good standing are eligible to participate. This program is not intended for students in joint programs such as bioinformatics, biomedical engineering, and healthcare technology management, where the courses between Marquette and MCW are cross-listed. Interested students should contact the Graduate School of Management office for additional information and enrollment forms.

MIDWEST CATHOLIC GRADUATE SCHOOLS CONSORTIUM

The consortium of Midwest Catholic Graduate Schools (MCGS), which includes Loyola University, Chicago, Ill.; Marquette University, Milwaukee, Wis.; University of Notre Dame, South Bend, Ind.; and St. Louis University, St. Louis, Mo.; has established the protocol whereby a degree-seeking student at one university may take course work at any of the other three universities to apply toward degree requirements at the home institution.
With prior approvals, the student enrolls at the home institution and makes financial arrangements there, but attends classes, on a short-term basis, as a visiting student at the host university. Final grades are forwarded from the host to the home university for listing on the student's permanent record. The following restrictions apply: 1) Participation is restricted to those fields of study which are under the academic jurisdiction of the graduate deans at both the home and the host institutions; 2) Non-degree or temporary students may not participate; 3) The degree-seeking student must have completed at least the equivalent of one full term at the home university before visiting one of the other institutions; 4) A student may gain approval for more than one visitation at more than one host institution, but no more than nine credit semester hours of courses from host institutions can become part of a degree program at the home institution.

To participate, a student must complete, for each course to be taken at a host institution, an Inter-University Visitation Enrollment Form and an Inter-University Exchange Course Approval and Manual Registration Form, both of which require signatures of approval. Because of the paperwork involved and the number of approvals that must be obtained, the student must begin the inter-university visitation application process no later than June 1 for a fall term visitation, October 1 for the spring term, or March 1 for summer sessions. Interested students should contact the Graduate School of Management office for additional information and enrollment forms.

**JESUIT MULTILATERAL AGREEMENT (JESUIT MBA)**

The Society of Jesu (Jesuits) was founded in 1540 by Saint Ignatius of Loyola. It is the largest religious order of the Roman Catholic Church. For centuries, Jesuits have influenced mathematics, business, astronomy, architecture, law, medicine, and most academic pursuits. A primary mission of the Jesuits is education.

In 1996 a group of MBA directors and administrators from Jesuit and Jesuit-friendly universities decided to work together to promote the many benefits of Jesuit business education. This consortium of 30 Jesuit and a subset of Jesuit-friendly schools include some of the most revered names in business education. The collective of resources of these schools provides you with a unique competitive advantage.

Across the United States, twenty three AACSB accredited Jesuit and three Catholic, non-Jesuit universities formed a multilateral agreement. Students in the Graduate School of Management may, if necessary, transfer credits from a member of the multilateral agreement. The student applies for admission at the Jesuit MBA school as a ‘Jesuit Multilateral’ applicant and submits all required application materials for the receiving school. The Graduate School of Management completed the Multilateral Agreement Form along with a letter of ‘good standing’ and forwards this to the receiving school upon written notification from the student. The student benefits with a continued Jesuit education, ability to continue with the Marquette University MBA and not restricted to six transfer credits. Students earn the MBA degree from the school that granted more than 50% of the credits. Additional Jesuit MBA information can be found at www.jesuitmba.org.

**LEAVE OF ABSENCE**

Graduate School of Management degree students who must temporarily discontinue their graduate studies for one or more terms may qualify for an official leave of absence. Students are urged to be extremely cautious in requesting a leave of absence. During the leave period, students do not have enrollment status for purposes such as health insurance, loan deferment, or access to academic facilities on campus, such as library and computer services.

Only written requests that include specific information about why the leave is being requested and the expected date of return will be considered. There is no guarantee that a request will be granted. All leaves must be approved by the department director of graduate studies or chair, and the associate dean of the Graduate School of Management.

Students granted a leave of absence will have their time-to-completion of degree extended by the amount of time granted in the leave of absence.

**READMISSION**

Students who have withdrawn from the university, failed to enroll for one or more academic-year terms, were administratively withdrawn from their program, or who were suspended for any reason must be formally readmitted to the Graduate School of Management before resuming their studies. To be readmitted, students must receive departmental endorsement and complete
a new Application for Graduate School of Management Admission via our Web site at www.marquette.edu/gsm. Furthermore, no application for readmission will be considered for any former student with an outstanding balance of $3,000 or more owed to the university. The associate dean of the Graduate School of Management and the Director of the Master's program jointly decide if a student will be readmitted.

In being readmitted, students face the possibility that previously completed work might not be accepted with the readmission decision, even if taken within the same program. The major department and/or Graduate School of Management may also set readmission conditions on the student's resumption of work toward a degree such as registering for additional course work, retaking examinations, completing the degree within a specified time period, or other appropriate terms.

Requests for readmission from students who have been suspended will be based on many considerations including the applicant's ability, evidence of growth and maturity, credits earned at another institution, and time elapsed since leaving Marquette.

SUMMER STUDIES

During the summer term, Summer Studies offers graduate and selected undergraduate courses that may be taken for graduate credit. These courses are applicable to degrees in all colleges and schools of the university in the following modular formats: two consecutive six-week sessions and four additional sessions longer than the traditional six-week format. Several of the six summer sessions offer short courses varying in length.

MBA courses are offered on and off the Marquette campus during several sessions within the summer term. Domestic and foreign travel programs are offered each summer and provide graduate students with an exciting off-campus study experience. Summer Studies provides an opportunity for graduate students to complete needed course work or accelerate their graduate programs of study.

For information, contact the Graduate School of Management at phone: (414) 288-7145, e-mail: mba@marquette.edu.

TIME LIMITATIONS

Students must complete all requirements for a master's degree within six years of their first term of registration in the program. Students who are unable to complete their degree within the six-year limit may petition the Graduate School of Management for an extension; Request for Extension of Time forms are available online at www.marquette.edu/gsm. To ensure timely consideration, the Extension of Time form should be filed early in the term in which the time limit expires. If the extension is approved, the student is notified of the expectations for progress and completion of the degree. If the extension is denied, the student is terminated from the graduate program.

Failure to complete the program or to obtain an approved extension of time may result in an administrative withdrawal from the program. These students must follow the guidelines for readmission (see Readmission).

TRANSFER OF CREDIT

Limits are placed on the number of credit hours that may be transferred from other institutions in order to protect the integrity of the Marquette degree programs. Only credits directly applicable to a student's Marquette degree program will be considered for transfer, and there is no guarantee that these will be approved. Accounting, Business Administration and Economics require all transfer credits to be from AACSB accredited schools. Students are encouraged to have courses pre-approved for transfer prior to registering for courses outside the Marquette University Graduate School of Management. Credits that are accepted for a Marquette degree, if transferred in from another university, will not be included when calculating the student's GPA. However, credits taken at Marquette in another program, if accepted for transfer into a degree program, will be included in the student's GPA. Only courses in which a grade of B or above has been earned may be transferred for credit into a master's program. Students are strongly urged to consult their advisers before requesting or taking any course for which they will want to transfer credits.

Normally, six credit hours of approved graduate work from an outside AACSB accredited master's program will be transferred with the consent the associate dean of the Graduate School of Management. Exceptions to this limit are rare and must be submitted in writing to the Director of your master's program and the associate dean of the Graduate School of Management. A stu-
dent can anticipate a maximum transfer of credit only in unusual or compelling circumstances. (See the Jesuit Transfer Agreement for exception.) Credits approved for transfer must have been earned within the previous five years at an AACSB accredited school, and will affect the time limits for completing a Marquette program.

Only credits for courses directly comparable in content to the requirements of the current degree program will be considered for transfer, and no credits will be considered until the student has completed the Graduate School of Management's Master's Degree Transfer of Credit Request form, found online at www.marquette.edu/gsm. The student must also have met the following conditions: 1) completed six credits (nine credits if admitted on probation) as a degree-status student in his or her Marquette master's program; 2) taken the courses requested for transfer at the graduate level and for graduate credit; 3) earned a grade of B or above in each of the courses; 4) course must have been completed within five years; and 5) official transcripts are on file in the Graduate School of Management from the institutions involved, if other than Marquette.

Credits approved from a school using a quarter-system will transfer as two-thirds credit each when converted to Marquette's term system. Semester credit equivalents for transfers from schools using a trimester system will vary by school and must be evaluated individually. Students who are less than one credit short of graduation requirements after such transfers will need no additional course work. A student short one full credit or more for graduation must take additional course work.

Graduate level credits earned at Marquette, as a degree student in a different graduate program or as a non-degree student, may transfer following the same request and approval procedures outlined above. Students are responsible for initiating this process. Credits transferred between Marquette programs or statuses are included as part of the credit transfer limit with the exception of the second master's degree. Members of the Jesuit Multilateral Agreement (See Jesuit Multilateral Agreement) may transfer more than 6 credits of pre-approved course work.

UNDERGRADUATE STUDENTS IN GRADUATE COURSES

An undergraduate senior may, with the permission of his or her home college and the department offering the course, register for a 200-level graduate course if the student has a B (3.00) or above average. To register for a graduate course, the undergraduate student must complete the Permission to Enroll in a Graduate School of Management Course form, available online at www.marquette.edu/gsm. Once all signatures of approval have been obtained and the student has received the permission number from the Graduate School of Management, the student must then register for the course online through CheckMarq.

An undergraduate student who enrolls in an upper division (100-level) course (any of those designated for graduate credit in the Snapshot of the Schedule of Classes) with the intention of earning graduate credit that might, subsequently, be transferred to a graduate program, must complete the Permission to Enroll in a Graduate School of Management Course form following the above instructions. The course cannot be taken under the S/U option.

WAIVER EXAMS

Waiver Exams are available for the five foundation courses: BUAD 201 Economics Foundations, BUAD 202 Accounting Foundations, BUAD 203 Mathematics Foundations, BUAD 204 Statistics Foundations and BUAD 205 Managing Information Technology Foundations. Recommended review guides are available on our Web site at www.marquette.edu/gsm. Waiver Exams must be taken with the first year of study as a GSM student. The cost of each waiver exam is $100. The waiver exam may be taken once per subject. Information regarding the waiver exam may be obtained through the Graduate School of Management office at (414) 288-7145 or via e-mail at mba@marquette.edu.

Successful completion of the waiver exam exempts the foundation course. Neither the waiver exam results nor the exemption appear on student transcripts.
DEGREES OFFERED

Master of Business Administration (M.B.A.), including the Executive M.B.A. program
Master of Science in Accounting (M.S.A.)
Master of Science in Applied Economics (M.S.A.E.)
Master of Science in Engineering Management (M.S.E.M.)
Master of Science in Healthcare Technologies Management (M.S.H.T.)

SATISFACTORY PERFORMANCE

All students are expected to maintain satisfactory performance in their progress toward their degree. Accordingly, the graduate program director reviews all student grades at the end of each academic session. This review includes all work that was attempted as well as completed. Students are expected to maintain a grade point average of 3.00 or above for satisfactory performance in and graduation from the M.S.A., the M.B.A., the M.S.A.E., the M.S.H.T., the M.S.E.M., or the M.S. in HMT program. Students that have below average or unsatisfactory work will be sent official notification from the Graduate School of Management. In addition to academic performance, students are expected to display the highest levels of personal and professional integrity as they interact with the university, faculty, staff, and one another. Serious breaches of integrity may subject the student to disciplinary action, including expulsion from the university.

ACCOUNTING (ACCO)

DEGREE OFFERED

Master of Science in Accounting, Plan B only

PROGRAM DESCRIPTION

The master of science in accounting (M.S.A.) program is designed to provide students with the broad range of skills that successful accounting professionals need in today’s complex and changing business environment. Courses emphasize technical knowledge in the functional areas of accounting, stress communication skills, and promote awareness of the accountant’s ethical and social responsibilities. The M.S.A. program meets the American Institute of Certified Public Accountants (AICPA) requirement for individual membership in that organization, and eligibility to take the CPA examination. The M.S.A. program is accredited by the Association for the Advancement of Collegiate Schools of Business (AACSB-International) and reflects the high standards and expectations of that accreditation.

PREREQUISITES FOR ADMISSION

Admission to the M.S.A. program requires: a) a four-year bachelor's degree from an accredited college or university with a major in accounting or equivalent undergraduate course work; b) an acceptable record of academic achievement at the bachelor’s level and in any previous graduate course work; c) acceptable scores on required admission tests; and d) an overall composite profile of admission data (including an evaluation of previous work experience) that predicts success in the program.

APPLICATION REQUIREMENTS

Students may apply for Regular Degree, Temporary Degree or Non-degree status. It is recommended that students apply for Regular Degree Status when possible. The application is online via our Web site at www.marquette.edu/gsm. Then click on Apply Now.

1. A completed application form and fee.
2. Essay questions on the application form.
3. Official transcripts from all current and previous colleges/universities except Marquette.
4. Official test scores from the Graduate Management Admission Test (GMAT).
5. Resume or job profile.
6. (For international applicants only) three letters of recommendation and an official TOEFL score or other acceptable proof of English proficiency.

Note: Temporary non-degree applicants (admission valid for one term only) must submit all of the above, except the GMAT scores.

Students are encouraged to complete all application materials and apply for degree status. Temporary status is valid for one semester only. Temporary non-degree status students are not eligible to continue taking M.S.A. classes beyond one semester without degree admissions. Typically, non-degree admission is not recommended in the M.S.A. program.

