

Undergraduate Catalog

Volume 44, 2016-2017

(Effective as of Fall Semester 2016)

This Undergraduate Catalog is a compendium of opportunities available at Madonna University. It includes information on academic programs, requirements for admission and graduation, rules, regulations, and expectations. Failure to read this Undergraduate Catalog does not excuse students from the requirements and regulations described herein. While every effort is made to provide accurate and current information, the University reserves the right to change rules, policies, fees, curricula, courses, and other programs described to reflect faculty or administrative action.

This Undergraduate Catalog is accurate as of the publication date.

Mission Statement: The mission of Madonna University, a Catholic and Franciscan institution of higher learning, is to instill in its students Christian humanistic values, intellectual inquiry, a respect for diversity, and a commitment to serving others through a liberal arts education, integrated with career preparation, and based on the truths and principles recognized within the Catholic tradition.

Madonna University guarantees the right to equal educational opportunity without discrimination because of race, religion, sex, age, national origin, or disabilities.

Madonna University

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MADONNA UNIVERSITY ACADEMIC CALENDAR

SEMESTER I — FALL	2016-2017	2017-2018	2018-2019
Faculty Conference	Aug. 22	Aug. 21	Aug. 20
Classes Begin	Aug. 29	Aug. 28	Aug. 27
Course Add and Drop Periods	See Academic Plan	ning Guide	
Fall Convocation	Aug. 25	Aug. 24	Aug. 23
Deadline:—Removal of "I" grade from Spring/Summer Semester	Sept. 9	Sept. 22	Sept. 21
Filing Deadline—Application for Graduation: Winter Semester, May	Sept. 30	Sept. 29	Sept. 28
Community Gathering	Oct. 14	Oct.13	Oct. 12
Web Registration Begins—Spring/Summer Semester	Oct. 24	Oct. 23	Oct. 22
In Person/Open Registration Begins—Spring/Summer Semester	Oct. 31	Oct. 30	Oct. 29
Final Date, Election of S Grade	Nov. 4	Nov. 3	Nov. 2
Final Filing Date/Doctoral Capstone Experience for December graduation	Nov. 17	Nov. 16	Nov. 15
Final Date, Withdrawal from Courses (No later than 75% completed course work)	Nov. 18	Nov. 17	Nov. 16
Thanksgiving Recess	Nov. 24-27	Nov. 23-26**	Nov. 22-25**
Final Examinations	Dec. 12-17	Dec. 11-16	Dec. 10-15
End of Fall Semester	Dec. 17	Dec. 16	Dec. 15
Grades Due by 12:00 noon	Dec. 20	Dec. 19	Dec. 18

^{**}Thanksgiving Recess begins at 4:00 p.m. on the Wednesday before Thanksgiving.

SEMESTER II — WINTER	2016-2017	2017-2018	2018-2019
Classes Begin	Jan. 9	Jan. 8	Jan. 7
Course Add Period	See Academic Pla	nning Guide	
Deadline—Removal of "I" grade from Fall Semester	Jan. 27	Jan. 26	Jan. 25
Filing Deadline—Application for Graduation Spring/Summer Semester, July	Jan. 31	Jan. 31	Jan. 31
Web Registration Begins—Spring/Summer Semester	April 3	April 2	April 1
Final Date, Election S Grade	Mar. 17	Mar. 16	Mar. 15
Spring Vacation	Mar. 6-11	Mar. 5-11	Mar. 4-9
Final Date, Withdrawal from Courses (No later than 75% completed course work)	April 7	April 6	April 5
Final Filing Date/Doctoral Capstone Experience for May graduation	April 6	April 5	April 4
Easter Recess	Apr. 14-16	Mar. 30-Apr. 1*	Apr. 19-21*
Web Registration Begins—Fall Semester	Apr. 3	Apr. 2	Apr. 1
In Person/Open Registration Begins—Fall and Winter Semesters	Apr. 10	Apr. 9	Apr. 8
Final Examinations	May 1-6	Apr. 30-May 5	Apr. 29-May 4
End of Winter Semester	May 6	May 5	May 4
Grades Due by 12:00 noon	May 9	May 8	May 7
Graduation Liturgy	May 11	May 10	May 9
Commencement	May 13	May 12	May 11
Filing Deadline—Application for Graduation Spring/Summer Semester, July Web Registration Begins—Spring/Summer Semester Final Date, Election S Grade Spring Vacation Final Date, Withdrawal from Courses (No later than 75% completed course work) Final Filing Date/Doctoral Capstone Experience for May graduation *Easter Recess Web Registration Begins—Fall Semester In Person/Open Registration Begins—Fall and Winter Semesters Final Examinations End of Winter Semester Grades Due by 12:00 noon Graduation Liturgy	Jan. 31 April 3 Mar. 17 Mar. 6-11 April 7 April 6 Apr. 14-16* Apr. 3 Apr. 10 May 1-6 May 6 May 9 May 11	Jan. 31 April 2 Mar. 16 Mar. 5-11 April 6 April 5 Mar. 30-Apr. 1* Apr. 2 Apr. 9 Apr. 30-May 5 May 5 May 8 May 10	Jan. 31 April 1 Mar. 15 Mar. 4-9 April 5 April 4 Apr. 19-21* Apr. 1 Apr. 8 Apr. 29-May 4 May 4 May 7 May 9

^{*}Easter Recess begins at 4:00 p.m. on the Thursday before Easter.

SEMESTER III — SPRING-SUMMER	2016-2017	2017-2018	2018-2019
Classes Begin	May 15	May 14	May 13
Course Add Period	See Tuition and Fee	es Section	
Memorial Day—No Classes	May 29	May 28	May 27
Filing Deadline—Application for Graduation Fall Semester, December	May 31	May 31	May 31
Deadline: Removal of "I" grade from Winter Semester	June 16	June 15	June 14
Final Date, Withdrawal from courses	No later than 2/3 or	f Complete Course W	ork
Final Filing Date/Doctoral Capstone Experience for July graduation	July 6	July 5	July 4
Independence Day—No Classes	July 4	July 4	July 4
Final Examinations	July 31-Aug. 5	July 30 - Aug. 4	July 29-Aug. 3
End of Spring/Summer Semester	Aug. 5	Aug. 4	Aug. 3
Grades Due by 12:00 noon	Aug. 8	Aug. 7	Aug. 6

PLEASE REVIEW ACADEMIC PLANNING GUIDE FOR UPDATED & FURTHER INFORMATION.

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Students are held individually responsible for the information contained in the University Catalog. Failure to read and comply with University stipulations will not exempt students from whatever consequences they may incur.

The University reserves the right to withdraw or modify information in this catalog.

Section I:

University Overview

Madonna University

Vision for the New Century

Madonna University is an independent Catholic, Franciscan institution of higher learning committed to teaching, scholarship, and service. The University's educational philosophy is founded on the Franciscan spirit, which encounters God in the whole of creation, manifested by persons, events, and natural things. This view defines men and women as moral-ethical beings and advocates a life based on truth, goodness, and service to others, rooted in the teachings and traditions of the Roman Catholic Church. Drawing inspiration from the selfless love of Jesus Christ and his Mother, the Madonna, the University seeks to communicate a coherent understanding of reality, discernable through the spirit, mind, and imagination. The University adheres to the guidelines set forth in *The Application of Ex corde Ecclesiae in the United States*.

Madonna University is dedicated to meeting the educational needs of traditional and nontraditional students as they pursue associate, baccalaureate, and graduate degrees and lifelong learning. The University's strong foundation of liberal arts education combined with career preparation is acknowledged for its relatedness to the quality of life and economic growth and development of southeastern Michigan. In realizing all aspects of its vision, the University emphasizes a service approach to students through an integrated student support structure and flexible delivery systems both on and off campus, nationally and internationally, and through in-person and distance education instruction.

Mission

Madonna University expresses its mission in the following statement:

Mission Statement

The mission of Madonna University, a Catholic and Franciscan institution of higher learning, is to instill in its students Christian humanistic values, intellectual inquiry, a respect for diversity, and a commitment to serving others through a liberal arts education, integrated with career preparation, and based on the truths and principles recognized within the Catholic tradition.

Foundational Values of Our Mission

The Catholic Tradition

Madonna University, founded and sponsored by the Felician Sisters of Livonia, Michigan,

- maintains fidelity to the teaching authority of the Catholic Church through its academic curriculum and student life activities;
- promotes an appreciation for and openness to other religious traditions:
- encourages an atmosphere of respect and sensitivity to all persons

The University's faith environment fosters the search for unity and the spirit of ecumenism, interreligious dialogue, and intellectual freedom. Through undergraduate, graduate, and continuing professional study, Madonna University provides men and women with opportunities for intellectual, spiritual, and personal growth. The University endeavors to develop the capacity of its students to evaluate values and norms of modern society and culture from a Christian perspective in order to give full meaning to human life. Ultimately, the Christian message calls upon all people to witness God's unconditional love to the world through the pursuit of truth, the promotion of social justice, and the commitment to serve others who are less fortunate.

The Franciscan Ideal

The Madonna University Community supports and maintains an educational environment which is in harmony with the teachings of Jesus Christ as exemplified in the life of St. Francis of Assisi. The Franciscan ideal encourages a "conversion of heart" away from selfish worldliness toward a Christ-centered vision of creation. The mission of the University receives its spirit from such Franciscan values as:

- a reverence for the dignity of each person;
- a love of God translated into assisting all people, especially the poor, minority groups, and individuals challenged with disabili- ties:
- · an appreciation of nature and all creation; and
- a conviction that the liberal arts and sciences develop the intellect so as to prepare the individual to render more effective service to humanity.

Christian Humanistic Values

Christian humanism, taking inspiration from the Judeo-Christian tradition of respect for life, supports the belief that a Higher Being judges and redeems life, thereby encouraging men and women to define their relationship with their brothers and sisters across the globe and throughout history itself. This philosophy recognizes the innate dignity of each person and affirms the human capacity and freedom of will to develop one's physical, social, psychological, and spiritual well-being to the fullest. In this context, education is a means of empowerment, preparing individuals to reach their full potential.

Core Values

In order to meet the intellectual, spiritual, and personal development needs of learners within the framework of Catholic and Franciscan higher education, the Madonna University community commits itself to living the following core values:

Excellence

Madonna University is aware of the responsibility that results from the trust placed by the community in its ability to educate its students effectively. It, therefore, commits itself to quality as it endeavors to fulfill its mission and educational purposes. The University pursues a philosophy of continuous improvement based upon rigorous assessment, focused reflection, and informed decision making.

• Respect

Madonna University recognizes that each individual's contribution is vital to achieving society's goals and, therefore, values each person's special talents and abilities. A diversity of races, creeds, cultures, and physical ability enriches the University community, and, by creating a climate of mutual respect and justice, the University affirms each individual's right to dignity and civility.

Community

Madonna University fosters a spirit of belonging, interdependence, and solidarity based on principles of mutual trust, respect for each individual, and social justice. The University strives to be an agent of transformation that, through the power of liberal arts education integrated with career preparation, educates men and women to create positive change in the lives of individuals and the global community.

Educational Access

Since its founding, Madonna University has provided educational access for diverse groups that would not have had ready access to higher education otherwise, regardless of race, creed, physical ability, age, or socioeconomic status. This commitment led to the admission of male students in 1972 and to programs for off-campus and distance education students in the 1980's and 1990's.

The University will continue to be a positive force in society by responding to the educational needs of underserved groups. In addition, Madonna University strives to deliver exceptional value at a cost below national norms for private institutions, thus remaining affordable to all students.

• Intellectual, Spiritual, and Personal Development

Madonna University creates a learner-centered environment committed to the intellectual, spiritual, and personal development of its members: students, faculty, and staff. It is focused on developing the whole person both for professional employment and a dedication to truth, goodness, and service. Each member of the University community is expected to manifest a commitment to lifelong learning and continued professional development.

Integrity

The University practices honesty in all matters, including how it presents itself to its various publics and conducts all transactions. By manifesting integrity, the University models this ideal for its students, employees, and the community at large and, thus, fulfills a significant aspect of its teaching mission.

Responsible Stewardship

The Madonna University community recognizes that all of its resources are gifts from God. With these blessings comes the responsibility to shepherd resources wisely and responsibly and to optimize their role in achieving the University's mission, vision, and purposes. Animated by the Franciscan spirit of service, the University deploys its resources for the benefit of its members, to foster learning and promote the fulfillment of human potential.

Vision of Diversity and Inclusion

Madonna University aspires to live out its mission and values by creating and maintaining an environment where all persons are treated with understanding and respect regardless of their individual differences. The University regards diversity and inclusion as guiding principles. Diversity calls upon individuals to know how to relate to qualities, conditions, and identities that are different from their own and from the groups to which they belong. Members of the University community are expected to respect others regardless of race, ethnicity, gender, sexual identity, socioeconomic status, age, physical abilities, cognitive abilities, family status, religious beliefs, political beliefs, or religious tradition. The University community

guarantees the freedom of individuals to explore their evolving selfidentity in a safe, positive, and nurturing environment.

To advance the concept of inclusion, the University strives to ensure that all persons can participate in and have access to the everyday life of the institution. This deepens the understanding and appreciation of the individuality and circumstances of everyone. Inclusion is essential for the creation of an environment of respect, hospitality, understanding, and welcome.

At Madonna University, the commitment to diversity and inclusion emanates from the Franciscan values of respect for the dignity of each person, concern for the disadvantaged and oppressed, and reverence for life, rather than as a response to external regulations.

Liberal Arts Integrated with Career Preparation Madonna University believes in the enduring values of the liberal arts, with its curriculum based on the arts, humanities, sciences, and social sciences as the foundation for the critical and creative thinking, decision-making, and higher literacy necessary for being a responsible and productive citizen in contemporary society. Programs of study are designed to:

- be intellectually challenging;
- foster independent learning;
- cultivate new knowledge through study, research, dialogue, analysis, and synthesis;
- · instill the sense of global awareness; and
- eliminate ignorance, fear, injustice, and prejudice.

A Student-Centered Learning Community

Madonna University measures its success by the high level of learning achieved by its students. It focuses on student outcomes and has identified multiple evaluation strategies to assess student academic achievement.

The Madonna University graduate is expected to achieve the following learning goals:

- 1. **College Writing:** Develop the ability to write clear, effective English prose.
- 2. **Religious Values**: Achieve an understanding of religious and moral dimensions of human experience.
- 3. **Cultural Traditions:** Develop an understanding of and responsiveness to the aesthetic, emotive, and intellectual expressions of human concerns through the humanities and arts.
- Scientific Inquiry: Achieve an understanding of modern concepts of science, computer technology and mathematics, and
 the relationship between scientific and technological realities
 in contemporary life.
- Personal and Social Environment: Develop an understanding of the ways in which individuals perceive, experience, and behave in their personal and social environment.
- Global Citizenship: Develop a facility for international and national citizenship skills.
- Personal and Career Development: Achieve individual educational goals for personal enrichment and career development.

The University

Madonna University History

For the past 79 years, Madonna University has been committed to quality liberal arts education integrated with career preparation in the interest of public service. Founded by the Felician Sisters of Livonia as Presentation Junior College in 1937, in 1947 it was renamed Madonna College and incorporated as a baccalaureate institution. It became coeducational in 1972, initiated its first graduate programs in 1982, achieved University status in 1991, and launched its first doctoral program in 2008. In 2003, St. Mary's College of Orchard Lake merged with Madonna University, and its students and many of its faculty were welcomed into the Madonna University community.

Madonna University maintains its identity as an independent Catholic University in the Franciscan tradition. A pioneer in opening its doors to both older and younger adults with diverse economic, religious, social, and cultural backgrounds, the University remains committed to its belief in the spiritual, educational, and service-oriented mission: Education for truth, goodness, and service.

The Livonia Campus

The main campus of Madonna University is located in Livonia, Michigan, a suburb on the western perimeter of metropolitan Detroit. The campus faces Schoolcraft Road and the Jeffries (I-96) Freeway (Exit 173 at Levan or Newburgh Road), and has easy access to downtown Detroit, the Detroit Metropolitan Airport, Ann Arbor, and important state highways.

The Academic Building

The Academic Building accommodates a variety of purposes, from administrative offices to classrooms and support services. The University utilizes advanced technology as a tool for teaching and learning, increasing opportunities for students to engage in learning on an "anywhere, anytime" basis. In addition to face-to-face classroom instruction, course offerings use a blend of technologies to reach students at off-campus sites, at work, or at home using *Blackboard* as its learning management tool for online courses, email communication, audio, video, and live, interactive two-way video. Madonna's facilities include an interactive video classroom with recording facilities and videocasting and web conferencing capabilities. The building also has wireless access throughout.

The Ford Motor Company Technology Wing, the 1100 corridor, provides state-of-the-art learning resources with computer laboratories, computer classroom, faculty multimedia authoring lab, and a Macintosh/PC-based multi-media lab that supports art and graphic design, video, and journalism. The Information Technology staff maintains computer services across the campus, including the IT network, which allows remote access from offices, student lounges, the residence hall, and off campus. Internet access provides immediate communication with faculty, support offices, other students, and the global community.

The University promotes the integration of learning technologies across the curriculum, from face-to-face classes enhanced with technology to courses offered entirely online. The University has outfitted most of its classrooms with state-of-the-art multimedia and computing technologies in order to promote advanced technology literacy in its faculty and students. The University provides training on Blackboard for students and faculty members on the

various features of the system in order to use it to its full potential.

The **Nursing Simulation Laboratories**, room 1410, provides a range of instructional resources, including simulation rooms for medical/ surgical, pediatric/childbirth, intensive care, and community health nursing; observation rooms; and practice laboratories. Nursing students encounter real-world simulations as preparation for their extensive clinical placements in hospitals throughout the metropolitan Detroit area.

The **Sign Language Instruction Laboratory** and office suite, room 1405, provides 24 workstations equipped with specialized language-learning software adapted for the visual nature of American Sign Language, housed within a space that can be reconfigured as a high-tech classroom. In addition, faculty and staff offices are located in an adjacent space to facilitate student-faculty interaction.

The **Career Services Office**, room 1411, provides assistance to students seeking work experience, part-time or full-time employment, on-campus student employment, and career counseling. Students are invited to participate in job fairs, on-campus recruiting, and workshops in résumé writing, job-search techniques, and interviewing.

The Center for Personalized Instruction (CPI), Suite 1400, provides students with academic resources and support services. The CPI coordinates the university-wide tutoring program. Services include one-on-one or group tutoring, supplemental instruction, walk-in mathematics laboratory support, and success strategy workshops focused on topics that promote the intellectual and personal growth of students. Housed within the CPI is the federally-funded Student Support Services TRIO Program.

The **Center for Research**, room 2404, coordinates Human Subject reviews and provides support for research, scholarly activities, and interdisciplinary collaboration to faculty, staff, and students.

The **Office of Service-Learning**, room 1203, supports and promotes academic service-learning opportunities across all fields of study through programs and services for students, faculty, and the wider community.

The **Center for Study Abroad**, room 1501, was established in 1991 as a clearinghouse for all international education programs. The focus of the Center is to promote and facilitate a wide range of study, work, and travel abroad opportunities for both students and faculty.

The **Technology Classroom,** Room 2207, houses the most current technologies used by K-12 teachers in the schools. This setting provides a rich context for pre-service teachers to become familiar with such technologies as the interactive whiteboard/SMART board, Touch Accessible Platform for Interactive Technology/TAPit, SMART Projection Audio system, document camera, web cams, and graphing calculators.

The **Library**, built in 1984, houses more than 110,000 books and other print and non-print materials, including an array of electronic database collections. The library provides comfortable study and reading areas, in addition to group study and conference rooms. The library's ethnic heritage study alcoves contain a variety of artifacts related to the cultural backgrounds of Madonna University's multiethnic student body.

The library wing also houses the **University Archives** and **Kresge Hall**, a 275-seat auditorium for lectures and special events,

including an annual student-produced musical production.

The Activities Center

The Activities Center, attached to the academic building, seats 1,000 spectators and provides facilities for sports activities. The Madonna University Athletic department has grown to an eleven-sport program recognized by the National Association of Intercollegiate Athletics (NAIA), and competes as a member of the Wolverine-Hoosier Athletic Conference (WHAC).

The Franciscan Center for Science and Media

The Franciscan Center Science and Media Building is the first "green" building built in Livonia that is certified by Leadership in Energy and Environmental Design (LEED). It is located between the academic building and the University Center, overlooking the St. Francis gazebo, the pond, and Cardinal Square.

The two-story building is home to the College of Science and Mathematics and the Media Center and includes state-of-the-art instructional laboratories in the physical and biological sciences, classrooms, seminar rooms, a 150-seat lecture hall, a high-definition digital TV studio and sound stage, radio studio, editing laboratory, and editing suites. A variety of learning spaces are provided throughout the building for students to collaborate on projects, study, or relax during class breaks. A gathering space is adjacent to the lecture hall and Stacks Deli, where students can have some dinner or snacks before classes.

Celebrate Michigan, a public service television program, is produced and crewed by broadcast and cinema arts students and watched by over 40,000 people. Students also run the Madonna University Radio on the Internet at www.Live365.com.

The **Technology Learning Services** department, housed in the Franciscan Center, assists faculty and students throughout the University in the effective use of media for teaching and learning, through technology learning support and assistance from media specialists in the preparation of media for presentation or instruction. This department operates the computer and multi-media laboratories, an interactive television classroom, and the IT Help Desk, and assists with classroom support, instructional design, online course development, streaming media, web conferences, and distance learning. Technology Learning Services has daytime, evening, and Saturday hours.

The Angelo DiPonio Building

The Angelo DiPonio Building, which was acquired by Madonna University through a \$1.2 million donation from the Angelo and Margaret DiPonio Foundation, houses the College of Nursing and Health's Nursing programs and Hospice and Palliative Studies programs. It provides faculty offices, classrooms, advanced nursing skills laboratories, and the Transcultural Nursing Office.

The Maertens Building

The Maertens Building was acquired through the donation of \$1 million by John and Elizabeth A. (DeSeranno) Stevens and Aline DeSeranno in memory of Aline's father. This 12,000-square-foot building houses the University's School of Business and Outreach and Distance Learning Office, and provides state-of-the-art technology in its classrooms and offices, including a computer classroom and a high-tech 'smart classroom'.

The University Center / Residence Hall

The University Center/Residence Hall, 14221 Levan Road (Livonia 48154), renovated in 2000, houses up to 225 men and women. The renovated building includes gathering areas on each floor, attractive suite areas, and kitchenettes. In addition to computer connective suite areas, and kitchenettes.

tions, cable TV, and telephones in each room, twenty rooms are now equipped with emergency lighting systems for hard-of-hearing students. Throughout the year, the residence hall lounges, the commons, and the spacious dining halls are centers for gatherings, dances, cultural programs, and workshops, as well as student leadership council and club meetings. The roof-covered patio and the upper and lower terraces afford a view of the tree-lined pond and landscape.

All of the buildings on the Livonia campus are accessible according to ADA standards. Madonna University also provides accommodations as needed, including in-class notetaking, sign language interpreting, alternative testing accommodations, adaptive computer equipment, braille printing capabilities, and videophones.

Outreach Sites

Macomb University Center

Madonna University is a partner at the Macomb University Center (MUC) located on the Macomb Community College Center Campus in Clinton Township, 44575 Garfield Road. Articulation agreements are established with several community colleges offering seamless matriculation into four-year bachelor-degree programs.

The University offers degree completion in high-demand areas: criminal justice, emergency management, hospitality and tourism management, merchandising management, and paralegal studies.

All offered University degree programs can be completed entirely at the Macomb University Center. Madonna University's office is located in UC-1, Room 120.

Southwest [Detroit] Educational Empowerment Program (SWEEP)

The Southwest [Detroit] Educational Empowerment Program (S.W.E.E.P), established in 1998, provides specialized services primarily for low-income, non-traditional African-American and Latina women and men who, for economic, geographic, or other reasons, have been unable to pursue a college degree.

SWEEP offers evening and weekend classes at 5716 Michigan Avenue in Southwest Detroit. The Southwest Detroit facility provides classrooms, a computer laboratory, a resource room, a Writing Center, and a faculty office.

University Center at Gaylord

Madonna University participates in the University Center at Gaylord in order to deliver higher education to the citizens of rural, northern Michigan. The University has been a partner since 1996, when it began offering a degree-completion program for the B.S.W. in Social Work, which is based on seamless articulation agreements with area community colleges.

Assessment, Accreditation, Approvals, and Quality Standards

MADONNA UNIVERSITY IS COMMITTED to the highest quality standards for higher education. The University uses its own measures of quality as well as standards required by professional and accrediting organizations. Many organizations review the curriculum and facilities, instruction and administration,

and the assessment of student outcomes as part of the approval and accreditation process. The University has designed a comprehensive assessment plan that measures and reports on student achievement as part of this process.

Approval by accrediting agencies and professional organizations exists at international, national, regional, and state levels. These organizations have varying cycles of review that can be anywhere from one to ten years.

The following is a list of approvals and accreditations:

Higher Learning Commission (formerly North Central Association), 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604-

1413; (800) 621-7440; *www.hlcommission.org*; 1959, 1968, 1978, 1982 (Graduate Education), 1988, 1998, 2004 (merger with St. Mary's College), 2008 (doctoral degree)

Accreditation Council for Education in Nutrition and Dietetics (ACEND, formerly The Commission on Accreditation for Dietetics Education [CADE]) Accreditation 2000, 2010; The Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2000, Chicago, Illinois 60606-6995; (800) 877-1600).

American Bar Association, 1984, 1990, 1994, 2000, 2007, 2014.

American Dietetic Association Approvals: Plan IV, 1977, 1982; Plan V, 1990, 1995.

Commission on Collegiate Nursing Education, 2006 (graduate and undergraduate); 2010 (graduate, undergraduate, and DNP); One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120; (202) 887-6791

Council on Social Work Education, 1982, 1988, 1995, 2003, 2011.

Forensic Sciences Education Programs Accreditation Commission (FEPAC) (undergraduate), 2014

State of Michigan Board of Education:

Approval of four-year degrees, 1947

Teacher certifications, 1954

Master of Science in Administration, 1982

Master of Science in Nursing, 1987

Michigan Board of Nursing, 1967

National Council for Accreditation of Teacher Education, 1972, 1981, 1992, 1996, 2002, 2009

National League for Nursing Accrediting Commission (NLNAC), 1970, 1978, 1984, 1992, 1993, 1999 (undergraduate and graduate).

Selected Memberships

Academy of Criminal Justice Sciences

Academy of Nutrition and Dietetics

All Saints Neighborhood Center, Southwest Detroit

American Academy of Forensic Sciences

American Assembly of Collegiate Schools of Business

American Association for Family and Consumer Sciences

American Association for Higher Education

American Association for Paralegal Education

American Association for Physics Teachers

American Association for the Advancement of Science

American Association of Colleges for Teacher Education

American Association of Colleges of Nursing

American Association of Collegiate Registrars and Admissions Officers

American Chemical Society

American Collegiate Retailing Association

American Conference of Academic Deans

American Council on Education

American Educational Research Association

American Folklore Society

American Library Association

American Meteorological Society

American Organization of Nurse Executives

American Personnel and Guidance Association

American Psychological Association

American Society on Aging

American Sociological Association

Archdiocese of Detroit Catholic Campus Ministry

Association for Computing Machinery

Association for Counseling and Development

Association for Gerontology in Higher Education

Association for Orientation, Transition, and Retnetion in Higher Education

Association for Quality and Participation

Association for Student Affairs at Catholic Colleges and Universities.

Association for Supervision and Curriculum Development

Association for Systems Management

Association for the Advancement of Sustainability in Higher Education

Association of American Colleges and Universities

Association of Catholic Colleges and Universities

Association of College and Research Libraries

Association of Franciscan Colleges and Universities

Association of Governing Boards of Universities and Colleges

Association of Independent Colleges and Universities of Michigan

Association of Professional Humane Educators

Association on Higher Education and Disability

Broadcast Education Association

Campus EAI Consortium

Catholic Library Association

Chaldean American Chamber of Commerce

College Sports Information Directors Association

College Student Educators International (ACPA)

NOTE: Accreditation materials are available for review online.

Comparative and International Education Society

Conference of Interpreter Trainers

Conference on College Composition and Communication (NCTE)

Consortium of College and University Media Centers

Cooperative Education Association

Council for Adult and Experiential Learning

Council for Exceptional Children Council of Independent Colleges

Council of Undergraduate Psychology Programs

Council on Social Work Education

C.R.E.A.D., The Inter-American Distance Education Consortium

Detroit Area Catholic Higher Education Consortium

EDUCAUSE

Fashion Group International Friends of the Rouge (River)

Greater Detroit Chamber of Commerce

Historical Society of Michigan

Institute for International Education Institute

of Food Technology

International Assembly for Collegiate Business Education International Association of Campus Law Enforcement

Administrators

International Association of Chiefs of Police

International Reading Association

International TESOL (Teachers of English to Speakers of Other Languages)

International Transcultural Nursing Society

Learning Disabilities Association

Legal Assistants Association of Michigan

Livonia Chamber of Commerce Mathematical Association of America

Michigan Academy of Science, Arts, and Letters

Michigan Association for Computer Users in Learning

Michigan Association for the Deaf

Michigan Association of Baccalaureate Social Work Educators

Michigan Association of Broadcasters Michigan Association of Chiefs of Police

Michigan Association of Colleges for Teacher Education

Michigan Association of Colleges of Nursing Michigan Association of Collegiate Registrars and

Admissions Officers

Michigan Association of CPA's

Michigan Association of Early Childhood Teacher Educators

Michigan Association of International Educators Michigan Association of Teacher Educators

Michigan Campus Compact

Michigan Catholic Campus Ministry Association

Michigan Catholic Guidance Council

Michigan College and University Placement Association

Michigan College Counseling Association Michigan College English Association Michigan College Personnel Association

Michigan Colleges Foundation

Michigan Committee for Jobs and Energy

Michigan Consortium on Substance Abuse Education

Michigan Council on Human Service Education

Michigan Counseling Association

Michigan Hispanic Chamber of Commerce

Michigan Library Association

Michigan Music Teachers' Association Michigan Psychological Association

Michigan Registry of Interpreters for the Deaf Michigan Student Financial Aid Association

Michigan Teachers of English to Speakers of Other Languages

Michigan Writing Centers Association

Mid-America Association of Education Opportunity Program
Personnel

Midwest Archives Conference

Midwest Association of Graduate Schools

Midwest Association of Student Financial Aid Administrators

Midwest Collaborative for Library Services Midwest Consortium for Study Abroad

Modern Language Association

National American Arabic Nurses Association NAFSA: Association of International Educators National Academic Advising Association

National Academy of Television Arts and Sciences

National Association for the Education of Young Children National Association of College and University Attorneys

National Association of College and University Business Officers

National Association of College Directors of Athletics

National Association of Hispanic Nurses

National Association of Independent Colleges and Universities

National Association of Intercollegiate Athletics National Association of Legal Assistants

National Association of Nurse Practitioner Faculties

National Association of Social Workers

National Association of Student Financial Aid Administrators National Association of Student Personnel Administrators

National Association of the Deaf National Catholic Office of the Deaf

National Commission for Cooperative Education

National Communication Association

National Council of Educational Opportunity Associations

National Council of International Studies Program Administrators National Council of Teachers of English

National Council of Teachers of Mathematics

National Fire Protection Association

National League for Nursing

Online Consortium of Independent Colleges and Universities Project Management Institute (Global Registered Education Provider)

Registry of Interpreters for the Deaf Religious Communication Association

Servicemembers Opportunity Colleges Sign Language Instructors Guidance Network Society for College and University Planning Society for Technical Communication

Society of American Archivists

Southeastern Michigan League of Libraries

Academic Programs

Madonna University offers programs in more than 70 areas, leading to certificates of completion, certificates of achievement, associate degrees, baccalaureate degree majors and minors, and post-baccalaureate certificates, described in this Catalog. (The University also offers more than thirty master's degree programs, an education specialist, and one doctoral program. See the Graduate Catalog.)

Madonna University follows a career ladder approach to course and degree work.

Credits earned for certificates or the associate degree also apply toward the baccalaureate degree.

Certificate of Completion

A certificate of completion is awarded in specified areas to admitted Madonna University students who successfully complete an approved program of study (9-29 s.h.) with a grade of C (2.0) or better in each course in the certificate. At least 50% of the certificate program must be completed in residence* at Madonna University.

Certificate of Achievement

A certificate of achievement is awarded in specified areas to admitted Madonna University students who earn 30 semester hours or more in a planned program of study, including WRT 1010, with a grade of C (2.0) or better in each course in the certificate. (Postbachelor candidates select another course, approved by the advisor, to substitute for WRT 1010.) At least 50% of the certificate program must be completed in residence* at Madonna University.

Associate Degree Requirements

The associate degree requires a minimum of 60 semester hours with a cumulative and final-semester grade point average of 2.0 (C) or better. The last 15 semester hours must be completed in residence* at Madonna University. The 60 semester hours for the associate degree include: (1) 24-32 semester hours in a major field of study (see individual plans of study) with a minimum grade of C (2.0) in each course of the major sequence; (2) a minimum of 21 semester hours in general education, and (3) a minimum of 8 semester hours in the University core.

The University Requirement may also apply. See page 61 for more detail on general education, the University core, and the University requirement.

Bachelor Degree Requirements

For the baccalaureate degree a minimum of 120 semester hours with a cumulative and final-semester grade point average of 2.0 (C) or better is required. The last 30 semester hours must be completed in residence* at Madonna University. Candidates for the baccalaureate degree must successfully complete the capstone experience required by their specific major(s). Students are encouraged to consider a second major or a minor or certificate whenever possible.

The 120 semester hours for the baccalaureate degree include: (1) 30-66 semester hours in a major field of study (see individual plans of study) with a minimum grade of C (2.0) in each course of the major sequence, and in all foundation and support courses required by the major; (2) a minimum of 31 semester hours in general education; and (3) a minimum of 22 semester hours in the University core.

The University requirement may also apply. See pages 62-63 for more detail on general education, the University core, and the University requirement.

Note: A maximum of 6 s.h. of physical education activity courses may be counted toward the 120 s.h. of a baccalaureate degree.

* On residency, see pages 19 and 46.

Minors, Double Majors, and Dual Baccalaureate Degrees

As part of the bachelor degree, students may earn an academic minor, which consists of a planned program of study in an academic field ranging from 20 to 32 semester hours in length. Only courses with grades of C (2.0) or higher may apply toward a minor. For some majors, it is a requirement that a particular minor also be completed as part of degree requirements (see individual plans of study).

While a Madonna University bachelor degree may be earned in a single major, students may find their academic goals are better met by declaring and completing two majors, or adding one or more minors or certificates to the degree plan. Whether such a degree plan can be completed within the minimum required 120 semester hours or will require additional hours varies with the majors, minors, and certificates selected.

Note that when applying for a degree with two majors for which each would result in a different degree (for instance, one major the B.A. and the other the B.S.), the student must designate which degree is the preferred one, or is to take precedence, for the student's record and diploma. Once awarded, this cannot be changed at a later date.

Madonna University students may earn two baccalaureate degrees simultaneously provided they have completed all of the requirements for both majors and have completed a minimum of 150 semester hours.

Students graduating with a double major or with two baccalaureate degrees must observe the rule stated in the University Policies section of the Catalog, pages 42-44, that a course may not be used toward fulfillment of more than one major or minor, although it may be simultaneously used toward a requirement in one of general education or University core, or in a certificate, or in the role of required foundation or support course.

Second Baccalaureate Degrees

Students with a baccalaureate degree may pursue a second degree by completing (1) the University core religious studies requirement, (2) the requirements of the second major, including required foundation and support courses, and (3) at least 30 semester hours in residence* at Madonna University past the first bachelor degree, including electives if necessary.

No courses used in the major of the first degree may be used in developing the major of the second degree. However, any other courses from the prior degree, including courses used in a minor and religious studies course work, may be so used. It is acceptable to use courses from the first degree major in the role of required foundation or support courses for the second degree major.

Undergraduate Programs of Study

The faculty of Madonna University are organized into teaching departments within five colleges and schools. Each program of study at the University has a "home" and advisors in one of these academic units. To seek advisors and in-depth information on any program in the chart that follows, please refer to the listed college home.