All application material should be sent to: Graduate School of Management; David A. Straz, Jr., Hall Executive Center, Suite 275, Marquette University; P.O. Box 1881, Milwaukee, WI 53201-1881

BACHELOR’S-MASTER’S PROGRAM

This five-year program allows students to earn both their master of science in accounting (M.S.A.) and an undergraduate degree from the College of Business Administration. Undergraduate students begin their graduate work in their senior year by taking two graduate level courses. These graduate courses double-count toward the undergraduate and graduate degrees. Should a student be denied admission to the M.S.A. program, the courses will be counted toward the undergraduate degree only. Upon completion of the first term as a master’s candidate, the student must petition their Graduate School of Management program director to transfer the courses taken as an undergraduate to the master’s degree.
To be considered for admission to the five-year program, applicants must formally apply to the Graduate School of Management during their senior year at Marquette University, complete all of the application requirements as listed above, and indicate on their application that they are applying for the five-year program. For information, contact the Accounting Department at (414) 288-7340, or send an e-mail to James.Trebby@marquette.edu.

MASTER'S REQUIREMENTS
The M.S.A. program requires a minimum of 30 credit hours: 18 hours of accounting courses (nine hours required and 9-12 hours of electives) and 9-12 hours of non-accounting courses.

The course work involves six functional areas of accounting: financial, managerial, taxation, systems, auditing, and governmental/not-for-profit.

M.S.A. PROGRAM DETAILS

REQUIRED COURSE WORK
Accounting
ACCO 222 Corporate and Not-for-Profit Reporting Issues
ACCO 233 Auditing: Ethical, Legal, Professional, and Reporting Responsibilities
ACCO 235 Taxation of Corporations and Partnerships

ELECTIVE COURSE WORK
Accounting
(9-12 credit hours required)
ACCO 232 Advanced Cost Management
ACCO 240 Analysis of Corporate Financial Statements
ACCO 241 International Accounting
ACCO 242 Tax Research Seminar
ACCO 243 Accounting Theory
ACCO 244 Accounting Information Systems
ACCO 246 Governmental Accounting
ACCO 247 International Taxation
ACCO 248 State and Local Taxation
ACCO 249 Fraud Examination
ACCO 250 Capstone Case Course in Financial Accounting
ACCO 296 Seminar in Accounting

Business
(9-12 credit hours required)
Select from other graduate-level business (BUAD) courses or, with the permission of the program director, other graduate-level non-business courses excluding BUAD 201-205, 230, 231, 239 and 263.

COURSE DESCRIPTIONS

UPPER DIVISION COURSE THAT MAY CARRY GRADUATE CREDIT:
ACCO 110. Accounting Communications
3 sem. hrs.
ACCO 147. International Taxation
3 sem. hrs.

GRADUATE COURSES:
ACCO 222. Corporate and Not-for-Profit Reporting Issues 3 sem. hrs.
Study of business combinations (mergers, consolidations, and acquisitions of net assets of common stock). Construction of consolidated financial statements, including analysis of inter-company transactions. Introduction of international accounting issues. Accounting for colleges and universities and health care, voluntary health and welfare, and other not-for-profit organizations. Prereq: Enrolled in the Graduate School and ACCO program, and cons. of M.S.A. prog. dir.

Develops an understanding of accounting as a financial information system. Cost accounting is designed to structure financial information so as to assist management in decision making. As a result, course has a decision orientation which is important for students who seek careers in either profit-motivated or not-for-profit organizations. Prereq: Cons. of M.S.A. prog. dir.

ACCO 233. Auditing: Ethical, Legal, Professional, and Reporting Responsibilities 3 sem. hrs.
Focuses on major issues in auditing not addressed in an undergraduate auditing and assurance course. Specific attention is given to the Finance, Inventory, Property, Plant and Equipment and Payroll cycles of the audit engagement, corporate governance, Sarbanes-Oxley Act as well as in depth coverage of audit reporting, review and compilation reports. A major component of the course is the conduct and presentation of the results of an operational audit. Prereq: ACCO 133 or the equiv.; enrolled in Graduate School and ACCO program; cons. of M.S.A. prog. dir.

ACCO 235. Taxation of Corporations and Partnerships 3 sem. hrs.
Partnership and corporation income tax laws studied for proper treatment of various types of income, deductions, the consequences of ownership interests and the application of various tax rates to taxable situations. Prereq: Enrolled in Graduate School and ACCO program.

ACCO 240. Analysis of Corporate Financial Statements 3 sem. hrs.
Provides experience in reading, interpreting, and analyzing corporate financial statements. Specific attention is given to the evaluation methods necessary to assess a firm’s short-term liquidity, long-term solvency flows, capital structure, return on investment, operating performance, and asset utilization. Effects of alternative accounting methods and footnote disclosures. Prereq: Enrolled in Graduate School and ACCO program, and cons. of M.S.A. prog. dir.

ACCO 241. International Accounting 3 sem. hrs.
Overview of managerial and financial accounting issues faced by multinational corporations or firms involved in international business. Issues include diversity of worldwide accounting principles and prospects for uniform international accounting standards, foreign currency transactions and translation inflation, technical accounting methods and the implications of their application, financial disclosures, analysis of financial statements, auditing, investment analysis, risk management, management information systems, performance evaluation, methods of financing, transfer pricing, and taxation. Prereq: Enrolled in Graduate School and ACCO program, cons. of M.S.A. prog. dir. and cons. of dept. ch.

Development of essential tax research skills and their application in the prevailing federal tax environment. The student will learn how to find tax authority, evaluate the efficacy of that authority, and apply the results of research to a specific situation. Prereq: Enrolled in Graduate School and ACCO program, and cons. of M.S.A. prog. dir.

ACCO 243. Accounting Theory 3 sem. hrs.
Analysis of the theoretical structure underlying financial accounting. Emphasis directed toward its development from both normative and descriptive approaches. Relates accounting theory to the basic financial statements and to selected topical areas. Examination of current issues under study by Financial Accounting Standards Board. Prereq: Enrolled in Graduate School and ACCO program, and cons. of M.S.A. prog. dir.

ACCO 244. Accounting Information Systems 3 sem. hrs.
Substantial hands-on involvement in computing environments which enable accountants to be more productive and to provide better service to clients and management. Applications in cost behavior, cost analysis, cost estimation, cost allocations, budgeting, profit planning, capital budgeting, and expert systems. Examination of various approaches to the computerization of the transaction processing cycle, using a suitable software package, with special emphasis on the problems of internal controls. EDP auditing and the accountant’s role in the systems development cycle. Prereq: Enrolled in Graduate School and ACCO program, and cons. of M.S.A. prog. dir.

ACCO 246. Governmental Accounting 3 sem. hrs.
Study of accounting principles for state and local governmental units as promulgated by the Governmental Accounting Standards Board and the related financial reporting and disclosure requirements. Examination of objectives of financial reporting of these entities and the theoretical structure underlying these principles. Introduction to federal government accounting and audits of governmental units. Prereq: Enrolled in Graduate School and ACCO program, and cons. of M.S.A. prog. dir.

ACCO 247. International Taxation 3 sem. hrs.
U.S. Taxation of international transactions and foreign taxpayers. A study of the U.S. and foreign taxation of international commercial transactions involving U.S. and foreign taxpayers, including the taxation of income of U.S. taxpayers operating abroad through branches and subsidiaries; the U.S. foreign tax credit provisions; cross-border asset transfers and related intercompany pricing issues; the U.S. taxation of non-resident individuals, partnerships, associations and foreign corporations; and bilateral and multilateral income tax treaties. Prereq: Enrolled in Graduate School and ACCO program, and cons. of M.S.A. prog. dir.

ACCO 248. State and Local Taxation 3 sem. hrs.
T ax able incidents and multiple taxation under the Commerce Clause of the United States Constitution; current tax developments under the Import-Export clause of the United States Constitution; allocation and apportionment formulas; and multi-state tax
ACCO 249. Fraud Examination 3 sem. hrs.
An analysis of how and why fraud is committed, how fraudulent conduct can be deterred and how allegations of fraud should be investigated and resolved.
Prereq: Enrollment in Graduate School and cons. of M.S.A. prog. dir.

ACCO 250. Capstone Case Course in Financial Accounting 3 sem. hrs.
Uses "real world" cases to expose students to current issues in financial accounting. It covers current accounting standards, the conceptual framework and issues before the EITF, and SEC Staff Accounting Bulletins. Prereq: ACCO 122 or ACCO 222; or enrolled in the M.S.A. program.

ACCO 295. Independent Study 1-3 sem. hrs.
Prereq: Enrollment in Graduate School and ACCO program; cons. of M.S.A. prog. dir.

ACCO 296. Seminar in Accounting 2-3 sem. hrs.
Elective. Topics vary. Offered occasionally. Prereq: BUAD 230 and enrolled in the M.S.A. program. 
Prerequisites and corequisites vary. Elective. Offered occasionally.

ACCO 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of G.S.M.

ACCO 876. Graduate Assistant Research – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment.
Prereq: Cons. of G.S.M.

PROGRAM DESCRIPTION
The objective of the M.B.A. program at Marquette University is to provide students with a broad professional education in preparation for responsible managerial positions in business, public service, or education. The program is built upon the foundations of quantitative analysis, behavioral sciences, economics, and management theory. Emphases of the program include an understanding of business problems and the development of managerial skills. The M.B.A. program is accredited by the Association for the Advancement of Collegiate Schools of Business (AACSB—International) and reflects the high standards and expectations of that accreditation.

PREREQUISITES FOR ADMISSION
Admission to the M.B.A. program requires:
1. A four-year bachelor’s degree from an accredited college or university;
2. An acceptable record of academic achievement at the bachelor’s level and in any previous graduate course work;
3. Acceptable scores on required admission tests;
4. An overall composite profile of admission data (including an evaluation of previous work experience) that predicts success in the program.

APPLICATION REQUIREMENTS
Students may apply for Regular Degree, Temporary Degree or Non-degree status. It is recommended that students apply for Regular Degree Status when possible. The application is online via our Web site at www.marquette.edu/gsm. Then click on Apply Now.
1. Completed application form and fee.
2. Essay questions on the application form.
3. Official transcripts from all current and previous colleges/universities except Marquette.
4. Official test scores from the Graduate Management Admission Test (GMAT).
5. Resume or job profile.
6. (For international applicants only) three letters of recommendation and an official TOEFL score or other acceptable proof of English proficiency. Note: Temporary non-degree status students are not eligible to continue taking M.B.A. classes beyond one semester without degree admission. Typically, non-degree admission is not recommended in the M.B.A. program.

All application materials should be sent to:
Graduate School of Management; David A. Straz, Jr., Hall Executive Center; Suite 278; Marquette University; P.O. Box 1881; Milwaukee, WI 53201-1881.

OFF-CAMPUS PROGRAMS
The M.B.A. program currently offers the M.B.A. program at two off-site locations: Kohler, Wisconsin and Waukesha, Wisconsin. Although the programs have some collaboration with local companies, students from all companies are welcome to apply. Admission to these programs is for fall only. As a “lock-step – cohort group” there are ideally no new entries into the program once the group has matriculated. Students will take all classes together from matriculation to graduation. Classes meet one night a week each fall, spring and summer term. Currently, the Kohler program is completed in 33 months, and the Waukesha program is completed in 24 months.

If a student is unable to continue with the group, he/she can transition to the on-campus program at the Marquette University campus. For additional information on either program, contact the M.B.A. office at (414) 288-7145, e-mail MBA@marquette.edu, or visit our Web site at www.marquette.edu/gsm.

JOINT PROGRAMS OF STUDY

M.B.A. – J.D. DEGREE
The Graduate School of Management, in conjunction with the Law School, offers a program of joint study leading to an M.B.A. degree and a juris doctor degree. Students seeking admission to the joint program must apply to both the Graduate School of Management and the Law School and must meet the admission requirements for each. Students start this joint program as a law student. Upon completion of the law program, students will be officially admitted to the M.B.A. program for completion of the remainder of the joint program.

Joint program students complete 28 months in the Law School and 28 graduate business credit hours beyond required foundation courses in the M.B.A. program. Up to 21 hours of an M.B.A.-J.D. student’s course work will count jointly toward both degrees. Twelve hours of Law School credits may be applied to M.B.A. requirements and as many as nine hours of M.B.A. credits may be applied to J.D. elective requirements.

All transfer courses from the Marquette University Law School must have a C or above grade. Joint program students must maintain a 3.00 grade point average to graduate with the M.B.A. degree.

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A specialization in sport business is available to students admitted to the joint M.B.A.-J.D. program, as well as to students in the sports law program in the Law School. Twelve credits of specific sports law courses will apply toward the M.B.A. degree. Students must take Amateur Sports Law or Professional Sports Law and two sports law workshops, along with Internet Law or Computer Law, which will also satisfy the M.B.A. IT/e-Business Elective Core requirement.

In general, joint program students will pay tuition at the full-time (flat tuition) Law School rate while a full-time law student, regardless of whether or not they are taking additional graduate courses. Upon receiving the juris doctor degree, joint program students will pay Graduate School of Management tuition at the per credit rate for graduate courses. Part-time law students will pay the per credit Law School rate for all courses.
tion, and assessment of hospital-based healthcare technologies.

Healthcare institutions, medical device companies, and healthcare consulting firms have a growing need for skilled professionals with technical and managerial skills, and an understanding of healthcare delivery and regulatory environments. Graduates of the program will have the education and skills needed to pursue career opportunities in clinical, industrial, and consulting environments. The program meets the needs of recent undergraduates seeking an advanced degree as well as employed engineers interested in opportunities to prepare for career advancement.

Elective courses, independent study projects, and entrepreneurship opportunities enable students to customize their training to meet individual needs, interests, and career goals. With the assistance of a faculty and industry/career adviser, students are required to design and complete an applied biomedical engineering project. This independent study/internship experience will help develop skills that will be useful in the clinical or industrial environment.

The course offerings and schedules are designed to allow working students to pursue this M.S. degree on a part-time basis. Full-time students can complete the program in three terms (12 months). Course topics include technology assessment, options for technology utilization, standards and regulations, product development, and the environment of healthcare delivery. Topics of study include health care technology assessment, development, and evaluation, ethics of technology utilization, and outcomes and medical effectiveness research.

Additional details concerning the master of science degree in healthcare technologies management are listed under the Graduate School section of this bulletin.

**M.B.A.-M.S.N. DEGREE**

The Graduate School of Management, in conjunction with the College of Nursing, offers a program of joint study leading to an M.B.A. degree and an M.S.N. degree with a specialization in Health Care Systems Leadership. Students seeking admission to the joint program apply to both programs and must meet the admission requirements for both the M.B.A. and M.S.N. programs. However, official test scores from the Graduate Management Admission Test (GMAT) may substitute for the GRE admission requirement in the College of Nursing. Because students are officially admitted into only one Marquette University graduate program at a time, applicants must indicate which program they intend to pursue and complete first, although once accepted for admission to both programs, students may take courses from both departments. Upon completion of the first program, the student will be officially admitted to the second program for completion of the remainder of the joint program. The application for the Graduate School of Management is online via our Web site at www.marquette.edu/gsm. Then click on Apply Now. The Graduate School also has an online application to the Political Science and International Affairs programs.

Joint degree students count 9 credits of course work in each program toward the required course work credits of the other program. Thus, 9 of the 40 credits required for the master of business administration degree will come from POSC courses, and 9 of the 30 credits required for the master of arts degree in political science or in international affairs will come from BUAD courses.

The number of required credit hours for the master of business administration degree might be as high as 50 credit hours if the student is not exempted from foundation courses on the basis of undergraduate studies. Students must identify the courses being applied toward both degrees prior to completion of the programs by contacting their advisers in both programs.

**MASTER'S REQUIREMENTS**

The M.B.A. program requires a minimum of 40 credits of course work and a maximum of 50 credits of course work (this number may be reduced to 34 or 37 hours if exemptions for core courses are granted based upon the applicant's undergraduate record and major field of study). The course work covers four distinct areas:

1. Foundation Courses (10 credits)
2. Core Courses (18 credits)
3. Elective Core Courses (12 credits)
4. Elective Courses — Normally chosen from the various graduate electives (10 credits).

The program does not require a thesis, essay, or comprehensive examination. Instead, BUAD 290, Strategic Management in a Global Economy, serves as the final integrating experience in the program. BUAD 290 may be taken only after completing 21 credits of core and elective core course requirements.

**M.B.A. PROGRAM DETAILS**

**FOUNDATION COURSES**

The foundation of the M.B.A. program consists of the five graduate courses (10 credits) listed below. A student can be exempted from foundation course requirements if he or she has recently completed equivalent course work, with satisfactory grades, as part of a degree program accredited by the AACSB—International or other regionally accredited program specifically recognized by the Graduate School of Management. Undergraduate courses would qualify for the master of business administration program for exemptions if taken as part of the core or elective requirements of a degree program that was completed within the 10 years preceding application to the Marquette M.B.A. program.

BUAD 201 Economics Foundations
BUAD 202 Accounting Foundations
BUAD 203 Mathematics Foundations
BUAD 204 Statistics Foundations
BUAD 205 Information Technology Foundations

**CORE COURSE WORK**

The core of the M.B.A. program consists of the 6 graduate courses (18 credits) listed below. Students are expected to observe prerequisite sequencing requirements within the core area. We also suggest taking the core courses in the stated sequence, when possible. In addition, students should have completed all foundation course requirements before enrolling in core courses.

BUAD 210 Managerial Economics
BUAD 220 Operations and Supply Chain Management
BUAD 230 Managerial Accounting
BUAD 240 Marketing Management
BUAD 250 Financial Management
BUAD 252 Organizational Behavior

**ELECTIVE CORE COURSE WORK**

There are four elective core areas in the M.B.A. program. Within each elective core area, students will choose one three-credit course from those listed to fulfill the elective core requirement. The four elective core areas are: Quantitative Methods; Information Technology and eBusiness; Social, Ethical and Political Environment of Business; and Business Strategy.

Courses that satisfy the elective core components are:

- Quantitative Methods (3 credits required)
- Choose one course from the following list:
  - BUAD 224 Quantitative Decision Modeling and Analysis
  - BUAD 243 Advanced Multivariate Data Analysis
  - BUAD 249* Seminar in Marketing: Marketing Research

- Business Strategy (3 credits)
- Choose one course from the following list:
  - BUAD 253 Fixed Income Markets and Securities
  - BUAD 255 Financial Derivatives
  - ECON 201 Applied Econometrics
Business Strategy (3 credits required)
Choose one course from the following list.
BUAD 229* Seminar in Operations and Supply Chain Management: e-Business and Supply Chain Management
BUAD 244 Direct Marketing and e-Commerce
BUAD 249* Seminar in Marketing: Internet Marketing or e-Marketing Strategy
BUAD 270 Information Technology Strategy
BUAD 272 Decision Support Systems
BUAD 273 Telecommunications
BUAD 274 Database Management
BUAD 279 Seminar in Information Technology (3 credits)

COSC 158 Software Design and Analysis (taken for graduate credit)
LAWG 723 Internet Law**
LAWG 744 Computer Law**
MSCS 236 Component Architecture
MSCS 237 Distributed Computing
MSCS 238 Enterprise Architecture
MSCS 239 Information Representation
MSCS 282* Topics in Computer Science: Computer Security
HURE 250 Human Resources Information Systems
ACCO 244 Accounting Information Systems

Social, Ethical, Political Environment (3 credits required)
Choose one course from the following list.
BUAD 263 Variable Topics in the Global Environment of Business
BUAD 249* Seminar in Marketing: Ethics & Social Responsibility
BUAD 259 Seminar in Finance: Investment Management, Ethics and Security
BUAD 260 Ethical Issues, Regulatory Environment and Human Resource Management
PHIL 260 Seminar: Business Ethics
ACCO 233 Auditing: Ethical, Legal, Professional, and Reporting Responsibilities

* Special attention must be given to the multi-topics courses: BUAD 229, BUAD 249, BUAD 259, and MSCS 282, etc. Only the topics listed above will apply toward the Core Elective requirement.
** Law classes may have specific prerequisites that must be met, including approval from the Law School, prior to registration for law classes. Special attention must be given to the multi-topics courses.

Business Strategy (3 credits required)
Choose one section of BUAD 290 Topics in Strategic Management in a Global Economy; all sections of this course fulfill this requirement. The various sections focus on strategic management in traditional corporations, strategic management in small businesses, including entrepreneurial efforts, and strategic management with an emphasis on the use of technology.

For additional information contact the M.B.A. office at (414) 288-7145, e-mail us at MBA@marquette.edu, or visit our Web site at www.marquette.edu/gsm.

ELECTIVE COURSE WORK
In selecting the 10 credit hours of required elective course work, the M.B.A. student has a variety of choices. Electives may be concentrated in one area of business, e.g., marketing, or they may be distributed over several areas. Courses chosen from Marquette’s graduate programs in accounting, economics, and human resources are routinely approved for elective credit in the M.B.A. program.

With prior approval from the M.B.A. program director, an M.B.A. student may choose, as electives, graduate courses from non-business fields in which he or she has the appropriate undergraduate background to enter graduate level courses.

One credit of the electives is required to be a Skills course. All Skills courses are numbered BUAD 291. Up to four credits of the electives may be in the Skills area. Skills electives are in various areas such as team building, communication skills, etc.

COURSE DESCRIPTIONS
The following courses require students to be enrolled in the ACCO, BUAD, ECON, HURE, HCTM, ENMA or NURS programs.

GRADUATE COURSES:
BUAD 201. Economics Foundations
2 sem. hrs.
Principles, analytic concepts, and techniques of the economic way of thinking, applied to consumer choice, resource use, and the firm’s pricing, hiring and production decisions. The operation of markets and the economic role of government. Determinants of aggregate production, employment, and the price level. Offered every term. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; and cons. of M.B.A. prog. dir.

BUAD 202. Accounting Foundations
2 sem. hrs.
Emphasis on external reporting to stockholders, government and other outside parties. Includes measurement of income and expenses and the valuation of assets and equities, under various forms of business organizations. Structuring data to aid management decision. Offered every term. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; and cons. of M.B.A. prog. dir.

BUAD 203. Mathematics Foundations
2 sem. hrs.
Traditional mathematics of algebra and calculus with an introduction to linear programming. Exponential and logarithmic functions are discussed with an introduction to the mathematics of finance. Revenue and profit maximization and cost minimization applications using calculus and linear programming. Offered every term. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; and cons. of M.B.A. prog. dir.

BUAD 204. Statistics Foundations
2 sem. hrs.
Classical statistics with application in business and economics, including statistical inference, simple and multiple correlation/regression and analysis of variance. Offered every term. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or HURS program; and cons. of M.B.A. prog. dir.

BUAD 205. Information Technology Foundations
2 sem. hrs.
Basic vocabulary principles include systems theory. data, information, hardware, software, database management systems, telecommunications, the systems development life cycle, and the hierarchy of information systems. Students become familiar with technical jargon and the relationship of technology components to each other. BUAD 205 is a prerequisite for BUAD 210. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or HURS program; and cons. of M.B.A. prog. dir. Ability to use personal computer and its tools.

BUAD 210. Managerial Economics 3 sem. hrs.
Incorporates the tools and logic of microeconomics together with quantitative and statistical methods. The principal focus is on understanding and predicting economic behavior of consumers, firms, and industries through product-line and industry modeling and model estimation. The use of current statistical software and computer technology is promoted throughout the course. May include a segment in applied microeconomics that addresses economic policy issues. Offered every term. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 201, 203, and 204; and cons. of M.B.A. prog. dir.

BUAD 216. International Trade 3 sem. hrs.
Examines traditional and contemporary issues of international trade using the basic tools of microeconomics. Addresses the basis for trade, the effects of trade and impediments to trade in particular. Specific topics include various trade theories, arguments for and against protection, the instruments and effects of trade policies, economic integration, and foreign direct investment. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 210 or equiv.; and cons. of M.B.A. prog. dir.

An examination of various foreign currency markets, including spot, forward, and derivative instruments, understanding the economic, historical, institutional, and empirical aspects of these markets. Analysis of the relationship between currency markets, money markets and bond markets. Development and study of the fundamental models of balance of payments and exchange rate determination. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 210 or equiv.; and cons. of M.B.A. prog. dir.

Provides the student with an introductory knowledge of the real estate development process. Focuses on the physical and analytical tools necessary in the real estate development process including: finding the development opportunity, land acquisition/site analysis, building design and public approvals, legal, market analysis, project management, construction, leasing, and financing. Throughout an increasingly sophisticated real estate development feasibility process is followed to assess the viability of a development at different stages of the development process. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 210 or equiv.; and cons. of the M.B.A. prog. dir.

BUAD 219. Seminar in Economics 1-3 sem. hrs.
An examination of current topics in economics. Topics vary. Offered occasionally. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 210 or equiv.; and cons. of M.B.A. prog. dir.
BUAD 220. Operations and Supply Chain Management 3 sem. hrs.
Survey course in operations management. It examines the operations function in manufacturing and service firms from a managerial perspective. It covers both classical and contemporary concepts and techniques of planning, designing, and managing operations and processes. To enhance learning concepts, it explores real problems and opportunities faced by (operations) managers through case analysis and research of hands-on experience issues. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 203, 204 or equiv.; and cons. of M.B.A. prog. dir.

BUAD 221. Manufacturing Management 3 sem. hrs.
Provides an overall understanding of the essential concepts, methods, and practices utilized in manufacturing management. Includes such topics as: manufacturing strategy, quality management, inventory management, production planning and scheduling, MRPII, capacity planning, and Just-in-Time systems. Taught from a managerial perspective and includes a discussion of some of the leading edge techniques in this area like synchronized manufacturing, cellular manufacturing, supply chain management, and virtual manufacturing. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 220 or equiv.; and cons. of M.B.A. prog. dir.

BUAD 222. Service Operations Management 3 sem. hrs.
Examines key concepts and techniques associated with designing, managing, and delivering services in various types of organizations. The main issues include service challenge, design, productivity, quality, demand and capacity management, workforce planning and scheduling, queue management, strategy, and integration. Leans heavily on the discussions of cases as well as hands-on experience assignments in various service industries. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 220 or equiv.; and cons. of M.B.A. prog. dir.

Focuses on the quality system as a strategic management concept. As such, first, issues related to customer focus, value, and satisfaction; organizational change, learning, adaptability, effectiveness, and improvement; and policy planning and deployment, are addressed. Next, concepts and methods dealing with product and process design, quality function deployment, benchmarking, and process improvement and reengineering are discussed. Finally, techniques for quality measurement and improvement such as statistical process control, reliability, process capability, and acceptance sampling are covered. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 220 or equiv.; and cons. of M.B.A. prog. dir.

BUAD 224. Quantitative Decision Modeling and Analysis 3 sem. hrs.
Examines quantitative aspects of managerial decision making. Introduces models and methods that are widely used for the analysis of a variety of managerial problems. Topics may include: linear programming, transportation models, networks, project management, queuing and simulation. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 203, 204 or equiv.; and cons. of M.B.A. prog. dir.