The College of Arts and Humanities

Room 2432 Administration Building — (734) 432-5543

The School of Business

Room 131 Maertens Building — (734) 432-5354

The College of Education

Room 2228 Administration Building — (734) 432-5655

The College of Natural and Social Sciences

Room 2202 Administration Building — (734) 432-5570

The College of Nursing and Health

Room 101 DiPonio Building — (734) 432-5717

Information on all programs and academic policies is also available from:

The Office of Academic Advising and Prior Learning Program

Room 1111 Administration Building (734) 432-5417

	COLLEGE HOME	Certificate of Completion Certificate of Achievement	ASSOCIATE Degree Major	BACHELOR Degree Major	Minor	Post-Bachelor Certificate*
Accounting	Business	yes		BS	yes	
Addiction Studies	Nat & Soc Sciences	yes				
Aging Studies	Nat & Soc Sciences	yes yes yes yes	AS	BS	yes	
Eldercare Practice		yes				
American Studies		yes	AAS	BAS		
Art Fine Arts Art History	Arts & Humanities			BA	yes yes	
Graphic Design			AA	B A	yes	
Visual Communication and Design		yes				
ASL Education (American Sign Language Education)				BA	yes	
Biology	.Nat & Soc Sciences	yes		BS BS	yes	
Biomedical Sciences	. Nat & Soc Sciences			BS		
Broadcast and Cinema Arts		yes	AA	BA	yes	
Business Administration	Business	yes	AS	BS	yes	
Business Law courses	Business					

*Note on Post-Bachelor Certificates: any undergraduate certificate may be earned post-bachelor. Designated certificates may be earned only post-bachelor.

continued on next page

	COLLEGE HOME	Certificate of Completion	Certificate of Achievement	ASSOCIATE Degree Major	BACHELOR Degree Major	Minor	Post-Bachelor Certificate*
Chemistry	Nat & Soc Sciences				BS	yes	
Child Development	. Education			AS	BS	yes	
Infant -Toddler Caregiver	•	yes					
Chinese Language and Culture	. Arts & Humanities	yes					
Clinical Imaging Sciences See Natural Science/Pre-Clinical Imaging Sciences							
Clinical Laboratory Sciences See Biomedical Sciences							
Communication Arts for Secondary Teachers	Arts & Humanities				BA		
Communication Studies	. Arts & Humanities				BA	yes	
Speech Communication	•					yes	
Career Communication		yes					
Community Leadership	. Nat & Soc Sciences	yes					
Comprehensive Elementary Education							
(available only with Early Childhood Education, ASL Education, or Spanish)	Education				BA		
Computer Science	. Nat & Soc Sciences			AS	BS	yes	
Computer Technology				AS			
Computer Technology and Entrepreneurship			yes				
Criminal Justice				AS	BS	yes	
Animal Cruelty Investigation		yes					
Crime Scene Practice Homeland Security		yes yes					
Private Investigation		yes					
Private Security		yes					
Deaf Community Studies	Arte & Humanities				BA		
Diagnostic Medical Sonography courses					DA		
					BS		
Dietetics							
Early Childhood Education (for elementary teacher certification only)					BS		
Earth/Space Science courses	_	3.7					
e-Commerce		Yes					
Economics courses	Business						
Education (Students in Teacher Education complete an academic major. Refer to Elementary Education		ans o	r Study	section for	or details.	.)	
Emergency Management	Nat & Soc Sciences	ves	yes		BS		
English		,	<i>J</i> = 2		BA	yes	
English as a Second Language courses					<i>D11</i>	jes	
English/Journalism					BA	yes	
Entrepreneurship		VAC			DA	yes	
		yes					
Environmental Safety and Health		yes			D.C.		
Environmental Science Environmental Science for Biology majors					BS	***	
Environmental Science for Chemistry majors						yes yes	
Family and Consumer Sciences					BS	yes	
Financial Administration courses							
Fire Science			yes	AS	BS	yes	
Forensic Science			<i>y</i> co	110	BS	yes	Achievement
Crime Laboratory Technician	•	yes	yes		DS		Acmevement
DNA Analysis	•	yes					
General Science (for elementary teacher certification only)	Nat & Soc Sciences				BS		
Geography courses	Nat & Soc Sciences						
Gerontology: see Aging Studies							
Gerontology: see Aging Studies Health Education	. Education					yes	

^{*} Note on Post-Bachelor Certificates: any undergraduate certificate may be earned post-bachelor. Designated certificates may be earned only post-bachelor.

	COLLEGE HOME	Certificate of Completion	Certificate of Achievement	ASSOCIATE Degree Major	BACHELOR Degree Major	Minor	Post-Bachelor Certificate*
Health Sciences	Nursing & Health				BS		
History					BA	yes	
Hospice and Palliative Studies Essentials in End-of-Life Care	Nursing & Health	yes	yes	AS	BS	yes	
Hospitality and Tourism Management		<u> </u>			BS	yes	
Humanities					yes		
Humane Studies	Nat & Soc Sciences					yes	
Instruction of English Language Learners K-12	Education	yes				-	
Integrated Science	Nat & Soc Sciences				BS		
Interdisciplinary Studies					BA		
International Studies			yes				
Journalism and Public Relations	Arts & Humanities		<i>J ==</i>	AA	BA	yes	
Language Arts (for elementary teachers)	Arts & Humanities				BA		
Long Term Care Administration	Nat & Soc Sciences	yes		AS	BS		
Management Information Systemse-Commerce	Business	yes			BS	yes	
Marketing	Business	-		AS		yes	
Mathematics		_			BS	yes	
Mathematics for Elementary Certification (for teacher certification only)					BS	yes	
Medical Technology: see Biomedical Sciences						<i>y</i> 0.5	
Music						yes	
General Music concentration Music Management concentration Church Music concentration Film Music Scoring concentration Instrumental Performance concentration Piano Performance concentration Vocal Performance concentration Music Education concentration Piano Pedagogy	 	yes	yes		BA BA BMus BMus BMus BMus BMus		
Natural Science Pre-Clinical Imaging Sciences	Nat & Soc Sciences			AS AS	BS	yes	
Nurse Paralegal							Achievement
NursingLPN to BSN, RN to BSN	U				BSN BSN		
Nutrition and Food Service Management	Nat & Soc Sciences			AS	BS	yes	
Nutritional Sciences	Nat & Soc Sciences				BS		
Occupational Safety and Health	Science & Mathematics	3	yes			yes	
Occupational Safety, Health, and Fire Science		yes		AS	BS		
Occupational Teacher Certification	Education						
Paralegal Studies	Nat & Soc Sciences	s		AS	BS		Achievement
Pastoral Ministry	Arts & Humanities				BA	yes	
Philosophy	Arts & Humanities					yes	
Physical Education (for teacher certification candidates only)	Education				BS	yes	
Physics	Nat & Soc Sciences				yes		
Political Science					<u> </u>		yes
Pre-Engineering (Consortial arrangement with University of Detroit Mercy)	Nat & Soc Sciences						
Pre-Law (Students must complete an appropriate major)							
aontinuad							

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 $^{{}^*\ \}text{Note on Post-Bachelor Certificates: any undergraduate certificate may be earned post-bachelor. Designated certificates may be earned \textit{only}\ post-bachelor.}$

	COLLEGE HOME	Certificate of Completion Certificate of	Achievement ASSOCIATE Degree Major	BACHELOR Degree Major	Minor	Post-Bachelor Certificate*
Preprofessional: Pre-Dentistry, Pre-Medicine, Pre-Optometry, Pre-Osteopathy, Pre-Pharmacy Pre-Physician Assistant, Pre-Podiatry, Pre-Veterinary (Students complete appropriate bachelor-level majors. Students should become familiar with the exact requirements of the school to which they will apply.)						
Professional and Technical Writing	Arts & Humanities			BA	yes	Completion
Psychology Psychology General concentration Business concentration Mental Health concentration Forensic Psychology		yes		BS BS BS	yes	
Quality and Operations Leadership, Fundamentals of	Business	yes				
Quantitative Systems courses	Business					
Religious	Arts & Humanities		AA	BA	yes	
Sign Language ASL Education Deaf Community Studies Deaf Community Studies for Interpreting and ASL Education Majors Sign Language Interpreting Studies	•			BA BA	yes yes	
Social Studies				BA		
Social Work and Sociology		yes yes		BSW		
Spanish Business Spanish Spanish for Law Enforcement Spanish for Medical Settings	Arts & Humanities	yes yes		BA	yes	
Spanish for Teacher Certification				BA	yes	
Speech Communication	. Arts & Humanities				yes	
Sport Management	. Education			BS	yes	Achievement
Television and Video Communications (see Broadcast and Cinema Arts)						
Writing	Arts & Humanities			BA	yes	

^{*}Note on Post-Bachelor Certificates: any undergraduate certificate may be earned post-bachelor. Designated certificates may be earned only post-bachelor.

This chart is used as a guide and is subject to change without notice. Please refer to Department Chairpersons.

Academic Options

The University Year: Flexible Scheduling

Madonna University has a three-semester calendar, which enables some students to complete a bachelor degree in three years.

Fall semester: 16 weeks, August through December **Winter semester**: 16 weeks, January through May **Spring/Summer semester**: 12 weeks, May through

August

6 weeks, May through June 6 weeks, June through August

Students may attend morning, afternoon, evening, or Saturday classes. Most classes are scheduled according to the following time blocks.

Weekday Classes	Saturday Classes
8 a.mNoon	9 a.mNoon
1-4 p.m.	1-4 p.m.
4-7 p.m.	and alternative
7-10 p.m.	scheduling

Weekend seminars, workshops, and institutes offer additional learning opportunities.

Advanced Standing

Madonna University awards advanced standing credits for a selection of Advance Placement (AP), International Baccalaureate (IB), and American Council on Education (ACE) experiences. Advanced standing college credits are recorded on the student's transcript.

Madonna University is a participant in the Advanced Placement program of the College Entrance Examination Board (CEEB). Under this program, a high school student who earns a score of 4 or 5 on an Advanced Placement examination listed on our website automatically receives college credit in the area of his or her proficiency.

Madonna University recognizes credits earned through the Inernational Baccalaureate program of the International Baccalaureate Organization (IBO). Under this program, a high school student who earns a score of 5 or above in an International Baccalaureate course listed on our website automatically receives college credit in the course content area.

Madonna University also accepts credits from the American Council on Education (ACE) College Credit Recommendation Service (CREDIT) for workplace learning experiences. A student who has received an ACE credit recommendation automatically receives elective credit equal to the ACE recommendation.

Catholic College Consortium

Madonna University is a member of the Detroit Area Catholic Higher Education Consortium. Institutions participating together with Madonna University are Marygrove College, Sacred Heart Major Seminary, and the University of Detroit Mercy.

Undergraduate students in good standing may, by working through their department advisor and the University Registrar, take one or more courses at other consortium institutions at no additional tuition cost. For exact procedures, see the University Policies section.

To be eligible for consortium registration in any given semester, a full-time student must be registered for a minimum of 8 semester hours at Madonna University. Part-time students must be registered for a minimum of 3 semester hours at Madonna University.

Cooperative Education/Internship

Cooperative Education (Co-op)/Internship is an academic program that allows students to connect academic knowledge with work experience in a supervised work setting related to the student's major field of study or career focus. Enrollment and registration for academic credit is required.

Students interested in participating must communicate with their faculty advisor to confirm the availability of academic credit in their program and the Career Services Office for assistance in locating possible opportunities. Application deadlines are:

Fall semester: June 1
Winter semester: October 1
Spring/Summer semester: February 1

Distance Learning

Distance learning at Madonna University consists of a variety of instructional delivery alternatives to provide learning that is convenient, flexible, and accommodating to the student's busy lifestyle and job requirements. Course offerings use a blend of technologies to reach students at off-campus sites, at work, or at home using online courses, e-mail, *Blackboard*, telecourses, audio tapes, videotapes and DVD's, satellite video conferences, or interactive (two-way) television.

Courses may consist of one or more *face-to-face sessions* with the remainder of the semester being conducted through technologies such as *e-mail* or *Blackboard*, an online course management tool that allows participants to share information. A *telecourse* is an educational package which may include video programs, audio tapes,

e-mail, a study guide, textbook, and some on-campus sessions with an instructor. Videotapes or DVD's for telecourses are provided to the student for home viewing. Madonna University has an *interactive television* classroom that allows two-way video and audio communication between the teacher and students on campus and at off-campus sites. Students who register for distance learning options should be self-disciplined learners. Library services are available to distance learning students.

Guest Students

Madonna University students in good academic standing may secure a guest pass to take a course at another institution only when the course is not taught that academic year at Madonna University and when waiting an additional year would cause severe inconvenience. Students beyond sophomore standing may not earn credit in two-year institutions for transfer to Madonna University.

Madonna University uses the Michigan Uniform Undergraduate Guest application. This assists visiting students in earning credits to be applied toward a program at their home institution. Students must have written approval from their advisor and the Registrar to obtain a Michigan Uniform Undergraduate Guest Pass before registering for a course at another institution. Courses which have been taken at Madonna University cannot be repeated at another institution for transfer credit. The guest pass is valid only for the timeframe indicated on the guest pass. A grade of C (2.0) or better will transfer (credit only, no honor points).

If admitted students take classes at another institution but fail to secure the necessary approval or authorization, the credits taken at

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the other institution will not apply to the Madonna University degree unless the student is readmitted to the University. Financial Aid may not cover courses taken at other institutions.

Independent Study

Independent study provides the opportunity for in-depth study of a subject which is of particular interest to the student beyond what is offered within the University's curriculum of formal courses. Students may earn credit for independent study with the approval of a faculty member, the department chairperson, and dean of the school or college in which the credit is awarded. The plan for the independent study and the required approvals, including whether the study will be done for a letter grade or on a S/F basis, are documented on the form Petition and Authorization for Independent Study, which must be attached to the normal registration paperwork.

Non-Credit Registration and Continuing Education

Several Madonna departments arrange through professional organizations the offering of continuing education units (CEUs) or other required continuing professional education designed to help graduates in their fields maintain their licensures: for example, Aging Studies, Sign Language Interpreting Studies, Social Work.

Continuing Education Units are a nationally recognized form of measurement which may be used as evidence of increased performance capabilities in a profession, but not as college credit. One CEU equals ten instructional hours. Alternatively, some professions create their own credentialing credit units. Persons with professional licensures that require continuing education should check with their credentialing organization for details on requirements and may communicate with the academic department preparing students for their profession to inquire on options available at Madonna.

Continuing Education Units may not be converted at a later date to academic credit.

Online Consortium of Independent Colleges and Universities

Madonna University is a member of the Online Consortium of Independent Colleges and Universities (OCICU), which allows students to register for online courses originated by other member independent universities. See page 47 of this Catalog and also the current Schedule of Classes for further information.

Prior Learning

The Prior Learning Program (PLP) facilitates the transfer into college credit of the learning acquired through life learning and experiences.

A student applying for prior learning credit needs to (a) correlate such learning with college courses and (b) have that evaluated in one of a variety of ways. Possible evaluation methods include University-approved standardized tests (CLEP, DSST, and NLN), Armed Services Evaluations (for education in military services), University Department Challenge Tests (e.g., those for CIS 2250 and CIS 2380), video (for musical/theatrical performances), interview, product, and portfolio. The method of evaluation is decided by the department faculty evaluator in consultation with the student.

A positive evaluation results in the student being able to register for the specified college credit at much reduced tuition/fee charges. For additional information on prior learning credits consult the University Policies section of this Catalog, or the Office of Academic Advising.

Service-Learning

Madonna University is committed to integrating pedagogies of engagement inside and outside the classroom. One form of curricular engagement is academic service-learning, which integrates community service with course content. Students enrolled in service-learning-designated courses have the opportunity to apply their talents, knowledge, and skills to address local community needs and pressing social issues in partnership with local and global non-profit organizations. Academic service-learning also fulfills the University's mission by instilling in students Christian humanistic values, intellectual inquiry, a respect for diversity, and a commitment to serving others.

Service-learning-designated courses:

- integrate service with course content; the service component supports the academic focus of the course;
- •engage students in relevant service that is of equal benefit to the learning and community partner(s);
- thread structured reflection that is continuous, challenging, connected, and contextualized;
- address aspects of civic responsibility and lifelong engagement;
- include a minimum of 15 service-learning hours (i.e., direct service, reflection, assignments related to the service-learning experience);
- are transcribed on the official academic transcript with an SL appearing to the right of the course title.

Service-learning courses are offered across the curriculum and include service projects that address issues including, but not limited to: access and success in higher education, animal welfare, capacity building in non-profit organizations, caregiving, community health, environment/sustainability, hunger, housing/homelessness, literacy, nutrition/wellness, poverty, and senior/elder services.

For more information, please contact the Office of Service-Learning, Room 1205, (734) 432-5704 or *servicelearning@madonna.edu*.

Study/Work/Travel Abroad

Madonna University promotes the expansion of international education through curricular development, international exchange programs, and study abroad programs. Numerous study-abroad opportunities are available for individual students, as well as Madonna University-sponsored short-term study abroad trips.

Students interested in finding out more about study abroad should communicate with the Center for Study Abroad, Room 1501, (734) 432-5669.

Flexible Scheduling

Madonna University offers unique alternatives to students to finish selected certificate, associate, bachelor, and master's degrees by enrolling in a combination of weekday/weekend classes, telecourses, and online courses, as well as submitting a portfolio for credit for prior learning. In keeping with the mission of Madonna University, all scheduling options allow opportunities for spiritual growth in addition to academic study through interaction with peers, lectures, retreats, communal prayer, and other activities that promote spiritual and personal development.

Academic Options 17

Admissions

MADONNA UNIVERSITY GRANTS ADMISSION at the beginning of any semester to students who are motivated to work for a degree and whose academic achievements demonstrate they are prepared to be successful in a university environment.

General Admission Requirements

The Office of Undergraduate Admissions receives all undergraduate applications and supporting information used to determine undergraduate admission.

The admissions process takes into account the following:

- grades
- •standardized test scores (ACT or SAT),
- •school official recommendations,
- exceptional talents,
- •involvement beyond the classroom,
- ·leadership potential, and/or
- •record of good citizenship.

It is highly recommended that students apply for admission early. Students who complete the admissions application process before the following recommended deadlines will be guaranteed an expedited admission decision, and students completing the financial aid application process will also be guaranteed an expedited decision. (Others may or may not be eligible to begin studies at the intended semester.)

Domestic Undergraduate Students:

- •August 1st Fall Semester
- •December 1st Winter Semester
- •April 1st Spring/Summer Semester

International Students*:

- •June 1st Fall Semester
- •November 1st Winter Semester
- •March 1st Spring/Summer Semester
- *Students who are not U.S. residents or have transcripts from outside the United States.

Madonna University welcomes students of various ages, econom- ic, cultural, experiential, and religious backgrounds. Consideration for admission is given to all qualified applicants who aspire to attain

their educational goals within the philosophy and academic framework of the University. Prospective students are expected to possess the integrity, interest, and talents that will enable them to contribute to and benefit from the life and programs of the University.

The University reserves the right to deny admission or matriculation, and/or require withdrawal, to any student who is in default on any Title IV HEA loans, falsifies any part of the application process, and/or for reasons considered appropriate by the University. Admission and matriculation are privileges with certain responsibilities.

Application Procedure

- Submit a completed Application for Undergraduate Admission and non-refundable application fee.
- 2. Provide the following official document(s):
 - a. high school transcript from a regionally-accredited high school, *or*
 - b. GED transcript, or
 - c. homeschool program transcript, and/or
 - d. College Board Advanced Placement (AP) examination scores, *and/or*
 - e. International Baccalaureate transcript, and/or
 - f. American Council on Education (ACE) transcript, and/or
 - g. college transcript(s) from a regionally-accredited college/ university documenting 12 or more transferable credits (if fewer than 12, also provide high school/GED transcript along with college transcript).
- 3. The University reserves the right to request additional information before reaching an admission decision. Further, some academic programs and departments may require higher or additional requirements for admission. Students can review the Plans of Study portion of this University Catalog for additional information.

First-Year Applicants

Current students or graduates of a high school, homeschool program, academy, early college program, or equivalent in good academic and personal standing may be eligible for admission provided there is evidence of potential success in a university environment. The minimum requirements are as follows:

- A minimum high school grade point average of 2.75, and
- ACT composite score of 20 or higher (current and recent graduates only);
 - (Applicants not meeting these requirements may be considered for Provisional Admission. See Provisional Admission, pages 18-23.) The ACT code for Madonna University is 2022. The SAT code for Madonna University is 1437.
- If applicable, official Advanced Placement (AP) test results; International Baccalaureate transcripts; American Council on Education (ACE) transcripts. Note that high school students with such advanced standing credits are still admitted as First-Year students and are required to participate in the First-Year Experience program.
- If applicable, official college transcript(s) indicating final grade(s) of college credit earned while in high school. All college credit receives standard transfer credit consideration (see Transfer Credit); however, high school students with college credit are still admitted as First-Year students and are required to participate in the First-Year Experience program.

Transfer Applicants

High school or equivalent graduates who have earned college credits and are in good academic and personal standing may be eligible for admission provided there is evidence of potential success in a university environment. The minimum requirements are as follows:

- •A minimum 2.0 cumulative college grade point average, and
- •Completion of two-thirds of all courses attempted.

(Applicants not meeting these requirements may be considered for Provisional Admission. See Provisional Admission, pages 18-23.)

If fewer than 12 transferable credits, the official high school or equivalent transcript is required.

Baccalaureate Graduates of Madonna University

Baccalaureate graduates of Madonna University returning for additional undergraduate-level study are not required to apply for readmission, but must reactivate their record with the Office of the Registrar.

Transfer Credit

The University will consider accepting credits from degreegranting institutions listed in *Accredited Institutions of Higher Learning*, published by the American Council on Education (ACE).

All transfer credits accepted will be listed on the Official Transfer Credit Evaluation, along with a notation of the actual number of credits accepted and the Madonna course equivalency. The Official Transfer Credit Evaluation will be completed upon receipt of all official college transcripts. Only those courses completed at a regionally-accredited college/university with a grade of 'C' (2.0) or better will be considered for transfer credit.

Students may transfer a maximum of 74 semester hours of credit from all regionally-accredited two-year colleges attended, unless otherwise noted per established articulation agreement. Students may transfer a maximum of 90 semester hours of credit from *all* regionally-accredited colleges attended. Repeated courses or courses with duplicate subject content evaluated by Madonna University to be the same course will not be considered for transfer credit.

Grades of credits accepted in transfer are not transferred and are not calculated in the Madonna GPA.

All requests for adjustments, additions, and corrections to the Official Transfer Credit Evaluation must be submitted in writing to the Office of the Registrar within the semester following the student's admission to the University. In addition, credit will not be granted at a later date for course work completed at an institution not listed on a student's application for admission. A student may be dismissed if prior academic history is omitted in order to gain admission.

Residency Requirement

Transfer students pursuing their first baccalaureate degree at Madonna University must complete the requirements for general education, the University core, and the desired major. The last 30 semester hours of the 120 semester hours required for the bachelor degree must be earned in residence at Madonna University, including electives if necessary.

Transfer students pursuing an associate degree at Madonna University must complete the requirements for general education, the University core, and the desired major. The last 15 semester hours of the 60 semester hours required for the associate degree must be earned in residence at Madonna University.

Transfer students pursuing their second baccalaureate degree at Madonna University must complete the religious studies requirement of the University core and the desired major. They must earn at least 30 semester hours in residence at Madonna University, including electives if necessary.

Note that advanced standing credits, such as those earned through Advanced Placement (AP), the College-Level Examination Program (CLEP), DSST's, Prior Learning, and/or course competency examinations are ignored in counting residency credits.

Satisfying the Michigan Transfer Agreement (MTA)

Madonna University welcomes transfer students from community colleges whose educational goal is to pursue a bachelor degree or an additional associate degree.

Transfer students normally receive full credit for college-level courses completed with a grade of C (2.0) or better at other regionally-accredited collegiate institutions.

With completion of the stipulations of the MTA, Madonna recognizes that the General Education component of graduation requirements (listed on page 61 for the associate degree and on pages 60-61 for the bachelor degree) has been completed. The student's official transcript from the two-year institution must indicate that the MTA has been satisfied.

Satisfying the MACRAO Transfer Agreement

Some students who began community college programs prior to 2014 may be able to meet requirements of the former MACRAO agreement until 2019. See your two-year college Registrar for information.

A "MACRAO-satisfied" certification from a community college is recognized as fulfilling University general education and University core graduation requirements at Madonna University, within the stipulations in the next paragraph. The student's official transcript from the two-year institution must indicate that the MAC- RAO agreement has been satisfied.

In keeping with the philosophy of Madonna University, students whose transfer course work satisfies the MACRAO guidelines are required to complete, for a Madonna University degree, any of the following general education or University core course work not included in their transfer credits:

For a bachelor degree:

Religious Studies
3000/4000- (junior- or senior-) level Literature course 4 s.h.
Biological Science or Physical Science or Mathematics* .3-4 s.h.
*Madonna University bachelor degrees require one biological
science course, one physical science course, and one
mathematics course (one science course must include a
laboratory experience). Complying with MACRAO

Computer Information Literacy**
**Students are required to pass a computer information literacy
course within their first three (3) semesters at Madonna
University, unless they receive transfer credit for such a

guidelines will satisfy two of the three requirements.

course taken at	t another institution.	
Social Sciences .		

In the case of a MACRAO-satisfied transfer student for whom a general education or University core course cannot be transferred in because the grade earned was below C (2.0), a waiver of the requirement is to be stipulated by and documented in the Office of the Registrar.

Advanced Standing for Non-traditional Students and Prior Learning

Advanced standing policies have been designed to assist students to gain credit for learning that they have acquired prior to enrolling at Madonna University or demonstrate through testing that can be correlated with college courses.

Students requesting advanced standing credit based on College Board Advanced Placement (AP) examinations with scores of 4 or 5 should have their AP scores sent to the Office of Undergraduate Admissions. Students requesting advanced standing credit based on International Baccalaureate (IB) or American Council on Education (ACE) credits should have their transcript sent to the Office of Undergraduate Admissions. These credits are evaluated with transfer credits upon admission.

Students with military credits on a Joint Services Transcript (JST) should have their branch send an Official Military Transcript to the Office of Undergraduate Admissions. These credits are evaluated with transfer credits upon admission, following standards of the American Council on Education (ACE).

Students requesting advanced standing credit based on CLEP examinations or DSST's should have official records sent to the Manager of the Technology Learning Center upon receipt of the admission letter.

Other forms of advanced-standing (prior learning) credits, after having been formally evaluated, are transcribed onto the academic records of *admitted and enrolled* students by the Office of the Registrar.

For other forms of prior learning credit potentially available for external study experience or professional training see the Prior Learning section of this Catalog, pages 45-46 for fuller particulars.

Notification of Admission

Generally, all applicants can expect to receive written notification of their admission status within a period of two weeks after submitting all required application documents to the Office of Under- graduate Admissions. Exceptions to this practice involve those programs of limited access, which may, in some cases, result in a delay of notification.

Following notification of University admission, students are required to meet with their designated advisor to design an individualized plan of study. Students will be notified of their academic standing, graduation requirements, academic advisor, and other related academic information within two weeks of their admission date. Students must meet the general education and University core requirements of the University Catalog in effect at the semester for which they are formally admitted or readmitted. Graduation requirements in the major must be met according to the University Catalog in effect at the time the major is declared.

Students who do not complete the formal admission process after their first semester of enrollment may have their admission status suspended and/or cancelled, jeopardizing future enrollment.

Provisional Admission

Provisional admission is offered to those applicants whose credentials may not satisfy the minimum admission requirements but whose maturity and seriousness of purpose indicate potential for academic success. Students granted provisional admission:

- •will be required to meet with the Provisional Advisor prior to registration each semester while on provisional status,
- •will be required to attend either the New Student Orientation program, the Adult/Transfer Student Orientation program, or the International Student Orientation program,
- will be required to utilize student support resources to encourage success, and
- •will remain on "provisional status" until they successfully complete:

- a minimum of 12 semester hours of academic credit; and
- two consecutive semesters of registration with a minimum semester and cumulative GPA of 2.0 or better.

Students on "provisional status" may be expected to fulfill additional requirements as determined by the Provisional Advisor. Students on "provisional status" will have a "Must attend Orientation" hold on their academic record until the requirement is satisfied, and will have a "Must See Provisional Advisor" Hold (for registration permission) on their academic record until "regular" admission status has been granted.

Regular Admission with Referral

Regular admission with referral is offered to those applicants whose credentials meet the minimum admission requirements but will benefit from a review of financial aid, student support, and/or other options available to foster successful academic planning.

Students with regular admission with referral will be expected to fulfill additional requirements per the discretion of the Director of Undergraduate Admissions.

Non-admitted Students/Non-degree-seeking Students

A student may register for no more than two semesters in the non-admitted and/or non-degree or -credential-seeking student status. Students in this status must complete a "Permit-To-Register" through the Office of Undergraduate Admissions. Students are asked to complete an Undergraduate Admissions Application, if applicable, within 2-3 weeks. One additional Permit-To-Register is allowed for the next semester of attendance.

The credits earned while attending as a non-admitted and/or non-degree-seeking student may or may not be applicable towards a degree or certificate at a later date. Financial aid is not available for students in this status.

Lapse of Admission and/or Registration (Readmission)

The admission files of applicants who are admitted for a specific semester but do not matriculate or whose files are incomplete are held in the Office of Undergraduate Admissions for no more than one year following the student's official application semester. After this period, non-matriculated applicants must reapply for admission consideration.

Students admitted to Madonna University who have not been in attendance for two years, or who have transferred to another institution of higher education, are required to complete an Application for Undergraduate Admissions for readmission consideration. Students who are readmitted to the University must meet the degree requirements of the University Catalog which is in effect at the time of readmission. Credits earned in certain fields more than seven years prior to admission or readmission may not be valid as degree credits.

New Student Merit Scholarship Program

Madonna is pleased to offer specific Merit Scholarship opportunities to new incoming students. (The University offers additional financial aid and scholarship opportunities that are available to *all* students, incoming and continuing. See the Financial Aid section of this Catalog, pages 28-35.)

To be eligible for these merit scholarships students must be new incoming students who are officially admitted, have a minimum 3.0

GPA (some scholarships have higher and/or additional requirements), and be enrolled full-time (12 s.h. or more), unless otherwise noted. For transfer students, the GPA is recalculated at the time of admission.

A complete listing of merit scholarships is available through the Office of Undergraduate Admissions.

Merit Scholarship General Terms and Conditions

- •The University will notify students in writing if they have been selected for a merit scholarship/award, and include the award in the Financial Aid Award Letter.
- •Scholarship recipients are selected by a committee, at the sole and absolute discretion of the University, leveraging several criteria which include, but are not limited to, cumulative grade point average, standardized test scores, community involvement, personal accomplishments, and documented financial resources.
- •Scholarships/awards only apply to the fall and winter semesters, unless otherwise noted. Scholarship/award amounts may be reduced consequent to federal, state, and other scholarships and grants awarded to the student that would result in exceeding tuition costs.
- •New student merit scholarships are automatically renewed provided the student maintains academic progress (see pages 50, 52 for information on Satisfactory Academic Progress).
- •Scholarship recipients are required to be full-time (12 or more semester hours per semester) enrolled undergraduate students unless otherwise noted. (Advanced standing credits such as those earned through Advanced Placement (AP), College-Level Examination Program (CLEP), DSST's, Prior Learning, and/or course competency examinations are not counted toward full-time enrollment status.)
- •Residence hall grants are based on room availability and can only be used for room cost (not to be used for tuition, board, or other University costs).
- •Students must complete the scholarship application (i.e. application, letters of recommendation, essay, and/or other requirements) by posted deadlines for award consideration.
- Students awarded a merit scholarship(s) are encouraged to apply for other financial aid consideration via the Free Application for Federal Student Aid (FAFSA).

Dual Enrollment for High School Students

Madonna University provides an opportunity for qualified high school students to enrich their education while concurrently enrolling for classes at Madonna University. High school students wishing to attend Madonna University through dual enrollment need to complete the dual enrollment application, available in the Office of Undergraduate Admissions, with the assistance of their high school counselor or principal. (Note: homeschooled students are also eligible, without high school approval.)

Dual enrollment students are granted the full privileges of any Madonna University student (e.g., library, research, and computer laboratory access). Students are expected to complete all requirements for high school graduation mandated by their high schools. After high school graduation, admission to a degree program at Madonna University is granted to students meeting the minimum admission requirements.

Dual Admission/Matriculation for Designated Distance Learning Programs

Dual admission/matriculation is defined as simultaneous enrollment at Madonna University and one or more other accredited higher education institutions. Distance learning programs are those programs in which students receive instruction through a variety of modalities remote from the University campus in Livonia or its official outreach sites. Distance learning programs depend upon collaborative arrangements with other institutions to provide prerequisite, general education, and University core courses and often entail dual admission.

Therefore, only those admitted students who are in designated dis-tance learning programs may simultaneously gain admission to and attend one or more other accredited higher education institutions. Courses completed under this arrangement will apply toward cer-tificate or degree requirements at Madonna University.

Articulation Agreements

Madonna University has articulation agreements with regionally-accredited two-year colleges. Through these agreements, students may be admitted directly into selected upper-level college courses. For more information on these agreements, please contact the Office of Undergraduate Admissions.

International Students

International students are encouraged to apply for admission to the University at least one semester before enrolling in classes. Applicants to Madonna University who are graduates of a high school outside the United States must have academic preparation equivalent to that required for eligible U.S. high school graduates. In addition to fulfilling the admission requirements previously listed, these students must submit the following documentation before the I-20 is issued:

- 1. A \$55 non-refundable admission application fee.
- Financial statement, issued within the most recent six months, from a bank, government agency, or other financial institution, indicating the financial resources of the applicant or the sponsor of the applicant.
- 3. Copy of passport identification page.
- 4. For non-native speakers of English, official results of the Test of English as a Foreign Language (TOEFL and TWE) or an equivalent English proficiency test such as MELAB, IELTS, PTE Academic, or agreement to be tested using an institutional English placement test upon arrival on campus.
- Residence Hall contract. (International students with no residence in the United States are required to live on campus during the first semester of study.)

Prior to the second Thursday of the first month of the semester, the following must be provided to the Student Accounts Office:

- •Proof in English of catastrophic health insurance coverage in the United States.
- Tuition and fees: Full payment is expected by the due date as
 outlined in Payment Plan 1 of each semester's Schedule of
 Classes: Payment Plans. In the case of international students in
 their first semester of study, the tuition payment deadline is the
 second Thursday of the first month of the semester.

Additional policies relating to international students may be obtained from the International Student Handbook, available from the International Students Office.

Non-Native Speakers of English

In line with our mission to support the academic success of all of our students, Madonna University recognizes that non-native speakers of English need a level of English skills adequate to their classroom work, and requires them to demonstrate the level of their English proficiency. The University offers courses in English as a Second Language (ESL) to assist students to raise their proficien- cy level.

Since these ESL courses are specifically designed to prepare students for the English proficiency necessary to complete their academic course work, and are designated English for Academic Purposes (EAP), all non-native speakers of English are welcome to elect ESL courses to sharpen their skills. Successfully completing ESL courses can help students avoid frustration in their studies and help toward achievement at a level more satisfactory to each scholar.

The requirement to demonstrate English language proficiency applies to the following four groups of applicants, and exists to assure that their knowledge of English is sufficient for successful completion of their degree program:

- F-1 visa students, who are non-native speakers of English;
- transfer students whose first language is not English(regardless of immigration status);
- recent U.S. high school graduates who may have studied ESL in high school;
- permanent residents or citizens of the United States whose first language is not English.

In order to qualify for *regular admission* to the University, applicants who are non-native speakers of English must meet one of the following English language proficiency requirements:

- Baccalaureate degree from an accredited college or university in the United States, Great Britain, Ireland, Canada (English language institutions only), the Bahamas, Guyana, Jamaica, Australia, New Zealand, or South Africa (English-language institutions only).
- Full four years of attendance at and graduation from a U.S. high school with standard-track English and, if available from within two years of making application, acceptable ACT or SAT scores; or
- Completion of 24 transferable credits, excluding ESL courses, from a U.S. two-year or four-year institution; or
- Matriculation from the British high school with comletion of at least three Advanced Level examinations; or
- International Baccalaureate diploma (IB) with a minimum of 3 higher level subjects or
- Internet Based TOEFL (iBT, Test of English as a Foreign Language) with a minimum score of 70; *or*
- TOEFL paper-and-pencil test with a minimum score of 523, accompanied by the Test of Written English (TWE) with a minimum score of 5; or
- MELAB score of 76+; or
- IELTS score of 6.0+.or
- PTE Academic score of 48.

Students who do not meet the listed standards may obtain *provisional admission* to the University; they are assigned to the ESL advisor and are required to successfully complete one or more semesters of the Intensive English program. Intensive English is offered at three proficiency levels: low-intermediate, high-interme-

diate, and advanced. Enrollment for Intensive English is for 16 s.h. per semester and scheduling is for 20 classroom hours per week. Those students who need to document full-time student status may obtain the appropriate verification.