BUAD 229. Seminar in Operations and Supply Chain Management 1-3 sem. hrs.
An examination of current topics in operations management. Topics vary but may include: supply chain management, project management, global operations management, and operations strategy. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 220 or equiv.; and cons. of M.B.A. prog. dir.

BUAD 230. Managerial Accounting 3 sem. hrs.
Emphasizes the role of the accounting system as a quantitative information system. Available data are structured in the form of internal reports to management for use in planning and controlling routine operations as well as in making non-routine decisions and formulating major plans and policies. The analysis of data makes use of regression analysis, matrix algebra, and linear programming. Offered every term. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 202, 203, 204 or equiv.; and cons. of the M.B.A. prog. dir.

BUAD 231. Legal Issues in Business and Technology 3 sem. hrs.
Provides an owner/manager’s perspective of the significant influence of the law and legal principles on managerial decision making. Major topics will include government regulation of business activities, contract law, liability law and forms of business organizations. Emphasis is on the application of these principles to managerial decision making in the current business environment. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 230; and cons. of M.B.A. prog. dir.

Addresses the various aspects of how technology law currently affects business. Areas of review will include such topical issues as Internet transmissions and jurisdictional issues and problems regarding both place of litigation and the law to be applied to technology-based legal actions; matters surrounding encryption codes, privacy, Web site content and filtering issues, unauthorized use of personally-identified data; the emerging and proliferating concept of Web-based libel suits; Internet crimes such as stalking, theft, terrorism; patent protection, copyright issues and trade secret law affecting technology based business; electronic funds transfer issues, debit card payment problems, e-commerce contracts, electronic signatures, etc. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; and cons. of M.B.A. prog. dir.

BUAD 239. Seminar in Accounting 1-3 sem. hrs.
Elective. Topics vary. Offered occasionally. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 230; and cons. of M.B.A. prog. dir.

BUAD 240. Marketing Management 3 sem. hrs.
An integrated approach to marketing from a managerial point of view. Making use of economic, quantitative, and behavioral concepts in analyzing and developing a framework for the decision-making and implementation of the firm’s marketing program. Offered every term. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; and cons. of M.B.A. prog. dir.

Examines the consumer’s process of planning, purchasing and using economic goods and services. The course is interdisciplinary in nature and applies concepts from psychology, sociology, economics and anthropology. Additional topics include services and industrial buying behavior. Case analyses are used. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 240; and cons. of M.B.A. prog. dir.

Objectives: 1. To develop an understanding of international marketing concepts and show how these concepts can be applied to different international marketing environments and situations. 2. To examine the major environmental factors influencing the development of international marketing strategies. 3. To critically evaluate the developments in global economic, technological, political, and social environments. 4. To examine the different international marketing mix configurations in terms of their strategic orientations and market relevance. 5. To evaluate the ethical dimensions of international marketing involvement. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 240; and cons. of M.B.A. prog. dir.

BUAD 243. Advanced Multivariate Data Analysis 3 sem. hrs.
Examines techniques of multivariate data analysis – methods that are often used to extract meaningful information from a data set. The course structure is based on the assumption that most users of multivariate data analysis techniques are applications-oriented managers who, from time to time, require these methods to help them in their professional work. This course is meant for such students, but not for those intending to become professional statisticians. However, knowledge of basic statistics and matrix algebra is necessary to appreciate the course content. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 203, 204 and 240; and cons. of M.B.A. prog. dir.

BUAD 244. Direct Marketing and e-Commerce 3 sem. hrs.
Examines the principles, strategies, and tactics of direct marketing (database marketing), how direct marketing differs from general marketing, and how direct response advertising differs from general advertising. Addresses marketing aspects of e-commerce and successful e-commerce (online direct marketing, e.g. Amazon.com). Covers CRM, how customer segmentation can increase customer mail, e-mail efficiency and file profitability, customer profitability and customer lifetime value, break-even analysis, tracking and forecasting in direct marketing (offline and online), testing and research in direct marketing, and legal ethical issues related to direct marketing, especially privacy. Determine how to develop marketing action plans [course project]. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 240; cons. of M.B.A. prog. dir; Internet access with a Web browser; and access to Microsoft Word/Office.
BUAD 245. Strategic Marketing 3 sem. hrs.
Provides students with the opportunity to discuss emerging issues in marketing as they influence marketing strategy. Contemporary writings in marketing strategy will be the focus of the seminar. Discussion will revolve around analyses of the various authors' observations and examination of the practical value to a working manager. Special emphasis on the relation of the external environment and its impact on marketing decisions. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 240; and cons. of M.B.A. prog. dir.

BUAD 246. Customer Relationship Management 3 sem. hrs.
Analyzes how companies can obtain a sustainable competitive advantage by managing their relationships with their customers more effectively. Teaches the main marketing variables that impact customers' satisfaction judgments. Emphasis on understanding the powerful relationship between customer loyalty and company profits. Discusses and evaluates the most effective methods for responding to dissatisfied customers' complaints. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 240; and cons. of M.B.A. prog. dir.

BUAD 247. Marketing and Public Policy 3 sem. hrs.
Reviews the changing regulatory, legal, social, and ethical environment affecting marketing managers. Specific course topics include: marketing and advertising regulation and self-regulation, advertising deception and unfairness, marketing's impact on society, regulation of mergers and joint ventures, warnings and disclosures, and legal issues involved in product, pricing and distribution decisions. Special emphasis will be placed on consumer protection issues faced by federal agencies. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 240; and cons. of M.B.A. prog. dir.

BUAD 249. Seminar in Marketing 1-3 sem. hrs.
An intensive study and critical examination of marketing theories, concepts, and contemporary marketing problems. Course content changed each time offered and may include: marketing logistics, quantitative methods in marketing, international marketing, or marketing and society. Offered occasionally. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 240; and cons. of M.B.A. prog. dir.

Application of financial theory and advanced techniques to the managerial decisions of the business firm. Topical coverage includes the areas of risk, valuation, capital structure, mergers and acquisitions, investment decisions and international finance. Offered every term. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 202, 203, 204 or equiv.; and cons. of the M.B.A. prog. dir.

BUAD 251. Investments 3 sem. hrs.
The role and functioning of securities markets. Specific topics include the equity, fixed income, options and futures markets. Presents portfolio and capital market theory, the efficient markets hypothesis, institutional organization, and security valuation techniques. Offered occasionally. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 290; and cons. of M.B.A. prog. dir.

BUAD 252. Cases in Financial Policy 3 sem. hrs.
Application of financial principles and techniques to the operational aspects of the business firm through case problems. Estimating amount and timing of required funds, acquisition of short- and long-term funds, valuation of assets and enterprises. Offered occasionally. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 290; and cons. of M.B.A. prog. dir.

Focuses on the use of fixed income securities to fulfill investment requirements or accommodate corporate financing strategies. Coverage includes fixed income markets and the securities traded in those markets, techniques used to value fixed income securities, and derivative strategies using fixed income securities. Offered occasionally. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 290; and cons. of M.B.A. prog. dir.

BUAD 254. Security Analysis and Asset Valuation 3 sem. hrs.
Focuses on the application of valuation principles to common stock and other assets. Topical coverage includes estimating risk-adjusted discount rates, developing free cash flows to the firm and free cash flow to equity models, and using relative valuation techniques. Valuing real estate, private or unique firms, and non-traditional investments is also covered. Offered occasionally. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 290; and cons. of M.B.A. prog. dir.

BUAD 255. Financial Derivatives 3 sem. hrs.
Study of the mechanics, pricing, arbitrage, and risk of derivative securities markets, including options, futures, swaps, and collaterized securities and the markets in which they are traded. Applications are developed of the use of these markets as a hedging vehicle for portfolio managers, corporate treasurers, bankers, and others. Offered occasionally. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 290; and cons. of M.B.A. prog. dir.

BUAD 256. Bank Management 3 sem. hrs.
Management of a commercial bank, including lending, loan pricing, liability management, liquidity, and asset/liability management. Issues relating to the current bank regulatory environment, including bank failures and capital adequacy, are discussed. Offered occasionally. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 290; and cons. of M.B.A. prog. dir.

BUAD 257. Financial Markets 3 sem. hrs.
Concerned with capital markets and the institutions and services provided in that market. Students will become familiar with the various financial markets with an emphasis on the interrelationships; learn how the component capital/financial markets are interrelated as they offer financial services, and how prices are interrelated through valuation and arbitrage. This course will contain an analysis of the determination and structure of interest rates, a discussion of the Federal Reserve Bank and its role in financial markets, a review of monetary theory and policy, and an introduction to analysis of securities markets. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 290; and cons. of M.B.A. prog. dir.

Examines selected human resource policies and programs; the legal and regulatory environment pertaining to employees and to union organizations and representation; and establishing consistency between human resource management policies and programs and the strategic objectives of the organization. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 290; and cons. of M.B.A. prog. dir.

BUAD 259. Seminar in Finance 1-3 sem. hrs.
Elective. Topics vary. Offered occasionally. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 290; and cons. of M.B.A. prog. dir.

Addresses an array of human resource topics from the manager's point of view. Three themes will be woven throughout this course: ethical issues presented by selected human resource policies and programs; the legal and regulatory environment pertaining to employees and to union organizations and representation; and establishing consistency between human resource management policies and programs and the strategic objectives of the organization. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; and cons. of M.B.A. prog. dir.

BUAD 261. New Venture Formation 3 sem. hrs.
Focuses on starting and developing a new business. Topics include: evaluating opportunities and testing the feasibility of creative ideas, selecting and dealing with partners, alternative methods of financing, developing the initial competitive strategy, structuring and managing the business through the early survival months, and sources of outside help. Students will prepare a business plan that can be used to launch the new initiative. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 290; and cons. of M.B.A. prog. dir.

BUAD 262. Organizational Behavior 3 sem. hrs.
Analysis of the interaction of the administrative process and the organization in attaining goals in various environments. Determinants of group and organizational performance, with consideration given to the intergroup processes, complex organizational processes, and the behavioral consequences of organizational structure. Offered every term. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; and cons. of M.B.A. prog. dir.
BUAD 263. Variable Topics in the Global Environment of Business 3 sem. hrs.

“Environments” refers to a company interfacing with a variety of groups; that is, stakeholders, some internal to the company, such as stockholders and employees, and some external to the company, such as consumers, competitors, and government agencies. In a broader context, social environmentalism refers to the impact of a corporation’s social, legal, regulatory, political, ethical, and international environment upon a corporation’s objectives. The specific objectives are to provide a general understanding of the major relationships between business firms and their stakeholders, to develop key concepts and principles that can be used by managerial decision-makers as they cope with the firm’s various stakeholders, and to provide some practice in using these analytic tools by applying them to selected current problems and issues confronting business. Offered every term.

Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; and cons. of M.B.A. prog. dir.

BUAD 264. International Management 3 sem. hrs.

Directed toward practicing managers who wish to build cross-cultural competence and develop a deeper understanding of contemporary issues in international management (e.g., management of cross-border mergers, acquisitions and alliances; transfer of best practices across organizational and national boundaries). Grounded in theory, yet focuses on the implications of these issues for managers and their organizations. Class activities will comprise lectures, case analyses, videos, a cultural simulation exercise, and interactive activities and discussions.

Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 262; and cons. of M.B.A. prog. dir.

BUAD 266. Leadership, Motivation, and Organizational Change 3 sem. hrs.

Designed to: 1) examine and evaluate existing leadership theories; 2) survey topical issues and new developments in the leadership area; and 3) develop students’ leadership skills and abilities. Motivation and leadership concepts will be used to analyze, diagnose, and make decisions about various organizational situations. Primary focus on case analysis. Lectures and discussions also will be used to provide perspective on assigned readings.

Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 262; and cons. of M.B.A. prog. dir.

BUAD 267. Understanding Entrepreneurship 3 sem. hrs.

An overview of current theory and research on entrepreneurial phenomena. Material from economics, organizational science, psychology, political science, sociology, and public policy will be used to explore conceptions of entrepreneurship, entrepreneurial career choices, new firm foundings, new firm survival and success, effects of social context on entrepreneurship, and the impact of public policy.

Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 262; and cons. of M.B.A. prog. dir.

BUAD 268. Topics in Human Resource Management 3 sem. hrs.

E elective. Topics vary. Offered occasionally.

Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 262; and cons. of M.B.A. prog. dir.

BUAD 269. Seminar in Organizational Management 1-3 sem. hrs.

Designed to enhance or broaden the student’s understanding and perception of personal organizational behavior for role effectiveness. Concentrates on depth analysis of specific theories, topics, issues in organizational structure and human interaction. Offered occasionally. Topics vary.

Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 262; and cons. of M.B.A. prog. dir.

BUAD 270. Information Technology Strategy 3 sem. hrs.

Covers how information flows throughout an organization and how it impacts managerial decision-making. Emphasizes user involvement/leadership in information systems project management to prepare non-IT managers to be responsible for budgets of IT initiatives. Student managers can realize how to exploit and leverage information for decision-making that re-engineers businesses. Methodologies include case studies and team projects.

Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 262; and cons. of M.B.A. prog. dir.


Provides the student with an appreciation of how the computer can be used in supporting the managerial decision-making function. Application and architectures for implementing such a system are discussed. Emphasis is placed on expert system’s technology as a tool for implementing DSS. Students will be expected to utilize such software tools as databases, spreadsheets or modeling languages, and expert systems shells (instruction on expert systems shells will be provided). A term project will involve the implementation of an expert system prototype within a DSS context. Offered occasionally.

Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 262; and cons. of M.B.A. prog. dir.

BUAD 273. Telecommunications 3 sem. hrs.

Designed to provide non-information technology (IT) managers a brief overview of the essential elements of connectivity and the resources needed to deploy worldwide communication. Topics include: media, network configuration, efficient resource allocation, the communication carrier industry, videocferencing, gateways, and applications in supply chain management and e-business. Students will use team case analyses, expert speakers, field trips, and project reports to explore telecommunications.

Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 262; and cons. of M.B.A. prog. dir.

BUAD 274. Database Management 3 sem. hrs.

Examines how corporate data can be organized and managed within a computerized data base environment. Topics include: the process of planning, designing, and implementing an organization’s database; perspective of the user accessing data and the database manager are addressed. The course grade is based primarily on a midterm, a final exam and a term project. Some case materials may be used in class and “hands-on” computer work using the SQL data base query required.

Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 262; and cons. of M.B.A. prog. dir.

BUAD 279. Seminar in Information Technology 1-3 sem. hrs.

Elective. Topics will vary. Offered occasionally.

Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; BUAD 262; and cons. of M.B.A. prog. dir.


Structured travel and study programs in international business. Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; student in good academic standing; and cons. of M.B.A. prog. dir.

BUAD 289. Seminar in International Business 1-3 sem. hrs.

Elective course; topics will vary. Offered occasionally.

Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; and cons. of M.B.A. prog. dir.

BUAD 290. Topics in Strategic Management in a Global Economy 3 sem. hrs.

Study of comprehensive business cases involving problematic situations of top management significance and requiring the application of mature and resourceful diagnostic, problem-formulating, and problem-solving competence. Offered every term.

Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; 21 core hours of graduate credit; and cons. of M.B.A. prog. dir.

BUAD 291. Business Skills 1 sem. hr.

Variable topics. Suggested topics: effective communications-writing, speaking and presentations; conflict management, team building; crisis management; effective use of software in business (e.g., statistical software, such as SAS, SPSS, and GIS software, such as ArcView, etc.); topical areas in decision making, market research, etc.

Prereq: Admitted to the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE or NURS program; and cons. of M.B.A. prog. dir.

BUAD 295. Independent Study 1-3 sem. hrs.

Offered every term. Prereq: Admitted to the graduate BUAD program and cons. of dept. ch.; or the graduate ACCO, BUAD, ECON, ENMA, HCTM, HURE program; and cons. of M.B.A. prog. dir.

BUAD 873. Graduate Standing Continuation – Less than Half-Time 0-3 sem. hrs.

Fee. SNC/UNC grade assessment.

Prereq: Cons. of G.S.M.

BUAD 876. Graduate Assistant Research – Full-Time 0 sem. hrs.

Fee. SNC/UNC grade assessment.

Prereq: Cons. of G.S.M.
ECONOMICS (ECON)
Chairperson and Professor: D. Clark
Professor: Brush, Chowdhury, Davis, Nourzad, Smiley (Emeritus)
Associate Professor: Breeden, Crane, Daniels, McGibany, Toomanoff
Assistant Professor: Wang, Yakusheva
Adjunct Assistant Professor: Lephardt
Visiting Assistant Professor: Kohls
Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREE OFFERED
Master of Science in Applied Economics, Plan B only

SPECIALIZATIONS
A general track, requiring no specialization, is also available.

PROGRAM DESCRIPTION
The master of science program in applied economics is designed for individuals seeking careers as economic or financial analysts in industry, government, or the financial sector. The program provides students with the solid grounding in economic theory and the working knowledge of advanced quantitative methods needed to succeed as business economists, financial analysts, economic researchers, government staff economists, or economic consultants. The program concentrates on developing and applying practical skills which can be used to solve real problems confronting business and government. The curriculum is designed to produce practitioners who can develop and interpret economic models. Courses emphasize the application of economic theory and the use of quantitative techniques rather than the derivation of their theoretical underpinnings. Communication skills are stressed through frequent written and oral presentations of results from applied projects.

PREREQUISITES FOR ADMISSION
Applicants are expected to have a four-year baccalaureate degree with at least one course in each of the following areas: intermediate microeconomic theory, intermediate macroeconomic theory, statistical methods, and calculus. At least minimal familiarity with computer programming is also required.

APPLICATION REQUIREMENTS
Students may apply for Regular Degree, Temporary Degree or Non-degree status. It is recommended that students apply for Regular Degree Status when possible. The application is online via our Web site at www.marquette.edu/gsm. Then click on Apply Now.
1. A completed application form and fee.
2. Official transcripts from all current and previous colleges/universities except Marquette.
3. Three letters of recommendation from former professors.
4. GRE scores or GMAT scores.
5. (For international applicants only) a TOEFL score or other acceptable proof of English proficiency.

All application materials should be sent to: Graduate School of Management; David A. Straz Jr., Hall Executive Center, Suite 27B; Marquette University; P.O. Box 1881; Milwaukee, WI 53201-1881.

BACHELOR’S–MASTER’S PROGRAM
This five-year program allows students to earn both their master of science in applied economics (M.S.A.E.) and an undergraduate degree from the College of Arts and Sciences or the College of Business. Undergraduate students begin their graduate work in their senior year by taking two graduate level courses and starting their graduate essay project.

These graduate courses double-count toward the undergraduate and graduate degrees. Should a student be denied admission to the M.S.A.E. program, the courses will be counted toward the undergraduate degree. Upon completion of the first term as a master’s candidate, the student must petition their Graduate School of Management program director to transfer the courses taken as an undergraduate to the master’s degree.

To be considered for admission to the five-year program, applicants must formally apply to the Graduate School of Management during their senior year at Marquette University, complete all of the application requirements as listed above, and indicate on their application that they are applying for the five-year program. For detailed information, contact the Economics Department by telephone (414) 288-7377 or fax (414) 288-5757.

MASTER’S REQUIREMENTS
The program requires a minimum of 30 credit hours of course work (at least 15 of which must be in 200-level graduate courses), a non-credit master’s essay, and an oral comprehensive examination.
For students completing a specialization, course work will include: 12 credit hours of required core courses in economics, 12 credit hours of course work relating to a chosen area of specialization, and six credit hours of electives. General track students must complete the 12 credit hours of required core courses, 12 credit hours of economics electives, and six additional credit hours in economics, business or the social sciences. With the approval of the program director and appropriate extra work of graduate caliber, a student may apply toward the degree up to six credit hours of selected 100-level upper division courses. Also, with the approval of the program director, a student may substitute, for the usual elective requirements, up to six credit hours of course work in fields outside of economics and business administration.

The master’s essay consists of a careful application of the student’s newly acquired analytical skills to a particular issue or problem. The essay is completed during the final term of the program and is often an extension of a previously completed course project.

An oral comprehensive examination will be administered in the student’s last term of the program. This examination will cover subject matter prescribed by the Department of Economics.

PROGRAM DETAILS
Each student must choose one of the areas of specialization: business economics, financial economics, international economics, marketing research, real estate economics, or the student must complete the general track. All specializations and the general track require a common set of core courses: two courses in quantitative analysis (ECON 201 and 202) and two courses in microeconomic and macroeconomic theory (ECON 210 and 220). ECON 201 is strongly recommended to be taken in the first term of course work.

Business economics requires the core course work plus: six to nine credit hours of additional course work in economics: Managerial Accounting (BUAD 220); and six to nine credit hours from Operations and Supply Chain Management (BUAD 220), Manufacturing Management (BUAD 221), Service Operations Management (BUAD 222), Quantitative Decision Modeling and Analysis (BUAD 224), Legal Issues in Business and Technology (BUAD 231), Marketing Management (BUAD 240), Advanced Multivariate Data Analysis (BUAD 243), Seminar in Marketing: Marketing Research (BUAD 249), Financial Management (BUAD 250), and Organizational Behavior (BUAD 262). Skills (BUAD 291) ideally, SAS, SPSS and GIS or equivalent.

Financial economics requires the core course work plus: Monetary Theory and Policy (ECON 240), Managerial Accounting (BUAD 230), Financial Management (BUAD 250), Seminar in Finance (BUAD 259), and six credit hours of electives in economics.

International economics requires the core course work plus: Monetary Theory and Policy (ECON 240), International Trade (ECON 258), International Currency Markets (ECON 257); six credit hours selected from Global Marketing Strategy (BUAD 242), International Management (BUAD 264), International Political Economy (POSC 278); and Comparative Economic Development (ECON 155); and three additional credit hours in economics. For international economics, there is an additional requirement of a minimum of 12 credit hours of foreign languages at the undergraduate level or the equivalent.

Marketing Research requires the core course work plus: Marketing Management (BUAD 240), Seminar in Marketing: Marketing Research (BUAD 249); six credit hours selected from Consumer Behavior (BUAD 241), Global Marketing Strategy (BUAD 242), Direct Marketing and e-Commerce (BUAD 244), Strategic Marketing (BUAD 245), Customer Relationship Management (BUAD 246), Marketing and Public Policy (BUAD 247), and up to three 1-credit MBA skills classes ideally in SAS, SPSS and GIS (BUAD 291); and six credit hours of electives in economics.

Real estate economics requires the core course work plus: Studies in Urban and Regional Economics (ECON 246), Financial Management (BUAD 250), Seminar in Finance: Real Estate Finance and Investments (BUAD 259), Principles of Commercial Real Estate Development (BUAD 218), 3 credit hours of Business Skills (BUAD 291) ideally in SAS, SPSS and GIS or equivalent, and 3 graduate level elective hours in economics, preferably Economics of the Public Sector (ECON 245).

General economics track requires the core course work plus: 12 credits in economics and 6 elective hours in economics, business administration, or social sciences. Note: Business Administration (BUAD) courses may require appropriate prerequisites.
COURSE DESCRIPTIONS

UPPER DIVISION COURSES THAT MAY CARRY GRADUATE CREDIT:

Economics (ECON)

ECON 155. Comparative Economic Development 3 sem. hrs.
ECON 163. Environmental and Natural Resource Economics 3 sem. hrs.

GRADUATE COURSES:

Business Administration (BUAD)

Specific descriptions of BUAD courses are provided in the Business Administration section of this bulletin.

Economics (ECON)

ECON 201. Applied Econometrics 3 sem. hrs.
Specification, estimation, and statistical verification of multiple linear regression models, and hypothesis testing. Causes, consequences, detection of such problems as heteroscedasticity, autocorrelation, and ARCH. Other topics include estimation of models with panel data and limited dependent variables. Offered fall term. Prereq: Admitted to the graduate ECON program and cons. of MSAE prog. dir.

Continuation of ECON 201 focusing on more advanced econometric and forecasting techniques using primarily time-series models such as ARIMA and transfer functions, VAR, andVEC as well as the method of combining forecasts. Emphasis on the practical knowledge of above techniques, and on reporting and presenting econometric results. Offered spring term. Prereq: Admitted to the graduate ECON program and cons. of MSAE prog. dir.

Surveys mathematical techniques applied to economics, including differential calculus and linear algebra. Develops neoclassical theory of firm and consumer behavior using mathematical techniques. Emphasizes the methodology of constructing and using microeconomic models. Explains economic behavior at the individual, firm, market, and general equilibrium levels. Offered fall term. Prereq: Admitted to the graduate ECON program and cons. of MSAE prog. dir.

Covers both long-run growth and short-run fluctuations. Begins with an analysis of the economy's long-run growth path using neoclassical and endogenous growth models, then surveys theories of the business cycle orthodoxy by orthodoxy in historical order. Static and dynamic models of the economy are developed and used for policy analysis. Offered spring term. Prereq: Admitted to the graduate ECON program and cons. of MSAE prog. dir.

ECON 231. Industrial Organization and Public Policy 3 sem. hrs.
Empirical studies in patterns of market structure, business behavior and performance. Industrial concentration, entry barriers, pricing and promotional behavior, efficiency and profitability. Applications in the field of antitrust and regulation. Offered occasionally. Prereq: Admitted to the graduate ECON program and cons. of MSAE prog. dir.

ECON 240. Monetary Theory and Policy 3 sem. hrs.
Factors affecting money supply, money demand, and money's influences on the macroeconomy. Federal Reserve policy and its implication for money supply. International monetary economics and coordination of monetary policy among different countries. Monetary policy under different exchange rate regimes. Examination of contemporary theoretical and econometric monetary issues and policy prescriptions. Offered occasionally. Prereq: Admitted to the graduate ECON program and cons. of MSAE prog. dir.

ECON 245. Economics of the Public Sector 3 sem. hrs.
Economic analysis of the public sector, including the topics of taxation and expenditure policy, federalism/centralism, economics of law, Parento criteria, and constitutional economics. The course will culminate in the presentation of a research paper on a suitable topic in public economics. Offered occasionally. Prereq: Admitted to the graduate ECON program and cons. of MSAE prog. dir.

ECON 246. Studies in Urban and Regional Economics 3 sem. hrs.
Uses economic tools to examine decisions of firms and households in a spatial setting. Covers regional economic issues, such as why cities exist and where they tend to develop, inter-urban household migration and firm location decisions, and models of urban growth. The urban economic topics explored include the inter-urban location decisions of economic agents in the context of amenities, public goods and zoning restrictions. Finally, the tools developed in the class are used to investigate urban problems such as poverty, housing, and transportation issues. Offered occasionally. Prereq: Admitted to the graduate ECON program and cons. of MSAE prog. dir.