Students' English skills are retested at the end of each semester in the Intensive English program. When successful English scores are achieved, the student moves to regular admission status and a regular program advisor.

If the student scores at the advanced level of the Madonna University ESL courses, other content courses may be taken concurrently with the required ESL courses. ESL courses are credit bearing, and the credit for 4000-level ESL courses may apply towards the baccalaureate degree requirements. ESL course grades are included in computing the student's grade point average (GPA).

ESL 4230, Research Paper Writing, is taken by non-native speakers of English in place of WRT 1020 and fulfills the University core requirement for this writing course.

Recognized Non-Collegiate Credit

Madonna University may grant credit for certain non-collegiate prior learning, according to guidelines on page 45 of this Catalog.

Upon admission to Madonna University, students who have completed an approved program of study are able to obtain transfer credits which can be applied toward the requirements of specific majors within the University or, often, be used as general electives within other programs of study. Specific guidelines and requirements vary.

Credits will be transcripted by the Office of the Registrar after the student is admitted and has enrolled. It is the responsibility of the student to verify with his/her academic advisor that procedures and paperwork for this transcription are in place. Additional information may be obtained through the Office of Undergraduate Admissions.

Listed below are prior learning experiences routinely reviewed by relevant Madonna programs. Students who believe they have other prior learning experiences for which credit may be available should refer to pages 45-46, Prior Learning, for more information regarding guidelines and how to proceed.

Michigan Fire Fighters Training Council: Persons who have completed the programs offered through the Michigan Firefighters Training Council may request experiential learning credits through the Program Coordinator for Emergency Management (EM), Fire Science (FS), and Occupational Safety, Health, and Fire Science (OSF) in the Physical and Applied Sciences Department. Credits to be awarded are determined on an individual basis. These credits may apply toward degree completion in the Emergency Management major, the Fire Science major, or the Occupational Safety, Health, and Fire Science major.

Certified EMS Programs: Graduates of a state-certified EMS program may request experiential learning credits, depending upon their current state licensure as a Basic EMT or Paramedic EMT, through the Program Coordinator for Emergency Management (EM), Fire Science (FS), and Occupational Safety, Health, and Fire Science (OSF) in the Physical and Applied Sciences Department. These credits may apply toward degree completion in the Emergen- cy Management major, the Fire Science major, or the Occupational Safety, Health, and Fire Science major, or as general electives to- wards another degree program at Madonna University.

Credit earned in Military Service: Persons who earned credit

during military service that is posted with their discharge papers should request their transcripts to be sent through the Joint Services Transcript (JST) system to the Office of Undergraduate Admissions. These credits will be evaluated upon admission, following standards of the American Council on Education (ACE).

Specs Howard School of Media Arts: Students who have completed the Specs Howard *Broadcast Media Arts* program in core radio, television, and news media broadcasting skills are granted *up to* 24 semester hours to be applied as the specialty area within the Madonna University Broadcast and Cinema Arts major (only), associate or bachelor degree. Students apply to the Language, Literature, Communication, and Writing department for the credit. Students who have completed the Specs Howard *Graphic*

Students who have completed the Specs Howard *Graphic Design* program are are granted *up to* 24 semester hours to be applied as the specialty area within the Madonna University Graphic Design major (only), associate or bachelor degree. Students apply to the Art Department for the credit.

Tuition and Fees

Madonna University Believes that higher education should be affordable to all who seek it; therefore, tuition is maintained at the lowest possible level. The following schedule is in effect beginning in Fall Semester of the academic year 2016-2017. Tuition rates are reviewed annually.

Tuition Rates

Full tuition payment is expected BY THE DUE DATE as outlined in Payment Plan 1 of each semester's Academic Planning Guide: Payment Plans.

Undergraduate

1-11 Credits\$ 650 per C	`redit
12-18 Credits	Rate
19 Credits + \$9,750 Flat Rate plus \$650 per Credit Over	18
Additional Tutition for NUR Courses	Credit
Noncredit\$390 per	Hour
High School Dual Enrollment	redit

English as a Second Language Program

0	_	_	_	
1-15 Credits				\$535 per Credit
16 Credit Intensive Progr	am .			\$6,800 Flat Rate
Additional Tuition for ES	L 40	000 Lev	el Course	es\$225 per Credit
ESL 5000 Level Courses				\$745 per Credit
Non-Credit ESL courses				\$405 per Hour

Fees

Madonna University reserves the right to change fees without advance notice. Inquiries relating to fees should be referred to the Student Accounts Office in writing or *sa@madonna.edu* or call (734) 432-5600.

General Fees

Deferred Tuition Fee: All tuition and fees are payable in advance,
unless the student chooses to participate in one of the available
payment plans. (See plans in Academic Planning Guide.)
Two payments
Three or Four payments
Late Enrollment Fee\$ 60
Late Payment Penalty for unpaid balances:
5% up to a maximum of \$75
Late Submission of Application for Graduation\$10
Madonna OneCard ID:
Lost card
Returned as undeliverable\$5
Parking Free in all lots
Prior Learning Testing Fee (per evaluation) \$ 25
Replacement Fees
Diplomas
Certificates
Student Account Records
Student Account Records\$ 5 per semester Returned check penalty\$ 25
•
Returned check penalty
Returned check penalty \$ 25 Study Abroad (administrative fee) \$ 75
Returned check penalty\$ 25Study Abroad (administrative fee)\$ 75Reinstatement Fee\$ 60
Returned check penalty\$ 25Study Abroad (administrative fee)\$ 75Reinstatement Fee\$ 60Transcription Fee\$ 50
Returned check penalty
Returned check penalty \$25 Study Abroad (administrative fee) \$75 Reinstatement Fee \$60 Transcription Fee \$50 Transcript Issuance Fee: Transcripts, each copy \$\$10
Returned check penalty

Residence Hall Fees

Room (rented per semester)

Residential contract deposit fee (see pages 26-27) \$ 175
Double \$ 4,600 two semesters / \$ 2,300 per semester
Quad\$ 5,200 two semesters / \$ 2,600 per semester
Private \$ 7,750 two semesters / \$ 3,875 per semester
Rooms are rented for a semester. Room and board refund policies
align with the university full-term course withdrawal policies with
the exception of the first two weeks of each semester. During the
first two weeks of the semester students withdrawing from the
residence hall are charged a weekly rate for both the room and
meals.

Board—Residents

250 meals plus \$100 Crusader Cash* \$ 2,475 per semester 180 meals plus \$250 Crusader Cash \$ 2,370 per semester 130 meals plus \$350 Crusader Cash \$ 2,265 per semester Students living on campus are required to take a board plan. Selective meals are available at the 1551Grill and Stacks Deli on the Livonia campus. Because of contractual arrangements relating to service in the Dining Hall, no refund will be made on the board fee. Occasional or week-end absences are non-refundable.

Commuter Meal Plans

Choose the right amount for you. Each dollar purchase earns you the same amount in Crusader Cash. Meal cards may be purchased for \$25 or \$50 or \$100 . Just swipe your MadonnaOne card to remit payment at: Take Five, 1551Grill, Stacks Deli, and Residence Hall Dining in Livonia.

Incidentals

Students May register for courses when the past-due financial obligations have been met.

Students may register online (ID number and password required) through the Madonna University website, *www.madonna.edu*. or at the Office of the Registrar. Registration forms are located in the current semester's Academic Planning Guide or at the Registration counter. Tuition and fees may be required at the time of registration. See each semester's Academic Planning Guide for payment due dates.

Students whose accounts are past due for a current semester's enrollment, or who are in debt to the University at the end of any semester, are not entitled to register, receive transcripts, or receive a diploma or certificate until the account is settled.

E-Billing and 1098-T's

Madonna University does E-Billing and E-1098-T's. Both are real-time statements, available using the Madonna University MY Portal, accessed from the Madonna web site at *www.madonna.edu* (click on **Login to MY Portal** and enter your Madonna University ID and password). E-mail reminders are sent to each student's e-mail @*my.madonna.edu* about two-to-three weeks prior to the due date available in each semester's Academic Planning Guide. For students who are not attending in the January semester, 1098-T's will be mailed.

Payment Plans

Tuition and fees are payable in advance in full, in U.S. currency, at the time billed. Students may pay by cash, check, echeck, or credit card (MasterCard, Discover, American Express, Visa).

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STUDENT PAYMENT POLICIES

Checks should be made payable to MADONNA UNIVERSITY.

NOTE: ALL TUITION AND FEES MUST BE PAID IN U.S. CURRENCY.

An online payment system is available using the Madonna University MY Portal at *www.madonna.edu* (click on **Login TO MY PORTAL** and enter your ID and password).

- Pay by e-check: no service fee. (E-checks processed incorrectly are charged the \$25 returned-check fee.)
- Pay by credit card: credit card payments are charged a serv- ice fee of 2.9%.
 - Madonna University uses a third-party payment vendor, CASHNet®. (The Student Accounts Office is no longer able to process credit card payments at the service window or over the telephone.)
- Payment may also be sent by mail; however, the university is not responsible for lost or delayed mail. The assessment of registration adjustments and late penalty charges will be determined by the postmarked date. No statements are mailed. Due dates are available using the Madonna University MY Portal, accessed from the Madonna web site at www.madonna.edu (click on Login to MY Portal and enter your Madonna University ID and password). Please mark your personal calendar each semester. Notification will be sent to your @my.madonna.edu e-mail address. You can review and print your own invoice (prior to the last month of any term), using your ID number and password, at the Madonna University MY Portal. Current term statements are no longer available as of one month prior to a new term.

NOTE: Approximately two weeks prior to the due date, a reminder notice is sent to your @my.madonna.edu e-mail. Students who register, or add to their registration, as of the first due date for the semester, are required to remit payment at the time of registration or changes to an existing registration. Students registering for non-credit or CEUs are required to pay 100% of the charges at the time of registration.

- 2. Students who do not pay in full in advance may choose to participate in one of the available payment plans, at an additional cost of \$20 for two payments or \$50 for three or four payments (see Schedule of Classes for available plans).
- 3. Payment may be made through the direct crediting of a financial aid award to the student's account, provided that the award is sufficient to cover the required advance minimum payment. This plan excludes university work-study awards. Students with an insufficient amount of financial aid to cover the minimum advance payment are required to pay the differ-

ence by the invoice due date. Students who have not received their official award verification notice prior to the billing close date are also required to pay the minimum advance payment when due.

NOTE: The following student assistance programs, for which the student has applied and/or been approved but from which the student has not yet received funds, will not serve to release the student from the obligation of required minimum payments when due: special department awards, veteran benefits (with the exception of students participating under VA: Post-9/11 GI Bill).

4. Students whose employer or other third-party payer is to be invoiced for tuition and expenses may submit a billing authorization form prior to the due date in lieu of the advance payment.

Application of Discounts

Madonna University offers tuition discounts to qualified students. A student may claim only one applicable discount in a given term. The discount to be applied (as: Alumni discount, Senior Citizen discount, Travel Abroad discount, community college agreement discounts, etc.) will be the one which provides the "optimal" reduction in tuition for the student.

Billing Error or Dispute

If you beleive there is an error or mistake on your bill, submit your concern in writing within 30 days. Your written inquiry must include: your name, student ID#, a description of your presumed error, and the dollar amount of the presumed error. You are responsible for paying the portion of your bill not in dispute, but the disputed amount may remain unpaid until such time that the problem is resolved. Send billing inquiries to Student Accounts Office, Madonna University, 36600 Schoolcraft Road, Livonia, Michigan 48150-1176, or sa@madonna.edu.

Other Fees

1. Late Payment Penalty:

- a.) Failure to meet the required minimum advance payment due date will result in the suspension of the student's registration. Prior to the end of add/drop week, in order to reinstate the registration, the student is required to pay a \$10 late payment fee in addition to the full payment. At the end of add/drop week, in order to reinstate the registration, the student is required to pay \$60 in addition to the full payment. A student who does not plan to attend must withdraw through the Office of the Registrar.
- b.) A penalty of 5 percent up to a maximum of \$75 is assessed if the second payment is not received by the invoice due date
- Returned Checks: Checks returned for any reason will constitute non-payment and will be subject to a \$25 penalty per check. Late penalty charges will be assessed when applicable.
 This applies to e-checks where information is entered incorrectly.
- **3.** Add/Drop Change of Courses: A minimum of 50% of the increased tuition and fees resulting from a change in registration made as of the first due date must be paid at the time of adjustment.
- **4. Record Replacement Fee:** Requests to duplicate billing records to verify payments are assessed a \$5 per semester replacement fee.

Student Payment Policies 25

Tuition Credit Adjustments

Students are required to drop or withdraw officially fromclasses in person or in writing through the Off of the Registrar. Written notification may be faxed over the weekend or after business hours to fax number (734) 432-5405. Students may drop/withdraw in person during business hours. The date that the Office of the Registrar receives the request via fzx or, in the case of a withdrawal form sent by US Mail, the postmark date, determines the amount of any adjustment of tuition after classes have begun.

Students who do not officially drop or withdraw from a class within the specified add/drop periods are responsible for full tuition and fees fro the courses. In such cases, the grad of F is entered for the courses on the student's transcript.

Tuition credit adjustments are made according to the following schedule. (At the time of withdrawal only tuition is adjusted. No other fees are changed.)

FULL SEMESTER courses and courses that start the first week of classes and are eight weeks or longer:

Add/Drop Week	100%
Drop Week	100%

For All Other Courses

Tuition credit adjustments for all other courses are defined by the following schedule:

Course Duration	100% Tuition Refund* (course must be dropped by close of business on this day)			
4 weeks or less	1st day of class			
5 - 7 weeks	2nd - 7th day			
8 - 15 weeks	8th - 14th day			
*no refund for course withdrawals after the day specified				

NOTE: Students unable to complete the withdrawal process within the designated time periods, or those compelled to withdraw completely at any time because of circumstances beyond their control, may appeal the credit adjustment decision in writing. Obtain the Special Academic or Administrative Requests form from www.madonna.edu > RESOURCES> SPECIAL REQUESTS. Completed forms, signed and dated by the student, are to be submitted to the Office of the Registrar.

Refunds

When students decrease their schedule or withdraw from classes, only certain credit for the total tuition commitment can be granted based on the above credit adjustment schedule. A credit adjustment is not necessarily a refund. If the credit is greater than the amount due, the difference is refunded to the student. If the credit is less than the amount due, the difference must be paid by the student.

Students whose tuition was paid all or in part from financial aid funds will have all or a portion of the refund restored to the aid program; therefore, students may not be eligible for a cash refund.

A student's account that has a credit balance from financial aid/loans is automatically refunded. Madonna University has partnered with Higher One, a financial services company, to manage refunds with new options for processing. *All refunds are processed through BankMobile*.

New students who have their Social Security number and photograph on file will receive a Madonna Debit OneCard ID within three weeks following enrollment for their first semester. Students go online at www.MadonnaOne.com to select their choice of (1)

having funds disbursed to the Madonna OneCard for use in credit card transactions (funds available within 24 hours); (2) having funds transferred to the student's own checking or savings account (three days); or (3) having a check sent to the home address (five days or more).

The use of the Madonna OneCard ID for refunds is encouraged, but not mandatory. In any case, the card must be retained for account access. There is a replacement cost for lost cards or cards that can not be delivered because of incorrect addresses.

Non-Refundable Fees

- 1. Admission Application fee or International Student Admission Application fee.
- 2. Graduation fee: A non-refundable graduation fee of \$75 is charged each student who applies for graduation. The application is valid for one year from the semester for which the student is applying. Students may obtain an Application to Graduate form from the Office of the Registrar or from the Madonna University website at www.madonna.edu. The application form must be completed, signed by the student's advisor, and presented to the Office of the Registrar after the fee is paid. See the University Calendar for deadlines.
- 3. Room and Board fees: These fees are refundable in accordance with the full-semester tuition credit adjustment schedule. Rooms are rented for a semester; after the 4th week of school, no refund is made in case of withdrawal. After the 4th week, no refund can be made on the board fee because of contractual arrangements relating to services provided.

Residence Hall Fees

Room Damage

Upon check-out, any damages to the room that are assessed at that time are applied to the student's account.

Room Reservations Fees

Contracts are available on line at www.madonna.edu > Current Students > Residence Hall, at the Student Accounts Office, or at the Residence Hall.

The required payment that is to be remitted with each contract cannot be paid from your expected financial aid.

Students who move into the residence hall for the fall and winter semesters (August to December and January to May) will have \$100 out of the initial payment of \$175 applied to their Student Accounts record by October 1st. Students who move into the residence hall for the winter semester (January to May) will have the remaining \$75 out of the initial \$175 applied to their Student Accounts record by February 1st.

Students who move into the residence hall for the spring/summer semester (May to August) will have their deposit of \$75 applied to their Student Accounts record by June 1st.

Room Reservations for Residence Hall

Reserve aroom in the Residence Hall by completing the following steps:

- Complete the Residence Hall Contract.
- Include a deposit of \$175.

The deposit can be made by check, money order online payment, or wire transfer. Please note that no room is reserved until the deposit and a completed contract is received by the Student Accounts Office.

The room deposit will be applied to your room payment and is non-refundable if you do not move into the Residence Hall. The deposit will be forfeited.

For international students—if your visa should be denied, the room deposit will be reimbursed in full.

STUDENTS CALLED TO ACTIVE MILITARY DUTY

Students who are called to active military duty and have their program of study disrupted may contact the Office of the Registrar to determine a satisfactory arrangement with regard to their academic program. Options will vary depending on the timing of the request within the semester. Options may include:

- dropping the courses with full tuition and fee refund;
- completion of a course(s) at a later date;
- · online or independent study;
- · or some other mutually agreeable resolution.

Students will need to provide a copy of their military orders. Students called to active duty will be allowed to pursue finishing their incomplete course work within one academic year after completing their active military duty.

Room and Board fees will be refunded on a prorated basis for actual services the student received up to the date of withdrawal.

Student aid recipients who withdraw from school because they are called to active duty, or are otherwise affected by mobilization or terrorist attacks, will not be required to return financial aid funds they received for books and living expenses.

It is the intent of the university that no students suffer a loss of funds or educational opportunity because they were called to military service.

Contact the Office of the Registrar, Room 2003, (734) 432-5309.

Student Payment Policies 27

Financial Aid

MADONNA UNIVERSITY provides financial assistance to admitted students whose scholastic aptitude merits a scholarship and/or whose personal and family resources are inadequate to meet the educational cost. All students are urged to apply for financial aid.

The primary responsibility for financing a college education rests with the student, the parents, and/or the spouse. Financial aid is a supplement to the funds which can reasonably be provided by the applicant and the applicant's family. The student is expected to contribute toward education expenses through savings, employment, untaxed income, and earnings from the student's spouse and/or parents.

The demand for student aid exceeds the supply of funds available; therefore most financial aid programs must limit their awards to students who can demonstrate need according to a nationally-accepted formula which is applied uniformly to all individuals applying for aid.

Students who receive federal, state, or institutional financial aid may have their aid package adjusted or reduced if they receive private scholarships or grants, third-party payments, or other sources of funding that exceed their tuition charges or cost of attendance as calculated by the Financial Aid Office.

Eligibility for Financial Aid

The eligibility requirements for most Federal and State programs are as follows:

- The student must be a U.S. citizen*, national, or U.S. permanent resident who has an I-151 or I-551 (Alien Registration Receipt Card) or I-94 with proper endorsement.
 - *Michigan residence for Michigan Tuition Grant and Competitive Scholarship.
- The student must be enrolled in an eligible course of study on at least a half-time basis* (six credit hours). NOTE: Credit by examination, audit, life experience, and/or experiential learning credits are NOT counted in determining a student's eligibility for any type of financial aid.
 - *Students less than half-time may qualify for some programs. See the Financial Aid Office for details.
- The student must have a high school diploma, a GED, or have completed a two-year program that is acceptable for full credit toward a bachelor degree.
- To be eligible to receive and/or to continue to receive financial aid, the student MUST be making Satisfactory Academic Progress. More detailed information on Satisfactory Academic Progress is available on pages 50, 52 of this Catalog and upon request from the Office of Academic Advising.
- The student must not be in default on a student loan or owe an overpayment on a student grant.
- The student must have demonstrated financial need.

In addition to the criteria listed above, applicants must be officially admitted to Madonna University and be enrolled in a degree or certificate program to be eligible for the following Federal Student Aid programs: Pell Grant, Supplemental Educational Opportunity Grant, Federal Work Study, Direct Student Loan programs.

Application Procedure

To be considered for Federal, State, and most Madonna University programs, apply for financial aid using the Free Application for Federal Student Aid (FAFSA) which is available online at www.fafsa.gov.

Applications should be submitted as early as possible each year. Students are encouraged to apply as follows:

Fall semester: March 1st Winter semester: May 1st

Spring/Summer semester: January 1st

NOTE: Students need to apply once each academic year.

Students whose applications are selected for verification may be required to provide additional supportive documentation (tax information, child support paid, etc.).

Students who are not U.S. Citizens or U.S. Nationals may be asked to provide a copy of their I-151 or I-551 (Alien Registration Receipt Card) or I-94 with proper endorsement.

Once the FAFSA has been reviewed, instructions will be sent on how to access the Madonna University Online Financial Aid System, *MY Financial Aid*. Students will be able to check the status of their applications, download requested forms, and view financial aid awards.

Federal Aid Programs

FEDERAL PELL GRANTS:

Undergraduate students from limited income families may be eligible for up to \$5,730 per year in Federal Pell Grant aid on the basis of financial need.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (SEOG):

The federally funded Supplemental Educational Opportunity Grants may be awarded to undergraduate students whose financial aid applications demonstrate exceptional need. These grants may be renewed each year that need is shown and funds are available until the student completes an undergraduate degree. Amounts vary depending on need.

FEDERAL WORK STUDY:

The Federal Work Study Program encourages on-campus employment for undergraduate and graduate students who demonstrate financial need. These jobs are secured through the Career Services Office.

FEDERAL DIRECT STUDENT LOANS:

SUBSIDIZED: Available to undergraduate students with financial need. The interest on the loan is paid by the government while the student is enrolled at least half-time. Loan amounts vary depending on the student's dependency status and the year in school.

UNSUBSIDIZED: Available to undergraduate and graduate students regardless of financial need. The interest IS NOT paid by the federal government while the student is enrolled in school. Loan amounts vary depending on the student's dependency status and the year in school.

FEDERAL DIRECT PLUS LOANS FOR PARENTS AND FOR GRADUATE STUDENTS:

Available to creditworthy parents of dependent undergraduate students and to graduate students regardless of financial need.

Parents and graduate students may borrow up to the cost of education less any other financial aid awarded.

Detailed information regarding application procedures, current loan amounts, interest rates, deferment, postponement, cancellation, and repayment provisions for the loans listed above are available upon request from the Financial Aid Office.

For more information on Federal Aid Programs, visit: http://stu-dentaid.ed.gov.

Michigan Aid Programs

MICHIGAN TUITION GRANTS:

The Michigan Tuition Grant Program provides grants to qualifying undergraduate Michigan residents with financial need.

MICHIGAN COMPETITIVE SCHOLARSHIPS:

Michigan Competitive Scholarships are awarded to undergraduate Michigan residents with financial need and qualifying scores on the American College Test (ACT) or Enhanced ACT.

The Michigan Tuition Grant and Competitive Scholarship awards are restricted to tuition and mandatory fees. If eligible, students may receive the equivalent of ten (10) semesters of full-time assistance as an undergraduate.

For more information on Michigan Aid Programs, visit: http://www.michigan.gov/mistudentaid.

Madonna University Aid Programs

Madonna University offers Service Scholarships/Awards, Honorary Scholarships, Endowment Scholarships, and Annual Funded Scholarships to both incoming and continuing students.

Madonna University also offers merit scholarships to new, incom- ing students, awarded at the time of admission. These scholarships are competitive and only awarded to new students. A complete list- ing of the merit scholarships can be obtained through the Office of Undergraduate Admissions.

Scholarship General Terms and Conditions

To be eligible for University awards and scholarships, a student must be officially admitted, have a minimum 3.0 GPA (some schol- arships have higher requirements), and be enrolled full-time (12 s.h. or more) unless otherwise noted. For transfer students, the GPA is recalculated at the time of admission.

- For award consideration, students must complete the scholarship application (i.e., application, letters of recommendation, essay, and/or other requirements) by the established deadline.
- The University will notify students in writing if they have been selected for a scholarship/award, and include the award in the financial aid package.
- Scholarship recipients are selected by a committee and are awarded based on cumulative grade point average, community involvement, personal accomplishments, and documented financial resources.
- Scholarships/awards only apply to the fall and winter semesters, unless otherwise noted.
- Scholarship recipients are required to be enrolled full-time (12 or more semester hours per semester) unless otherwise noted.

MADONNA UNIVERSITY SERVICE SCHOLARSHIPS/ AWARDS

 Felician Service Award; awarded by drawing, at the end of win ter semester, to a student who has met criteria for service hours

- in service-learning and other co-curricular activities during her/his First Year at Madonna University and submitted an activity summary to the Associate Dean for Advising and First-Year Experience.
- Franciscan Spirit Award; to a Catholic student in good academic standing who renders outstanding leadership and service in Campus Ministry or other campus service organizations. Awarded by recommendation of a Vice President, faculty member, or staff member aware of student's service activities.

HONORARY SCHOLARSHIPS ESTABLISHED BY MADONNA UNIVERSITY

- Mother Mary DeSales Scholarship (1947): awarded to a graduate of Ladywood High School or other Catholic high school.
- Felician-Franciscan Scholarship (1982): awarded to a Felician Sister or Postulant recommended by the Director of Ministry of Our Lady of Hope Province. Preference will be given to a candi- date who is enrolled full-time.
- Anton **Jakobs** Scholarship (1968): awarded to a community college graduate.
- Sister Mary Paulette Krakowski, CSSF, Scholarship (1993): awarded to a music major.
- Jack **Krasula** Athletic Scholarship (2000).
- Sister Mary Joela **Patelski**, CSSF, Scholarship (1984): awarded to a Catholic high school graduate.
- Bishop John Quinn Scholarship in Memory of George and Mary Quinn (1979).
- Sister Mary Danatha **Suchyta**, CSSF, Scholarship (1976): awarded to a Catholic high school graduate.

ENDOWMENT SCHOLARSHIPS

- Aging Studies Scholarship (1980): awarded to an aging studies major. Established by Madonna University Aging Studies Department.
- Madonna University Alumni Association Scholarship (1985): awarded to a child or legal dependent of a Madonna University graduate. Established by the Madonna University Alumni Association.
- Sister Mary Jacqueline **Anderson**, CSSF, Scholarship (1999): awarded to minority women for any English Department major. Established by Dr. Miriam Fabien, Sister Kathleen Marie Wlodarczak, CSSF, and Art and Anne Anderson.
- Bishop Moses B. Anderson, SSE, and Dr. Frank Hayden Scholarship (1989): awarded to African-American students of the Detroit Metropolitan area. Established by Bishop Moses B. Anderson, Auxiliary Bishop of the Archdiocese of Detroit.
- Archdiocesan Catholic Minority Student Scholarship (1991).
 Established by Adam Cardinal Maida of the Archdiocese of Detroit.
- Bala/Wlodarczak Scholarship (2004): awarded to a full or parttime student with a major in the College of Science and Mathematics. Established by the Wlodarczak family.
- Robert K. and Betty J. Barbour Scholarship (1998): awarded to students enrolled in health care programs. Established by Robert K. and Betty J. Barbour.
- Diane M. Bargagna Scholarship (2001). Established by Diane M. Bargagna.

- Barnes & Noble College Bookstores, Inc./Fr. Francis S. Tebbe, OFM, Scholarship (2001): awarded to transfer students. Established by Barnes and Noble College Bookstores, Inc.
- Barton Family Scholarship (1997): awarded to a minority under- graduate and graduate student pursuing teacher education pro- gram. Established by Dr. Norene Barton Daly and Mary Margaret Barton Kelley.
- Sister Mary Rachel Bawol, CSSF, Scholarship (1998).
 Established by Carol A. and Joseph P. Copland.
- Ruth and Ludger A. Beauvais Scholarship (2009): awarded to a student with financial need. Established by Ludger A. Beauvais.
- Harry and Evelyn Beck Scholarship (1993): awarded to a stu-dent pursuing teacher education program or accounting. Estab- lished by Evelyn Beck.
- Rev. Mitchell Bednarski Scholarship (1995): awarded to a grad- uate from Catholic Central High School, Redford Michigan, relocated in July 2005 to nearby Novi, or in absence of a qualify- ing student, to a Ladywood High School graduate. Established by Rev. Mitchell Bednarski.
- Francis B. and Elizabeth R. **Berkemeier** Scholarship (2004): awarded to a full-time student, regardless of need, from Lumen Christi High School in Jackson, Michigan, or if no such candi- date is available, to a graduate from a Catholic high school. Established by Elizabeth R. Berkemeier, Francis X. and Janet G. Berkemeier.
- Christopher Bisset Memorial Scholarship (2004): awarded to a criminal justice major. Established by loving family, generous friends, and dedicated special agents, U.S.
 Department of Education, Office of Inspector General (OIG).
- Sister Mary Crispin Blaszczyk, CSSF, and John and Lorene Blas- ky Scholarship (1994). Established by John and Lorene Blasky.
- Rosalee M. **Bleecker** Scholarship (2006): awarded to non-tradi-tional (age 25 and older), part-time, music major or history major students. Established by Rosalee M. Bleecker.
- Dr. James S. **Bonadeo** Scholarship (1998). Established by Dr. James S. and Earlene Bonadeo.
- Viola R. and Dr. Thomas G. Bosco Scholarship (1987): awarded to an African-American student or to a needy student in the nursing/BSN program. Established by Dr. Thomas G. and Viola R. Bosco.
- Eva L. and Lawrence L. Bourgeois and Mary Hall Memorial Scholarship (1987). Established by Lawrence L. Bourgeois.
- Brocki/Poniatowski and Irene and Adam Ponte, DDS, Memorial Scholarship (1988): awarded to a student in the Humanities. Established by Sister Mary Damascene Brocki, CSSF, and Adam Ponte, DDS.
- Elizabeth Briggs Fisher Scholarship (2014): Established by the Society of the Sacred Heart / Women's Cultural Collaborative.
- Andrew R. and Sara L. Brodhun Scholarship (2008): awarded to junior or senior level student with a grade point average of 3.0 and higher, in need of financial assistance and pursuing a degree in the College of Science and Mathematics or the College of Education. Established by Andrew R. Brodhun.
- John and Marie B. Bush Scholarship (2000): awarded to a

- student enrolled in music or art. Established by Daniel and Rose Kachnowski.
- Rodrigo and Adela **Bustamante** Family Scholarship (2001): awarded to a needy Latino-American student. Established by Rodrigo and Adela Bustamante.
- John J. Cale Scholarship (2007): awarded to a needy, fullor part-time student pursuing a major in international business.
 - Established by Mary B. Cale.
- Florence and William **Cameron** Scholarship (1988); awarded to a U.S. resident student with demonstrated need. Established by Florence Cameron.
- John J. Carlo Scholarship (1987): awarded to a nursing major. Established by Louis E. Carlo.
- Venerable Solanus Casey Scholarship (1995): awarded to a part- time or full-time student in any graduate or undergraduate major in the College of Science and Mathematics. Established by Dr. Mary M. Hunt.
- Virginia **Clementi** Scholarship (1994). Established by Virginia Clementi.
- John D. Corr Scholarship (1996). Established by John D. and Dr. Jean Corr.
- Ed P. and Wanda L. Czapor Family Scholarship (2004).
 Estab- lished by Ed P. and Wanda L. Czapor.
- Bruno and Emily Czenkusz Memorial Scholarship. Established by Beatrice Czenkusz.
- Daoud Foundation Scholarship (1992). Established by Drs. Tarik and Helen Daoud.
- **Daoud** Foundation/Arab American Nurses Association (AANA) Scholarship (2004): awarded to Arab American students pursu- ing the nursing program at Madonna University. Established by Drs. Tarik and Helen Daoud.
- George DeDecker Scholarship (1991). Established by Julia DeDecker.
- Dama Maria Del Carmen Montes Scholarship (1993): awarded to a Latino-American student. Established by Dama Maria Del Carmen Montes.
- Elizabeth M. and Earl J. **Demel** Scholarship (1997). Established by Elizabeth M. Demel.
- Shirley Dudek **Demmer** Scholarship (2008): awarded to sociology majors, or in absence of qualifying students, to creative writing majors. Established by William J. Demmer.
- Magdalene and Dominic Derkins Scholarship (2002).
 Estab- lished by Stella Derkins.
- Stella and Raymond Derkins Scholarship (2002).
 Established by Stella Derkins.
- **DeRoy** Testamentary Foundation Scholarship (1999): awarded to a deaf or hard of hearing student. Established by the DeRoy Testamentary Foundation.
- Charles and Patricia **Derry** Broadcast and Cinema Arts Scholar- ship (1994): awarded to a sophomore level or higher student with Broadcast and Cinema Arts major and must be an active major currently enrolled in Broadcast and Cinema Arts class(es) at Madonna University. Established by Charles and Patricia Derry.
- Detroit Edison Foundation Scholarship (1995): awarded to minority students pursuing science, especially for prospective teachers in elementary schools. Established by the Detroit

- · Edison Foundation.
- Kathleen M. (Dilworth) Wozniak Scholarship (1998): awarded to a nursing major. Established by Joyce A. Dilworth.
- Angelo DiPonio Scholarship (1988). Established by the Angelo and Margaret DiPonio Foundation.
- Margaret E. DiPonio Criminal Justice Program Scholarship (1997): awarded to a student in criminal justice.
 Established by the Angelo and Margaret DiPonio Foundation.
- Sister Mary Virgilia Dragowski, CSSF, Scholarship (2004): awarded to a financially needy student. Established by Agnes Witkowski.
- Patrick and Joan **Duggan** Family Scholarship (2004): awarded to nontraditional adult women returning to school. Established by Hon. Patrick and Dr. Joan Duggan.
- Susan Edwards Scholarship (1999): awarded to prospective teachers of developmentally disabled, emotionally impaired and learning disabled children. Established by Joseph and Ann Edwards.
- Dr. Alan E. Eichman Scholarship (1999): awarded to a criminal justice major. Established by Meryl Schilling.
- Doris Evelyn Eichman Memorial Scholarship (1998): awarded to a student in hospice and palliative studies. Established by Dr. Alan E. Eichman.
- Cecily Farragher Scholarship (2003): awarded to students pursu- ing teacher education. Established by John and Susan McMeel.
- Felician Sisters Scholarship (1988): awarded to members of the Felician Community in Our Lady of Hope Province, either candidates or professed sisters, pursuing undergraduate or graduate degrees or programs at Madonna University. Established by Msgr. Vincent J. Horkan.
- Frank and Sophia Filipek Scholarship (2007): awarded to student of Polish descent. Established by Frank and Sophia Filipek.
- Emily and Raymond T. Gapinski Scholarship (1994).
 Established by Sr. Mary Janet, CSSF, and Emily and Raymond T. Gapinski.
- Patricia **Gerstner** Scholarship for Women (2011): awarded to a full-time or part-time female student who is older than 25 years. Established by Patricia Gerstner.
- Sister Mary Humilitas Gersztyn, CSSF, Scholarship (1989): awarded to a nursing major. Established by the Madonna University Nursing Department.
- Rev. William and Sister Mary Henrietta, CSSF, Gieranowski Scholarship (2002). Established by Rev. William Gieranowski.
- Aging Studies Department Scholarship in Honor of Marilynn Goering (2008): awarded to student majoring in aging studies or long term care administration. Established by the Madonna University Aging Studies Department.
- Hilary L. and Beverly G. Gross Scholarship (2000): awarded to members of the Felician Community in Our Lady of Hope Province, either candidates or professed sisters, pursuing under-graduate or graduate degrees or programs at Madonna University. Established by Hilary L. and Beverly F. Gross.