ECON 256. International Trade 3 sem. hrs.
Examines traditional and contemporary issues of international trade using the basic tools of microeconomics. Addresses the basis for trade, the effects of trade, and impediments to trade in particular. Specific topics include various trade theories, arguments for and against protection, the instruments and effects of trade policies, economic integration, and foreign direct investment. Offered occasionally. Prereq: Admitted to the graduate ECON program and cons. of MSAE prog. dir.

An examination of various foreign currency markets, including spot, forward and derivative instruments, understanding the economic, historical, institutional, and empirical aspects of these markets. Analysis of the relationship between currency markets, money markets and bond markets. Development and study of the fundamental models of balance of payments and exchange rate determination. Offered occasionally. Prereq: Admitted to the graduate ECON program and cons. of MSAE prog. dir.

Determinants of the demand and supply of the services of human beings. Compensatory wage differentials, human capital investment, migration and immigration, and labor market discrimination. The role of unions, government in the labor market and current issues. Offered occasionally. Prereq: Admitted to the graduate ECON program and cons. of MSAE prog. dir.

ECON 270. Practicum in Applied Economics 1-3 sem. hrs.
Directed work in applied economic analysis under the supervision of a working professional in a business, financial, international or public policy area. Requires a faculty supervisor. Offered annually. Prereq: Admitted to the graduate ECON program and cons. of MSAE prog. dir.

ECON 295. Independent Study 0 sem. hrs.
Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of G.S.M.

ECON 296. Seminar in Economics 1-3 sem. hrs.
Specific titles to be announced in Schedule of Classes. Prereq: Admitted to the graduate ECON program and cons. of MSAE prog. dir.

ECON 867. Master's Comprehensive Exam Preparation – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of G.S.M.

Fee. SNC/UNC grade assessment. Prereq: Cons. of G.S.M.

ECON 869. Master's Comprehensive Exam Preparation – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of G.S.M.

ECON 876. Graduate Assistant Research – Full-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of G.S.M.

ECON 877. Graduate Assistant Research – Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of G.S.M.

ECON 878. Graduate Assistant Research – Less than Half-Time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of G.S.M.

ECON 884. Professional Project Continuation less than half time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of G.S.M.

ECON 885. Professional Project Continuation half time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of G.S.M.

ECON 886. Professional Project Continuation full-time 0 sem. hrs.
Fee. SNC/UNC grade assessment. Prereq: Cons. of G.S.M.
EXECUTIVE MASTER OF BUSINESS ADMINISTRATION (EXBU)

DEGREE OFFERED
Master of Business Administration, Plan B only

SPECIALIZATIONS
A specialization in International Business is earned by all students in the Executive M.B.A. program who successfully complete all International Business courses with the grade of B or above. These courses are part of the E.M.B.A. curriculum. Additional courses are not required.

Students wishing to pursue a second specialization in Economics, Finance, Human Resources, Management Information Systems, Marketing, or Total Quality Management must complete a separate set of 12 credits specific to that specialization requirement. For a list of approved specializations and the requisite course work, contact the M.B.A. program director, or visit our Web site at www.marquette.edu/gsm. Specializations are noted on the students’ official university transcript.

Graduates of the Executive M.B.A. program may pursue a specialization within five years of graduation. To obtain additional information regarding this opportunity, contact the M.B.A. office at (414) 288-7145 or e-mail MBA@marquette.edu.

PROGRAM DESCRIPTION
The Marquette Executive M.B.A. program is designed for participants whose increasing career responsibilities require the development of broad business knowledge and skills. This is accomplished during a relatively short schedule while allowing participants to fulfill the demands of their current job. The Executive M.B.A. is designed so that students finish their degree in less than 18 months. After a five-day introductory session, the program meets all day on Fridays and Saturdays of every other week.

Marquette’s program is both global and technological. The global focus includes courses on global finance and economics and international management and marketing, culminating with an international trip. The curriculum ensures that participants will have the theoretical and practical knowledge as well as the skills necessary to be a leader.

The integration of knowledge and skills culminates in the International Business Research Project course. (The schedule is subject to revision.)

FALL TERM, YEAR 1
EXBU 210 Economic Issues of Today 3 sem. hrs.
EXBU 224 Quantitative Tools for Decision Making 3 sem. hrs.
EXBU 230 Accounting for Managerial Decisions 4 sem. hrs.
EXBU 240 Marketing Management 3 sem. hrs.

SPRING TERM, YEAR 1
EXBU 209 Information Technology 3 sem. hrs.
EXBU 243 Global Marketing and Management 3 sem. hrs.
EXBU 250 Corporate Finance 3 sem. hrs.
EXBU 262 Managing People in Organizations 3 sem. hrs.
EXBU 284 International Business Research Methods 3 sem. hrs.

SUMMER, YEAR 1
EXBU 283 Legis and Political Environment of Business 4 sem. hrs.
EXBU 280 International Study in Business (includes international trip) 4 sem. hrs.
EXBU 283 International Business Consulting Project (course extends through fall) 4 sem. hrs.
EXBU 288 Selected Business Topics 3 sem. hrs.
EXBU 284 Ethical and Societal Issues in Business 3 sem. hrs.

PREREQUISITES FOR ADMISSION
Applicants are expected to have a four-year bachelor’s degree in any field and at least five years of managerial or professional experience.

APPLICATION DEADLINE
Applications are accepted throughout the year and reviewed as they are received. Applicants will be accepted as they qualify until the class has been filled. Classes start each August.

APPLICATION REQUIREMENTS
The Executive M.B.A. program has prepared an admissions packet for applicants. Copies may be obtained by contacting the Executive M.B.A. office by phone at (414) 288-7145, by fax at (414) 288-8078, by email at ExBu262@marquette.edu, or by e-mail at MBA@marquette.edu. Also visit our Web site at www.marquette.edu/gsm. Applicants must submit, directly to the Graduate School of Management:

1. A completed application form and fee.
2. Specific information including a recent resume, career goals, professional/community activities, honors and other special circumstances.
3. Official transcripts from all current and previous colleges/universities except Marquette.
4. Two letters of recommendation (using the form in the application packet).
5. Official test scores from the Graduate Management Admission Test (GMAT).
6. Additional information, which may be requested on an individual basis.
7. A personal interview is required of all applicants. It will be scheduled after college transcripts and letters of recommendation have been received.

GENERAL INFORMATION
Executive M.B.A. tuition for the class starting in fall 2008 is $48,000.00 for the entire 17-month program. Fee includes the $1,000 deposit, all tuition credits, all textbooks and materials, a laptop computer which the student retains at the end of the program, computer software, most meals, an international trip, including travel to and from destination plus lodging, and all other applicable fees. For more detailed information, contact the Executive M.B.A. office by phone at (414) 288-7145, by fax at (414) 288-8078, by email at ExBu262@marquette.edu, or by e-mail at MBA@marquette.edu.

MASTER’S REQUIREMENTS
The curriculum ensures that participants will have the theoretical and practical knowledge as well as the skills necessary to be a leader. The integration of knowledge and skills culminates in the International Business Research Project course. (The schedule is subject to revision.)

FALL TERM, YEAR 2
EXBU 253 Global Issues in Finance and Economics 3 sem. hrs.
EXBU 265 Ethical and Societal Issues in Business 3 sem. hrs.
EXBU 270 Service and Manufacturing Operations 3 sem. hrs.
EXBU 290 Strategic Management 3 sem. hrs.

* Courses are ½ term.

COURSE DESCRIPTIONS

GRADUATE COURSES

EXBU 209. Information Technology 3 sem. hrs.
Examines various emerging information technologies, possibly including data communications and networking, object-oriented design, expert systems, and group computing software. Emphasis is placed on understanding how to assess the potential application of these technologies to business problems, and on the process of assimilating these technologies within the organizations.

Prereq: Admitted to Executive M.B.A. program.

EXBU 210. Economic Issues of Today 3 sem. hrs.
Integrates economic theory with quantitative and statistical methods for decision making and forward planning by management. The principal focus is on understanding and predicting the economic behavior of consumers, firms, and industries through product-line and industry modeling.

Prereq: Admitted to Executive M.B.A. program.

Provides the business manager with effective quantitative methods and tools for managerial decision making and problem solving. The use of statistical and mathematical concepts and techniques for formulating and analyzing business problems will be emphasized. Instead of concentrating on detailed theoretical material, this course seeks to increase the executive’s conceptual appreciation for statistical and quantitative techniques.

Prereq: Admitted to Executive M.B.A. program.

EXBU 230. Accounting for Managerial Decisions 4 sem. hrs.
Emphasizes the role of accounting as a financial information system for managerial decision. Since course participants will have had differing exposure to financial accounting, the basic financial accounting concepts and procedures will be covered first. Then, specific managerial accounting techniques and concepts will follow. Short cases, term projects and a computerized operational planning exercise will be utilized to learn the value of budgeting as a planning tool. Each of the major assignments will require written and oral reports.

Prereq: Admitted to Executive M.B.A. program.

EXBU 240. Marketing Management 3 sem. hrs.
An integrated study of the analysis, planning, implementation, and control of marketing programs from a managerial point of view. Topics include: application areas of strategic marketing, customer analysis, market segmentation and competitive positioning, product development, brand management, pricing strategy, marketing channels, marketing communications, social and ethical issues in marketing, among others. Highlighting the course are case studies applied in the above topical areas.

Prereq: Admitted to Executive M.B.A. program.
Discussion of the economic environment and an organization’s ability to succeed in global markets. Topics include: 1) leveraging core competencies in international markets, and 2) understanding and managing global marketing strategies.

EXBU 245. Corporate Finance 3 sem. hrs.
Focuses on the application of financial theory on managerial decision-making. Topics include: risk, valuation, capital structure, mergers and acquisitions, and investment decisions. Issues are addressed through case studies of successful and unsuccessful financial strategies.

EXBU 250. Corporate Finance 3 sem. hrs.
Focuses on the application of financial theory on managerial decision-making. Topics include: risk, valuation, capital structure, mergers and acquisitions, and investment decisions. Issues are addressed through case studies of successful and unsuccessful financial strategies.

Surveys modern approaches to balance of payments and exchange rate determination, and examines various foreign currency markets including spot, forward, and derivative markets. Covers foreign exchange risk, pricing, and arbitrage. Applications include exposure and hedging in these markets for corporate and portfolio managers. Also includes an in-depth analysis of international trade including the pros and cons of free trade and the effects of tariffs and quotas. Recent trade policy such as NAFTA, the WTO, and the EU are also considered. Prereq: Admitted to Executive M.B.A. program.

EXBU 260. Teams and Performance 1.5 sem. hrs.
Focuses on the dynamics of teams and group processes, and group development. Participants will be evaluated in terms of the overall team performance, as well as through peer evaluations by team members. Topics include: team building activities, developing group visions, group versus individual decision making, and strategies for improving team performance. S/U grade assessment. Prereq: Admitted to Executive M.B.A. program.

EXBU 262. Managing People in Organizations 3 sem. hrs.
Investigates the impact of human behavior on organizations and investigates how managers can predict and influence such behavior. Begins by focusing on the individual, then the group, and finally the organization as a whole. Topics include: interpersonal perception, motivation, conflict, leadership, corporate culture and organizational change. Prereq: Admitted to Executive M.B.A. program.

EXBU 263. Legal and Political Environment of Business 3 sem. hrs.
Examines the legal and regulatory environment in which business operates. Topics may include: the impact of public policy related to environmental issues, taxation, government spending, industry regulations and deregulation, and antitrust laws. Prereq: Admitted to Executive M.B.A. program.

EXBU 264. Ethical and Societal Issues in Business 1.5 sem. hrs.
Examines the impact of business on society, and the impact of ethical and societal issues on business. Objectives include: improving the student’s ability to recognize and identify ethical issues, placing ethical issues in an organizational context, and improving the student’s ability to reason toward a satisfactory resolution. Prereq: Admitted to Executive M.B.A. program.

EXBU 265. Ethical and Societal Issues in Business 2 1.5 sem. hrs.
Introduces the descriptive, normative and prescriptive elements of moral theory and their application to business. Students will gain familiarity with classical theories of right and wrong, good and bad, distributive justice and rights. The frameworks will then be applied to moral dilemmas in business. Pedagogical approaches may include case studies and research of current and classical ethical issues in business. Particular attention will be paid to international and global aspects of current corporate practices. Prereq: Admitted to Executive M.B.A. program.

EXBU 270. Service and Manufacturing Operations 3 sem. hrs.
Examines issues critical to service and manufacturing operations. Topics include: just-in-time systems, total quality management, sourcing and logistics, technology transfer, and risk management. Emphasis will be given to globalization of operations. Prereq: Admitted to Executive M.B.A. program.

Consists primarily of a structured 7-day trip to compare and contrast international business practices with those of the United States. Preparation includes readings and case discussions of international firms, including those scheduled to be visited. After the trip, a written analysis of the differences and similarities of European and American companies is required. Prereq: Admitted to Executive M.B.A. program and student in good academic standing.

In teams, participants will identify a significant problem for an organization. The team will diagnose the problem, identify several potential solutions, choose one or more of those ideas, develop a complete and detailed action plan, and present that plan to the management of the company in need. Prereq: Admitted to the Executive M.B.A. program.

EXBU 284. International Business Research Methods 1.5 sem. hrs.
Acquaints the students with the appropriate tools to use in conducting international business research. Various sources for research, including library data, Internet sources and similar resources will be presented. Provides the foundation for the International Business Consulting Projects. Prereq: Admitted to the Executive M.B.A. program.

EXBU 288. Selected Business Topics 1-3 sem. hrs.
A variety of potential topics will be presented to the class which will then make the final choice. Potential topics may include (but are not limited to): database marketing, human resources for the general manager, competitive marketing strategy, managing diversity, international policy, total quality management, flexibility in operations, taxes and strategic decision-making, and others. Prereq: Admitted to Executive M.B.A. program.