- Kristen H. Hallerman Scholarship (1994): awarded to a beginning student in nursing from Plymouth-Canton High School, Plymouth-Salem High School or Garden City High School. Established by Kristen Hallerman and Richard and Annajo Hallerman.
- Mary **Hart** Tribute Scholarship (1999): awarded to a student majoring in social work.
- William Randolph Hearst Scholarship (1988): awarded to students in service-oriented degree programs. Established by the William Randolph Hearst Foundation.
- Jeanne M. **Hildebrandt** Memorial Scholarship (1999). Established by Jeanne M. Hildebrandt.
- The Conrad N. Hilton Foundation Scholarship in Honor of Sister Mary Francilene Van de Vyver, CSSF (2002): awarded to deaf, hearing impaired, or needy students. Established by the Conrad N. Hilton Foundation.
- Dr. Julienne Hoff Memorial Scholarship (1998): awarded to a graduate nursing major. Established by William R. Hoff.
- Jennie Horowitz Scholarship (1993): awarded to an African-American full-time student in nursing. Established by Evelyn Beck.
- Dr. Lorraine I. Jakubielski Scholarship in memory of William and Lottie Jakubielski (2002). Established by Dr. Lorraine Jakubielski.
- Floyd R. Kannberg Scholarship (1994): awarded to a student in hospice and palliative studies or nursing.
 Established by Frances M. Kannberg.
- Joseph and Angela Kapuscinski Scholarship (2013): for the
 education of members of the Felician sisters of Livonia and
 other religious orders pursing a degree program at Madonna
 University including gerontology, religious studies, hospice,
 nursing, and other majors. (has an annual scholarship as well)
- Sister Mary Cleopha **Kaptur**, CSSF, Scholarship (1996). Established by Hon. Marcia C. Kaptur.
- Charles and Frances Kazul Memorial Scholarship (1990): award-ed to a needy student. Established by Sister Mary Nunciata Kazul, CSSE
- Dr. Robert and Monika Kimball Scholarship (1996): awarded to an international student in the United States on an F-1 Visa. Established by Dr. Robert and Monika Kimball.
- Marge Kleinert Collins Scholarship (2005): awarded to students in teacher education. Established by Charles and Margaret Collins.
- Rudolf and Evelyn **Kleinert** Scholarship (2002): awarded to a community college graduate. Established by the Kleinert Family and friends.
- Knight Foundation, Inc. Scholarship (1989): awarded to deaf or hard-of-hearing students. Established by the Knight Foundation, Inc.
- Knights of Columbus/Michigan State Council Scholarship (1989): awarded to prospective teachers of developmentally disabled/mentally retarded, emotionally impaired, and learning disabled children. Established by the Knights of Columbus of Michigan.
- Carla L. Knudsen Scholarship (1987): awarded to a nursing

- major. Established by Frank and Joan Knudsen and friends.
- Richard **Koch** Scholarship (1980): awarded to a criminal justice major. Established by Betty Koch.
- Theodore and Eleanor Konarski Scholarship (1983).
 Established by Eleanor Konarski.
- Sister Mary Hugoline, CSSF, Sister Mary Laurenta, CSSF, and Paul and Anna Konkel Scholarship (1990): awarded to a a graduate of a Catholic high school. Established by Paul Konkel, Francis X. and Janet Berkemeier, and John and Clara Berkemeier.
- Rev. Francis P. Kozlowski Scholarship (1993): awarded to a Catholic student. Established by Stella Gutowski.
- Sister Mary Paulette **Krakowski**, CSSF, Scholarship (2001). Established by Mary Anne Barczak.
- L. Pat Kramek Family Scholarship (2003): awarded to an under-graduate and/or graduate-level student pursuing teacher education. Established by L. Pat Kramek.
- Nancy F. **Kriegler** Memorial Scholarship (1999): awarded to a student majoring in nursing, hospice and palliative studies, or aging studies. Established by Frank Kriegler.
- Fred and Catherine Kubiak Scholarship (2000). Established by Catherine Kubiak.
- Sister Mary Hospicia, CSSF, and Rev. Edward J. Kubiak Scholar- ship (1987). Established by Rev. Edward J. Kubiak.
- Anna and Stanley Kucharski Scholarship (1984). Established by Eleanor Konarski.
- Sister Mary Chester Kucharski, CSSF, Scholarship (1983).
 Established by Eleanor Konarski.
- Francis and Anna Kujawa Scholarship (1991). Established by Anna Kujawa.
- Rev. Zanos Gougoutas, Christopher, and Drs. George and Bess **Kypros** Family Scholarship (2002): awarded to students pursuing an Autism Spectrum Disorders graduate program and to students pursuing Child Development or Early Childhood Education graduate or undergraduate programs. Established by Drs. George and Bess Kypros.
- Our **Lady** of Refuge Parish Scholarship (1996): awarded to a Catholic student in a service-oriented degree program. Established by Our Lady of Refuge Parish.
- Remie and Norma **Laenen** Scholarship (1990). Established by Remie and Norma Laenen.
- Dr. Bernard and Meta **Landuyt** Scholarship (1987): awarded to a business administration major. Established by Dr. Bernard and Meta Landuyt.
- Latinos de Livonia Scholarship (1989): awarded to students of Hispanic heritage. Established by the Latinos de Livonia.
- Donald and Denise L'Huillier Scholarship (2006): awarded to student pursuing undergraduate nursing major or criminal justice major. Established by Denise L'Huillier.
- Lions/Lioness Club Scholarship (1979): awarded to deaf or hard of hearing students. Established by Lions and Lioness Districts of Michigan.
- **Livonia** Jaycees Scholarship Fund (1990): awarded to a junior or senior student. Established by the Jaycees of Livonia.
- Livonia Symphony Scholarship (1996): awarded to amember of the Livonia Symphony Orchestra pursuing a

- degree or certificate at Madonna University, or in absence of a qualifying student to a music major. Established by the Livonia Symphony Society, IncJ. Edward **Lundy** Scholarhip (2005). Established by J. Edward Lundy.
- William A. and Dr. Mary A. Lyons Family Scholarship (2001). Established by Dr. Mary A. Lyons.
- John and Mary MacKenzie Memorial Scholarship (1994): awarded to a nursing major.
- Alycia C. Madgwick Memorial Scholarship (1998): awarded to a qualifying student from Franklin High School in Livonia, Michigan. Established by Dr. William T. and Bridget Phillips.
- Saviour, Iris, Carmen and John **Mangion** Scholarship (1994). Established by Sam and Iris Mangion.
- Julie Martin Memorial Scholarship for Academic and Athletic Excellence (2006). Established by the Athletic Department, the College of Arts and Humanities, family and friends.
- Dr. Don and Joyce Massey Scholarship (1990). Established by Dr. Don Massey.
- Edward H. **McNamara** Scholarship (2003): awarded to a resi dent of Wayne County, sophomore or higher status, with a 3.0 or higher grade point, full-time student, and with a demonstrated need for financial assistance. Established by the McNamara Scholarship Fund.
- Lucille McNamara Scholarship (1995): awarded to eligible deaf or hard of hearing students or future teachers of deaf or hard of hearing persons. Established by Hon. Edward H. and Lucille McNamara.
- Michael F. **McManus** Scholarship (2013): awarded to a student enrolled full time in a business related major. Established by the Michael F. McManus Foundation.
- Mickel-Magrames-Mickel Scholarship (2002): awarded to a student in the criminal justice program. Established by Charles E. and Georgia Stahl.
- Msgr. Stanley E. Milewski Scholarship (2003).
 Established by Msgr. Stanley E. Milewski.
- Robert A. and Stephanie L. **Miller** Scholarship. Established by Stephanie L. Miller.
- Leona D. **Miloch** Scholarship in Memory of Louis and Lillian Miloch (2005). Established by Leona D. Miloch.
- Jessica Marie Mitsch Scholarship (2006): awarded to second degree, undergraduate students in nursing.
 Established by John and Mary Mitsch and Family.
- Thomas B. and Jacquelyn Murphy Scholarship (2006): awarded to incoming freshmen with demonstrated financial need and scoring in the top ten percentile on the SAT, ACT, or other college entrance exam. Established by the T. B. Murphy Foundation Charitable Trust.
- Anthony Nardi and Joan Kaminski Nardi Scholarship (2011) in Memory of Mary Noreen Kaminski: awarded to a student pursuing a degree in the College of Arts and Humanities. Established by M. Joan Nardi.
- Kathleen A. Needham Scholarship (2004): awarded to a student pursuing certificate or degree in aging studies.
 Established by the Madonna University Department of Aging Studies.

- Joseph and Andrea Nodge Family Scholarship (2001): awarded to a student in teacher education. Established by Joseph and Andrea Nodge.
- Edward W. Nycz Memorial Scholarship (1994).
 Established by Edward W. Nycz.
- Henry and Josephine **Obloj** Scholarship (1998). Established by Henry Obloj.
- Dr. Leo and Dr. Bernice (Ostrowski) Obloy Scholarship (1991).
 Established by Drs. Leo and Bernice Obloy.
- Warren and Genevieve Orlick Scholarship (1992).
 Established by the Professional Golfer's Association of America-Michigan Section.
- Sister Mary Berarda Osinski, CSSF, Scholarship (1983): awarded to a child development major. Established by Dr. Thomas S. Monaghan.
- Outer Drive-Vencor Hospital Auxiliary Scholarship (1992): awarded to a sophomore, junior or senior level student enrolled in a health-related program. Established by the Outer Drive-Vencor Hospital Auxiliary.
- Walter and Lillian Pachota Family Scholarship (1996): awarded to students with a 3.0 grade point average. Established by Walter and Lillian Pachota.
- Alfred R. Pawlak Scholarship (2005): awarded to criminal justice students or Polish descendants. Established by Paul and Renne (Pawlak) Fershee.
- Sophie A. and Thomas F. Pluto Memorial Scholarship (2008): awarded to full-time, undergraduate-level student pursuing teacher education. Established by Elizabeth J. Pluto.
- World Heritage Foundation-Prechter Fund Scholarship (1999). Established by the World Heritage Foundation-Prechter Fund, and Heinz and Waltraud Prechter.
- The **Privaloff** Family Hospice Education Fund (2012): awarded to a student pursuing a degree in Hospice and Palliative Studies. Established by Kathleen and G. Michael Loewe.
- Catherine, Agnes, and Sister Grace Marie Prybys, CSSF, Scholarship (1990). Established by Sister Grace Marie Prybys, CSSF, and the Prybys Family.
- Hon. Carl D. and Peggy **Pursell** Scholarship (1993): awarded to a student in business, nursing, or teacher education. Established by Hon. Carl D. and Peggy Pursell.
- Ramser-Morgan Scholarship (2012): Awarded to a female student with financial need enrolled in the business program. Established by The Ramser-Morgan Foundation.
- Redford High School Alumni Association/Edward H.
 McNamara Scholarship (2005): awarded to graduates of
 Redford High School, Detroit, Michigan. In case of closure of
 the school, scholarship may be awarded to a minority student
 with financial need. Established by the Redford High School
 Alumni Associ- ation and Edward H. McNamara.
- **Renkowski-Ciak** Scholarship (2006); awarded to a community college transfer student pursuing a science major. Established by Anthony and Lorraine Ciak.
- Mary Pitrone Richards Scholarship (1978): awarded to a junior or senior level student in nursing/BSN program. Established by Jack Richards
- L. Peter and Eugenia Riters Scholarship (1997). Established by Eugenia Riters.

- Edwin S. and Barbara Roberts Family Scholarship (2000): awarded to a deaf or hard of hearing student or a student pursu- ing sign language studies (SLS). Established by Barbara Roberts.
- Mitchell J. Romanowski Scholarship (1996): awarded to a student in teacher education. Established by Mitchell J. Romanowski.
- Rozek Family Scholarship (1989): awarded to a student of Hispanic heritage. Established by Sister Mary Martinez Rozek, CSSF, and the Rozek Family.
- Sister Mary Bridget Roznowski, CSSF, Scholarship (1987): awarded to a family and consumer science major. Established by Sister Mary Bridget Roznowski, CSSF.
- St. Jude Scholarship (2015). Established by John J. Jr. and Nancy O'Connell.
- St. Lawrence Mission Scholarship (2000): awarded to a student demonstrating financial need and pursuing a degree from Madonna University. Established by Lawrence Sutherland.
- Sage Foundation Scholarship (1988). Established by the Sage Foundation.
- Ramandeep Kaur Sandhu Memorial Scholarship (2015): awarded to Sikh women, either in undergraduate study or graduate study, that are pursuing a degree in nursing or elementary education. The awardee is required to be enrolled full time. Established by Chain SIngh Sandhu, CEO, NYX.
- Mary and Thomas Shields Scholarship (1995): awarded to a student pursuing a degree in hospice and palliative studies or nursing. Established by Donna Berry and Dennis and Ken Shields.
- Stephen and Pelagia Smigielski and George A. Ski Scholarship (2016): for students with physical disabilities, in financial need, pursuing an undergraduate or graduate degree on a full or part time basis. Established by George A. Ski.
- Rev. Raymond S. **Skoney** Scholarship (1995). Established by Rev. Raymond S. Skoney.
- Marilee Smith Scholarship (1995): awarded to a student major- ing in nursing, Licensed Practical Nurse preferred. Established by William H. Smith.
- Shirley M. Smith Scholarship (1997). Established by Shirley M. Smith.
- Marie C. Sochalski Memorial Scholarship (1995): awarded to a nursing major. Established by Marie C. Sochalski.
- Anthony and Agatha Sryniawski Family Scholarship (1990). Established by Helen A. and Joseph Sryniawski.
- Frank A. Sryniawski Scholarship (1990). Established by Helen A. and Joseph Sryniawski.
- Helen A. Sryniawski Scholarship (2001): awarded to a student in teacher education. Established by Helen A. Sryniawski.
- Joseph Sryniawski Scholarship (1991): awarded to a Catholic student. Established by Helen A. Sryniawski.
- Sister Mary Immaculata Sryniawski, CSSF, Scholarship (1989): awarded to a graduate of a Catholic high school. Established by Helen A. and Joseph Sryniawski.
- Stephanie **Sryniawski** Scholarship (2002). Established by Elizabeth V. Wasik.
- Genevieve A. and Thaddeus A. Stankowski Family

- Scholarship (2006): awarded to needy undergraduate students pursuing a major related to social justice service areas. Established by Sister Janet M. Stankowski, O.P., and Lorraine McGuinness.
- Armand and Lillian Stefani Scholarship (1998): awarded to a student with financial need in the School of Business. Estab- lished by William Stefani and Anne Schuster.
- Edward C. and Hazel L. **Stephenson** Fund Scholarship (2004). Established by the Edward C. and Hazel L. Stephenson Foundation.
- Frank S. and Anne Suchyta Family Scholarship (2004): awarded to a Catholic student of Polish ancestry pursuing a pre-med course of study at Madonna University. Established by Frank S. and Anne Suchyta.
- Louise and Joseph, Sr., **Suchyta** Family Scholarship (2001). Established by Sister Mary Danatha Suchyta, CSSF, family, and friends.
- Dr. Theophil J. and Barbara Sutton Family Scholarship (2000). Established by Dr. Theophil J. and Barbara Sutton.
- Frank J. and Josephine **Svoboda** Scholarship (1962): awarded to a student in art or journalism. Established by Robert L. Svoboda in memory of his parents.
- Nancy E. and Roswell F. Tanger Scholarship (1997): awarded to a student in teacher education. Established by Nancy E. and Roswell F. Tanger.
- Dr. Susan S. **Thoms**, MD, Scholarship (1999). Established by Rev. James Hayes.
- Emmet E. and Frances **Tracy** Scholarship (1986). Established by Emmet E. and Frances Tracy.
- Sister Mary Francilene **Van de Vyver**, CSSF, Scholarship (1992): awarded to music majors and to international students. Established by Sister Mary Francilene Van de Vyver, CSSF, and Hector and Irene Van de Vyver.
- Peter A. and Ruth **Ventura** Family Scholarship (1991). Estab-lished by Peter A. and Ruth Ventura.
- Doreen Vivyan Hospice and Palliative Studies Scholarship (2005): awarded to hospice undergraduate or graduate students, part-time or full-time, who maintain a minimum 3.25 GPA and demonstrate financial need. Established by Dr. Kelly Rhoades, Madonna University Hospice and Palliative Studies Department, family, and friends.
- Michael B. **Washburn** Memorial Scholarship (1997). Established by Debra Ronayne.
- Elizabeth V. and Theophil Wasik Scholarship (2002).
 Established by Elizabeth V. Wasik.
- Theodore P. and Genevieve R. **Wasztyl** Family Scholarship (1998): awarded to a student age fifty and over. Established by Theodore P. Wasztyl.
- A. Thomas and Mary Watkowski Family Scholarship (2001): awarded to eligible student(s) from Our Lady of Mount Carmel High School or Parish in Wyandotte, Michigan, or from any Catholic Parish in the Downriver area; otherwise, the choice should be at the discretion of the Madonna University Financial Aid Department. Established by A. Thomas Watkowski.
- Lucille A. Weber Memorial Scholarship (1989): awarded to an aging studies major. Established by Charles and Patricia Doemer.
- Norman and Andrea (Ligeski) Whipple Endowment

- Scholarship in Memory of Parents, Ed and Estelle Browarski: awarded to students of Polish descent. Established by Norman and Andrea Whipple.
- David M. **Whitney** Fund Scholarship (1996). Established by the David M. Whitney Foundation.
- Pamela G. Witte and Helen Wojtaszek Scholarship (2008): awarded to student majoring in social work, primarily for tuition; if funds are available, for purchase of books or travel abroad expenses for social work endeavors. Established by Pamela G. Witte.
- Henry M. and Wanda (Zavislak) Wojcik Scholarship (2001): awarded to students in the nursing program, preferably in hos-pice and palliative studies and pediatric nursing. Established by Henry M. Wojcik.
- Rev. Ferdinand A. Wolber Scholarship (2009). Established by Rev. Ferdinand A. Wolber.
- Woodworth and Cox Alumni Scholarship Award (2011): award- ed to a student athlete who plays basketball for the Madonna University Men's Basketball Team. Established by James Woodworth and The Law Offices of Aaron Cox.
- Josephine Barski and Alexander Wowk Scholarship (1994): awarded to a student in nursing or hospice and palliative studies. Established by Edmund Barski and Joan Wowk.
- John and Emily **Wysolmierski** Scholarship (1988). Established by Loraine Mierski.
- Rev. Francis J. Zdrodowski Scholarship (1993). Established by Rev. Francis J. Zdrodowski.
- Sister Mary Angelis, CSSF, and George and Caroline Zgoda Family Scholarship (1980). Established by Sister Mary Angelis Zgoda, CSSF.

ANNUAL FUNDED SCHOLARSHIPS

- American Association of University Women/Plymouth-Canton Branch (2000): awarded to a mature woman from the Plymouth- Canton area with financial need.
- Bettie Archer-Johnson/American Business Women's Associa- tion Scholarship (2005). Established by the American Business Women's Association—Novi Oaks Charter Chapter.
- **Briggs-Fisher** Foundation Scholarship (2007).
- The Cold Heading Foundation Scholarship (1986): awarded to qualified students. Established by Rene and Aline A. DeSeranno.
- Gladys **Collins** Hospice and Palliative Studies Scholarship (1989).
- Theresa **Higgins** Roose (2014): awarded to a full time or part time student in Religious Studies.
- Joseph and Angela Kapuscinski Scholarship (2013): for the education of members of the Felician sisters of Livonia and other religious orders pursing a degree program at Madonna University including gerontology, religious studies, hospice, nursing, and other majors. (has an endowed scholarship as well)
- Honorable and Mrs. Timothy **Kenny** Scholarship (2004).
- Kathleen M. Lenaghan Scholarship for the Arts (2014). Established by Arthur R. Lenaghan for art and/or music majors.
- Livonia Civic Chorus Scholarship in Memory of Sister Mary Francilene Van de Vyver, CSSF (2002): awarded to a

full or part-time student in music preparing for a career in the vocal arts at Madonna University and who has not previously been a recipient of it; featured at LCC's Christmas or spring concerts. Established by the Livonia Civic Chorus.

- Livonia Rotary Club Scholarship (1989).
- Michigan Colleges Foundation Scholarship Programs
 funded by the following corporations and foundations: Mary
 Maybury Berkery Memorial Trust, Building Industry
 Association, Comeri- ca Charitable Foundation, The DeRoy
 Testamentary Foundation, Earhart Foundation, Gordon Food
 Service, Health Alliance Plan (HAP), JSJ Corporation,
 Liberty Scholarship Program, Eugene
 A. Miller Scholarship Program, Rose Memorial Scholarship
 Program, United Parcel Service (UPS).
- TRIO Student Scholarship (1997).
- Melissa Dawn Wilson Scholarship (2015): awarded to an under-graduate or graduate student in the Social Work program. Established by Gary Borowski.

OTHER

- Madonna University Athletic Grant: awarded to full-time students with a minimum cumulative GPA of 2.5 and demonstrated athletic ability.
- Financial Award for Travel and Education (F.A.T.E.): awarded to admitted, undergraduate students enrolled half-time or more, who are in good standing and who are participating in an approved overseas or exchange program.
- Madonna University Grant: awarded to students on a financial need basis.
- Senior Citizen Tuition Waivers are available to individuals 65 years of age or older. Tuition is charged at one-half the regular rate. Applies to tuition ONLY. Details available from the Student Accounts Office.
- TRIO Grant Aid: awarded to TRIO Program students with financial need.

Supplemental Assistance Programs

A variety of funds are also available for students who are in specific situations. Some of the major sources of such funds are:

- VETERANS EDUCATIONAL BENEFITS: The
 Deparment of Veterans Affairs administers a number
 of educational programs for veterans, servicepersons,
 and eligible dependents. Contanct the Transition
 Center or the Department of Veterans Affairs for
 more information.
- MICHIGAN REHABILITATION SERVICES (MRS):
 Michigan Rehabilitation Services assists eligible
 Michigan citizens who require vocational
 rehabilitation services in order to work. For additional
 information visit the web site at:
 www.michigan.gov/mrs.
- EMPLOYEE TUITION REIMBURSEMENT
 PROGRAM: Many employees will pay tuition for
 their employees who successfully complete course
 work at Madonna University. For more details check
 with the Human Resources Office at your place of
 employment.

More Information

More detailed information on all financial aid programs is available from the Madonna University Finincial Aid Office (734) 432-5663. All students are encouraged to contact the Financial Aid Office for further information and assistance in applying for financial aid.

The Financial Aid Office is open Monday and Thursday from 8:00 a.m. to 6:00 p.m. and Tuesday, Wednesday, and Friday from 8:00 a.m. to 5:00 p.m

Students should consult the Madonna University Student Financial Aid Handbook for detailed information on all University aid programs. Particular attention should be paid to application deadlines and to award and packaging priorities.

MY Portal

Access to personalized information and services is available through the MY Portal link at the top of the home page of the Madonna website <code>www.madonna.edu</code> or directly from a web browser at <code>https://myportal.madonna.edu</code>. After signing in using their Madonna University ID and password, students are able to register, to view and pay charges to their student accounts, to access financial aid information and academic plans, and view calendar information (from athletic and musical events to registration times and filing deadlines).



Technology Learning Services

Technology Services

Madonna University places high priority on information technology. Classrooms, seminar rooms, lecture halls, and laboratories are equipped for multimedia display. Wi-Fi (wireless access) is available throughout campus. Through the Madonna University portal and website, www.madonna.edu, students can access information and online services such as online registration, student billing, grades, and Blackboard learning management software. IT staff provide support for online learning, web and video conferencing, interactive television classes, classroom response systems, computer testing, and video on the web.

IT Help Desk

The IT Help Desk, housed in the Ford Technology wing, provides one point of contact for technology assistance. Madonna University students may e-mail their technology questions to *helpdesk@madonna.edu* or call (734) 432-5800. IT Help Desk assistance and tutorials are also available on MY Portal through the Madonna University website.

Computer Laboratories

Located in the Ford Technology wing on the Livonia campus, the Technology Learning Center's computer laboratories provide student access to networked systems, including PCs, Mac's, multimedia equipment, scanners, and laser printers, all of which are available for students, faculty, and staff. The laboratories accommodate walk-in students, scheduled classes, and testing services. Many software programs are available on all computers, such as the Microsoft Office Suite, which includes Word, Excel, PowerPoint, and Access. Image and video editing software, such as Adobe Photoshop, Adobe Illustrator, Adobe Premier, and Apple Final Cut Pro, is available on many lab computers. During the fall and winter semesters the computer laboratories are open Monday through Sunday. A friendly support staff is available to help with most computer problems.

Blackboard

Blackboard is the online learning management system used at Madonna University. A free workshop, "How to Thrive in an Online Course", is offered at the beginning of every semester for students in online courses. For the workshop schedule, which includes evening and weekend sessions, go to the IT Help Desk under *Quick Links* on the Madonna University website home page.

Media Services

Celebrate Michigan, a regionally-syndicated public service television program, is produced and crewed by Broadcast and Cinema Arts students and watched by 40,000 people in the metro Detroit area.

Students in the radio classes broadcast their favorite music and special events on the Internet at www.Live365.com/stations/madonnauniversity2.

Additional facilities and services include audio and web conferencing, and an interactive television classroom where courses are offered through two-way video to off-campus sites. Production facilities include a digital HD TV studio and sound stage, a radio studio, announce booth, control room, edit lab, and edit suites.

Student E-mail

Information regarding Registration, Financial Aid, Student Accounts, and Student Life is sent to you through your student e-mail

All Madonna University students are given an official email account, @my.madonna.edu. The University authorizes the use of email for official communication among students, staff, faculty, and administrators. The university directs all official email communications to this address.

account. You are responsible for checking it regularly. Your e-mail user name and default password is provided in the same letter you received that contained your student ID and password for MY Portal and *Blackboard*. If you cannot log into your account, please contact helpdesk@madonna.edu to reset your password.

All members of the Madonna University community are expected to comply with established guidelines and procedures which define the proper use of electronic communications.

E-mail Responsibilities

- APPROPRIATE USE OF MU E-MAIL: Use of University e-mail is
 to be consistent with the University mission statement and foundational values. Illegal use, malicious use, and commercial use
 are not acceptable. For fuller statements of acceptable use of email, see the Madonna University Student Handbook on the
 website.
- Redirecting of MU e-mail: Madonna University recognizes that
 its students may choose to forward their official Madonna e-mail
 to a non-university e-mail account (such as gmail or hotmail);
 however, students are responsible for ensuring that the configuration of their e-mail service does not accidentally label University
 mail as spam. Users who forward their e-mail do so at their own
 risk. Forwarding e-mail does not absolve users from their responsibilities associated with communications sent to their official email address, such as billing and student accounts information.
 Madonna University does not offer support for messages lost because of the forwarding of e-mail.
- Access to MU E-MAIL: Students who do not have access to a
 computer or the Internet from home are encouraged to use computers available in the campus laboratories or in other community access locations such as their local library.
- FOR ASSISTANCE, visit the IT Help Desk in Room 1103, call (734) 432-5800, or e-mail *helpdesk@madonna.edu*. Please refer to the Madonna University website or MY Portal for additional information.

E-mail Abuse

Abuse of e-mail usage policies will result in loss or restriction of e-mail account privileges. Loss or restriction of e-mail accounts can be appealed to the Vice President for Student Affairs and Mission Integration.

Your First Year at Madonna University

Students experiencing their first year of studies at Madonna University are in a unique time of transition. The Office of the First-Year Experience and the Center for Students in Transition oversee a variety of programs to help students navigate this experience successfully, make new friendships, form relationships with faculty and staff members, and make the adjustment to a new community and environment.

The Office of the First-Year Experience

Serving traditional-aged students (under age 24) who are coming to the University directly from high school, home school, and early college programs, the overall goal of the First-Year Experience (FYE) program is to help learners make a healthy embrace of their new identity as full-time college students and assist them in assum- ing responsibility for themselves and their education. The Office of the First-Year Experience exists to support students in these en- deavors through curricular, co-curricular, and extra-curricular programming. Located in Room 1111, the Office of the First-Year Experience is an educational resource available for students and their families.

The First-Year Experience program includes the following components:

NEW STUDENT ORIENTATION (NSO): All new students are required to attend an orientation. A "must Attend Orientation" hold is put on all student records until the student has completed the orientation requirement.

UNV 1010, Transition to Higher Education: This one-semester-hour course is required of all incoming students who are less than 24 years of age and have fewer than 13 college transfer hours (excluding Advanced Placement, dual enrollment, Inter- national Baccalaureate, and early college credits). It is designed to address transition issues that First-Year students face when entering the University; introduce them to thought-provoking, challenging, and interesting ideas to enhance their critical think- ing, research, writing, and presentation skills; engage them in a community of learners; and incorporate a service-learning expe- rience that fulfills the University's mission of service. (Note: Students who complete a semester of Intensive English as a Second Language are excused from this requirement, because of material included in the Intensive.)

COLLABORATIVE STUDIES: Incoming traditional-age students are encouraged to participate in the Collaborative Studies program, which typically links two courses in general education and/or the University core with a section of UNV 1010. The faculty members create learning experiences in which students work collaboratively, cross the boundaries of different academic disciplines, and engage in discussion and conversation about relevant ideas and issues. The linked courses also integrate reflection on the service-learning project conducted in UNV 1010.

Philosophy Statement of the First-Year Experience at Madonna University

Madonna University believes that the first year of university study calls for a focused program of study, advisement, and orientation, based on the following philosophical perspectives:

WE BELIEVE THAT LEARNING IS SOCIAL and is best promoted and supported by a community of learners. To this end, the University requires first-year-of-college students to participate in the Collaborative Studies Program, a curriculum that links first-year courses to create a community of learners.

WE BELIEVE THAT LEARNING IS DEVELOPMENTAL, that is, that First-Year students are at individual levels of maturation and intellectual, social, and personal development. As educators, the faculty is committed to understanding where students are when they come to us, accepting and valuing them as persons, and identifying strategies for fostering their development.

WE BELIEVE THAT LEARNING IS HOLISTIC and we strive to fulfill our mission of intellectual, spiritual, and personal development. To this end, the Collaborative Studies Program promotes interdisciplinary approaches to learning and problem solving so that students recognize the interconnectedness of knowledge and human experience.

WE BELIEVE THAT OUR EDUCATIONAL PRACTICE SHOULD BE
LEARNER-CENTERED. This implies that students need to be taught
to take responsibility for their learning in order to promote the
ideal of life-long learning. One aspect of this goal relates to the
component of UNV 1010, Transition to Higher Education, that
familiarizes students with the variety of academic support
services available to them as Madonna University students and
encourages them to use these services when they experience
academic difficulty.

WE BELIEVE THAT EDUCATION AT MADONNA UNIVERSITY SHOULD PROMOTE THE IDEAL OF SERVICE TO OUR COMMUNITIES, particularly to those in the global community who are less fortunate. This is a reflection of the University's commitment to Catholic teachings on social justice and to the ideals of St. Francis of Assisi. To this end, the University requires all students in UNV 1010 to participate in a service-learning experience.

WE BELIEVE THAT STUDENTS BENEFIT FROM UNDERSTANDING THE HISTORY, TRADITIONS, AND FOUNDATIONAL VALUES of the university they attend. Through the continuum of admissions, orientation, pre-enrollment, first semester, and second semester, the University has designed intentional strategies for communicating these ideals to First-Year students.

The First-Year Experience 37

Student Affairs and Services

MADONNA UNIVERSITY STUDENTS should become acquainted with the individual offices providing an array of services to support their success in University life.

The University recognizes that a quality higher education experience is not limited to academic opportunities alone. Diverse and stimulating extracurricular activities promote individual growth and interest. Extensive support services assure that all Madonna University students have opportunities to be successful in their intellectual, spiritual, and personal growth.

The following opportunities exist for all students regardless of age, gender, national origin, religion, or disability.

Title IX

The University's policy on Title IX is located in the student handbook. The Title IX Coordiantor for Madonna University is Dr. Chris Benson, Assistant Vice President and Dean of Students.

Academic Advising

The purpose of academic advising is to assist new, transfer, and current students with academic life. Your academic advisor is committed to your academic success and can assist or reaffirm your selection of major. An academic advisor may help you with exploring and declaring majors; help with course selection and scheduling; answer questions regarding university requirements, policies, and procedures; and put you in touch with helpful university resources.

In addition, an academic advisor can: recommend opportunities for personal growth and academic development; make referrals to community and campus resources; support students when they encounter both academic and non-academic challenges; discuss alternatives if students have doubts about their initial choice of major; and/or provide students with career-related information.

First-time, first-year students, undeclared students, and provisional students meet with advisors in the Office of Academic Advising, Room 1111. Declared students past the First-Year Experience are assigned faculty advisors in their major department(s). See page 43 for more information.

In addition to their academic advisors, students have access to counselors who assist in promoting personal growth and development and who aid them in times of stress and need. Students interested in these services should see Guidance and Support, page 40.

Athletics

Madonna University has sponsored intercollegiate athletics since 1987 and its teams now include baseball (men), men's and women's basketball, men's and women's bowling, men's and women's cross-country, men's and women's golf, men's and women's lacrosse, men's and women's soccer, softball (women), men's and women's track & field, and women's volleyball. The school is a member of the National Association of Intercollegiate Athletics (NAIA) and participates in the Wolverine-Hoosier Athletic Conference (WHAC).

While having a brief history, Madonna athletic teams have built strong programs and compete favorably at a national level in nearly all sports. Volleyball is the oldest and most decorated program. However, all eleven teams have advanced to the National Tournament or had individual representation at the National Championship event.

Madonna athletics facilities include the Livonia campus Activities Center, where basketball and volleyball are played, as well as Ilitch Ballpark (baseball), Madonna University Field (softball), and a new synthetic turf soccer field. In addition, the golf teams use several area golf courses, and cross-country calls Cass Benton Park home.

Madonna student-athletics also boasts a strong academic history. Annually, multiple student-athletes earn academic honors at the conference and national level.

Qualified student-athletes are also eligible for athletic grants.

More information on Madonna University athletics may be found at www.madonnacrusaders.com.

Campus Ministry

Campus Ministry at Madonna University, with an office in Room 1408, is an important religious ministry dedicated to the service of individuals and the total University community. Campus Ministry seeks to encourage the practical application of Christian moral principles through student participation.

Among the activities sponsored by Campus Ministry are: week-day celebrations of the Eucharist in the University Chapel; Reconciliation services; small group meetings; multiple annual retreats; and service opportunities, such as volunteering at Gleaners Food Bank. E-mail *campusministry@madonna.edu*, or stop in Room 1408 of the academic building, to inquire further about campus ministry activities. Persons of any faith traditions are welcome to participate.

The University Chapel is located on the ground floor of the University Center in Livonia. A Christian prayer room, room 1211 in the academic building, and an Interfaith prayer room, located near room 2100, are also available for students to spend time in quiet reflection.

Career Services

Career Services, in Suite 1411, provides job search assistance and an integrated four-year plan of career decision-making and development. The Career Services Office follows the professional practice standards of the National Association of Colleges and Employers (NACE).

The office assists students seeking Cooperative Education/Internship experiences and on-campus student employment; provides opportunities to attend job fairs and networking with employers; holds workshops in job search, résumé writing, and interviewing; and critiques résumés.

Many students utilize a computer-based career exploration program to assist them in career exploration and decision making. Students needing more assistance may schedule an appointment for indvidual career counseling.

The MU Job Link is updated regularly with current job announcements, job fair information, and scheduled activities. The student portal features, "What Can I Do With A Major In...," providing career information on a variety of majors; links to job search engines; and Job Choices, featuring articles on job search.

Center for Personalized Instruction

The Center for Personalized Instruction (CPI), Suite 1400, provides students with academic resources and support services. Many serv-

ices are available to all Madonna students.

Tutoring is available in specific subject areas each semester in a one-on-one or group setting. Supplemental Instruction (SI), a series of weekly study sessions, is also offered for selected courses iden- tified in the Schedule of Classes. Additional support for mathemat- ics is available to students during Mathematics Laboratory walk-in hours. The CPI also offers success strategy workshops focused on topics that promote the intellectual and personal growth of stu- dents. Graphing calculators as well as resource book loans are also available to students.

The CPI coordinates the Student Support Services TRIO Program, funded by a federal grant to serve those with a demonstrated financial need (based on federal income guidelines), first-generation college students, and individuals with a documented disability. TRIO students may receive tutoring, advising, a laptop loan, mentoring, and access to cultural and leadership opportunities free of charge, as well as additional financial grant aid support. Students must apply to the TRIO Program and meet eligibility requirements.

Center for Study Abroad

The main focus of the Center for Study Abroad (Room 1501) is to promote and facilitate a wide range of study abroad opportunities for Madonna University students and faculty. The Center helps students identify appropriate study abroad programs, register for classes, and seek out possible scholarships. Support is provided for students both during and after the study-abroad experience. Stop in Room 1501 to discuss your study-abroad interests.

Cultural Affairs

An essential dimension of a liberal arts education is the opportunity for artistic expression and appreciation. Madonna University offers various programs in the fine and performing arts for student participation.

In the fall and spring there are student fine art and photography exhibits. Music recitals, Lyric Theatre productions, and the Madonna University Chorale, open to all students and community members, offer opportunities for performing arts expression. Students seeking off-campus cultural activities will find many opportunities in the greater Detroit-Ann Arbor metropolitan areas.

Disability Resources

Established in 1976, the Office of Disability Resources (ODR), Suite 1113, creates an accessible, positive learning environment for all students.

The ODR assists students with disabilities to fully participate in their university experience by reducing architectural, communication, and attitudinal barriers. Madonna University's successful integrated learning environment results from mutual cooperation and support of the faculty, staff, and administration.

Students with a documented disability are eligible for support services to assist them in their educational progress. The ODR support team includes:

- Experienced advisors, who guide students in their transition to college life:
- A Notetaker Coordinator, who manages notetakers and facilitates a positive working relationship among student, notetaker, and instructor;
- · An Interpreter Coordinator, who manages and schedules inter-

preting services and supervises interpreters.

The ODR team works closely together to continually provide an accessible learning environment through services such as:

- *in-class notetaking
- *sign language interpreting
- *student-instructor liaison
- *counseling and advising
- *alternative testing accommodations
- *assistive listening devices
- *adaptive computer equipment
- *adaptive tables and chairs
- *e-text, enlarged text and braille printing capabilities
- *videophones
- *tutoring referrals

While students are ultimately responsible for their own progress, ODR services ensure students access to university life.

Diversity and Multicultural Affairs

The Office of Diversity and Multicultural Affairs (ODMA), Room 1115, values diversity and works to foster an appreciation of diversity at Madonna University and within the larger society. ODMA works in partnership with the Institutional Standing Committee on Campus Diversity and Inclusion to offer an array of diversity programs to the university and the surrounding communities, including the Bridging Lost Gaps (BLG) Program, whose participants receive structured support to promote persistence and graduation, and programs, symposia, and special events taking up diversity topics in the Madonna community. Look for announcements of events throughout the academic year.

Food Services

In Livonia, the campus dining hall is in the upper level of the University Center adjacent to the Residence Hall. The Cafeteria is open to the entire Madonna Community: students in residence and commuters, faculty, staff, and guests to the University. Non-residents have wide selections of meal purchase options. Residents must elect a meal plan, opting for 10, 14, or 19 meals per week (the plan is effective for the full 15-week semester). No refunds are available on the board fee (a result of contractual agreements between the University and the contracted food service). Occasional/weekend absences are likewise non-refundable.

In complement to the dining hall at the Livonia campus are the 1551Grill located in the Take 5 Lounge and the Stacks Deli in the Franciscan Center, open only when classes are in session in the Fall and Winter semesters. Because of attendance fluctuations, the grill hours are subject to change near major holidays or at the start or end of each semester. Advance posting is made of any changes.

Guidance and Support

Individual counseling is available for educational, career, social, or personal concerns. Students whose academic performance is being disturbed by personal problems resulting from stress may contact the Coordinator within the Office of Student Affairs, Suite 1400, (734) 432-5880, for assistance.

The Psychological Services Clinic is available to students, who can schedule appointments by calling (734) 432-5493. Referrals to community professionals are made in cases where problem resolu-

tion is beyond the realm of University resources.

Health Services

Health services are available at St. Mary Mercy Hospital, which is adjacent to the University at Five Mile and Levan Roads. Students are responsible for all medical bills incurred because of sickness or injury on or off campus. Students may receive information about medical insurance at the Office of Student Life, Room 1411, or at the Student Accounts Office during September or January of each academic year.

International Students Office

The International Students Office (ISO, Room 1207) strives to provide quality services to international students, including information on international admission requirements and F-1 student status, orientation, advising, and coordination of extracurricular and cultural exchange activities, such as American host family visits and English conversation partners. International students are always welcome to contact the ISO to seek assistance.

Library Services

Madonna University Library advances the University mission by supporting the research needs and enhancing the information literacy skills of students, faculty, and staff. To achieve these goals, the Library provides quality resources, assistance, and instruction.

- Librarians offer expert assistance, at the reference desk, by phone or e-mail, or by appointment in private research consultations, and offer classes, and workshops to ensure that students access, evaluate, and use information effectively and ethically in the research process.
- More than 110,000 print and electronic books, multimedia resources, and over 100 subscription databases that offer 24/ 7 access to 25,000+ online full-text journals.
- Reciprocal borrowing agreements with nearby colleges and universities, and library participation in the Southeastern Michigan League of Libraries Infopass program, enable students to take ad-

vantage of the extensive research resources in the Detroit-Ann Arbor area.

- Interlibrary loan and document delivery services extend the availability of library materials.
- The library offers wireless access, quiet study areas, and rooms for collaborative work.
- The library also houses the University Archives.

Access to all library resources is available on the Library website, http://library.madonna.edu/, including website access to the Ask a Librarian e-mail facility.

When borrowing books, students are asked to show a valid, current Madonna OneCard ID.

The University library is open daily. Regular library hours are:

 Monday - Thursday
 8:00 a.m.-10:00 p.m.

 Friday
 8:00 a.m.-7:00 p.m.

 Saturday
 9:00 a.m.-5:30 p.m.

 Sunday
 1:00 p.m.-5:00 p.m.

Spring and summer semester, intersession, and holiday hours vary. They are posted in advance at the library and on our library web page.



Residence Life

Madonna University maintains a residence hall at the Livonia campus (14221 Levan Road) with separate floors for male and female students. Room and board are required as part of the residential contract. Admitted students may apply for housing through the Student Accounts Office by submitting a residence hall contract and deposit.

A Residence Hall Handbook is a section within the Madonna University Student Handbook and explains policies for life in the residence hall. (On the Madonna University website, select University Resources, then Student Services.) For more information, call (734) 432-5755.

Student Clubs and Organizations

Madonna University students have the opportunity to enhance and explore their interests by becoming members of various campus organizations. Organizations in areas of professional study are often affiliated with local, state, and national professional associations. This allows students exposure to current professional practice in their chosen field of study.

The viability of any student organization depends on student interest and involvement. Faculty and staff coordinators contribute to the vitality of the organization by active engagement and providing guidance to the members of the organization.

Madonna University also offers opportunities for student involvement in service activities. Students interested in the environment may join the Sustainability Task Force. Community service activities include Habitat for Humanity, Right to Life, Gleaners, Christmas for Kids, Campus Ministry, service at soup kitchens, alternative spring break service trips, and other volunteer opportunities in the community. These activities are reflective of the Franciscan values promoted at Madonna University.

Membership in the various organizations offers students an opportunity to clarify values and to enhance community leadership and team building skills outside the classroom. Students should visit or contact the Office of Student Life, Room 1411, for an upto-date listing of the over 30 clubs and organizations they can join.

Student Leadership Council (SLC)

Madonna University students are represented by the Madonna Student Leadership Council. This council is composed of student representatives from the various organizations and students-atlarge. The purpose of the Student Leadership Council is to serve as a student advisory group to the Office of the Vice President for Student Affairs and Mission Integration. Additionally, this council guides the funding of on-campus student activities and directs programming sponsored by the Office of Student Life. Members of the Student Leadership Council grow as leaders individually and as a campus community.

Student Representation, University Committees Students are invited to serve on the following institutional committees:

Trustee Standing Committees

Academic Administration Advancement and Public Relations Planning and Mission Effectiveness Student Affairs and Services

Faculty Standing Committees

Curriculum, Educational Policy, and Assessment Graduate School Library

Institutional Standing

Committees Campus Diversity and Inclusion New-Student Experience Mission Integration Planning and Mission Effectiveness Student Affairs and Services

Institutional Advisory Committees

Bookstore Food Services

University Task Forces

Sustainability

Underage Drinking Awareness and Education

Student Honor Societies

Madonna University also offers a number of organizations which recognize scholastic and academic achievement within a variety of departments and programs. These honor societies include:

Achievement Honor Society: Chi Alpha Epsilon
First-Year and Second Year Students:
National Society of Collegiate Scholars
Business Honor Society: Delta Mu Delta
Education Honor Society: Kappa Delta Pi
Gerontology (Aging Studies) Honor Society: Sigma Phi
Omega History Honor Society: Phi Alpha Theta
National Catholic Honor Society: Kappa Gamma Pi
Nursing Honor Society: Sigma Theta Tau International
Paralegal Honor Society: Lambda Epsilon Chi
Psychology Honor Society: Psi Chi
Science and Mathematics Honor Society: Sigma Zeta
Social Work Honor Society: Phi Alpha

Transition Center

The Center for Students i Transition directly supports student veterans, transfer students, adults returning to college after a delay in their education, and first-time adult learners over the age of 24. Located in Room 1404, the Center for Students in Transition serves as a helpful and welcoming space with specialized programming targeted to the needs of adult learners, beginning with the half-day Adult and Transfer Student Orientation program, designed to acclimate adult students to the University.

Adult learners are encouraged to connect with the Transitions Coordinator, Suite 1411, as soon as possible after being admitted to the University. Guidance, mentoring, and coaching are provided to adults, returning learners, transfer students, and student veterans. Students are connected to a variety of academic, social, and community resources, encouraging learners to reach their educational goals despite life's challenges. The Transitions Coordinator serves as a student advocate on many University committees to represent the interests of adult learners.

Writing Center

Students, both undergraduate and graduate, can receive no-cost help with their writing assignments for any subject area and at any stage of the writing process in the Writing Center, room 1403. Both undergraduate peer tutors and tutors with graduate degrees (Writing Center Specialists) work in the Center, tutoring both native speakers and English as a Second Language students.

Tutoring is available in pre-scheduled appointments, on a dropin basis, online, or via Skype. Writing tutoring is also available in the Southwest Detroit program. For information call the Writing Center at the Livonia campus: (734) 432-5304.

University Policies • Academic Process

Academic Advising

Students work with their academic advisors to successfully navigate academic life. Academic advising is required to develop a plan of study toward graduation requirements. With an academic advisor, students explore, declare, and reaffirm selection of majors, select courses, obtain information on university requirements, policies, and procedures, and identify helpful campus resources.

Students should meet with their assigned academic advisor(s) early in the first semester at Madonna University to discuss academic goals and career plans. Students are also strongly encouraged to meet with their advisor(s) prior to each registration period and on an as-needed basis to review course selections and evaluate their Plan of Study. The University assumes no responsibility for a student's program if the student is self-advised.

Assignment of Academic Advisors to Students Following notification of admission, students are sent an Academic Information letter from the Office of the Registrar which lists their assigned advisor(s).

- All first-year students (students under age 24 or transferring in fewer than 13 semester hours of college credit, excluding Advanced Placement, dual enrollment, International Baccalaureate, and early college credits) will be temporarily assigned to meet with an academic advisor in the Office of Academic Advising (Room 1111) during their first semester at Madonna University.
- Admitted students who have not yet declared a major, or are exploring major options, are encouraged to speak with an academic advisor in the Office of Academic Advising.
- Admitted students with declared majors are assigned academic faculty advisors who assist them in developing plans of study to meet their graduation requirements.

Students can identify their assigned academic advisor by logging on to MY Portal, or may find specific major advisors by visiting the Academic Advising website. The Office of Academic Advising is available to assist students with questions related to the advising process.

Student Orientation

All new students are required to attend an orientation. A "Must Attend Orientation" hold is put on all student records until the student has completed the orientation requirement.

Which Orientation Program to Attend

Traditional age (under age 24) On-Campus New Student Orientation required.

Adult, returning/Transfer students: On-Campus or Online Adult and Transfer Student Orientation required.

International students coming from abroad: International Student Orientation *required*.

International students transferring from U.S. institutions: See Adult, returning/Transfer studentsrequirement.

University Catalog Requirements

Students must meet the requirements of the University Catalog in effect at the semester for which they are formally admitted or readmitted (termed the "Catalog of Record").

In the event that students change their major or program during their course of study, the students are expected to meet the requirements for that major or program from the University Catalog in effect at the date of the change. The requirements for general education, the University core, and the University requirement, however, may be in compliance with the University Catalog in effect at the time of admission or readmission.

Writing Assessment and Placement

The faculty and staff at Madonna University have made a commitment to writing across the disciplines. They recognize that writing competency affects a student's success in college, in graduate school, in the professions, and in everyday life. For this reason, Madonna University actively promotes the development of strong writing skills. All incoming undergraduate students, including those transferring from other institutions of higher education, are required to write an assessment essay, created and scored by Madonna University writing faculty, for placement in Madonna's required writing courses. (Students enrolling *only* for a Certificate of Completion are excused from this policy. If such a student later enrolls for a Certificate of Achievement or an undergraduate degree, writing assessment and placement would then be required.)

All students are expected to begin their writing requirement sequence, based on placement by the assessment results, in their first Madonna University semester and must have fulfilled their writing requirements by the end of their third semester at Madonna. Writing instruction is required early because it will likely help students succeed in their content-area courses. This requirement will be monitored by each student's academic advisor.

Students who have taken the essay portion of the ACT within two years of making application and achieve a subscore of 7 or higher are exempt from taking the Madonna University Writing Assessment, and may register for WRT 1010 followed by WRT 1020. Students without transferable composition credits are not exempted from the two-semester Composition sequence on the basis of the ACT essay score. They may, however, receive exemptions based on Madonna's Writing Assessment.

Students with transfer credits for WRT 1010 and/or WRT 1020, including documented AP credit for WRT 1010, need not repeat these courses if their scores on the Writing Assessment indicate a need for further work in developing their writing skills. Their transfer credits are honored. They are required, however, to complete a writing review course if the assessment indicates that they would benefit from this.

Post-degree students are not required to write the essay assessment. They may take it if they wish and receive advice about strengthening their writing skills in a subsequent conference with the Writing Programs Director.

Placement appeals

Students are welcome to discuss their Composition placements with the Writing Programs Director. Students who believe their placement scores do not reflect their abilities may re-take the assessment once. They will be placed according to the higher of the two scores.

Class Status

Freshman status is 0-29 hours. Sophomore status is 30-59 hours. Junior status is 60-89 hours. Senior status is 90 hours or more.

Semester Hour Definition

Earning one semester hour of undergraduate credit requires a minimum of one hour of classroom or direct instruction each week for a full semester and a minimum of two hours of out-of-class student work each week for a semester, or its equivalent.

An equivalent amount of work (*minimum three hours per week for a semester*, or its equivalent of combined direct instruction and out- side-of-class student work) is used as the measurement for a credit hour in other credit-bearing activities, such as laboratory experi- ences, service-learning, internships, practica, clinicals, studio work, and other academic experiences.

Full-Time Student, Academic Load, Overload

A minimum load of twelve credit hours per semester is required for certification as a full-time undergraduate student. Note that credits earned through Advanced Placement (AP), College-Level Examination Program (CLEP), DSST's, Prior Learning, and/or course competency examinations are not included when determining full-time enrollment status.

The normal load per semester is fourteen semester hours; more than eighteen semesters hours in a semester, exclusive of choral and physical education activities, is an overload. Approval to regis- ter for an overload requires special permission from the Vice Presi- dent for Student Affairs and Mission Integration. See the Office of the Registrar for the Special Academic Request form to request an overload.

Registration

To enroll in courses, students must register through the Office of the Registrar. Students may register via the web, through the mail, by fax, or in person according to dates published each semester in the University class schedule.

For shortened or late-starting classes, students may register any time prior to the first session.

Drop / Withdrawal from Classes

A course is considered 'dropped' during the period of time in which the tuition refund is 100%. A class may be dropped during the peri- od of time designated in the course schedule. Drops may be done online through MY Portal during the posted dates, or in writing with the Office of the Registrar.

Courses dropped after the 100% refund period are considered 'withdrawn'. Students who wish to withdraw from a course(s) must do so officially at the Office of the Registrar. Requests must be made in writing before the deadline date specified in the calendar of the University Catalog.

Forms are available online, www.madonna.edu > CURRENT STUDENTS > REGISTRAR'S OFFICE > REGISTRATION - CHANGES, and at the Office of the Registrar. Failure to officially withdraw from a course(s) will be recorded as an F (0.0) grade and computed in the grade point average.

The date that the request for withdrawal is received by the Office of the Registrar is used to determine the amount of tuition adjustment, if any, after the classes have begun (see chart on page 26 of this Catalog or the front pages of the current Schedule of

Classes). A student who does not officially withdraw from classes before the specified date, even though he/she did not attend class(es), is responsible for payment of full tuition and fees for the class(es).

Note: if withdrawal results from a call to active military duty, see also page 27.

Attendance

Class attendance is required of all students. Individuals are only permitted to attend courses in which they are currently enrolled.

Repeated absences may result in lowering of grade or loss of credit. The University places the responsibility for attendance upon the student. Prolonged absences will be reported to the Office of the Vice President for Student Affairs and Mission Integration.

When a faculty member is unavoidably detained for a scheduled class, students are expected to wait one half hour.

Continuation of Instruction in the Event of a City-wide or Regional Emergency

The following policies apply when a course is interrupted by a citywide or regional emergency.

If campus technology and electricity are operating, but the public is advised not to travel or congregate:

- students are to continue reading and completing assignments until classes resume:
- the online software, Blackboard, becomes the default instructional delivery mode;
- grades are submitted according to the regular schedule; except for laboratories, where an Incomplete will be given.

If campus facilities, technology, and electricity are not operating:

- students are to continue reading and completing assignments;
- communication will be by cell phone;
- clinical and field placements continue as scheduled, unless otherwise directed.

Declaration/Change: Major, Minor, Certificate

Students wishing to declare, change, or delete a major and/or minor do so after consultation with their assigned advisor and an advisor in the discipline which they wish to declare. The Change of Academic Record form (available in Room 1111) must be filled out, signed by the appropriate advisor(s), and submitted to the Office of the Registrar. Students changing their major/minor are to meet the requirements for that major/minor in the University Catalog in effect at the time of change. The general education and University core requirements, however, may be in compliance with the University Catalog in force at the time of admission.

Several Madonna programs have admission, or pre-admission, requirements specific to their programs: ASL Education, Biomedical Sciences, Deaf Community Studies, Dietetics, Forensic Science, Music, Nursing, Paralegal Studies, Sign Language Interpreting Studies, Social Work, and Teacher Education. See the Plans of Study listings in this Catalog, or departmental advisors, for requirements and procedures specific to each program.

Examinations

Final examinations are administered at the end of each course. An

unexcused absence from a final examination may constitute a failure in the course.

Application for Graduation

Students who plan to earn bachelor degrees, associate degrees, or certificates must file the appropriate form with the Office of the Registrar according to the dates published each semester in the Schedule of Classes. Failure to meet the deadline date may result in graduation being postponed until the following semester.

Non-refundable graduation fees are assessed for each degree and each certificate (see page 25). The application is valid for one year from the semester for which the student is applying. Students may postpone their graduation date for three consecutive semesters.

Students who wish to file an Application for Graduation pay the fee(s) at the Student Accounts office at that time. The completed application form, signed by the student and student's major advisor, is submitted by the student to the Office of the Registrar with an attached plan of study.

See the University Calendar (page 2) and the published Schedule of Classes for each semester for deadline dates. Students may file late only within 30 calendar days of the due date with the approval of the Office of the Registrar. An additional fee is assessed. Applications for graduation may not be accepted beyond 30 days after the due date.

To qualify for graduation in the semester of intent, students have 30 days beyond the last date of the semester to meet all of the requirements, such as completing all courses/course work, having incomplete grades resolved and submitted by the instructor to the Office of the Registrar, transfer and/or advanced standing course work submitted, etc. Requirements submitted beyond the 30 days will be considered for the next available conferral period at the end of the following semester. Cases involving students who complete Directed Teaching beyond the 30-day limit will be considered on an individual basis, with input from the Coordinator of Directed Teaching and the approval of the Dean of the College of Education.

Graduation

Students may graduate at the end of each semester upon completion of degree requirements. A minimum 2.0 final semester and cumulative grade point average is required. The annual commencement exercises are scheduled early in May. Students receiving degrees or completing certification are encouraged to participate in the exercises.

Commencement

Students who expect to complete degree or certification requirements at the end of the summer session may participate in the current May commencement exercises. To register for Commencement, visit the Madonna University website at Current Students > Graduation.

Diplomas

Diplomas for April, July, and December graduates are mailed to the graduates approximately four weeks after each graduation date.

University Policies • Course Options and Plans of Study

Level of Instruction

Courses with numbers from 1000-2990 are lower division courses intended primarily for First-Year students and Sophomores. Juniors and Seniors are urged to take upper division courses with numbers from 3000-4990. Additional guidelines can be found in the Course Numbering Guidelines at the beginning of the Course Descriptions section of this Catalog, page 119.

Selection of Course Offerings

Students must observe requisites (such as prerequisites, corequisites, program admission processes, etc.) set by the University and/or by their specific departments. Since the University must consider the needs of the entire student body, it may be impossible to honor individual requests for particular hours and instructors. The scheduling of courses and sections at certain hours does not assure a student's admission to any given section.

The University may cancel or substitute any course listed for which there is insufficient registration.

When Courses May Satisfy More Than One Requirement

A course may simultaneously satisfy (a) a requirement for a degree major or minor, (b) a Required Foundation Course or Support Course requirement of other major(s) or minor(s), (c) any Certificate of Completion or Certificate of Achievement requirement, and (d) either one general education or one University core requirement. When a course is used toward fulfillment of more than one component of the graduation plan, the credit hours accumulate into the student's graduation total only once.

A course may, however, apply toward the Required Course component of only one major or minor. In the case of the same course being required in a second major or minor, the student must substitute a different course with the advisor's approval. This substitution must be documented in the Office of the Registrar by using the Substitution of Course form.

This policy extends to majors and minors in a second (or later) bachelor degree.

Elective S Grade

Juniors, seniors, or post-bachelor students may elect in each semester one course, not applicable to a major, minor, certificate, or professional program, for which the usual academic credit may be granted with a grade of S. The intention of the elective S grade is to encourage exploration, by upper-division students, of new subjects in general education, University core, and free elective course offerings. See pages 48-50 under **S** – **Satisfactory (Optional Grade)** for the full policy.

Prior Learning

The **Prior Learning Program** has been designed to help adults gain credit for learning that they have acquired before returning to the university and that can be correlated with college courses. Prior learning credit can be applied toward a major, minor, or other required or elective course.

Any formally-admitted and enrolled student may apply for prior learning credit. The credit will be transcribed by the Office of the Registrar at reduced course fees (see page 24).

A total of 60 semester hours of credit can be granted for prior learning. Thirty of these can be awarded through the College Level Examination Program (CLEP) or DSST program, combined. (Note that 30 of the minimum of 120 credits for graduation must be residential credits. Prior learning credits cannot be used to satisfy the 30 semester hours of residential credits for first and/or second bac-calaureate degrees.)

Prior learning credits are excluded when determining eligibility for financial aid, full- or part-time status, Dean's list, and proof of U.S. residency (I-20 verification).

The Prior Learning Evaluation Process

The student first meets with an academic advisor or departmental advisor to develop a plan of study for the desired degree program. A student who has identified the possibility for credit for prior learning within the context of the plan then works with an evaluator to decide what course content has been mastered, how the knowledge will be documented (letters, certificates, work samples), and how evaluated (portfolio, examination, product, video, obser- vation). The prior learning is to meet the following criteria:

- Learning: Credit is awarded for learning, not for the experience itself.
- Precedent: Madonna University must have awarded credit in this area.
- Non-Routine: Learning is different from what everyone gains through life, or from that acquired before entering college.
- Independent from Credits Previously Earned: Learning must not overlap granted credits earned at a post-secondary institution. Where learning is sequential, the student differentiates between levels of learning.
- Theoretical and Applicable: Students should understand and articulate theory, history, principles, and concepts of subject, and be able to apply knowledge to different situations.
- **Documented and Verifiable:** Learning must be supported by acceptable documents and demonstrated to an expert.

Evaluations fall generally into two broad types: (1) recognition of specified non-collegiate programs, examinations, and certifications, and (2) individualized indepth evaluations designed specifically for the student and/or the course content. Usually the grade of "S" (Satisfactory) is recorded for Prior Learning credit.

Recognized programs, examinations, certifications:

Madonna University awards credit for 30 of the examinations of the College Level Examination Program (CLEP), for 16 of the DSST examinations, for the completion of certain non-collegiate programs (such as that of the Specs Howard School of Media Arts or the Michigan Fire Fighters Training Council and certain allied health professional training programs), or for learning indicated by holding certain licenses and certificates (as for the various health science/allied health professional personnel). Madonna also awards credit, during the admission process, for Advanced Placement (AP) examinations with scores of 4 or 5.

College Level Examination Program (CLEP) examinations and

DSST (formerly DANTES Standardized Subject Test) examinations measure a student's mastery of college-level introductory course content in a wide variety of disciplines. Students meeting the credit-granting score standard will earn the credits for that course. For CLEP examinations, a score of 50 represents mastery within each discipline. For DSST's, the Manager of the Technology Learning Center can supply a reference list of credit-granting scores.

A student can procure the CLEP registration form or DSST registration form (to take the examination) and the roster of examinations accepted by Madonna University from the Office of Academic Advising, Room 1111, or from the Manager of the Technology Learning Center, Room 1104. A student can register for the CLEP or DSST Computer Based examinations through the Manager of the Technology Learning Center, Room 1104, telephone (734) 432-5323.

When registering for CLEP or DSST examinations, the student will be asked to specify in advance whether a grade of S (Satisfactory) or a traditional letter grade is requested. For courses meeting general education or University core requirements, the S grade is always acceptable. If the credit is to be used toward the requirements of a major, minor, or certificate, note that in some programs there is a departmental policy that a letter grade must be assigned for the credit to count toward majors, minors, or certificates. Check with advisors in the specific department for information.

Registered Nurses (RNs) and Licensed Practical Nurses (LPNs or LVNs) holding current licenses may see advisors in the College of Nursing and Health, Room 101 DiPonio Building. Holders of licenses or certificates in other allied health professional fields should see the Applied Science advisor, College of Science and Mathematics.

Graduates of programs listed under Recognized Non-Collegiate Credit on page 23 should consult the program directors indicated there.

To register for credit earned through these recognized examinations, programs, and licenses, a signed Transcription of Credit form is required. For the form, see the Coordinator of Prior Learning in the Office of Academic Advising, Room 1111, on referral from a department advisor or when CLEP or DSST scores are received. Registration can be done at any time at the Office of the Registrar, with the payment of a transcription fee (see Tuition and Fees, page 24).

Persons who earned credit during military service that is posted with their discharge papers, see page 23.

Individual Course Evaluations

For evaluation of prior learning applicable to the courses CIS 2250, Computer Fundamentals, or CIS 2380, Introduction to Computers, the student should see the secretary in the School of Business, Room 101 Maertens Building. For evaluation of prior learning applicable to all other Madonna courses, the student should see the Office of Academic Advising to begin the process, which also involves department faculty evaluators.

To register for credit awarded through an individual evaluation, the student and evaluator complete the Prior Learning Evaluation form available in the Office of Academic Advising or the Student Accounts Office. Registration for credit is at regular registration periods. Reduced tuition is charged for Prior Learning Credit (see Tuition and Fees, page 24).

Residency Credits

Credits earned by direct Madonna University registration for a course and completion of the associated course work are credits earned in residence.

Prior learning credits, such as those earned through Advanced Placement (AP), College-Level Examination Program (CLEP), DSST's, and/or course competency examinations, are ignored when counting residency credits and are not included for any enrollment status.

Substitutions and Waivers

Students seeking a modification to their plan of study should consult with their advisor and/or the chair or program leader of the related department for guidance.

Substitution/Waiver of a Course Within a General Education or University Core Requirement

A department chair may approve a substitution or waiver of a course within a general education or University core requirement whose course(s) fall within that department's area. Documentation of the substitution/waiver, including rationale (for waivers only), should be filed with the Office of the Registrar.

Substitution/Waiver Other Than for a General Education/University Core Requirement

Non-course requirements, Catalog-listed requirements related to Madonna residency within the major, minimum upper-division within the major/minor, senior comprehensive examination). A chair or program leader may approve the substitution/waiver of a non-course requirement within a major, minor, or certificate within that department's area. Documentation of the substitution/waiver, including rationale (for waivers only), should be filed with the Office of the Registrar.

Course requirement. A chair or program leader may approve the substitution/waiver of a course requirement within a major, minor, or certificate within that department's area by authorizing the substitution of another course or courses suitable to the program or by waiving the requirement. The required credit hour total for the major or minor, and for the credential (degree or certificate), and the required grade point average must be maintained regardless of the substitution or waiver. Documentation of the substitution/waiver, including rationale (for waivers only), should be filed with the Office of the Registrar.

Note

If extraordinary circumstances impede a student's effort to make a timely appointment with the chair or program leader, the student should meet with the chair's dean to discuss his/her petition.

Cooperative Education (Co-op)/Internship

Students participating in a Co-op/Internship experience must communicate with their faculty advisor to confirm the availability of academic credit for the experience. Upon confirmation, students will work with the Career Services Office for assistance in locating a Co-op/Internship experience.

Students who have secured a Co-op/Internship experience are required to register for academic credit using the following course numbers of the appropriate department: 1910, 1920, 2910, 2920, 3910, 3920, 4910, and 4920.

Eligibility criteria for students interested in coopera- tive education:

- Sophomore or higher college status, unless approved for earlier placement by the department granting credit.
- Transfer students qualify after earning twelve semester hours at Madonna University or earlier upon departmental recommendation.
- 3. A cumulative and Madonna University grade point average of 2.5 or better or as defined by the department in which co-op credit will be earned.
- A declared major.
- 5. Available for employment during the semester defined by the employer's job requirements.

A student may apply for cooperative education by obtaining an application form from the Office of Career Services and making an appointment with a co-op coordinator.

Application for cooperative education studies should be completed by June 1st for Fall semester, October 1st for Winter semester, and February 1st for Spring/Summer semester.

Catholic College Consortium

Madonna University is a member of the Detroit Area Catholic Higher Education Consortium.

Undergraduate students in good standing may take one or more courses at other consortium institutions (Marygrove College, Sacred Heart Major Seminary, and the University of Detroit Mercy) at no additional tuition cost, subject to the following conditions.

- Full-time students who wish to take consortium courses in a
 given semester must be registered for a minimum of twelve
 (12) credit hours, at least eight (8) of which are to be taken at
 Madonna University; students must pay at least the minimum
 full-time tuition at Madonna University.
- 2. Part-time students who wish to take consortium courses in a given semester must be registered for a minimum of six (6) credit hours, at least three (3) of which are to be taken at Madonna University.
- Consortium enrollment is limited to undergraduate courses. It does not extend to the graduate level.
- 4. Approval for enrolling in courses at other consortium institutions must be obtained from Madonna University; consortium authorization form(s) must be completed by the student and signed by the Registrar. The signature of the Madonna Registrar constitutes assurance to the student that the credits taken at the host school will be accepted by Madonna University on the same basis as course work completed at Madonna.
- 5. Tuition is paid to Madonna University. Special laboratory and/or studio fees are paid directly to the host school.
- 6. Students must follow all registration procedures at both Madonna University and the host institution. To add, drop, or withdraw from a course, a student must comply with the deadline of the host institution and must complete the appropriate forms at both institutions so that both Registrars are notified.
- The authority to limit total number of courses which Madonna University students may pursue at other consortium schools rests with the Provost and Vice President for Academic Administration.
- 8. A part-time student may not register for more than twelve (12) semester hours of consortium credit during his or her undergraduate career.
- 9. Awarding of Title IV financial aid to students in the consor-

tium is the sole responsibility of the home school, Madonna University.

Online Consortium of Independent Colleges and Universities (OCICU)

Madonna University is a member of the Online Consortium of Independent Colleges and Universities (OCICU).

- 1. A student must be an admitted Madonna University student to register for OCICU courses.
- 2. A student on probation may not take OCICU courses.
- A student must have sophomore or higher standing (30 or more accumulated semester hours) to register for OCICU courses.
- 4. Students must complete satisfactorily a two-phase training module, first a module offered by Madonna University on Online Learning and then one offered by the Host Institution on the specific online teaching platform of that institution.
- 5. Students must register for a course at least two weeks prior to the course start date.
- Students who withdraw from an OCICU course prior to the start date qualify for tuition refund. After the start date, students are responsible to pay the course tuition.

Accumulated Credit for Physical Education Activity Courses

Students may enroll for credit in a given physical education activity course more than one time with permission of the instructor. Accumulated credit for a given physical education activity course is limited to 4 s.h. A maximum of 6 s.h. of credit from physical education activity courses may be used to fulfill the 120 s.h. graduation requirement for the baccalaureate degree.

University Policies • Academic Standards

Scholastic Integrity

Madonna University's core values are the basis for the student code of ethics, which promotes the life principles of honesty and integrity. Academic dishonesty violates this code of ethics and includes:

- Plagiarism, that is, representing the work of another as one's own. When a student uses the words, ideas, or information of another person or source without correctly giving credit to that source, he or she is violating the ethical code of Madonna University. Examples of plagiarism include purchasing a paper over the Internet, "borrowing" a paper someone else has written, turning in an essay with uncredited passages from an outside source, cutting and pasting from the Internet without proper citations, or resubmitting a paper written for a different class without the instructor's permission.
- Cheating on a test or examination or helping another student cheat.
- 3. Submitting an assignment that is not the student's own work.
- Violating library rules regarding unauthorized removal or dam- aging of books, magazines, or periodicals.

The course instructor will determine an appropriate penalty for academic dishonesty after meeting or communicating with the student. The consequences of academic dishonesty may include a failing grade on an assignment; a failing grade for the course; or, in cases of repeated academic dishonesty, expulsion from the University. In cases of suspected plagiarism, the instructor may choose to include the Director of Writing in this discussion. A student so accused has the right of appeal to the Student Appeal Board (see Student Grievance Procedure, page 54).

Students having difficulty with their assignments are encouraged to meet with their course instructors for additional help and make use of Madonna University's academic support services: Center for Personalized Instruction, Writing Center, Nursing Simulation Laboratories, and library staff and website.

Research Integrity

In keeping with the Franciscan value of reverence for the dignity of each person, Madonna University promotes respect for the individual in the ethical conduct of research. University faculty operationalize this across the institution by requiring all students involved in research education to receive training in research integrity and the protection of human subjects.

University policies for research integrity mirror those of federal agencies regarding funded research. Full information on research integrity policies, the Human Subjects Review Committee, and the investigation and resolution of allegations of research misconduct is available on the web page of the Center for Research.

Professional Performance and Decorum

The University reserves the right to request students to withdraw from a program because of unsatisfactory performance in the theoretical and/or practical phases of that program or because of inappropriate behavior.

Interpretation of Grades

Madonna University uses a plus/minus grading scale which includes the following grades: A, A-, B+, B, B-, C+, C, C-, D+, D, and F. Specific accommodations to the plus/minus grading scale (i.e., A-, B+, B-, and C+) have been left to the discretion and interpretation of the individual departments, but should be consistent with the following general guidelines:

A – Exceptional – computed into the Grade Point Average at 4 honor points per semester hour.

Represents outstanding achievement. It implies that the student:

- a. consistently exceeds average requirements;
- is always alert, active, and makes original and pertinent contributions to class discussions with evidence of a well-developed critical attitude and sound judgment;
- c. is prompt, accurate in assignments, and shows command of English and mastery of the subjects;
- d. reads extensively, works independently, and pursues research projects independently;
- e. gives evidence of superior aptitude, high originality, and great ability to grasp and organize the subject matter of the course and apply it to other fields and to the problems of daily life.

B – Very Good – computed at 3 honor points per semester hour. Represents work which is decidedly above average. It implies that the student:

- a. frequently exceeds average requirements;
- b. is usually alert and active in class discussion, showing some critical attitude and good judgment;
- c. exercises noticeable care in working on assignments and gives evidence of doing independent reading and research;
- d. is eager to learn and willing to profit from direction and criticism:
- e. has ability to transfer the general principles of the course to other situations.

C - Satisfactory - computed at 2 honor points per semester hour.

Represents work which is good. It implies that the student:

- a. performs the required assignments regularly;
- b. is attentive during class hours and gives adequate answers;
- c. is usually careful, neat, and accurate in work;
- d. masters the facts of general principles of the course and grasps their more general significance;
- uses material from preceding courses but needs additional assistance;
- f. does research and independent reading.

D - Poor but Passing - computed at 1 honor point per semester hour

Designates work which is below average, that is, below the standards set for graduation unless it is balanced by superior work in other courses. D grades are not acceptable for courses in a major, minor, certificate or professional programs. A D grade implies that the student:

a. usually does the minimum requirements and merely grasps the

basic material of the course;

- frequently misunderstands the assignments and is careless in preparation of them;
- c. is willing but slow to comply with instruction and correction;
- d. seldom or never participates in class discussion and only gives irregular answers when detailed questions are directed by the instructor or other students.

F - Failure - allowed 0 honor points.