EXBU 290. Strategic Management 3 sem. hrs.
Examines the diagnostic, problem-formulating, and problem-solving strategies of top managers. The course serves as an integration of earlier courses, and also presents current ideas concerning appropriate strategies for firms of varying sizes in diverse environments. Prereq: Admitted to Executive M.B.A. program.

ENGINEERING MANAGEMENT (ENMA)

Engineering Director of Graduate Studies and Adjunct Associate Professor: Polczynski
Business Administration Director of Graduate Studies and Professor: Srivastava
Note: Faculty members and their ranks are for the 2007–2008 academic year.

DEGREES OFFERED

Master of Science in Engineering Management, Plan B only; Certificate

PROGRAM DESCRIPTIONS

MASTER’S PROGRAM

The Marquette University master of science in engineering management program responds to the world’s growing need for technologists who can lead in the conceptualization, development, and globalization of new generations of commercially viable technology-based products, processes, and services. Program graduates acquire knowledge, skills, and direct hands-on experience in:

- generating innovative technical solutions to existing and emerging market needs;
- transferring technical solutions into entrepreneurial products and services; and
- developing global supplier and customer bases to apply technical solutions worldwide.

By its very nature, this program requires a partnership between the fields of engineering and management. Marquette’s engineering management program is truly interdisciplinary since it is developed, sponsored, organized, and administered by a coalition of members from the College of Engineering and the Graduate School of Management. Both have graduate programs that are long-standing and highly regarded. The engineering management program capitalizes on these strengths by drawing on established and successful courses from each college.

PREREQUISITES FOR ADMISSION

Admission decisions are based on a variety of criteria, each of which is intended to measure the applicant’s ability to succeed in the program. No application can be evaluated until all of the required official documents have been received.

Applicant must have completed or be in the process of completing a four-year bachelor’s degree (usually in engineering) from an accredited college or university. Students holding a bachelor’s degree in disciplines other than engineering may be admitted to the program but may be required to take additional courses.

APPLICATION REQUIREMENTS

Applicants must submit, directly to the Graduate School:

1. A completed application form and fee.
2. Essay questions on the application form.
3. Official transcripts from all current and previous colleges/universities except Marquette.
4. Two letters of recommendation.
5. (For master’s applicants only) official GRE or GMAT test scores.
MASTER'S REQUIREMENTS

All students must complete a minimum of 33 credit hours of course work, of which 27 credit hours are considered core courses and 6 credit hours are electives. A minimum of 18 credit hours must be taken from the College of Engineering and a minimum of 15 credit hours must be taken from the Graduate School of Management.

Students who do not have an adequate undergraduate background in business may also be required to complete one or more M.B.A. foundation courses (BUAD 201–205) in preparation for the core business courses.

CORE COURSES

Nine core courses (27 credit hours) must be selected from a restricted set of classes in each of the following three areas: business administration, engineering management, and decision support. The list of approved core courses may change from time to time to maintain a state-of-the-art program. Currently, the core courses that are approved in each of the three required areas are as follows:

Business Courses
(select at least three)
BUAD 210 Managerial Economics
BUAD 220 Operations and Supply Chain Management
BUAD 230 Managerial Accounting
BUAD 240 Marketing Management
BUAD 250 Financial Management
BUAD 262 Organizational Behavior

Engineering Courses
(select at least four)
ENMA 279 Lean Manufacturing Systems
ENMA 279 Engineering Six Sigma Design and Development
ENMA 281 Engineering Project Management
ENMA 282 Reliability, Failure Analysis, and Risk Assessment
ENMA 283 Innovation and Technology
ENMA 286 New Product and Process Portfolio Management
ENMA 287 Front-End Engineering Product Development
ENMA 290 Management Issues in Engineering and Technology
ENMA 295 Independent Study

Decision Support Courses
(select at least two)
ENMA 288 System Modeling, Simulation, and Analysis
ENMA 291 Engineering Innovation and Entrepreneurship
BUAD 224 Quantitative Decision Modeling and Analysis
BUAD 249 Seminar in Marketing: Marketing Research
ECON 201 Applied Econometrics

ELECTIVE COURSES

Students choose any two graduate-level engineering or business administration (200-level) beyond foundation elective courses that meet their individual needs. Students who wish to select courses from other departments must obtain approval from the Graduate Committee.

HUMAN RESOURCES (HURE)

DEGREE OFFERED

Master of Science in Human Resources, Plan B only

PROGRAM DESCRIPTION

The master of science in human resources (M.S.H.R.) program is designed to meet the educational needs of individuals who are pursuing or intend to pursue a career in human resources. Students from any undergraduate field may be accepted into the program. Central to the program’s objective is the development of skills and knowledge in the areas of greatest concern to a human resources professional. These critical areas include: compensation and reward systems, employment and labor law, labor relations, training and development, staffing, benefit administration, human resources information systems, and issues of diversity.

PREREQUISITES FOR ADMISSION

Admission to the M.S.H.R. program requires: a) a four-year bachelor's degree from an accredited college or university; b) an acceptable record of academic achievement at the bachelor's level and in any previous graduate course work; c) acceptable scores on required admission tests; and d) an overall composite profile of admission data (including an evaluation of previous work experience) that predicts success in the program.

APPLICATION REQUIREMENTS

Students may apply for Regular Degree, Temporary Degree or Non-degree status. It is recommended that students apply for Regular Degree Status when possible. The application is online via our Web site at www.marquette.edu/gsm. Then click on Apply Now.

1. A completed application form and fee.
2. Essay questions on the application form.
3. Official transcripts from all current and previous colleges/universities except Marquette.
4. Official test scores from the Graduate Management Admission Test (GMAT) or the Graduate Records Exam (GRE).
5. Resume or job profile.
6. (For international applicants only) three letters of recommendation and an official TOEFL score or other acceptable proof of English proficiency. Note: Temporary non-degree applicants (admission valid for one term only) must submit all of the above except the GMAT or GRE scores. Students are encouraged to complete all application materials and apply for degree status. Temporary status is valid for one semester only. Temporary non-degree status students are not eligible to continue taking M.S.H.R. classes beyond one semester without degree admission. Typically, non-degree admission is not recommended in the human resources program.

BACHELOR’S-MASTER’S PROGRAM

This five-year program allows students to earn both their master of science in human resources and an undergraduate degree with a major or a minor in human resources. Students begin their graduate work the summer immediately following their senior undergraduate year by taking two graduate level courses. The remaining eight courses are completed in the student’s fifth year.

Students may take two HURE courses (six credits) in their senior undergraduate year. These graduate courses double-count toward the undergraduate and graduate degrees. Should a student be denied admission to the M.S.H.R. program, the courses will be counted toward the undergraduate degree. Upon completion of the first term as a master’s candidate, the student must petition their Graduate School of Management program director to transfer the courses taken as an undergraduate to the master’s degree.

To be considered for admission, applicants must formally apply to the Graduate School of Management during their senior year at Marquette University. Complete all of the application requirements and indicate their application to them that they are applying for the five-year program. To request more information, contact the director of the M.S.H.R. program by telephone (414) 288-3643, by fax (414) 288-5754, or by e-mail at tm.keavenny@marquette.edu.

MASTER’S REQUIREMENTS

The M.S.H.R. program requires a minimum of 36 credit hours of course work. The required number of credits can be as many as 38 if a student has not completed a microeconomics course during undergraduate studies.

FOUNDATION COURSE WORK

Students who have not completed a microeconomics course are required to complete BUAD 201 Economics Foundations (2 sem. hrs.). This course is in addition to the required 36 hours for the M.S.H.R. degree.

CORE COURSE WORK

Students must complete each of the following courses for 6 credit hours:
HURE 212 Human Resource Statistics and Research Design
HURE 251 Human Resource Strategy and Planning

HUMAN RESOURCES CORE

Students must complete 3 or 4 of the following courses for 9 or 12 credit hours:
HURE 210 Staffing Work Organizations
HURE 220 Training and Development
HURE 230 Employee Compensation
HURE 240 Labor Relations

Staffing, training, compensation and labor relations are the central functions performed by human resource professionals. Our students are required to take at least one course in three of the four areas. If a student elects to take all four of the above courses, the supporting field course work is reduced from 9 credit hours to 6 credit hours.

ETHICS CORE

(Select one)
BUAD 263 Variable Topics in the Global Environment of Business
HURE 211 Employment Law
HURE 221 Diversity in Organizations
ELECTIVE CORE
(Select three)
HURE 211 Employment Law
HURE 221 Diversity in Organizations
HURE 231 Employee Benefit Systems
HURE 241 Negotiations
HURE 250 Human Resources Information Systems
HURE 293 Seminar in Human Resources
BAUD 260 Ethical Issues, Regulatory Environment and Human Resource Management
BAUD 262 Organizational Behavior
BAUD 264 International Management
BAUD 266 Leadership, Motivation, and Organizational Change
PSYC 204 Industrial Psychology and Organizational Development
PSYC 205 Personnel Selection

SUPPORTING FIELD COURSE WORK
In addition to foundation and core course work, students in the M.S.H.R. program must take six or nine credits (two or three courses) selected from a wide variety of supporting areas both within and outside of the Graduate School of Management. Supporting areas of study include: communication, counseling, instructional leadership, economics, law, research methodology, and business administration. Students may choose any combination of courses in these areas from the list of designated classes (available from the Graduate Programs Office in the Graduate School of Management).

COURSE DESCRIPTIONS

GRADUATE COURSES:

HURE 210. Staffing Work Organizations 3 sem. hrs.
Studies theories and practices relevant to staffing work organizations. Topics include: reliability and validity of selection procedures, criterion development, evaluation of alternative selection procedures and compliance with equal employment opportunity, affirmative action as well as other relevant regulations. Offered occasionally.
Prereq: HURE 212 or equiv.; cons. of M.S.H.R. dir.

HURE 211. Employment Law 3 sem. hrs.
Provides an overview of the major federal laws which regulate human resources management, as well as common law. Topics include: wrongful discharge, privacy, defamation, negligent hiring, Title VII, affirmative action, the Americans with Disabilities Act, ERISA, Workers’ Compensation, and the Occupational Safety and Health Act. Provides human resource managers and line supervisors with a sufficient working knowledge of these laws to reduce the risk of imposing legal liability on their employers by their own actions and to minimize liability for questionable or unlawful acts of company agents through prompt and effective action. Offered occasionally.
Prereq: Cons. of M.S.H.R. dir.

Addresses the topics of measurement, sampling and research design in the context of human resources management systems. Statistical methods studied include analysis of variance, analysis of covariance, correlation, regression, multiple regression, as well as selected nonparametric statistics and measures of association. Extensive use of human resource management examples will be employed to facilitate management transfer to work organization settings. Offered occasionally.
Prereq: Cons. of M.S.H.R. dir.

HURE 220. Training and Development 3 sem. hrs.
Addresses principles and factors that contribute to the personal growth and development of employees. Focuses on training and employee development within work organizations. Training includes program development, principles of learning, training techniques and evaluation. Employee development topics involving career planning and management will also be addressed. Offered occasionally.
Prereq: Cons. of M.S.H.R. dir.

HURE 221. Diversity in Organizations 3 sem. hrs.
Focuses on the complex dynamics of diversity in organizations as seen from the vantage point of social science and organizational studies. Examines demographic trends in the work force, differentiates cultural practices and values among diverse groups, and discusses strategies for dealing with discrimination and stereotyping. The focal themes of the course include: the nature or character of diversity, organizational practices, and theoretical implications. Individual, interpersonal and organizational factors influencing diversity will be examined using both a conceptual and an experiential approach. Offered occasionally.
Prereq: Cons. of M.S.H.R. dir.

HURE 230. Employee Compensation 3 sem. hrs.
Focuses on theory and practice relevant to the development of compensation systems which are internally consistent, externally competitive and individually motivating. Topics include: motivation theories; job evaluation methods; salary and benefit surveys; pay structures; and alternative compensation plans, including gainsharing, broadbanding and pay-for-knowledge. Relevant government regulations are also studied. Offered occasionally.
Prereq: Cons. of M.S.H.R. dir.

HURE 231. Employee Benefit Systems 3 sem. hrs.
Addresses the design and administration of employee benefit systems. Among the programs studied are: health insurance and wellness programs; pensions, salary reduction and deferred compensation; pay for time not worked; and cafeteria plans. State and federally mandated employee benefits, as well as tax issues related to employee benefit systems are investigated. Offered occasionally.
Prereq: Cons. of M.S.H.R. dir.

HURE 240. Labor Relations 3 sem. hrs.
The objectives of this course are to: 1) survey the alternative philosophies and approaches to labor relations taken by U.S. companies, 2) assess the potential costs and benefits of each approach, 3) analyze case studies of organizations which have taken each approach, both among competitors in other countries as well as within the U.S., and 4) identify strategies for pursuing each alternative within the constraints of current U.S. labor law. A recurring theme will be labor-management conflict versus cooperation. Within this broad framework, basic skills in U.S. labor law governing union organizing and bargaining, grievance and arbitration procedures, and cooperative programs will be developed. Offered occasionally.
Prereq: Cons. of M.S.H.R. dir.