- a. designates unacceptable work and requires the student to repeat the course to gain credit.
- b. F is included in computing the grade point average.

S – Satisfactory (Optional Grade equivalent to a C (2.0) or better)

Except for specifically designated S courses open to all students, only junior, senior, or post-bachelor students may elect in each semester one course, not applicable to a major, minor, certificate, or professional program, for which the usual academic credit may be granted with a grade of S. The intention of the elective S grade is to encourage exploration, by upper-division students, of new subjects in general education, the University core, and free elective course offerings. The S grade is not factored into the GPA. The policies governing such markings are:

- a. The option for S marking may not be given in courses for the major, minor, certificate, or professional programs, unless granted by department chairperson, or under the circumstances noted in 'h' below.
- b. Students may elect the S grade at the Office of the Registrar not later than the date specified in the school calendar.
- c. Typically, instructors will issue standard grades for course work which will be transcribed according to the S grade policy by the Office of the Registrar.
- d. Only grades of C (2.0) and above will be converted to S. A grade of C-, D+, D, or F will remain as such and will be included in the grade point average.
- e. S grades cannot be converted to letter grades at a later date.
- f. Students taking CLEP or DSST examinations must decide whether they will take the course for an A, B, C, D, F grade or for an "S/F" grade. If they choose to take an "S/F" grade, they will fill out, sign, and turn in (to the CLEP Administrator) the Request for an "S" Grade form prior to the taking of the examination. Students must discuss this decision with their major advisors because department policies vary. In some departments the letter grade must be elected.
- g. Students taking *Independent Study* courses must decide whether they will take the course for an A, B, C, D, F grade or for an S/F grade at the time they apply for the Independent Study course.
- h. Departments may designate entire courses as graded only on an S/F basis upon consultation with their respective Dean and notification to the Registrar. Students enrolled in these courses will receive either an S or F grade.

W - Withdrawal

Students who wish to withdraw from a course(s) must do so officially, in writing, at the Office of the Registrar before the deadline date specified each semester in the schedule of classes. Failure to officially withdraw from a course will be recorded as F, a failing grade, and computed in the grade point average.

Y - Carry-Over

For courses taught over two semesters with grade awarded in second semester. *Used only for graduate-level courses*.

AU - Audit

Audit status must be selected at the time of registration with the Office of the Registrar. Audit status cannot be selected when registering online (elect with in-person or fax registration). Students who audit a course do not take examinations. The audit grade of "AU" is entered on the student's transcript; the AU grade is not included in the grade point average calculation. Students cannot convert a course taken for audit to academic credit or vice versa at a later time. Students pay full tuition and fees to audit courses.

I – Incomplete

It is a student's responsibility to initiate the request for a grade of "I," Incomplete, from the course professor. This grade is only appro- priate at the end of the semester when most of the course work has been completed, but for serious reason the student is unable to complete the remaining course requirements by the grade filing deadline. A request for an "I" grade may be approved or denied at the discretion of the professor.

If the student does not complete the required work before six weeks after the end of the semester, the "I" grade automatically becomes "F".

The deadline for each semester is published in the Schedule of Classes

Minimum Course Grades in Programs

Only a grade of C (2.0) or better in each required course or required support or foundation course for a major, minor, certificate, or professional program, will apply toward completion of a program.

Repeating Courses

- Students receiving a grade below C (2.0) in a required course or a required support or foundation course of a major, minor, certificate, or professional program taken at Madonna University must repeat that course at Madonna University. A comparable course taken at another institution will not be transferred in
- 2. Students receiving a grade below C (2.0) may be permitted to repeat the course once; twice, if approved by the instructor and department. In computing the GPA, only the grade and credit hours of the last attempt is included in the computation; however, all earlier attempts remain on the transcript.

How to Calculate Grade Point Average (GPA)

To compute a Grade Point Average (GPA) for one semester:

- convert letter grades to point equivalents (thus: A=4.0, A=3.66, B+=3.33, B=3.0, B=2.66, C+=2.33, C=2.0, C=1.66, D+=1.33, D=1.0, and F=0.0; note that S-grade, I-grade, and Audit courses are not included in the computation);
- multiply the number of points representing the grade for each course times the number of semester hours for the course;
- add the grade points earned for the semester;
- divide the total points by the number of semester hours attempted that semester, excluding "S" grades and their semester hours.
 (Note that AP, transferred, and transcribed credits are all calculated with "S" grades.)

The result is the semester GPA. For example:

			Point		Grade
Course	Credits	Grade	Value	Calculation	
WRT 1010	3 s.h.	B+	3.33	$3 \times 3.33 =$	9.99
SOC 1010	4 s.h.	C	2.00	4 x 2.00 =	8.00
RST 1330	3 s.h.	A-	3.66	$3 \times 3.66 =$	10.98
UNV 1010	1 s.h.	F	0.00	$1 \times 0.00 =$	0.00
BIO 1010	4 s.h.	D	1.00	4 x 1.00 =	4.00
	15 s.h.				32.97

The semester GPA in this example is the total grade points (32.97) divided by the total semester hours (15), i.e., 2.19 semester GPA.

The career GPA is calculated the same way, including all semesters, course grades, and credit hours attempted at Madonna University. (For repeated courses, see the policy under "Policies Related to Low Course Grades.")

A student's baccalaureate GPA is frozen at the time of graduation. Students who return to Madonna University for further work earn a GPA recalculated to reflect honor points earned for courses taken for the second degree.

Academic Standards—Good Standing

A student is in good standing if the student is a new student (has not yet completed a semester at Madonna University), or the student's semester and cumulative grade point average is at least 2.00.

Dean's List

Students who register for and complete at least 6 semester hours of letter-graded Madonna University credit (none by evaluation), and who maintain a grade point average of 3.5 or better during the semester, merit first honors on the Dean's List; 3.25 to 3.49, second honors. The GPA will be computed only upon earned grades of A, B, C, D, or F. Grades from courses taken concurrently at other institutions will be excluded from consideration.

A student's baccalaureate GPA will be frozen at the time of grad- uation. Students who return to Madonna University for further work will earn a GPA recalculated to reflect honor points earned for courses taken for the second degree.

Degrees with Distinction

Academic Honors with Distinction are available to students receiving a bachelor degree. To be eligible for a degree with distinction a student must earn a cumulative GPA of 3.5 or higher at Madonna University.

Degrees with distinction are based on the following grade point averages: With honors, 3.5-3.699; With High Honors, 3.7-3.899; With Highest Honors, 3.9-4.0.

A student pursuing a second baccalaureate degree may earn a degree with distinction based on all course work beyond the first degree.

Policies—Not in Good Standing

Probation

A student is placed on probation if during the most recent semester in attendance the student had been in good standing but at the end of that semester the semester grade point average was below 2.00. Grades of I and Y are not considered in computing this grade point average.

The period of probation is one semester. Students on probation

are required to see a Satisfactory Academic Progress mentor (SAP mentor) by the third Friday of the semester. If they do not, a hold will be placed on their registration. If at the end of that semester the semester grade point average is at least 2.00 and the cumulative grade point average is above a 2.00, the student is returned to good standing. If not, the student will be put on extended probation, final probation, or academically recessed.

If in the special case that there are grade changes during that semester which result in the student's semester grade point average increasing to at least a 2.00 and the cumulative grade point average is above a 2.00, the student is returned to good standing.

Extended Probation

A student is placed on extended probation if during the most recent semester in attendance, the student was on probation and at the end of the semester the semester grade point average was again below 2.00. Grades of I and Y are not considered in computing the cumulative or semester grade point average. The period of extended probation is one semester.

Students on extended probation are required, by the third Friday of the semester, to see a SAP mentor and utilize other academic support resources identified by the Vice President for Student Affairs and Mission Integration. If they do not, a hold will be placed on their registration.

At the end of the semester on extended probation, the semester grade point average must be at least 2.00, or the student will be academically recessed. A student who is academically recessed must not enroll in courses at Madonna University for at least one semester up to a full academic year, at the discretion of the Vice President for Student Affairs and Mission Integration.

If in the special case there are grade changes during that semester which result in the student's semester grade point average increasing to at least a 2.00 and the cumulative grade point average is above a 2.00, the student is returned to good standing.

Final Probation (Making Progress)

An exception to being academically recessed can be made for students who have shown substantial progress during the semester and the evidence suggests that the student would attain good standing in one more semester. Such a student may be granted one additional semester on final probation at the discretion of the Vice President for Student Affairs and Mission Integration.

Students on final probation are required, by the third Friday of the semester, to see a SAP mentor and utilize other academic support resources identified by the Office of Academic Advising.

Warning for Repeats

At the discretion of the Office of Academic Advising, a student will be put on warning for repeats after repeating between 20 and 30 credits.

Students on warning for repeats are required to see a SAP mentor by the third Friday of the semester before enrolling for any subsequent semester. If they do not, a hold may be placed on their registration.

At the end of the semester in which more than 30 credits have been repeated, the student is dismissed.

Warning for Withdrawals

At the discretion of the Office of Academic Advising, a student will be put on warning for withdrawals after withdrawing from 2/3 of the courses attempted in a semester.

Students on warning for withdrawals are required to see a SAP

mentor by the third Friday of the semester before enrolling for any subsequent semester. If they do not, a hold may be placed on their registration.

At the end of the semester in which more than 40 attempted credits have been withdrawn from, the student is dismissed.

If a student receives financial aid and if for any reason the student completely withdraws from school, the student may be required to pay back a portion of the financial aid received. Failure to pay back excess funds could result in the loss of all future financial aid.

The student must consult with the Office of Financial Aid before withdrawing from classes. Withdrawing from classes can have a sig- nificant impact on students' satisfactory academic progress for financial aid eligibility.

Warning for Lack of Satisfactory Progress in the Major

If at the end of a semester an upper-division student is not making satisfactory progress toward the degree requirements stated in the Undergraduate Catalog (e.g., a student is not taking courses in the student's major, or the student's grade point average in courses in the major is below the required major grade point average), or the student's semester grade point average is below 2.00, the student may be put on warning for lack of satisfactory progress in the major. Refer to the College's guidelines for specific majors.

Such students must receive written guidance of the criteria they must satisfy to progress satisfactorily. Students on warning for lack of satisfactory progress in the major may be required to see an aca- demic advisor by the third Friday of the semester before enrolling for any subsequent semester. If they do not, a hold may be placed on their registration.

If a student has been on warning for lack of satisfactory progress and is not making satisfactory progress in any subsequent semester, the student will normally be academically recessed. However, if lack of satisfactory progress is due to poor grades in the major courses and the student is otherwise in good standing, the student would be permitted (even encouraged) to remain at Madonna University if the student changed to a more appropriate major.

Academic Recess

A student who is academically recessed shall not be enrolled in any courses at Madonna University for at least one semester up to a full academic year, at the discretion of the Vice President for Student Affairs and Mission Integration.

- 1. If in any semester a student receives all semester grades of 0.0 (numeric equivalent) or I and there are at least 6 credits of 0.0, the student will be academically recessed unless there are compelling reasons certified to the record by the Vice President for Student Affairs and Mission Integration.
- 2. If at the end of a semester during which the student was on final probation the cumulative grade point average is still below 2.00 and the semester grade point average is below 2.00, the student will be academically recessed.
- 3. If a student has previously been put on warning for lack of satisfactory progress in the major and at the end of any subsequent semester the student is not making satisfactory progress, the student will be academically recessed.

After an academically recessed student has been out of Madonna University for the prescribed period, the student may be reinstated to Madonna University at the discretion of the Vice President for Student Affairs and Mission Integration. If reinstated, the student

will be put on probation, final probation, or warning for lack of progress in the major, and the Vice President for Student Affairs and Mission Integration will impose specific conditions, in writing, that must be met. A second recess is dismissal.

Academic Dismissal

Students who have been dismissed shall not be enrolled in any courses at Madonna University for at least one year up to two years after their last semester enrolled before they apply to be reinstated to the University.

- If a student has previously been academically recessed or dismissed, reinstated, and still has not attained good academic standing or has failed to comply with the specific written conditions imposed at the time of reinstatement, the student will be dismissed.
- 2. At the end of a semester in which more than 30 credits have been repeated the student will be dismissed.

After that period, they may be readmitted only if a convincing case can be made to the Vice President for Student Affairs and Mission Integration that circumstances have changed so that there is a reasonable probability of success. In consultation with the Vice President for Student Affairs and Mission Integration, the Office of Undergraduate Admissions may readmit a student and specific conditions, in writing, will be imposed.

After Academic Recess or Academic Dismissal

Academic recess or dismissal does not imply future readmission nor does it mean that the person is forever barred from enrollment at Madonna University.

Academic Reinstatement

A student who has been academically recessed may apply for reinstatement, to be effective at the conclusion of the specified period of recess or dismissal if less than two years has elapsed. An academ- ically recessed student after a period of at least one semester up to one year and a dismissed student after a period of at least one year up to two years can be allowed a second chance to demonstrate satisfactory academic performance and be reinstated, at the discretion of the Vice President for Student Affairs and Mission In- tegration.

Academic Reinstatement Procedure

Any undergraduate student who in less than two years was academically recessed or dismissed from the university, would submit a request for reinstatement to the Office of the Vice President for Student Affairs and Mission Integration at least one month prior to the beginning of the semester in which the student intends to resume studies. Students applying for reinstatement should complete a Special Academic Request form in the Office of the Registrar and include the following items:

- •Student name, identification number, Madonna e-mail address, and current phone number;
- Explanation of circumstances that led to academic recess or dismissal;
- Evidence of growth in maturity and responsibility indicative of capacity to perform university-level work;
- •Personal plan for academic success.

Academic Readmission

A student who has been dismissed may apply for readmission to be effective at the conclusion of the specific period of academic recess or dismissal, if two years or more have elapsed. Academically recessed or dismissed students after a period of two years or more

can apply for readmission through the Office of Undergraduate Admissions.

A student will be required to submit a report of activities during the period of recess. The report will be used as one kind of evidence regarding readiness to return. If the student has attended another institution while on recess, he or she must submit an official transcript and have earned at least a 2.00 grade point average (GPA), or its equivalent, to be considered for reinstatement. Refer to Policies Related to Low Course Grades on page 50 for more information.

Academic Readmission Procedure

Any undergraduate student who more than two years previously was academically recessed or dismissed from the university should submit a readmission application to the Office of Undergraduate Admissions at least one month prior to the beginning of the semester in which the student intends to resume studies. Additionally, students applying for readmission should complete a Special Academic Request form in the Office of the Registrar and include the items listed in the academic reinstatement procedure.

Declarations of good intentions are not sufficient. Each request for reinstatement or readmission will be considered on its merits. If the student has attended another institution while on dismissal, he or she must submit an official transcript to be considered for reinstatement or readmission. Reinstatement and readmission is not automatic, but based upon the merits of each applicant and the documentation of activities during the dismissal period. Additional supporting documents may be required through the reinstatement and readmission process.

Students dismissed twice are not eligible to return to the University. On occasion, when students have been away from the University for at least 10 years, a request for readmission may be submitted for consideration through the Office of the Vice President for Student Affairs and Mission Integration by completing a Special Academic Request form from the Office of the Registrar.

Satisfactory Academic Progress for Financial Aid

Federal and State regulations require that students make satisfactory academic progress in order to receive financial aid. This means that the student must maintain a minimum cumulative GPA of 2.0. In addition, the student must also complete a minimum number of credit hours each semester. Federal regulations require that the standards applied to students receiving financial aid also apply to those students during periods when they are not receiving aid. To measure satisfactory academic progress, the Financial Aid Office uses the following 'SATISFACTORY ACADEMIC PROGRESS' policy.

Academic Standards

The Madonna University standards outlined in the Academic Standards section of the Undergraduate Catalog apply to all students. For the purpose of determining eligibility to receive financial aid, overall quality and quantity of performance (as measured by grade point average and number of credits completed) is reviewed and evaluated by the Financial Aid Office. Satisfactory Progress is assessed prior to the student's first disbursement of the school year, and again at the end of each semester once grades are available.

Evaluation of Progress During Terms When Student Did Not Receive Aid

In accordance with federal regulations, satisfactory academic progress for all students must be evaluated whether or not financial aid

was received or applied for. Students with no previous academic history at Madonna University are assigned MAKING PROGRESS status. Students who have attended Madonna University previously without the benefit of financial aid are held to the same academic standards defined on pages 52.

- •Students in good academic standing are given a Financial Aid 'MAKING PROGRESS' status.
- •Students on academic probation are given a Financial Aid 'WARNING' status.
- •Students on academic extended probation are given a Financial Aid 'EXTENDED WARNING' status.
- •Students on academic final probation are given a Financial Aid 'FINAL WARNING' status.
- •All students who have attended Madonna University who have less than a 2.0 cumulative grade point average after four semesters of attendance are placed on Financial Aid 'GPA SUSPEND-ED' status in accordance with federal regulations, until their cumulative grade point average is brought up to a minimum 2.0.
- •Students who have less than a 2.0 grade point average but have attended fewer than four semesters: see Minimum Cumulative GPA Requirement section below.
- •Students who received financial aid at Madonna University in the past who had a break either in attendance or in receiving financial aid will have their current satisfactory academic progress status evaluated as follows: a semester-by-semester evaluation applying current Satisfactory Academic Progress standards will be performed, starting with the last official financial aid Satisfactory Academic Progress status calculated on the student's records.

Minimum Cumulative Grade Point Average Required for Satisfactory Academic Progress for Financial Aid Any student who has completed prior credits at Madonna University who has a cumulative grade point average (GPA) of less than 2.0 will be placed on Financial Aid 'GPA WARNING' status.

Students may receive financial aid while on warning, but must meet satisfactory academic progress requirements each semester in order to continue eligibility. Such students with less than 2.0 GPA will continue on GPA WARNING until their cumulative GPA is brought above 2.0. Such students who subsequently fail to meet satisfactory academic progress in any semester while on GPA WARNING will be suspended after that semester.

Students must have a minimum cumulative 2.0 GPA in order to be eligible for the Federal Direct Student Loan program.

Any student who has attended two or more years (four semesters) at Madonna University who has a cumulative GPA of less than 2.0 is ineligible for financial aid and will be placed on a finan-cial aid 'GPA SUSPENDED' status.

Students may not receive financial aid while suspended. Such students with less than 2.0 GPA will continue on SUSPENDED status until their cumulative GPA is brought above 2.0, in accordance with federal regulations.

Maximum Time Frame Allowed for Satisfactory Academic Progress for Financial Aid

With respect to the University's Satisfactory Academic Progress policy, a student must complete his or her program in a period of time no longer than 150% of the school's published program length. Madonna University will measure the progress of all students in attempted semester credits taken at Madonna University.

An 'attempted semester hour' is defined as any semester hour the student remains enrolled in AFTER the add/drop period.

Using the 150% limit, students pursuing a bachelor degree are ineligible for financial aid after 180 attempted semester hours (credits). A student enrolled in a certificate program may attempt a maximum of 150% of the published length of that individual program (measured in credits) according to the Undergraduate Bulletin. (All ESL courses may be excluded from the 150% limit.) Once this limit has been reached, no further financial aid can be received.

The maximum time frame includes semester hours attempted at Madonna University during all periods of enrollment in which the student did or did not receive financial aid. The maximum time frame also includes evaluated semester hours from prior colleges which meet program requirements of the student's current academic objective as determined from official transcripts. This is required if the student has requested inclusion of prior academic credit for any purpose, and is required for all students with a prior bachelor degree seeking loan eligibility.

If the student's total credits equal or exceed the maximum time frame of 150% (equivalent to 180 attempted credits for a BA/BS), his/her eligibility for financial aid will be terminated. If there are extenuating circumstances, the student may appeal for an exception to this policy by submitting a Petition for Excessive Credits to the Office of Financial Aid.

Formula to Determine a Student's Total Credits for Financial Aid

Total attempted semester hours (credits) at Madonna University

LESS
All ESL credits

Credits transferred in from prior colleges which meet program requirements of the student's major

EQUALS

TOTAL CREDITS TO BE COUNTED TOWARD MAXIMUM TIME FRAME

At 180 attempted credits the student is no longer eligible for financial aid at a four-year institution (except by petition).

Minimum Number of Semester Hours and GPA Which Must Be Earned Each Semester for Satisfactory Academic Progress for Financial Aid

Satisfactory academic progress for all financial aid programs is based on earning 67% of the total number of semester hours attempted each semester with a minimum 2.0 GPA. 'Attempted credits' are defined as any credits you remain enrolled in after the add/drop period each semester. Credits "earned" or "completed" with satisfactory progress are those courses in which a letter grade is received. The number of credits you complete with a grade of "T", "Y", and for audited classes will not count toward your minimum satisfactory academic requirement of 67% of credits completed.

Satisfactory Progress Chart

Attempted credits	Completed credits (67%)
18+	12+
15	10
13	9
	credits 18+ 15

Full-Time	12	8
Three-quarter time	11	7.5
Three-quarter time	9	6
Half time	8	5.5
Half time	7	5
Half time	6	4
Less than half time	5	3.5
Less than half time	3	2

Semester GPA must be 2.0 with 67% completion rate to make satisfac- tory academic progress.

Grade Changes After Final Grades Are Issued: Impact on Financial Aid

It is the student's responsibility to notify the financial aid office of any official grade changes that would affect the student's satisfactory academic progress status.

Additional Minimum Enrollment Requirement, Federal Direct Student Loans

In addition to completing with a 2.0 GPA a minimum of 67% of the credits attempted, a loan recipient must maintain enrollment in a minimum of 6 credits in accordance with federal regulations. Additionally, at least 6 credits of classes must have begun prior to release of loan funds.

Failure to Make Satisfactory Academic Progress for Financial Aid

The Financial Aid Office will send letters at the end of each semester, after grades are evaluated, to students who fail to maintain Satisfactory Academic Progress. The spring/summer session is considered a semester and grades are evaluated in the same manner as fall and winter semesters.

Financial Aid Warning

If the student fails to complete 67% of the credits attempted with a 2.0 GPA s/he will be placed on financial aid WARNING status. The student will continue to qualify for financial aid. Grant funds will continue to be paid on the first scheduled disbursement date each semester while a student remains on WARNING STATUS.

The student's WARNING status will be cleared when s/he completes at least 6 credits and at least 67% of the total semester credits attempted with a 2.0 GPA.

Financial Aid Suspension

A student will be placed on financial aid SUSPENDED status if the student:

- 1) fails to make financial aid satisfactory academic progress while on financial aid WARNING status; *or*
- 2) fails to make financial aid satisfactory academic progress during ANY three semesters; *or*
- 3) has a cumulative GPA below 2.0 after two years of college atten- dance ("two years of college attendance" is defined as any four semesters of attendance or the equivalent, including spring/sum- mer); *or*
- 4) s/he is DISMISSED from the university, or
- 5)s/he withdraws from all of his/her classes or earns 0 credits with a 0 GPA during any semester

A student who withdraws or receives any combination of 'F's, 'NC's, or 'Withdrawals' in all his/her classes will automatically be on FINANCIAL AID SUSPENDED STATUS.

Students receiving any combination of all F and/or NC grades are assumed to have unofficially withdrawn and are treated in accordance with Return to Title IV regulations, unless it can be documented that the student remained in one course until at least the 60% date and completed with a failing grade. It is the student's responsibility to have the instructor contact the Office of Financial Aid to verify attendance.

A student who is suspended from financial aid eligibility a second time after financial aid reinstatement is automatically terminated from all financial aid eligibility and is ineligible for financial aid re- instatement except by appeal.

Reinstatement of Financial Aid Eligibility

Reinstatement of eligibility for financial aid is possible after suspen- sion due to lack of satisfactory progress by doing one or more of the following, based on the reason for lack of progress:

- 1. completing a minimum of 6 credits in academic course work and completing 67% of credits attempted with a 2.0 GPA during a single semester; *and/or*
- 2. raising his/her cumulative GPA to 2.0 if a deficient GPA is the cause for suspension.

Financial Aid Appeal Procedure

To appeal an unsatisfactory progress status, a student should write a letter of petition for reinstatement or continuation of financial aid and submit it to the Office of Financial Aid. The disqualified student must include a written explanation of reason for petition, along with corrective action to be taken as applicable, and attach documentation to support his/her case.

Subsequent review and a determination will be made based upon several factors, including Federal and State regulations, the student's academic and financial aid history, and the student's clearly stated and documented extenuating circumstances. Examples of extenuating circumstances are death of an immediate family member, injury or illness of the student, or other special circumstances as appropriate.

The student will be advised in writing of the decision. If dissatisfied with that decision, the student may request that his/her Petition be submitted for further review by the Financial Aid Appeals Committee by completing the Special Academic Request form in the Office of the Registrar. Once determined, the Financial Aid Appeals Committee's recommendation is referred to the Vice President of Student Affairs, whose decision is final. The student will be notified in writing of the final decision regarding the appeal.

Students who believe their financial aid status (WARNING or SUSPENSION) has been determined in error should contact the Office of Financial Aid immediately to discuss their situation and to determine if an error has been made.

Student Grievance Procedure and Appeal Board

The Student Grievance Procedure provides a method for settling student grievances which result from misinterpretations in areas related to the Madonna University Catalog and/or departmental policies and/or a grade received in class. The grievance procedure must be initiated within 15 days following the grievant's knowledge of the complaint. Students appealing academic recess or dismissal for academic reasons have seven days from the date of notification to appeal. See the Student Handbook for complete student appeal procedures. The Student Handbook is available in the Office of Student Life, Room 1411, or at www.madonna.edu (click on Stu- dent Services).

Academic Forgiveness

Students who are readmitted or seeking readmission to work toward their initial baccalaureate degree at Madonna University may request to have their previous academic record reviewed if they:

- have been out of school for at least five years, or
- have completed an associate degree since leaving the University.

A committee consisting of the Registrar, a member of the appropriate academic department, and a third member representing Academic Advising, Admissions, or Student Affairs will review the request, make a decision, and inform the student. If the request is approved, all previous grades will be excluded from the cumulative GPA. The class record remains on the transcript; only the GPA is deleted. Only credits for classes which received a grade of C (2.0) or better, or S grades, will count toward graduation. A record will be forgiven only once and is irrevocable. Classes for- given will not be counted in the hours required for degrees with distinction.

University Policies • Student Records

Address Change

It is the responsibility of the student to inform the University of any address change by updating online his/her student record or by completing a change of address form at the Office of the Registrar. Mail returned to the University because of an address change will not defer the assessment of program adjustment and late penalty charges.

Name Change

Students who wish to have their name changed on their official records must complete a change of name form at the Office of the Registrar. A copy of the official authorization of change must be provided when the completed form is submitted (e.g., marriage license, court order, passport).

Social Security Number Change

It is the responsibility of the student to inform the University of a correction to an erroneous social security number. A change of social security number form is available at the Office of the Registrar. A signed copy of your social security card is required before the form can be processed.

Grade Reports and Transcripts

A report of the final grade in each course and the student's grade point average for the semester is available online.

Transcripts are issued within 3 business days after a signed request is received. Transcripts for completed course work will be mailed after all grades have been posted, usually within two weeks of the end of the semester. Requests for transcripts must be in writing and require a fee (see Tuition and Fees section).

STUDENT RECORDS POLICIES AND PROCEDURES FOR MADONNA UNIVERSITY

(REVISED SEPTEMBER 2000 IN COMPLIANCE WITH THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974).

PROCEDURE TO INSPECT EDUCATION RECORDS

Madonna University's policy with regard to student records follows the "Family Educational Rights and Privacy Act of 1974" (20 USCS Section and 1232 g) and is set out in brief form as follows: students have the right to inspect their records; the institution will comply with the student's request for information within 45 days after the request has been filed; confidential information pertaining to students will not be disclosed to any person, organization, or agency outside the University without the written authorization of the student, except: 1) in compliance with a court order; 2) when a parent or legal guardian of any student under 18 years of age may request to view the dependent's records; 3) directory information which is public information.

LIMITATION ON RIGHT OF ACCESS

Excluded from inspection by students of the institution are the following: parental financial records; confidential letters and statements of recommendation filed before January 1, 1975; and confidential recommendations solicited under a waiver of the right-of-future-access.

Records excluded from the provisions of the Act are: personal notes of teachers and administrators in the sole possession of the maker, not accessible or revealed to any other person except a substitute; law enforcement records; employee records of individuals employed by the educational institutions; and medical and psychiatric reports or related professional files made in connection with treatment of the student.

REFUSAL TO PROVIDE COPIES

Madonna University does not deny students access to educational records upon written request. Madonna University reserves the right to deny copies of records, including transcripts, not required to be made available by FERPA in the following situations:

- 1. The student lives within commuting distance of Madonna University.
- The student has an unpaid financial obligation to the University.
- 3. There is an unresolved disciplinary action against the student.
- The education record requested is an examination or set of standardized test questions.

DISCLOSURE OF EDUCATION RECORDS

Madonna University will disclose information from a student's edu-cation records only with the written consent of the student, except that records may be disclosed without consent when the disclosure is:

- To school officials who have a legitimate educational interest in the records.
- 2. To officials of another school in which the student seeks or intends to enroll, upon the student's request.
- 3. To certain officials of the U.S. Department of Education, the Comptroller General, and state and local educational authorities, in connection with audit or evaluation of certain state or federally supported education programs.
- In connection with a student's request for or receipt of financial aid to determine the eligibility, amount, or conditions of the financial aid, or to enforce the terms and conditions of the aid.
- To state and local officials or authorities if specifically required by a state law that was adopted before November 19, 1974.
- 6. To organizations conducting certain studies for or on behalf of the University.
- 7. To accrediting organizations to carry out their functions.
- 8. To parents of an eligible student who is claimed as a dependent for income tax purposes.
- 9. To comply with a judicial order or a lawfully issued subpoena.
- 10. To appropriate parties in a health or safety emergency.
- 11. To designated attorneys or legal consultants hired by the University.

- 12. To individuals requesting directory information so designated by the University. The information may include name, date of graduation, major field of study, dates of enrollment, and participation in officially recognized activity (sports, degrees, and awards).
- 13. As the result of any disciplinary proceeding conducted by the University against an alleged perpetrator of a crime of violence to the alleged victim of that crime.
- To senior federal justice officials with a court order in a terrorist investigation.
- Students may request that information not be provided to individuals by filing a written request with the Office of the Registrar.

RECORD OF REQUESTS FOR DISCLOSURE

Madonna University will maintain a record of all requests for and/ or disclosures of information from a student's education records. The record will indicate the name of the party making the request, any additional party to whom it may be redisclosed, and the legitimate interest the party had in requesting or obtaining the information. The record may be reviewed by the eligible student.

CORRECTION OF EDUCATION RECORDS

Students have the right to ask to have records corrected that they believe are inaccurate, misleading, or in violation of their privacy rights. Following are the procedures for the correction of records:

- A student must request in writing to the Registrar of Madonna University to amend the education records relating to the student. In so doing, the student should identify the part of the record to be amended and specify why the student believes it is inaccurate, misleading, or in violation of his or her privacy rights.
- 2. Within a reasonable period of time after receipt of the request to amend, Madonna University may comply with the request, or it may decide not to comply. If it decides not to comply, Madonna University will notify the student of the decision and advise the student of his or her right to a hearing to challenge the information believed to be inaccurate, misleading, or in violation of the student's privacy rights.
- 3. Upon the student's written request for a hearing, Madonna University will arrange for the hearing, and notify the student, reasonably in advance, of the date, place, and time of hearing.
- 4. The hearing will be conducted by a hearing officer who is a disinterested party; however, the hearing officer may be an official of the institution. The student shall be afforded a full and fair opportunity to present evidence relevant to the issues raised in the original request to amend the student's education records. The student may be assisted by one or more individuals, including an attorney, but must inform the hearing officer at least two days prior to the hearing.
- Madonna University will prepare a written decision based sole- ly on the evidence presented at the hearing. The decision will include a summary of the evidence presented and the reasons for the decision.
- If Madonna University decides that the information is inaccurate, misleading, or in violation of the student's right of privacy, it will amend the record and notify the student, in writing, that the record has been amended.
- 7. If Madonna University decides that the challenged informa-

- tion is not inaccurate, misleading, or in violation of the student's right of privacy, it will notify the student that he or she has the right to place in the record a statement commenting on the challenged information and/or a statement setting forth reasons for disagreeing with the decision.
- 8. The statement will be maintained as part of the student's education records as long as the contested portion is maintained. If Madonna University discloses the contested portion of the record, it must also disclose the statement.

UNIVERSITY POLICIES • STUDENT AFFAIRS

Students are responsible for knowledge of any authorized changes in policy, regulations, and procedures that may be implemented during the academic year. Please refer to the Madonna Student Handbook for more comprehensive information.

Children

Because of insurance, safety, and fire regulations, University policies prohibit students from bringing children to classes, or leaving them unattended in any area of the building, including the University Center. Child care can be arranged through St. Mary Mercy Hospital Childcare Center, (734) 655-1900, as part of their regular program.

Dress Code

When on campus, students are expected to exercise good judgment and propriety in wearing clothing appropriate to the academic setting.

Drives and Solicitation of Funds

Individual students, staff, or organizations are not permitted to operate stores or conduct sales on campus. Nor shall anyone solicit funds or organize and participate in fundraising drives for any reason without first obtaining approval from the University Advancement Department.

Madonna OneCard ID

University student identification cards are issued by the Office of Student Life (Room 1411) at the time of the first registration. A lost ID card can be replaced for \$35.00. The ID card should be carried at all times; it is used whenever identification is necessary, and must be presented when requested by a University staff member or Public Safety Officer.

Parking Regulations

Students may use all the parking lots, except where restrictions are posted for reserved parking for the disabled or for designated purposes. There is no parking on the grass or anywhere on the inner campus. Parking violators will be ticketed and/or stickered.

Prohibitions

Students are prohibited from carrying weapons or explosives, from gambling or using narcotics, drugs, and alcoholic beverages on campus. Madonna University recognizes its duty to uphold the laws of the State of Michigan. Students are reminded that violation of these laws may be considered a misdemeanor or a felony. The University will not condone the abuse of the law or of persons.

The University acknowledges, however, that alcohol and drug dependence is an illness and may make treatment recommendations in lieu of or in addition to penalties.

To promote a healthy environment, all buildings of the campus are smoke-free.

Respect for Property

Damage caused by students to University property will result in dis-ciplinary action, as well as financial assessment for replacement or repair.

Student Code of Conduct

See the Madonna University Student Handbook, on the University website at Current Student > Campus Resources > Student Handbook, and also on MY Portal.

Madonna University Alumni

All graduates are considered members of the Madonna University Alumni Association. To ensure you continue receiving information after you graduate, update your address, telephone, and e-mail with the Alumni Office.

Alumni may attend social and fundraising events, receive the Alumni E-News, join us on Facebook, Linked In, and Twitter, and stay informed about developments at the University.

Benefits include the graduate school tuition discount (see the Graduate Catalog), ongoing use of your *my.madonna.edu* e-mail account, access to the Library and the computer laboratories, career workshops, MU Job Link, and more.

Graduating seniors are encouraged to celebrate their graduation by participating in the Alumni Spirit Tassel program: the tassel is worn on your mortarboard and acknowledged during the commencement ceremony. Tassels are available for purchase year-round in the Alumni Office.

For more information, contact the Office of Alumni Relations at (734) 432-5811 or e-mail *alumni@madonna.edu*.

ACADEMIC LEARNING GOALS

LIBERAL ARTS EDUCATION is an education for life, designed to expand the student's understanding of significant ideas and issues relevant to participation in a diverse, complex, and multicultural world. Madonna University provides stu- dents with career preparation within a liberal arts framework consistent with the mission statement of the University. To this end, the University requires all students to engage issues of diversity within a program that includes general education, the University core, and a major program area.

The Madonna University program of study requirements evolves from statements of seven academic goals and competencies that together characterize the liberally educated person. These seven competencies provide a rationale for the courses that are required to complete a degree.

Liberal Arts Foundation (Goals 1-6)

Goal 1 - College Writing

Develop effective communication skills.

1.1 Demonstrate the ability to write clear, effective English prose.

Goal 2 - Religious Values

Achieve an understanding of religious and moral dimensions of human experience.

- 2.1 Identify and describe the values, questions, and expressions of truth as exemplified in the Judeo-Christian tradition as well as within various other religious traditions.
- 2.2 Explain the impact and influence of religion on contemporary institutions and on individual value decisions.

Goal 3 - Cultural Traditions

Develop an understanding of and responsiveness to the aesthetic, emotive, and intellectual expressions of human concerns through the Humanities and Arts.