Provides a comprehensive investigation of the process and dynamics surrounding adverse variety of negotiations and conflict resolution efforts. Both academic models of negotiations and actual events, historical and contemporary, will be examined in detail. Strategies and tactics for achieving objectives, limiting losses and maintaining positive relations will be emphasized in light of radically changing social and business climates. Methods for becoming an effective negotiator will be presented through both analytical frameworks and experiential opportunities. Cost/benefit assessment of negotiations will be developed in the actual costing of an agreement and the impact of failing to achieve an agreement and having to resort to alternative options. Offered occasionally.
Prereq: Cons. of M.S.H.R. dir.

HURE 250. Human Resources Information Systems 3 sem. hrs.
Addresses the use of human resource information systems to facilitate and improve managerial decisions pertaining to human resource issues. Topics include: information systems fundamentals and modeling of human resource issues to assist decision making in such areas as HR and affirmative action planning, staffing, training and development, compensation and benefit administration. Offered occasionally.
Prereq: Cons. of M.S.H.R. dir.
HURE 251. Human Resources Strategy and Planning 3 sem. hrs.
Investigate principles of human resource strategy and the link to business strategy. Concepts emphasized include resource-based theory of the firm, sustained competitive advantage, as well as fit and flexibility in the design of human resource systems. Approaches to evaluating and assessing the contribution and effectiveness of human resource systems are studied. Prerequisite: Completion of BUAD 262 for BAAD graduate students; completion of 9 HURE credits for HURE students; and cons. of the M.S.H.R. dir.

HURE 259. Seminar in Human Resources 1-3 sem. hrs.
Intensive treatment of selected human resource topics. Topics vary. Offered occasionally. Prerequisite: Cons. of M.S.H.R. dir.

HURE 295. Independent Study 1-3 sem. hrs.
Offered every term. Prerequisite: Cons. of dept. ch.; cons. of M.S.H.R. dir.

HURE 873. Graduate Standing Continuation – Less than Half-Time 0 sem. hrs.
Fee. SNC/ UNC grade assessment. Prerequisite: Cons. of G.S.M.

HURE 876. Graduate Assistant Research – Full-Time 0 sem. hrs.
Fee. SNC/ UNC grade assessment. Prerequisite: Cons. of G.S.M.
# University Directory

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## Corporate Vice President

- GREGORY J. KLEEBHAN

## Treasurer

- JOHN C. LAMB


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<td>ARTHUR SCHEUBER</td>
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<td>WILLIAM R. WIENER, Ph.D.</td>
<td>Vice Provost for Research and</td>
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<td>Dean of the Graduate School</td>
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Faculty elected at large (Psychology) – 2008

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Interim Provost – Ex-Officio

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Faculty elected at large (History) – 2008

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PROF. ED FALLONE
Law School elected faculty – 2010

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College of Nursing elected faculty – 2010

DR. KRISTIN HAGLUND
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MR. MIKE CLASS
College of Professional Studies FT/PT elected faculty – 2010

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MUSG – 2008

MR. BROCK BANKS
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STATISTICS AND COMPUTER SCIENCE

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University of Florida–Gainesville

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Marquette University

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Emory University

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Academic 47
Calendar: Inside Covers 18
Course Load 47
Deans 194
Dishonesty 10
Facilities and Resources 15
Honesty Policy 9
Performance 47
Satisfactory Progress 33
Senate 194
Status 48
Accounting (ACCO) 177
Accreditation 1
Administration of Justice. See Public Service 1
Administrators and Faculty 195
Advising 51
Allegations of Dishonesty 9
Appeals Procedure, Academic Dishonesty 9
Application Procedures 30
Financial Aid 30
Graduate School 162
Self-completed 39
Archives, Special Collections and 16
Art, Haggerty Museum of 17
Arts and Sciences, Helen Way Klingler College of Faculty 195
Assistantships 24, 28, 51
Audit 22, 33, 56
Bachelor’s-Master’s Programs Offered 8
Background Checks, Drug Testing 9
Bioinformatics (BIIN) 62
Biological Sciences (BSCI) 63
Biomedical Engineering (BIEN) 65
Blue Light Phones 18
Board of Graduate Studies 195
Board of Trustees 193
Business Administration (BUAD) 179
Business Administration, College of Faculty 201

B

Calculus (Calk) 33
Central Michigan University 5
Chemistry (CHEM) 68
Civil Engineering (CIEN) 70
Clinical Psychology (CLPs) 74
Commencement 14
Committee 78
Dissertation 46
on Research 195
Communication (COMM) 77
Communication, J. William and Mary Diederich College of Faculty 203
Computer Engineering. See Electrical and Computer Engineering (EECE) 102
Computer Science. See Mathematics, Statistics and Computer Science 104
Computing (COMP) 82
Conduct 13
Conduct, Academic 9
Confidentiality of Proprietary Information 14
Corporate Officers of the University 193
Council of Graduate Schools in the United States, Resolution of the 30
Counseling and Educational Psychology (COEP) 83

C

Calendar, Academic: Inside Covers 18
Campus Map 218
Campus Safety 18
Certificate(s) 7
Civil Engineering 4
Communication 4
Definition 7
Dentistry 5
Dispute Resolution 5
Educational Policy and Leadership 94
Director of Instruction 5
Elementary Education 5
Global 5
Reading Specialist 5
Reading Teacher 5
Secondary Education 5
Superintendent 5
Electrical and Computer 5
Engineering 4
Engineering Management 5
Gerontology 5
Law Enforcement Leadership 5
Management 6
Leadership Studies 6
Nursing 6
Professional Communication 4
Speech-Language Pathology (Bilingual English-Spanish) 7
CheckMarq 19
Chemistry (CHEM) 68
Civil Engineering (CIEN) 70
Clinical Psychology (CLPs) 74
Commencement 14
Committee 78
Dissertation 46
on Research 195
Communication (COMM) 77
Communication, J. William and Mary Diederich College of Faculty 203
Computer Engineering. See Electrical and Computer Engineering (EECE) 102
Computer Science. See Mathematics, Statistics and Computer Science 104
Computing (COMP) 82
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Confidentiality of Proprietary Information 14
Corporate Officers of the University 193
Council of Graduate Schools in the United States, Resolution of the 30
Counseling and Educational Psychology (COEP) 83

D

Deadlines. See Academic Calendar: Inside Covers 18
Deans and Registrar 194
Degrees 94
Abbreviations 8
Definitions 7
Doctoral Degree Requirements, Graduate School 44
Master’s Degree Requirements, Graduate School 41
Master’s Degree Requirements, Graduate School of Management 166
Offered 4
Dentistry (DENT) 87
Diplomas 15
Disability Services 19
Disciplinary Records 13
Dishonesty, Academic 10
Dispute Resolution. See Public Service 92
Dispute Resolution (DIRS) 92
Dissertation Process 46
Doctoral Degree Requirements 44
Drug Testing, Background Checks and 13

E

Economics (ECON) 184
Educational Policy and Leadership (EDPL) 94
Education (EDUC) 94
Electrical and Computer Engineering (EECE) 102
Engineering 106
Biomedical Engineering (BIEN) 65
Civil Engineering (CIEN) 70
Electrical and Computer Engineering (EECE) 102
Engineering Management (ENMA) 106
Mechanical Engineering (MEEN) 126
Engineering, College of Faculty 207
Engineering Management (ENMA) 106, 188
English as a Second Language Program (ESLP) 110
English (ENGL) 108
Ethics and Standards, Professional 13
Executive Master of Business Administration (EXBU) 186
Faculty and administrators  195
Arts and sciences  195
Business Administration  201
Communication  203
Dentistry  203
Dispute Resolution  206
Education  206
Engineering  207
Health Sciences  209
Nursing  210
Professional Studies  211
Transfusion Medicine  212
Family Education

Rights and Privacy Act (FERPA)  14
Fees  21
Fellowships  25, 29, 51
Financial aid  24, 30
Financial information  21
Foreign Languages and Literatures (FOLL)  110

Gerontology (GERT)  113
Graduate Assistantships  29
Graduate Bulletin  35
Graduate Management Admission Test (GMAT)  40, 164
Graduate Record Examination (GRE)  40
Graduate School
Academic Status  48
Administration  196
Admission Requirements  37
Admission Status  50
Application Procedures  37
Continuous Enrollment Policy  52
Course Descriptions  114
Deadlines  53
Doctoral Degree Program  44
Enrollment Changes  53
Grading System  54
Leave of Absence  57
Location  35
Master's Degree Program  41
Mission Statement  36
Policies  47
Preparing Future Faculty Program  36
Programs and Courses  61
Publications  35
Readmission  58
Self-completed Applications  39
Time Limitations  58
Transfer of Credit  59

Graduate School of Management
Academic Status  167
Accreditation  162
Administrators  201
Admission Status  167
Advising  168
Application Procedures  162
Continuation Enrollment Course Procedures  169
Course Load  166
Courses Descriptions  177
Deadlines  169
Faculty  201
Grading System  170
International Student Requirements  165
Jesuit Multilateral Agreement (Jesuit MBA)  174
Location  161
Master's Degree Program  165
Policies  166
Programs and Courses  177
Readmission  174
Time Limitations  175
Transfer of Credit  175
Waiver Exams  176
Graduate Student Organization  19
Graduation  14, 173

Hagerty Museum of Art  17
Hartman Literacy and Learning Center  17
Health Care Administration. See Public Service
Healthcare Technologies Management (HCTM)  115
Health History Form  37
Health Sciences, College of
Faculty  209
History (HIST)  116
History of Marquette University  2
Honesty Policy  9
Housing  23
Human Resources (HURE)  189

Immunization and Tuberculosis Screening Policy  37, 164
Independent Study  56
Institutes  18
Instructional Media Center  17
Intellectual Property  14
Interdisciplinary Ph.D. (INPR)  118
International Affairs. See Political Science
International Students
Definition of  38
Requirements (Graduate School of Management)  165
Test of English as a Foreign Language (TOEFL)  40
Visa Regulations  38
Inter-University Visitation  56, 173

Jesuit Multilateral Agreement (Jesuit MBA)  174
Joint Programs of Study  7, 56, 65, 78, 93, 130, 136, 140, 179

Law Enforcement Leadership and Management (LELM)  120
Law Library  16
Leadership Studies. See Public Service
Leadership Studies (LEDR)  120
Libraries
Law  16
Overview  15
Raynor Memorial  16
Special Collections and Archives  16
Literacy and Learning Center, Hartman  17

M.A.-J.D. Degree  7, 136, 140
Map, Campus  218
MARGCAT (online card catalog)  15
Master's Degree Requirements  41
Mathematics, Statistics and Computer Science (MSCS)  122
M.B.A.-J.D. Degree  7, 179
M.B.A.-M.S.N. Degree  7, 130
Meal Plans  24
Mechanical Engineering (MEEN)  126
Medical College of Wisconsin  5, 56, 62, 65, 106, 115, 173, 179
Midwest Catholic Graduate Schools Consortium  57
Millers Analog Test (MAT)  40
Mission Statement, Marquette University  2
M.S.N. and M.B.A.  7
Museum of Art, Hagerty  17

Non-profit Sector. See Public Service
Nursing, College of
Faculty  210
Nursing for Non-Nursing M.S.N.
Nursing Graduates  8, 22
Nursing (NURS)  129
Fees  23

Officers of the University, Major Staff  193
INDEX

P

Personal Resources and Facilities 18
Philosophy (PHIL) 135
Physical Therapy 138
Physician Assistant Studies 139
Physics (PHYS) 139
Plagiarism 10
Political Science (POSC)/International Affairs (INAF) 139
Preparing Future Faculty Program 36
Privacy Act (FERPA) 14
Professional Ethics and Standards 13
Professional Performance 13
Professional Studies, College of Faculty 211
Proprietary Information, Confidentiality of 14
Psychology, Clinical (CLPS) 143
Publications
  Graduate Bulletin 1
  Safety Resource Guide 18
Public Safety, Department of 18
Public Service (PUBS) 143

R

Raynor Memorial Libraries 16
Refunds and Adjustments 24
Religious Studies (REST), See Theology
Research
  Involving Humans, Animals or Radioisotopes 46
  Involving Humans or Animals 42, 166
  Misconduct 10
  Research Compliance, Office of 186
Research Assistantships 29
Research Centers and Institutes 18

S

Safety Resource Guide 18
Satisfactory Academic Progress Policy 33
Schedule of Classes 36, 60
Scholarships 29, 51
Services Fees 23
Snapshot 19
Social and Cultural Sciences (SOCS) 146
Special Collections and Archives 16
Speech-Language Pathology (SPLA) 148
Standards, Professional Ethics and 13
Statement on Human Dignity and Diversity 3
Statistics, See Mathematics, Statistics and Computer Science
Student
  Conduct Code and Procedures 13
  Employment 31
  Financial Aid 24
  Graduate Student Organization 19
Summer Studies 60

T

Teaching Assistantships 29
Test of English as a Foreign Language (TOEFL) 40
Theology (THEO) 150
Transcript of Records 19
Transfusion Medicine (TRME) 158
Trustees of the University 193
Tuberculosis Screening Policy 37, 164
Tuition 21
Discounts 22
Refunds and Adjustments 24

U

Undergraduate Students in Graduate Courses 60, 176
University
  Accreditation 1
  Board of Graduate Studies 195
  Committee on Research 195
  Corporate Officers 193
  Deans and Registrar 194
  Directory 193
  History 2
  Human Dignity and Diversity, Statement on 3
  Major Staff Officers 193
  Mission Statement 2
  Policies 9
  Trustees 193
  Vision Statement 3
University of Wisconsin–Milwaukee (UWM) 56, 173

V

Veterans Benefits 20
Victim/Witness Services 18
Visa Regulations 38
Vision Statement 3
Visiting Scholar Status 50

W

Waiver Exams 176

215