- 3.1 Identify and describe the stages of human civilizations as expressed through the creative arts.
- 3.2 Explain how historical and/or philosophical investigation of human experience reveals multiple views of the human condition.
- 3.3 Demonstrate the ability to interpret the Humanities as they are expressed in their cultural richness and ethnic diversity.
- 3.4 Critically assess how literature through the creative power of language evokes complex realities in response to questions of human worth, human purpose, and human potential.

Goal 4 - Scientific Inquiry

Achieve an understanding of modern concepts of science, computer technology, and mathematics, and the relationship between scientific and technological realities in contemporary life.

- 4.1 Demonstrate an understanding of the concepts, language, and tools of mathematics and develop the ability to reason using mathematical techniques.
- 4.2 Demonstrate an understanding of the scientific bases for the study of the physical and biological worlds and their relationship to cultural and social life.
- 4.3 Demonstrate an understanding of the scientific method and its application to problem solving and discovery.
- 4.4 Demonstrate the use of technology as a tool for work and lifelong learning

Goal 5 - Personal and Social Environment

Develop an understanding of the ways in which individuals perceive, experience, and behave in their personal and social environment.

- 5.1 Describe the ways in which the individual is affected by the total environment.
- 5.2 Describe and analyze the elements which contribute to effective interpersonal relationships.
- 5.3 Identify and analyze social problems confronting modern pluralistic society and the various personal and community strategies for dealing with these.
- 5.4 Demonstrate an understanding of adaptation to change in personal and social environments.

Goal 6 - Global Citizenship

Develop a facility for international and national citizenship skills.

- 6.1 Demonstrate an elementary theoretical understanding of international relations.
- 6.2 Describe international problems, achievements, and aspirations of the U.S. and other nations and cultures.
- 6.3 Analyze significant contemporary national and international issues.
- 6.4 Demonstrate through informed opinion the ability to participate effectively in the formulation of national and international policies.
- 6.5 Evaluate the impact of the increasingly multicultural nature and growing internationalization of American society.

Program Major and Career (Goal 7)

Goal 7 - Personal and Career Development

Achieve individual educational goals for personal enrichment and career development.

- 7.1 Master a significant body of knowledge and skills
- 7.2 Demonstrate the ability to read effectively, think critically, write competently for the professions, and communicate clearly in group situations as well as in individual presenta- tions.

GRADUATION REQUIREMENTS FOR ASSOCIATE DEGREE

For the associate degree, a minimum of 60 s.h., including, in addition to a major, a minimum of 21 semester hours in general education and a minimum of 8 semester hours in University core, as outlined below, as well as (for specified students) the University requirement, must be completed. (See also page 11.)

UNIVERSITY REQUIREMENT:

__ 1 s.h. UNV 1010 Transition to Higher Education

For all students under age 24 transferring in fewer
than 13 s.h. of college credit (excluding Advanced
Placement,

dual enrollment, IB, and early college credits). Students who complete a semester of Intensive English as a Second Lan- guage are excused from this requirement.

GENERAL EDUCATION

GOAL 1 — COLLEGE WRITING

GE-1*, MINIMUM OF:

3 s.h. WRT 1010 College Composition I (3 s.h.)

GOAL 3 — CULTURAL TRADITIONS

CULTURE AND AESTHETIC APPRECIATION, MINIMUM OF: GE-3A

3 s.h. AHIS 2020	Great Monuments in World Art (3 s.h.)
ENG 2230	Ideas in World Literature (3 s.h.)
MUS 2020	Music Through the Ages (3 s.h.)
MUS 2030	Musical Encounters (3 s.h.)
GE-3B	
3 s.h. HIS 1080	Ancient World (4 s.h.)
	3.6.19 1377 11 (4.1.)

HIS 2450	Medieval World (4 s.h.)
HIS 3300	Early Modern World (4 s.h.)
HIS 3330	Modern World (4 s.h.)
PHL 1010	Introduction to Philosophy (3 s.h.)
PHL	Any course listed or cross-listed as

GOAL 4 — SCIENTIFIC INQUIRY

PHL.

GE-4A, MATHEMATICAL SKILLS, MINIMUM OF:

 3 s.h.	MTH 1050	College Algebra (4 s.h.)
	MTH 1060	Trigonometry (3 s.h.)

MTH 1150 Contemporary Mathematics (3 s.h.)

MTH 1210 Precalculus (5 s.h.)

MTH Or any mathematics course having MTH 1040 or higher as a prerequisite.

GE-4B-C, Scientific Bases of Technological Realities, minimum of:

3 s.h. AGE 3150	How and Why the Body Ages (3 s.h.)
BIO 1010	Introductory Biology (4 s.h.)
BIO 1030	General Biology I (4 s.h.)
BIO 1040	General Biology II (4 s.h.)
BIO 2240	Basic Human Physiology (4 s.h.)
BIO 2260	Microbiology (4 s.h.)
BIO 2270	Microbiology for Health Sciences (3 s.h.)
BIO 2430	Human Anatomy and Physiology I (3 s.h.)
BIO 2440	Human Anatomy and Physiology II (3 s.h.)
CHM 1010	Intro. Principles of Chemistry (4 s.h.)
CHM 1110	General Chemistry I (4 s.h.)

CHM 1610	Introduction to Life Chemistry (4 s.h.)
ESS 2160	Earth Science (4 s.h.)
ESS 3030	Oceans: Our Continuing Frontier (4 s.h.)
ESS 3260	Meteorology (4 s.h.)
ESS 3290	Principles of Astronomy (4 s.h.)
FOR 1010	Introduction to Forensic Science (4 s.h.)
NFS 2250	Human Nutrition (FCS/HMG) (4 s.h.)
NSC 1250	Health Problems (4 s.h.)
PHY 2530	General Physics I (4 s.h.)
PHY 2540	General Physics II (4 s.h.)
PHY 2630	Physics for Scientists and Engineers I
	(4 s.h.)
PHY 2640	Physics for Scientists and Engineers II
	(4 s.h.)

GOAL 5 - PERSONAL AND SOCIAL ENVIRONMENT

GE-5A, MINIMUM OF:

__ 3 s.h. PSY 1010 General Psychology (3 s.h.)

GOAL 6 — GLOBAL CITIZENSHIP

GE-6, MINIMUM OF:

3 s.h.	CJ 2350	American Judicial Process (PSC) (3 s.h.)
	ECN 2710	Economics for Human Services (3 s.h.)
	ECN 2720	Principles of Microeconomics (3 s.h.)
	ECN 2730	Principles of Macroeconomics (3 s.h.)
	GEO 3010	World Regional Geography (4 s.h.)
	HIS 2310	United States to 1900 (4 s.h.)
	HIS 3410	Minority Groups in America (4 s.h.)
	HIS 4510	Economic and Business History of
	the United St	tates (ECN) (4 s.h.)
	HIS 4530	United States in the Modern Era (4 s.h.)
	PSC 2510	American Government (4 s.h.)
	PSC 3010	International Relations (4 s.h.)
	PSC 3210	Comparative Politics (4 s.h.)
	PSC 4510	State and Local Government (4 s.h.)
	Modern Lang	guage (3 s.h.)

UNIVERSITY CORE

GOAL 1 — COLLEGE WRITING

UC-1*, MINIMUM OF:

__ 3 s.h. WRT 1020 College Composition II (3 s.h.) or ESL 4230**Research Paper Writing (3 s.h.)

*See the policy Writing Assessment and Placement, page 42, for three-semester time-limit for completing Goal 1.

GOAL 2 — RELIGIOUS VALUES

UC-2, MINIMUM OF:

__ 3 s.h. Religious Studies

GOAL 4 — SCIENTIFIC INQUIRY

UC-4, TECHNOLOGY AS A TOOL FOR WORK AND LEARNING, MINIMUM OF:

2 s.h. CIS 2250	Computer Fundamentals (2 s.h.)
CIS 2380	Introduction to Computers (3 s.h.)
CSC 2010	Web Fundamentals (2 s.h.)
CSC 2250	JavaScript Programming (3 s.h.)

Note: Students are required to pass a computer literacy course within their first three (3) semesters at Madonna University, unless they receive transfer credit for such a course taken at another institution.

^{*}See the policy Writing Assessment and Placement, page 42, for three-semester time-limit for completing Goal 1.

^{**}For non-native speakers of English only.

GRADUATION REQUIREMENTS FOR BACCALAUREATE DEGREE

For the bachelor degree, a minimum of 120 semester hours, including a major, a minimum of 31 semester hours in general education, and a minimum of 22 semester hours in University core, as outlined below, as well as (for specified students) the University requirement, must be completed. (See also page 11.)

UNIVERSITY REQUIREMENT:

___ 1 s.h. UNV 1010 Transition to Higher Education
For all students under age 24 transferring in fewer than
13 s.h. of college credit (excluding Advanced Placement,
dual enrollment, International Baccalaureate, and early college credits). Students who complete a semester of Intensive
English as a Second Language are excused from this requirement.

GENERAL EDUCATION

GOAL 1 — COLLEGE WRITING:

GE-1*, MINIMUM OF:

_ 3 s.h. WRT 1010 College Composition I (3 s.h.)

GOAL 3 — CULTURAL TRADITIONS

CULTURE AND AESTHETIC APPRECIATION, MINIMUM OF: GE-3A

3 s.h. AHIS 2020	Great Monuments in World Art (3 s.h.)
ENG 2230	Ideas in World Literature (3 s.h.)
MUS 2020	Music Through the Ages (3 s.h.)
MUS 2030	Musical Encounters (3 s.h.)

GE-3B

3 s.h.	HIS 1080	Ancient World (4 s.h.)
	HIS 2450	Medieval World (4 s.h.)
	HIS 3300	Early Modern World (4 s.h.)
	HIS 3330	Modern World (4 s.h.)
	HUM 3110	Do Animals Matter? (4 s.h.)
	HUM 4300	Humane Studies (3 s.h.)
	PHL 1010	Introduction to Philosophy (3 s.h.)
	PHL	Any course listed or cross-listed as PHL.

GOAL 4 — SCIENTIFIC INQUIRY

GE-4A, MATHEMATICAL SKILLS, MINIMUM OF:

3 s.h. MTH 1050	College Algebra (4 s.h.)
MTH 1060	Trigonometry (3 s.h.)
MTH 1150	Contemporary Mathematics (3 s.h.)
MTH 1210	Precalculus (5 s.h.)
MTH 2330	Learning and Teaching Number
	Concepts (3 s.h.)
MTH	Or any mathematics course having MTH
	1040 or higher as a prerequisite.

GE-4B, SCIENTIFIC BASES OF TECHNOLOGICAL REALITIES/ BIOLOGICAL SCIENCE, MINIMUM OF:

3 s.h. AGE 3150	How and Why the Body Ages (3 s.h.)
BIO 1010*	Introductory Biology (4 s.h.)
BIO 1030*	General Biology I (4 s.h.)
BIO 1040*	General Biology II (4 s.h.)
BIO 2240	Basic Human Physiology (4 s.h.)

BIO 2260*	Microbiology (4 s.h.)
BIO 2270	Microbiology for Health Sciences (3 s.h.)
BIO 2430*	Human Anatomy and Physiology I (3 s.h.)
BIO 2440*	Human Anatomy and Physiology II (3 s.h.)
BIO 3150	Human Genetics and Society (3 s.h.)
NFS 2250	Human Nutrition (FCS/HMG) (4 s.h.)
NSC 1250	Health Problems (FCS/NFS) (4 s.h.)
NSC 3080	The Nature and Scope of Inquiry (3-4 s.h.)
NSC 3730*	Science Foundations I (4 s.h.)

GE-4C, SCIENTIFIC BASES OF TECHNOLOGICAL REALITIES/ PHYSICAL SCIENCE, MINIMUM OF:

4 s.h.	CHM 1010*	Introduct. Principles of Chemistry (4 s.h.)
	CHM 1110*	General Chemistry I (4 s.h.)
	CHM 1610*	Introduction to Life Chemistry (4 s.h.)
	ESS 2160*	Earth Science (4 s.h.)
	ESS 3030	Oceans: Our Continuing Frontier (4 s.h.)
	ESS 3260*	Meteorology (4 s.h.)
	ESS 3290*	Principles of Astronomy (4 s.h.)
	FOR 1010*	Introduction to Forensic Science (4 s.h.)
	NSC 3080	The Nature and Scope of Inquiry (4 s.h.)
	NSC 3250	The Ascent of Man (4 s.h.)
	NSC 3740*	Science Foundations II (4 s.h.)
	PHY 2530*	General Physics I (4 s.h.)
	PHY 2540*	General Physics II (4 s.h.)
	PHY 2630*	Physics for Scientists and Engineers I
		(4 s.h.)
	PHY 2640*	Physics for Scientists and Engineers II
		(4 s.h.)

^{*} These courses include a Laboratory Science Experience. One of the science courses selected must include a laboratory experience.

GOAL 5 - PERSONAL AND SOCIAL ENVIRONMENT

PERSONAL, SOCIAL, AND SOCIETAL SKILLS, MINIMUM OF: GE-5A

GE-5A				
3 s.h. PSY 1010	General Psychology (3 s.h.)			
GE-5B				
6 s.h. AGE 1070	Introduction to the Aging Experience (3 s.h.)			
AGE 3070	Psychology of Midlife and Aging (PSY) (3 s.h.)			
BUS 1010	Contemporary Society and the Organization (3 s.h.)			
CJ 1020	Introduction to Criminal Justice (3 s.h.)			
ENG 2620	Language and Culture (3 s.h.)			
FIN 3700	Life Cycle Financial Planning (FCS) (3 s.h.)			
LAW 1000	Introduction to Paralegal Studies (3 s.h.)			
MGT 2160	Human Behavior and Attitudes (2 s.h.)			
MGT 2360	Principles of Management (3 s.h.)			
MGT 3020	Organizational Behavior (3 s.h.)			
MGT 3160	Human Behavior and Leadership (2 s.h.)			
MIS 3420	Computer Ethics (3 s.h.)			
PSY 2450	Life Span Developmental Psychology			
	(4 s.h.)			
PSY 3660	Social Psychology (4 s.h.)			
SSC 3080	The Nature and Scope of Inquiry (3-4 s.h.)			
SLS 1000	Sign Language in Society (3 s.h.)			
SLS 2310	Deaf Culture (3 s.h.)			

SOC 1010 Introduction to Sociology (4 s.h.)

^{*}See the policy Writing Assessment and Placement, page 42, for three-semester time-limit for completing Goal 1.

SOC 2210	Social Problems (4 s.h.)
SOC 3120	Diversity, Discrimination, and Social Justice
	(3 s.h.)
SOC 3220	Race, Ethnicity, and Class in American
	Life (HIS*) (4 s.h.)
SOC 3530	Marriage and the Family (FCS) (4 s.h.)
SPA 1110	Spanish for Criminal Justice (3 s.h.)
SSC 3110	Do Animals Matter? (4 s.h.)
SSC 4300	Humane Studies (3 s.h.)
SW 2300	Introduction to Social Work (4 s.h.)
WRT 3260	Business and Professional Writing (BUS)
	(3 s.h.)

GOAL 6 — GLOBAL CITIZENSHIP:

GE-6, MINIMUM OF:

3 s.h. CJ 2350	American Judicial Process (PSC) (3 s.h.)
ECN 2710	Economics for Human Services (3 s.h.)
ECN 2720	Principles of Microeconomics (3 s.h.)
ECN 2730	Principles of Macroeconomics (3 s.h.)
GEO 3010	World Regional Geography (4 s.h.)
HIS 2310	United States to 1900 (4 s.h.)
HIS 3410	Minority Groups in America (4 s.h.)
HIS 4510	Economic and Business History of the
	United States (ECN) (4 s.h.)
HIS 4530	United States in the Modern Era (4 s.h.)
PSC 2510	American Government (4 s.h.)
PSC 3010	International Relations (4 s.h.)
PSC 3210	Comparative Politics (4 s.h.)
PSC 4510	State and Local Government (4 s.h.)
Modern Lan	guage (3 s.h.)*

^{*} Up to three (3) semester hours of modern language (Madonna currently offers American Sign Language, Spanish, Chinese, and Japanese) but excluding SLS 1000 and WL 2100, can be used to satisfy General Education Goal GE-6.

Students who wish to study a language not being taught at Madonna University should see their major advisor or the Office of Academic Advising to arrange Consortium registration at the University of Detroit Mercy or Marygrove College, or see the Center for Study Abroad to discuss opportunities for international study.

UNIVERSITY CORE

GOAL 1 — COLLEGE WRITING

UC-1*, MINIMUM OF:

3 s.h. WRT 1020 College Composition II (3 s.h.) or ESL 4230**Research Paper Writing (3 s.h.)

*See the policy Writing Assessment and Placement, page 42, for three-semester time-limit for completing Goal 1.

GOAL 2 — RELIGIOUS VALUES

UC-2, MINIMUM OF:

__ 6 s.h. Religious Studies

GOAL 3 — CULTURAL TRADITIONS

CULTURE AND AESTHETIC APPRECIATION, MINIMUM OF:

UC-3A

4 s.h. HUM 2010	The Medium and the Message (4 s.h.)
HUM 2020	Humanities Through the Arts (4 s.h.)
HUM 3050	The Idea of Justice (4 s.h.)
HUM 3080	The Nature and Scope of Inquiry (4 sh.)
HUM 3090	Holocaust: Issues and Themes in the
	Genocide of European Jewry (4 s.h.)

		Genocide of European Jewry (4 s.h.)
UC-3B		
4 s.h.	ENG 3010	Major American Writers: Beginnings
		to 1900 (4 s.h.)
	ENG 3020	Major Amer. Writers: 1900 to Pres. (4 s.h.)
	ENG 3540	American Folklore and Literature (4 s.h.)
	ENG 3550	Women in Literature (4 s.h.)
	ENG 3610	Major British Writers: Chaucer to
		Johnson (4 s.h.)
	ENG 3620	Major Brit. Writers: Blake to Eliot (4 s.h.)
	ENG 3710	Contemporary Literature (4 s.h.)
	ENG 4210	Time and Literature (4 s.h.)
	ENG 4230	Voices and Visions: Modern American
		Poets (4 s.h.)
	ENG 4240	Cultural Issues in Contemp. Literature and
		Film (1 s.h. each, must complete 4 topics)
	ENG 4540	Classics of African-American Lit. (4 s.h.)
	ENG 4550	Voices of Pluralism in American
		Literature (4 s.h.)
	ENG 4750	Studies in Literature (4 s.h.)

GOAL 4 — SCIENTIFIC INQUIRY

UC-4, TECHNOLOGY AS A TOOL FOR WORK AND LEARNING, MINIMUM OF:

2 s.h. CIS 2250	Computer Fundamentals (2 s.h.)
CIS 2380	Introduction to Computers (3 s.h.)
CSC 2010	Web Fundamentals (2 s.h.)
CSC 2250	JavaScript Programming (3 s.h.)

Note: Students are required to pass a computer literacy course within their first three (3) semesters at Madonna University, unless they receive transfer credit for such a course taken at another institution.

GOAL 6 — GLOBAL CITIZENSHIP:.

UC-6, MINIMUM OF:

3 s.h	HIS 1010	World Problems (PSC) (3 s.h.)
	HIS 4320	Foreign Policy History of the United States
		(3 s.h.)
	HIS 4631	Global Studies: Modern Africa (PSC)
		(3 s.h.)
	HIS 4632	Global Studies: Modern Asia (PSC) (3 s.h.)
	HIS 4633	Global Studies: Modern Latin America
		(PSC) (3 s.h.)
	HIS 4634	Global Studies: Modern Middle East
		(PSC) (3 s.h.)

Study Abroad

Madonna University believes a study abroad experience is a vital part of an undergraduate education. Study abroad makes students more confident and independent as well as enhancing their marketability. Students may receive credit for courses in their major or for general education or University core requirements. See page 39 or the Center for Study Abroad, Room 1501, for further information.

^{**}For non-native speakers of English only.

Plans of Study

Refer to the chart on pages 12-15 to identify the college or school which is home to the advisors for each of these plans. Advisors can discuss how each plan might meet your academic and career goals and provide more in-depth information on following the plan, as well as provide information on career paths and

ACCOUNTING

Accounting Major: Bachelor of Science (31 s.h.)

	•	•
REQUIRED	Major Courses:	
ACC 3030	Intermediate Accounting I	3 s.h.
ACC 3040	Intermediate Accounting II	3 s.h.
ACC 3410	Accounting Information Systems	3 s.h.
ACC 3590	Taxation	4 s.h.
ACC 4500	Auditing	3 s.h.
ACC 4700	Advanced Managerial/Cost Accounting	3 s.h.
ACC 4900	Contemporary Issues in Cost. Management	3 s.h.
ACC 4910	Internship	3 s.h.
FIN 3150	Business Finance	3 s.h.
MGT 3210	Operations Management	3 s.h.
		31 s.h.
REQUIRED	Business Foundation Courses (18 s.h.)	
ACC 2010	Principles of Accounting I	3 s.h.
ACC 2020	Principles of Accounting II	3 s.h.
BL 3330	Business Law I	3 s.h.
BUS 4950	Business Capstone	3 s.h.
MKT 2440	Principles of Marketing	3 s.h.
QS 3550	Applied Business Statistics	3 s.h.
		18 s.h.
REQUIRED	Support Courses:	
CIS 2380	Introduction to Computers	3 s.h.
ECN 2720	Principles of Microeconomics	3 s.h.
ECN 2730	Principles of Macroeconomics	3 s.h.
	Principles of Management	3 s.h.
MGT 3020	Organizational Behavior	3 s.h.
MTH 1050	College Algebra	4 s.h.
MTH 2350	Probability and Statistics	_4 s.h.
		23 s.h.

Students planning to take the CPA examination must include both ACC 4050, Advanced Accounting, and ACC 4060, Government and Non-Profit Accounting, in their Plans of Study, and are encouraged to take WRT 3260/BUS 3260, Business and Professional Writing.

Accounting Minor (22 s.h.)

K EQUIRED	MINOR COURSES:	
ACC 2010	Principles of Accounting I	3 s.h.
ACC 2020	Principles of Accounting II	3 s.h.
ACC 3030	Intermediate Accounting I	3 s.h.
ACC 3410	Accounting Information Systems	3 s.h.
ACC 3590	Taxation	4 s.h.
BL 3330	Business Law I	3 s.h.
MGT 2360	Principles of Management	<u>3 s.h</u> .
		22 s.h.

Forensic Accounting Certificate of Completion (15 s.h.):

Required	CERTIFICATE COURSES:	
CJ 4150	Criminal Investigation*	3 s.h.
CJ 4450	Interviewing and Investigative Report Writing*	3 s.h.
ACC 2010	Principles of Accounting I	3 s.h.
ACC 3410	Accounting Information Systems	3 s.h.
ACC 4800	Forensic Accounting	3 s.h.
		15 s.h.

*Prerequisite to CJ 4150 and CJ 4450: CJ 1020.

Must be taken at Madonna University.

Note: No more than two of the courses in the certificate program will be accepted as transfer credit.

ACTIVITY AND PROGRAM PLANNING

See listing under AGING STUDIES.

ADDICTION STUDIES

The Certificate of Completion is a credential from Madonna University. A student planning to also be certified as a State of Michigan Certified Alcohol and Drug Counselor (CADC) should meet with the Addiction Studies advisor prior to undertaking the Madonna certificate.

Addiction Studies Certificate of Completion (12 s.h.)

REQUIRED CERTIFICATE COURSES: PSY 1010 General Psychology 3 s.h. AS 2000 Addiction Studies: General Information 1 s.h. AS 3430 Addiction Studies: Focus on the Individual 1 s.h. AS 3440 Addiction Studies: Family Systems 1 s.h. AS 4840 Ethical Professional Practices (PSY/SW) 1 s.h. Addiction Studies electives 5 s.h. 12 s.h.

AGING STUDIES

All students working toward a minor, certificate, associate degree, or bachelor degree in Aging Studies are required to complete a series of approved professional contacts. This assures that each student has been introduced to a wide range of current programs, services, and organizations available in the field of aging.

Aging Studies Major: Bachelor of Science (33 s.h.*)

REOUIRED	MAIOR	Courses:
KEUUIKED	MAJON	COUNSES.

LLE COLLEGE	71.19 OH COCH5251	
AGE 1070	Introduction to the Aging Experience	3 s.h.
AGE 2010	Intro. to Alzheimer's Disease and Other Dementias	1 s.h.
AGE 2300	Programs and Services for Older Adults	3 s.h.
AGE 3020	Program Development for Adult Education and	
	Events (EDU)	3 s.h.

AGE 3030 Spirituality of Aging (RST)	1 s.h.	Achievement (31 s.h.)	
AGE 3070 Psychology of Midlife and Aging (PSY)	3 s.h.	REQUIRED CERTIFICATE COURSES:	
AGE 3150 How and Why the Body Ages	3 s.h.	WRT 1010 College Composition I	3 s.h
AGE 3700 Legal Issues for Older Adults	3 s.h.	AGE 1070 Introduction to the Aging Experience	3 s.h
AGE 4150 Societies and Aging or	2 1	AGE 2010 Intro. to Alzheimer's Disease and Other Der	
AGE 4250 Public Policy and Resources in Aging	2 s.h.	AGE 3020 Program Development for Adult Education at	
AGE 4760 Internship in Aging Studies	4 s.h.	Events (EDU)	3 s.h
AGE 4770 Professional Development Seminar	2 s.h.	AGE 3070 Psychology of Midlife and Aging (PSY)	3 s.h.
AGE 4950 Gerontology Senior Seminar	2 s.h.	AGE 3100 Enriching Life in Later Years	3 s.h.
Major electives	3 s.h. 33 s.h.	AGE 3150 How and Why the Body Ages	3 s.h.
		AGE 3500 Mental Health and the Older Adult	3 s.h.
* A minimum of 16 s.h. in the major must be taken at Mado	nna	AGE 3850 Documentation and Assessment	3 s.h.
University.		AGE 4760 Internship in Aging Studies	4 s.h.
Aging Studies Major: Associate of Science (2	98 c h)	AGE 4770 Professional Development Seminar	2 s.h. 31 s.h.
Required Major Courses:	.0 3.11.)	Prerequisite Course:	31 8.11.
AGE 1070 Introduction to the Aging Experience	3 s.h.	PSY 1010 General Psychology	3 s.h.
AGE 2010 Intro. to Alzheimer's Disease and Other Demo		131 1010 General I sychology	3 8.11.
AGE 2300 Programs and Services for Older Adults	3 s.h.	Aging Studies Certificate of Achievement (3	1 s.h.)
AGE 3030 Spirituality of Aging (RST)	1 s.h.	Required Certificate Courses:	
AGE 3070 Psychology of Midlife and Aging (PSY)	3 s.h.	WRT 1010 College Composition I	3 s.h.
AGE 3150 How and Why the Body Ages	3 s.h.	AGE 1070 Introduction to the Aging Experience	3 s.h.
AGE 3700 Legal Issues for Older Adults	3 s.h.	AGE 2010 Intro. to Alzheimer's Disease and Other Der	mentias 1 s.h.
AGE 4150 Societies and Aging	2 s.h.	AGE 2300 Programs and Services for Older Adults	3 s.h.
AGE 4760 Internship in Aging Studies	4 s.h.	AGE 3020 Program Development for Adult Education at	
AGE 4770 Professional Development Seminar	2 s.h.	Events (EDU)	3 s.h.
Major electives	3 s.h.	AGE 3030 Spirituality of Aging (RST)	1 s.h.
	28 s.h.	AGE 3070 Psychology of Midlife and Aging (PSY)	3 s.h.
Ading Studios Minon (QQ s h *)		AGE 3150 How and Why the Body Ages	3 s.h.
Aging Studies Minor (20 s.h.*)		AGE 3700 Legal Issues for Older Adults	3 s.h.
REQUIRED MINOR COURSES: AGE 1070 Introduction to the Aging Experience	3 s.h.	AGE 4150 Societies and Aging or	2 1
Minor electives**	3 s.n. 17 s.h.	AGE 4250 Public Policy and Resources in Aging	2 s.h. 4 s.h.
winor electives	20 s.h.	AGE 4760 Internship in Aging Studies AGE 4770 Professional Development Seminar	2 s.h.
* A minimum of 8 s.h. must be in upper division courses at		AGE 4770 Trolessional Development Seminal	31 s.h.
University.	Madollia	Prerequisite Course:	31 8.11.
** AGE 4760 and 4770 may not be used to satisfy the mind	m alaatirra	PSY 1010 General Psychology	3 s.h.
requirements.	of elective	, ,,	
requirements.		Care Management Certificate of Achievement	nt
Aging and Older Adults Certificate of Comple	etion	(33 s.h.)	
(9 s.h.)		REQUIRED CERTIFICATE COURSES:	
REQUIRED CERTIFICATE COURSES:		WRT 1010 College Composition I	3 s.h.
AGE 1070 Introduction to the Aging Experience	3 s.h.	AGE 1070 Introduction to the Aging Experience	3 s.h.
AGE 3070 Psychology of Midlife and Aging (PSY)	3 s.h.	AGE 2010 Intro. to Alzheimer's Disease and Other Der	
AGE 3150 How and Why the Body Ages	3 s.h.	AGE 2240 Supporting Family Caregivers	2 s.h.
	9 s.h.	AGE 2300 Programs and Services for Older Adults	3 s.h.
Demontic Cons Contificate of Completion (11	. .	AGE 3150 How and Why the Body Ages	3 s.h.
Dementia Care Certificate of Completion (11	s.n.)	AGE 3500 Mental Health and the Older Adult	3 s.h.
REQUIRED CERTIFICATE COURSES:	2 1	AGE 3850 Decementation and Assessment	3 s.h.
AGE 1070 Introduction to the Aging Experience	3 s.h.	AGE 3850 Documentation and Assessment AGE 3900 Care Management for Older Adults	3 s.h. 3 s.h.
AGE 2010 Intro. to Alzheimer's Disease and Other Dem		AGE 4760 Internship in Aging Studies	3 s.n. 4 s.h.
AGE 2240 Supporting Family Caregivers	2 s.h.	AGE 4700 Internship in Aging Studies AGE 4770 Professional Development Seminar	2 s.h.
AGE 3460 Addressing Rehavior Changes in Dementia (PS	3 s.h.	1300 4/10 1 foressional Development Seminal	33 s.h.
AGE 3460 Addressing Behavior Changes in Dementia (PS	SY) <u>2 s.h.</u> 11 s.h.	Prerequisite Course:	<i>33</i> 5.11.
	11 8.11.	PSY 1010 General Psychology	3 s.h.
Eldercare Practice Certificate of Completion		151 1010 General Layenology	J 8.II.
(14 s.h.)		Note: All ACE corress have been approved for and	uina oduse
REQUIRED CERTIFICATE COURSES:		Note: All AGE courses have been approved for continution credit in the renewal of the Nursing Home Admin	
AGE 1070 Introduction to the Aging Experience	3 s.h.	License.	15t1 atVI
AGE 2240 Supporting Family Caregivers	2 s.h.	Littlist.	
AGE 3500 Mental Health and the Older Adult	3 s.h.		
AGE 3850 Documentation and Assessment	3 s.h.	AMERICAN SIGN LANGUAGE	
AGE 3900 Care Management for Older Adults	<u>3 s.h.</u>	See listings under SIGN LANGUAGE STUDIES.	
	14 s.h.	see notings under story LARGUAGE STUDIES.	

Activity and Program Planning Certificate of

AMERICAN STUDIES

American Studies Certificate of Completion (24 s.h.)

REQUIRED	Certificate Courses:	
ENG 3010	Major American Writers: Beginnings to 1900 or	
ENG 3020	Major American Writers: 1900 to Present	4 s.h.
ENG 3540	American Folklore and Literature or	
ENG 4540	Classics of African-American Literature or	
ENG 4550	Voices of Pluralism in American Literature	4 s.h.
HIS 2310	United States to 1900 or	
HIS 4810	American Civil War	4 s.h.
HIS 4320	Foreign Policy History of the United States or	
HIS 4510	Economic and Business History of the United States	s 3-4 s.h.
HIS 4530	United States in the Modern Era	4 s.h.
	Certificate electives, to be chosen from:	4-5 s.h.
	Additional selections from above-listed courses	
	(1-5 s.h.)	
	AHIS 4750 Studies in Art History: American	
	Art topics (3 s.h.)	
	ENG 4750 Studies in Literature: American	
	topics (4 s.h. each)	
	PSC 2510 American Government (4 s.h.)	
	Approved workshops and electives (1-5 s.h.)	
		24 s.h.

ANIMAL CRUELTY INVESTIGATION

See listing under CRIMINAL JUSTICE.

APPLIED MANAGEMENT

The Applied Management program is designed as a degree-completion program for Chinese Nationals who are graduates of specific three-year diploma programs in the People's Republic of China. The program is limited to students admitted from the specified programs.

Applied Management Major: Bachelor of Applied Management (Degree Completion, 36 s.h.)

GENERAL EDUCATION/UNIVERSITY CORE REQUIREMENTS (21 S.H.):

UNIVERSITY REQUIREMENT:

ESL 1020	Orientation to American Higher Education	1 s.h.
GOAL 1:		
ESL 3120	Advanced Reading and Writing for Business	3 s.h.
GOAL 2:		
RST 1450	Survey of Western Religions	3 s.h.
RST 4080	Moral Issues in Business	3 s.h.
GOAL 3:		
HUM 3030	American Culture through Literature, Music, Art	3 s.h.
GOAL 4:		
NSC 4050	Science and Social Responsibility	2 s.h.
GOAL 5:		
SOC 3130	Sociology of the Family	3 s.h.
GOAL 6:		
HIS 4320	Foreign Policy History of the U.S.	3 s.h.
		21 s.h.
REQUIRED	MAJOR COMPLETION COURSES (15 S.H.)	
BUS 4950	Business Capstone	3 s.h.
MGT 2360	Principles of Management	3 s.h.
MGT 3020	Organizational Behavior	3 s.h.
MGT 3210	Quality Management	3 s.h.
QOM 4180	Supply Chain Management	3 s.h.
		15 s.h.

APPLIED SCIENCE

Associate of Applied Science; Bachelor of Applied Science

The Applied Science program is designed for graduates of non-collegiate technical programs who wish to build on their technical training to earn an associate or bachelor degree in applied science. The opportunity is available to both persons trained in physical science-related areas and in health science/allied health professions in non-collegiate settings.

Physical science-related applied science programs are under the direction of the Department of Physical and Applied Science, and include:

- Electronics technology program completed at National Education Center, Livonia or Eastpointe (formerly East Detroit), Michigan.
- 2. Auto collision repair, auto mechanics, electronic technology, and industrial controls programs completed at MoTech, Livonia.
- Selected certificate and associate degree technical programs completed at community colleges.
- Selected vocational and trade programs completed at collegiate or non-collegiate institutions which are applicable to a Michigan Interim Occupational (teaching) Certificate.

The health science/allied health professional who has completed an accredited clinical program, builds on the certification, licensure, or registration for an associate of applied science. Upon university admission, graduates of approved non-collegiate programs must apply for 16-32 s.h. of credit by evaluation. (See pages 45-46 under Prior Learning for more information.)

Graduates of the following non-collegiate, non-contractual health science professional programs may apply for 16 s.h. of credit:

	r-J
Certified Laboratory Assistant	Nuclear Medicine Technologist
(CLA)	Pharmacy Technician
Cytotechnologist	Phlebotomy Technician
Dental Assistant	Practical Nurse (LPN, LVN)
Dental Lab Technician	Respiratory Technician
Diagnostic Medical Sonographer	(CRRT)
Echocardiology	Surgical Technologist
Electroneurodiagnostic	Veterinary Technologist
Technician	
Medical Assistant (RMA,	
CMA)	

Graduates of the following non-collegiate, non-contractual health science professional programs may apply for 32 s.h. of credit:

CT-MRI Technologist	Nursing Home Administrator
Emergency Medical Technician	Radiographer (Radiologic
(paramedic)	Technologist)
Histopathology Technologist	Respiratory Therapist
Medical Laboratory Technician	RN (diploma graduates)
(MLT-C)	
Medical Technologist (HFW/AM)	Γ)

Medical Technologist (HEW/AMT)

See the Biological and Health Sciences Department for specific associate degree plans.

Bachelor of Applied Science Programs

REQUIRED MAJOR COURSES*:

APS 4950 Senior Seminar 2 s.h.

* See the Physical and Applied Sciences Department for specific Plans of Study, which list other course requirements.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (*This policy is general across all College of Science and programs.*)

APPLIED TECHNOLOGY

The Applied Technology program is designed as a degree-completion program for Chinese Nationals who are graduates of specific three-year diploma programs in the People's Republic of China. The program is limited to students admitted from the specified programs.

Applied Technology Major: Bachelor of Applied Technology (Degree Completion, 36 s.h.) GENERAL

EDUCATION/UNIVERSITY CORE REQUIREMENTS (21 S.H.):

LDCCATION	Civile Coke Regulation (21 5:11:):	
University	REQUIREMENT:	
ESL 1020	Orientation to American Higher Education	1 s.h.
GOAL 1:		
ESL 3120	Advanced Reading and Writing for Business	3 s.h.
GOAL 2:		
RST 1450	Survey of Western Religions	3 s.h.
RST 4080	Moral Issues in Business	3 s.h.
GOAL 3:		
HUM 3030	American Culture through Literature, Music, A	rt 3 s.h.
GOAL 4:		
NSC 4050	Science and Social Responsibility	2 s.h.
GOAL 5:		
SOC 3130	Sociology of the Family	3 s.h.
GOAL 6:		
HIS 4320	Foreign Policy History of the U.S.	3 s.h.
		21 s.h.
REOUIRED	MAJOR COMPLETION COURSES (15 S.H.)	
~	Strategic Planning in an e-Commerce Envrnmr	nt 3 s.h. MIS
	cation Development and Systems Analysis 3 s	
Web Design	n for Business Applications	3 s.h.
_	e-Commerce Information Technology	3 s.h.
MIS 4950	Information Systems Senior Seminar	3 s.h.
	•	15 s.h.

ART

The Madonna Art Department offers studio-based programs of study that professionally prepare graduates for visually expressive creative careers.

Art Department majors include Art Education, Fine Arts and Graphic Design. Art minors are available in Art History and Fine Arts; the Graphic Design Minor is available for Fine Arts Major students only. The Associate of Arts Major in Graphic Design is available, as is the Visual Communication and Design Certificate.

Completion of all Art Department majors requires participation in the Senior Exhibition and presentation of a comprehensive portfolio of original artwork. The Art Department may retain examples of student work for exhibitions or archival collections.

Award of advance placement credit is based on faculty evaluation of a portfolio of original artwork and prior coursework. Please see the Art Department Chair.

Art Education Major: Bachelor of Arts (55 s.h.)

REQUIRED MAJOR COURSES:	
AED 3100 Visual Culture (AHIS)	3 s.h.
AED 3800 Principles Elementary Visual Education	3 s.h.
AED 3810 Principles Secondary Visual Education	3 s.h.
AHIS 3250 Art History: Ancient to Renaissance	3 s.h.
AHIS 3260 Art History: Renaissance to 20th Century	3 s.h.
AHIS 3350 Asian Art: India, China, Japan	3 s.h.
AHIS 4150 Art History: 20th Century to Contemporary or	
AHIS 4250 History of Modern Design	3 s.h.
ART 1010 Drawing Foundations for Art and Design	3 s.h
ART 1030 Painting Foundations for Art and Design	3 s.h.
ART 1040 Ceramics Foundations for Art and Design	3 s.h.
ART 1060 Printmaking Foundations Art and Design	3 s.h.

ART 1700 Introduction to Computer Art	3 s.h.
ART 4950 Senior Seminar	3 s.h.
EDU 4510 Secondary Methods/Content	4 s.h.
JRN 3130 Photography I (ART)	3 s.h.
Required studio concentration -Select one concentration	
from (see below):	9 s.h.
Drawing <i>or</i>	
Painting <i>or</i>	
Ceramics or	
Printmaking	
	55 s.h.
Drawing Concentration (9 s.h.)	
ART 2010 Drawing II	3 s.h.
ART 3010 Drawing III - Advanced Studio	3 s.h.
ART 4010 Drawing IV - Advanced Studio	3 s.h.
Painting Concentration (9 s.h.)	
ART 2030 Painting II	3 s.h.
ART 3030 Painting III- Advanced Studio	3 s.h.
ART 4030 Painting IV- Advanced Studio	3 s.h.
Ceramics Concentration (9 s.h.)	
ART 2040 Ceramics II	3 s.h.

Note: the Art Education major, when successfully completed in conjunction with the Teacher Education Program, results in recommendation for a State of Michigan Provisional Secondary Teaching Certificate with an endorsement to teach Visual Arts Education to grades K-12. As a comprehensive teaching major, a teaching minor is not required. The Visual Arts endorsement is not available on a teaching certificate that is Elementary only.

Art Education is a comprehensive major, so a teaching minor is not required.

Fine Arts Major: Bachelor of Arts (45 s.h.)

ART 3040 Ceramics III - Advanced Studio

ART 4040 Ceramics IV - Advanced Studio

ART 3060 Printmaking III - Advanced Studio

ART 4060 Printmaking IV - Advanced Studio

Printmaking Concentration (9 s.h.)
ART 2060 Printmaking II

Fine artists are visionary project managers who know how to make new things happen in the world. The Fine Arts Major is a studio-based program of study that professionally prepares undergraduates for visually expressive creative work. This program develops the conceptualizing abilities, technical expertise, and imagination skills needed for exercising leadership of visually meaningful projects..

REQUIRED MAJOR COURSES:

KEQUIRED MAJOR COURSES:	
AED 3100 Visual Culture (AHIS) or	
AHIS 3350 Asian Art: India, China, Japan	3 s.h.
AHIS 3250 Art History: Ancient to Renaissance	3 s.h.
AHIS 3260 Art History: Renaissance to 20th Century	3 s.h.
AHIS 4150 Art History: 20 th Century to Contemporary <i>or</i>	
AHIS 4250 History of Modern Design	3 s.h.
ART 1010 Drawing Foundations for Art and Design	3 .s.h.
ART 1030 Painting Foundations for Art and Design	3 s.h.
ART 1040 Ceramics Foundations for Art and Design	3 s.h.
ART 1060 Printmaking Foundations Art and Design	3 s.h.
ART 4950 Senior Seminar	3 s.h.
Major electives, student selects courses from this list,	
or courses from concentrations other than	
the one selected:	9 s.h.
AHIS 4750 Studies in Art History (2-3 s.h)	
ART 1700 Introduction to Computer Art (3 s.h.)	
ART 3150 Photoshop (BCA/JRN) (3 s.h.)	
ART 4400 Independent Studio A (2-3 s.h.)	
ART 4410 Independent Studio B (2-3 s.h.)	
JRN 3130 Photography I (ART) (3 s.h.)	
JRN 3140 Photography II (ART) (3 s.h.)	

3 s.h.

3 s.h.

3 s.h.

3 s.h.

3 s.h.

Required studio concentration –Select one concentration		Graphic Design Major: Bachelor of Arts (45-46 s.h.)	
from (see below):	9 s.h.	REQUIRED MAJOR COURSES:	
Drawing <i>or</i>		AHIS 3250 Art History: Ancient to Renaissance	3 s.h.
Painting or		AHIS 3260 Art History: Renaissance to 20th Century	3 s.h.
Ceramics <i>or</i> Printmaking		AHIS 4150 Art History: 20th Century to Contemporary <i>or</i>	2 1
Printinaking	45 s.h.	AHIS 4250 History of Modern Design	3 s.h
Drawing Concentration (9 s.h.)	45 8.11.	ART 1010 Drawing Foundations for Art and Design	3 s.h.
ART 2010 Drawing II	3 s.h.	ART 1030 Painting Foundations for Art and Design	3 s.h.
ART 2010 Drawing III - Advanced Studio	3 s.h.	ART 1060 Printmaking Foundations Art and Design	3 s.h.
ART 4010 Drawing IV - Advanced Studio	3 s.h.	ART 1210 Introduction to Graphic Design	4 s.h.
Painting Concentration (9 s.h.)	3 3.11.	ART 1700 Introduction to Computer Art	3 s.h.
ART 2030 Painting II	3 s.h.	ART 2680 Graphic Design II	4 s.h.
ART 3030 Painting III- Advanced Studio	3 s.h.	ART 3100 Advertising Design	4 s.h.
ART 4030 Painting IV- Advanced Studio	3 s.h.	ART 4250 Advanced Graphic Design	4 s.h.
Ceramics Concentration (9 s.h.)	3 8.11.	ART 3150 Photoshop (BCN/JRN)	3 s.h.
ART 2040 Ceramics II	3 s.h.	ART 4950 Senior Seminar	3 s.h.
ART 3040 Ceramics III - Advanced Studio	3 s.h.	Major electives:	2- 3 s.h.
ART 4040 Ceramics IV - Advanced Studio	3 s.h.	AHIS 3100 Visual Culture (AED)(3 s.h.)	
Printmaking Concentration (9 s.h.)	3 3.11.	AHIS 3350 Asian Art: India, China, Japan (3 s.h.)	
ART 2060 Printmaking II	3 s.h.	AHIS 4750 Studies in Art History (3 s.h.)	
ART 3060 Printmaking III - Advanced Studio	3 s.h.	ART 1040 Ceramics Found. for Art and Design (3 s.h.)	
ART 4060 Printmaking IV - Advanced Studio	3 s.h.	ART 2010 Drawing II (3 s.h.)	
AKT 4000 Tillitillakilig IV - Advanced Studio	3 8.11.	ART 2030 Painting II (3 s.h.)	
		ART 2050 Typography (3 s.h.)	
Fine Arts Minor (21 s.h.)		ART 2060 Printmaking II (3 s.h.)	
Required Minor Courses		ART 2100 Illustration (3 s.h.)	
AHIS 3250 Art History: Ancient to Renaissance or		ART 3800 Web Design for Graphic Designers (3 s.h.)	
AHIS 3260 Art History: Renaissance to 20 th Century <i>or</i>		ART 4400 Independent Studio A (2-3 s.h.)	
AHIS 4150 Modern Art: Late 19th and 20th Century	3 s.h.	ART 4410 Independent Studio B (2-3 s.h.)	
ART 1010 Drawing Foundations for Art and Design	3 s.h.	JRN 3130 Photography I (ART) (3 s.h.)	
ART 1030 Painting Foundations for Art and Design	3 s.h.	JRN 3140 Photography II (ART) (3 s.h.)	45.46.1
ART 1040 Ceramics Foundations for Art and Design	3 s.h.		45-46 s.h.
ART 1060 Printmaking Foundations Art and Design	3 s.h.	* AHIS 3250 and AHIS 3260 meet the general education goal G	
MINOR ELECTIVES:	6 s.h.	a replacement for AHIS 2020. AHIS 2020 is NOT for Graphic I	Jesign
ART 2010 Drawing II (3 s.h.)		Majors.	
ART 2030 Painting II (3 s.h.)		One cooperative education placement is highly recommended.	
ART 2040 Ceramics II (3 s.h.)			
ART 2060 Printmaking II (3 s.h.)		Graphic Design Major: Associate of Arts (31 s.h	ı.)
ART 1700 Introduction to Computer Art (3 s.h.)		REQUIRED MAJOR COURSES:	r
ART 3150 Photoshop (BCA/JRN) (3 s.h.)		AHIS 3260 Art History: Renaissance to 20th Century <i>or</i>	
JRN 3130 Photography I (ART) (3. s.h.)		AHIS 4250 History of Modern Design	3 s.h.
JRN 3140 Photography II (ART) (3 s.h).		ART 1010 Drawing Fnds for Art and Design	3 s.h.
	21 s.h.	ART 1030 Painting Fnds for Art and Design	3 s.h.
		ART 1060 Printmaking Fnds Art and Design	3 s.h.
Art History Minor (20 s.h.)		ART 1210 Introduction to Graphic Design	4 s.h.
Required Minor Courses:		ART 2680 Graphic Design II	4 s.h.
AHIS 3250* Art History: Ancient to Renaissance	4 s.h.	ART 3100 Advertising Design	4 s.h.
AHIS 3260* Art History: Renaissance to Modern	4 s.h.	ART 4250 Advanced Graphic Design	4 s.h.
AHIS 3350 Asian Art: India, China, Japan	3 s.h.	Major electives:	3 s.h.
AHIS 4150 Modern Art: Late 19th Century and 20th Century		ART 1040 Ceramics Fnds. for Art and Design (3 s.h.)	
Art <i>or</i>		ART 2010 Drawing II (3 s.h.)	
AHIS 4250 History of Modern Design	4 s.h.	ART 2030 Painting II (3 s.h.)	
AHIS electives	_5 s.h.	ART 2040 Ceramics II (3 s.h.)	
	20 s.h.	ART 2050 Typography (3 s.h.)	
NOTE: When a student with an Art major also completes on A	+	ART 2060 Printmaking II (3 s.h.)	
NOTE: When a student with an Art major also completes an A		ART 2100 Illustration (3 s.h.)	
History Minor, all Art History courses are counted only in the M		JRN 3130 Photography I (ART)(3 s.h.)	
Other Art Department courses must be selected in consultation		JRN 3140 Photography II (ART) (3 s.h.)	
Art Department advisor to complete the 45 s.h. required in the	-		31 s.h.
These course selections must be documented with a Substituti			
Course Form signed by the advisor and submitted to the Office	of the	Graphic Design Minor for Fine Arts Majors (24	s.h.)
Registrar. See the topic "When Courses May Satisfy More That	an One	Required Minor Courses:	
Requirement" on page 45.		ART 1210 Introduction to Graphic Design	4 s.h.
*AHIS 3250 and AHIS 3260 meet the general education goal C	GE-3A	ART 2680 Graphic Design II	4 s.h.
as a replacement for AHIS 2020. AHIS 2020 is NOT for Fine		ART 1700 Introduction to Computer Art	3 s.h.
Majors.		ART 3100 Advertising Design	4 s.h.

4 s.h. 5 s.h.

24 s.h.

* Minor electives are to be chosen from graphic design major electives not used in the Fine Arts major. Consult with an Art Department advisor before making course selections. One cooperative education placement is highly recommended.

Visual Communication Certificate of Completion (14-15 s.h.)

Non-Art students are invited to this certificate, which focuses on digitally-created design projects.

CERTIFICATE REQUIREMENTS:

ART 1210 Introduction to Graphic Design (JRN) 4 s.h.
ART 1700 Introduction to Computer Art 3 s.h.
Certificate Electives:
7-8 s.h.
ART 1030 Painting Fnds. for Art and Design (3 s.h.)

ART 2680 Graphic Design II (4 s.h.)

ART 3100* Advertising Design (4 s.h.)
ART 3150 Photoshop (BCA/JRN) (3 s.h.)
ART 3800* Web Design for Graphic Arts (3 s.h.)
JRN 2050 Public Relations Writing (3 s.h.)
JRN 3130 Photography I (ART) (3 s.h.)
JRN 3570 Editing and Design (3 s.h.)
WRT 2440 Technical Writing (3 s.h.)

WRT 3440 Advanced Technical Writing (3 s.h.)

Other electives may be approved by Art
Department advisor

14-15 s.h.

^{*} Note: ART 2680 Graphic Design II is prerequisite to ART 3100 and ART 3800.

ART HISTORY

See listing under ART.

ASL Education

See listing under SIGN LANGUAGE STUDIES.

BIOCHEMISTRY

Biochemistry Major: Bachelor of Science (38 s.h.)

•
4 s.h.
<u>2 s.h.</u>
38 s.h.
4 s.h.
4 s.h.
4 s.h.
3-4 s.h.
5 s.h.
4 s.h.
4 s.h.
4 s.h.
32- 33 s.h.

^{*}Biology minor includes these courses plus BIO 1030 and BIO 1040.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

BIOLOGY

Biology Major: Bachelor of Science (33-34 s.h.)

The major in Biology is designed to provide students with fundamental concepts as well as theoretical and practical experiences unique to the biological sciences. The curriculum provides students with the foundation knowledge and skills needed to pursue graduate or professional school; or a career in research, education or industry.

Required Major Courses:			
BIO 1030	General Biology I	4 s.h.	
BIO 1040	General Biology II	4 s.h.	
BIO 3010	Genetics	4 s.h.	
BIO 4950	Senior Seminar	2 s.h.	
Major electives*		6 s.h.	
Courses in Cellular or Molecular Biology:		7-8 s.h	

BIO 2260	Microbiology (4 s.h.)
BIO 3170	Invertebrate Zoology (4 s.h.)
BIO 3280	Immunology (4 s.h.)
BIO 3610	Biochemistry (4 s.h.)
BIO 3740	Cell Biology (3 s.h.)
BIO 4410	Molecular Biology (3 s.h.)
BIO 4620	Forensic Biology (3 s.h.)

Courses in Evolution, Epidemiology or Ecology: 6 s.h BIO 3210 General Ecology (3 s.h.)

^{**}Students planning graduate study are advised to select PHY 2630 and PHY 2640 in their plans.

BIO 3450	Epidemiology(3 s.h.)	
BIO 3750	Special Topics in Biology(1-3 s.h.)	
BIO 4010	Population Genetics (3 s.h.)	
BIO 4700	Biological Investigation (1-4 s.h.)	
		33-34 s.h.
REQUIRED SUPPORT CO	URSES:	
CHM 1110 General Che	emistry I	4 s.h.
CHM 1120 General Che	emistry II	4 s.h.
CHM 2210 Organic Che	emistry I	4 s.h.
PHY 2530 General Ph	ysics I or	
PHY 2630 Physics for	Scientists and Engineers I	4 s.h.
PHY 2540 General Phy	vsics II or	
PHY 2640 Physics for	Scientists and Engineers II	4 s.h.
MTH 2350 Probability a	and Statistics	4 s.h.
•		24 s.h.

^{*}Major electives may be selected from all BIO courses except BIO 1010, BIO 2240, or BIO 3150.

Biology Minor (23 s.h.)

REQUIRED .	Minor Courses:	
BIO 1030	General Biology I	4 s.h.
BIO 1040	General Biology II	4 s.h.
BIO 2240	Basic Human Physiology	4 s.h.
BIO 2260	Microbiology	4 s.h.
BIO 3010	Genetics	4 s.h.
BIO 3210	General Ecology or	
ENV 3210	Limnology: The Study of Lakes	_3 s.h.
		23 s.h.

Environmental Science Minor for Biology majors (24 s.h.)

Required Minor Courses:			
CHM 2210	Organic Chemistry I	4 s.h.	
CHM 2220	Organic Chemistry II	4 s.h.	
ENV 3210	Limnology: The Study of Lakes	3 s.h.	
ENV 3320	Environmental Analysis	4 s.h.	
ENV 4710	Environmental Pollutions	4 s.h.	
ESS 3260	Meteorology	4 s.h.	
	Minor electives (see major for choices)	<u>1 s.h.</u>	
		24 s.h.	

DNA Analysis Certificate of Completion (21 s.h.)

REQUIRED	CERTIFICATE COURSES:	
BIO 3010	Genetics	4 s.h.
BIO 4010	Population Genetics (FOR)	3 s.h.
BIO 4410	Molecular Biology	3 s.h.
BIO 4620	Forensic Biology (FOR*)	3 s.h.
CHM 3610	Biochemistry I (BIO)	4 s.h.
MTH 2350	Probability and Statistics	<u>4 s.h.</u>
		21 s.h.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

BIOMEDICAL SCIENCES

The undergraduate degree in Biomedical Sciences is an intensive science and mathematics program designed to prepare students for advanced study in a broad range of health care fields. Students completing the Biomedical Sciences degree can arrange their post-degree advanced training in clinical laboratories within and outside of the State of Michigan or can proceed towards admission into medical or

other professional allied health programs.

Admission to the 3000-level MTE courses

The Biomedical Sciences major is designed to prepare students for advanced study in their chosen field. Students wishing admission to the 3000-level MTE courses must meet the following requirements:

- Complete a minimum 48 s.h. of credit (a minimum 12 s.h. taken at Madonna) with a cumulative GPA of 3.0.
- Submit a signed form for a criminal record background check.
- · Submit a record of hepatitis B immunization or immunity.
- Complete the following courses with a cumulative GPA of 3.0 over these courses (taken at Madonna or at another institution) and with no more than one of these courses repeated because of an initial grade below C (2.0):

MTH 2350, Probability and Statistics, 4 s.h. BIO 2260, Microbiology (with laboratory), 4 s.h. BIO 2430, Anatomy and Physiology I, 3 s.h. BIO 2440, Anatomy and Physiology II, 3 s.h. BIO 3010, Genetics, 4 s.h. CHM 3610, Biochemistry I, 4 s.h.

Submit an application for admission to 3000-level MTE courses.

Biomedical Sciences: Bachelor of Science (35 s.h.)

REQUIRED .	Major Courses:		
BIO 3280	Clinical Immunology and Serology (MTE)	4 s	.h.
BIO 4270	Clinical Bacteriology	4 s	.h.
BIO 4410	Molecular Biology	3 s	.h.
MTE 1010	Medical Terminology	2 s	.h.
MTE 3050	Clinical Hematology and Hemostasis	3 s	.h.
MTE 3070	Clinical Immunohematology	3 s	.h.
MTE 3090	Urinalysis and Body Fluids	2 s	.h.
MTE 3170	Parasitology (BIO*)	4 s	.h.
MTE 3500	Medical Mycology and Virology (BIO*)	4 s	.h.
MTE 3640	Clinical Chemistry (CHM)	3 s	.h.
MTE 3700	Clinical Laboratory Operations	2 s	.h.
MTE 4950	Senior Seminar	1 s	<u>.h.</u>
_		35 s	.h.
~	Support Courses:		
BIO 2260	Microbiology		.h.
BIO 2430	Anatomy and Physiology I		.h.
BIO 2440	Anatomy and Physiology		.h.
BIO 3010	II Genetics	4 s	.h.
CHM 1110	General Chemistry I	4 s	.h.
CHM 1120	General Chemistry II	4 s	.h.
CHM 2210	Organic Chemistry I	4 s	.h.
CHM 3610	Biochemistry I	4 s	.h.
MTH 1210	Precalculus	5 s	.h.
MTH 2350	Probability and Statistics	4 s	.h.
PHY 2530	General Physics I	_ 4 s	<u>.h.</u>
		43 s	. h.

ADDITIONAL PROGRAM REQUIREMENTS:

- · Hepatitis B immunization or proof of immunity
- TB test (must be done annually)
- · Criminal background check
- · Pre-employment drug screening.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

BROADCAST AND CINEMA ARTS

The Broadcast and Cinema Arts program uses an integrated theoretical and intensive hands-on approach to prepare students for careers in

broadcast, film, and new media industries.

The curriculum, grounded in the liberal arts, offers a professional preparation that is based on field training and that encourages student input and innovation throughout. Students develop skills that characterize adaptable professionals with wide-ranging expertise that can be applied to positions in television, radio, film, and many different digital media contexts.

Students can qualify to teach television and radio production at the high school level with additional course completion in education (see in this Catalog OCCUPATIONAL TEACHER CERTIFICATION).

Broadcast and Cinema Arts Major: Bachelor of Arts (47 s.h.)

REQUIRED N	Major Courses:	
BCA 2020	Cinema Studies	3 s.h.
BCA 2310	Modern Radio Techniques I	1 s.h.
	Television Production I	3 s.h.
BCA 2810	Field Production and Editing I	3 s.h.
BCA 3030	Writing for Radio, TV, Film	3 s.h.
BCA 3610	Television Production II	3 s.h.
BCA 3750	Television News Reporting and Production	3 s.h.
BCA 3820	Field Production and Editing II	3 s.h.
BCA 3830	Post Production	3 s.h.
BCA 4010	Mass Communication (COM/JRN*)	3 s.h.
BCA 4630	Directing and Producing for Television	3 s.h.
BCA 4810, 4	4820, 4830* Capstone in Film Production	6 s.h.
BCA 4910	Cooperative Education	1 s.h.
BCA 3440	Talent and Performance for Television and Radio or	
COM 1050	Communication Concepts and Contexts or	
	Public Speaking: Theory and Practice	3 s.h.
	Major electives, to be chosen from:	6 s.h.
	BCA: any course or workshop listed or cross-	
	listed as BCA	
	ART 3150 Photoshop (BCA/JRN)	
	ART 3210 The Moving Image (BCA)	
	COM 1050 Communication Concepts and	
	Contexts	
	COM 2350 Public Speaking: Theory and Practice	
	COM 3410 Acting Techniques I (4 s.h.)	
	COM 3420 Acting Techniques II (4 s.h.)	
	JRN 1320 News Reporting (3 s.h.)	
	MUAP 2610 Lyric Theatre (1-2 s.h.)	
	4	17 s.h.

* BCA 4810, 4820, 4830 together constitute a one-year course beginning in Winter semester and running through Spring semester and Fall semester of the same year. The student registering for BCA 4810 is committing to stay with the course for one calendar year.

Broadcast and Cinema Arts Major: Associate of Arts (24 s.h.)

REQUIRED	Major Courses:	
BCA 1010	Survey of Broadcast, Film, and Digital Media	3 s.h.
BCA 2020	Cinema Studies <i>or</i>	
BCA 3440	Talent and Performance for Television and Radio or	
COM 1050	Communication Concepts and Contexts or	
COM 2350	Public Speaking: Theory and Practice	3 s.h.
BCA 2610	Television Production I	3 s.h.
BCA 2810	Field Production and Editing I	3 s.h.
BCA 3610	Television Production II	3 s.h.
BCA 3820	Field Production and Editing II	3 s.h.
	Major electives, to be selected from all BCA courses	6
	<u>s.h.</u>	
	2	24 s.h.

Broadcast and Cinema Arts Minor (24 s.h.)
REQUIRED MINOR COURSES:

BCA 1010 Survey of Broadcast, Film, and Digital Media 3 s.h.

BCA 2610	Television Production I	3 s.h.
BCA 2810	Field Production and Editing I	3 s.h.
BCA 3610	Television Production II	3 s.h.
BCA 4010	Mass Communication (COM/JRN*)	3 s.h.
	Minor electives, to be selected from all BCA courses	9
	<u>s.h</u> .	
	2	24 s.h.

Post-Production for Film and Video Certificate of Completion (17 s.h.)

REQUIRED CERTIFICATE COURSES:			
BCA 1800	Final Cut Pro Level I Certification	2 s.h.	
ART 3150	Photoshop (BCA/JRN)	3 s.h.	
BCA 3830	Post Production	3 s.h.	
BCA 2850	Audio for Film, Broadcast, and Media	3 s.h.	
BCA 3840	Visual Effects and Compositing I (ART)	3 s.h.	
BCA 3850	Visual Effects and Compositing II (ART)	<u>3 s.h</u> .	
		17 s.h.	

BUSINESS ADMINISTRATION

Business Administration Major: Bachelor of Science (36 s.h.)

(30 3)		
REQUIRED .	Major Courses:	
FIN 3150	Business Finance	3 s.h.
INB 3140	International Business	3 s.h.
MGT 3210	Operations Management	3 s.h.
MGT 3690	Entrepreneurship	3 s.h.
MIS 2400	Introduction to Management Information Systems	3 s.h.
MIS 2850	Web Design for Business Applications	3 s.h.
MRM 2400	Principles of Retail Management	3 s.h.
QS 4220	Human Resources Selection, Tests, and	
	Measurements or	
QS 4230	Marketing Research	3 s.h.
	Specialty Concentration, select from	
	Health Services Administration or	
	Human Resources Management or	
	International Business or Marketing or	
	Merchandising and Retail Management	
	see below	12 s.h.
		36 s.h.
REQUIRED .	Business Foundation Courses (21 s.h.):	
	Deinsinles of Assounting I	2 a h

ACC 2010 Principles of Accounting I 3 s.h. ACC 2020 Principles of Accounting II 3 s.h. BL 3330 Business Law I 3 s.h. BUS 3960 Business Ethics 3 s.h.

BUS 3960	Business Ethics	3 s.h.
BUS 4950	Business Capstone	3 s.h.
MKT 2440	Principles of Marketing	3 s.h.
QS 3550	Applied Business Statistics	_3 s.h.
		21 s.h.

Required Support Courses:			
CIS 2380	Introduction to Computers	3 s.h.	
ECN 2720	Principles of Microeconomics	3 s.h.	
ECN 2730	Principles of Macroeconomics	3 s.h.	
MGT 2360	Principles of Management	3 s.h.	

DC1 12/30	Timespies of Macrocconomics	5 5.11.
MGT 2360	Principles of Management	3 s.h.
MGT 3020	Organizational Behavior	3 s.h.
MTH 1050	College Algebra	4 s.h.
MTH 2350	Probability and Statistics	4 s.h.
		23 s.h.

Concentration Requirements

TILLIE DI	EXTRES TESMINISTRETION CONCENTRATION	
MIS 3350	Health Care Informatics	3 s.h.
HSA 3750	Health Care Management	3 s.h.
HSA 4740	Health Care Finance	3 s.h.
HSA 4910	Internship *	3 s.h.

HEALTH SERVICES ADMINISTRATION CONCENTRATION

12 s.h.

*For a student with at least one year of full-time work experience related to the
concentration, the course HSA 4250, Health Care Law, 3 s.h., may be substi-
tuted for HSA 4910, at the discretion of the department.

HUMAN RESOURCES MANAGEMENT CONCENTRATION			
BL 3500	Employment Law	3 s.h.	
MGT 3100	Strategic Human Resources Planning	3 s.h.	
MGT 4350	Compensation	3 s.h.	
MGT 4910	Internship*	<u>3 s.h.</u>	

*For a student with at least one year of full-time work experience related to the concentration, the course MIS 4570, Human Resources Information Systems, 3 s.h., may be substituted for MGT 4910, at the discretion of the department.

INTERNATIONAL BUSINESS CONCENTRATION

HIS 4320	Foreign Policy History of the United States	3 s.h.
INB 4350	International Trade Structures and Systems	3 s.h.
INB 4450	International Management	3 s.h.
INB 4910	Internship*	3 s.h.
		12 s.h.

*For a student with at least one year of full-time work experience related to the concentration, the course INB 4550, Advanced Analysis in International Business, 3 s.h., or a study-abroad experience, 3 s.h., may be substituted for INB 4910, at the discretion of the department.

MARKETING CONCENTRATION

MKT 2550	Consumer Behavior (HMG/NFS)	3 s.h.
MKT 3730	Principles of Advertising	3 s.h.
MKT 4560	Marketing Management	3 s.h.
MKT 4910	Internship*	_3 s.h.
	-	12 s.h.

*For a student with at least one year of full-time work experience related to the concentration, the course MKT 3870, Sales Management, 3 s.h., may be substituted for MKT 4910, at the discretion of the department.

MERCHANDISING AND RETAIL MANAGEMENT CONCENTRATION

MRM 3010 Specialty Merchandising	3 s.h.
MRM 3480 Retail Buying	3 s.h.
MRM 4470 Retail Merchandising	3 s.h.
MRM 4910 Internship*	<u>3 s.h.</u>
	12 s h

*For a student with at least one year of full-time work experience related to the concentration, the course MRM 3080, Visual Merchandising, 3 s.h., may be substituted for MRM 4910, at the discretion of the department.

Business Administration and Leadership Major: Bachelor of Science (30 s.h.)

The Business Administration and Leadership program is an all-online offering to Haitian nationals with a minimum of two years of transfer credit who meet other specific admission criteria. The program leads to a Bachelor of Science in Business Administration and Leadership and a Certificate of Completion in Community Leadership.

GENERAL EDUCATION/UNIVERSITY CORE REQUIREMENTS:

GENERAL E	DUCATION/UNIVERSITY CORE REQUIREMENTS:	
GOAL 1:		
ESL 3190	ESL Reading and Writing for Business	3 s.h.
ESL 4230	Research Paper Writing	3 s.h.
GOAL 2:		
RST	Religious Studies courses	6 s.h.
GOAL 3:		
HUM 2010	Medium and the Message	4 s.h.
GOAL 4:		
MTH 2350	Probability and Statistics	4 s.h.
CIS 2380	Introduction to Computers	3 s.h.
GOAL 5:		
PSY 1010	General Psychology	3 s.h.
MGT 2360	Principles of Management	3 s.h.
SOC 1010	Introduction to Sociology	3 s.h.
GOAL 6:		
ECN 2730	Principles of Macroeconomics	3 s.h.

REQUIRED MAJOR COURSES:

BUS 3960	Business Ethics	3 s.h.
FIN 3150	Business Finance	3 s.h.
MGT 3210	Operations Management	3 s.h.
MIS	Upper-division elective	3 s.h.
QS 4230	Marketing Research	3 s.h.
*SOC 1010	Introduction to Sociology	4 s.h.
*SOC 1300	Introduction to Community Leadership	1 s.h.
*SOC 3120	Diversity, Discrimination, and Social Justice	3 s.h.
*SOC 3420	Urban Community	4 s.h.
*SOC 4890	Seminar in Community Leadership I	3 s.h.
		30 s.h.

*Completion of the five starred courses also earns the Certificate of Completion in Community Leadership.

REQUIRED BUSINESS FOUNDATION COURSES (15 S.H.):

BUS 4950	Business Capstone I	3 s.h.
MKT 2440	Principles of Marketing	3 s.h.
QS 3550	Applied Business Statistics	_3 s.h.
		15 s.h.
-	~ ~	

REQUIRED SUPPORT COURSES:

CIS 2380	Introduction to Computers	3 s.h.
ECN 2720	Principles of Microeconomics	3 s.h.
ECN 2730	Principles of Macroeconomics	3 s.h.
MGT 2360	Principles of Management	3 s.h.
MTH 1050	College Algebra	4 s.h.
MTH 2350	Probability and Statistics	_4 s.h.
		20 s h

‡SOC 4890 and BUS 4950 are to be taken together in the final semester with an internship integrated with both.

Business Administration Major: Associate of Science (30 s.h.)

REQUIRED MAJOR COURSES:

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ACC 2010	Principles of Accounting I	3 s.h.
CIS 2380	Introduction to Computers	3 s.h.
ECN 2720	Principles of Microeconomics	3 s.h.
MGT 2360	Principles of Management	3 s.h.
MKT 2440	Principles of Marketing	3 s.h.
	Major electives (School of Business Courses)	15 s.h.
		30 s.h.

Business Administration Minor (24 s.h.)

REQUIRED MINOR COURSES:

ACC 2010	Principles of Accounting I	3 s.h.
CIS 2250	Computer Fundamentals or	
CIS 2380	Introduction to Computers	2-3 s.h.
ECN 2720	Principles of Microeconomics	3 s.h.
	Minor electives (School of Rusiness courses)	15-16 s h

RECOMMENDED COURSES:

BL 3330	Business Law I	3 s.h.
MGT 2360	Principles of Management	3 s.h.
MKT 2440	Principles of Marketing	3 s.h.

24 s.h.

e-Commerce Certificate of Completion (9 s.h.)

REQUIRED CERTIFICATE COURSES: BUS 3530 Foundations of a Commerce

BUS 3530	Foundations of e-Commerce	3 s.h.
MIS 2850	Web Design for Business Applications	3 s.h.
MGT 4300	Strategic Planning in an e-Commerce Environment	3 s.h.
		9 s.h.

Entrepreneurship Certificate of Completion (18 s.h.)

Non-business majors are invited to this certificate: develop your own

business around your passion and skills.

CERTIFICATE REQUIREMENTS:			
ACC 2010 Principles of Accounting I	3 s.h.		
MGT 2360 Principles of Management	3 s.h.		
MKT 2440 Principles of Marketing	3 s.h.		
MIS 2850 Web Design for Business Applications	3 s.h.		
MKT 3100 Professional Selling	3 s.h.		
MGT 3690 Entrepreneurship	_3 s.h.		
	18 s.h.		
Required Support Course:			
CIS 2380 Introduction to Computers	3 s.h		

Fundamentals of Quality and Operations Leadership Certificate of Completion (9 s.h.)

REQUIRED CERTIFICATE COURSES:	
MGT 3210 Operations Management	3 s.h.
QOM 3560 Teaming	3 s.h.
QOM 3630 Material and Purchasing Management	3 s.h.
	9 s.h.

BUSINESS SPANISH

See listing under SPANISH.

CARE MANAGEMENT

See listings under AGING STUDIES and under LONG TERM CARE ADMINISTRATION.

CAREER COMMUNICATION

See listing under COMMUNICATION STUDIES.

CHEMISTRY

Chemistry Major: Bachelor of Science (38 s.h.)

Required Major Courses:			
CHM 1110 General Chemistry I	4 s.h.		
CHM 1120 General Chemistry II	4 s.h.		
CHM 2210 Organic Chemistry I	4 s.h.		
CHM 2220 Organic Chemistry II	4 s.h.		
CHM 3310 Quantitative Analysis	4 s.h.		
CHM 3510 Advanced Inorganic Chemistry	4 s.h.		
CHM 4410 Physical Chemistry I	4 s.h.		
CHM 4420 Physical Chemistry II	4 s.h.		
CHM 4510 Instrumental Analysis	4 s.h.		
CHM 4950 Senior Seminar	2 s.h.		
	38 s.h.		
RECOMMENDED ELECTIVES:			
CHM 3610 Biochemistry I	4 s.h.		
CHM 3620 Biochemistry II	4 s.h.		
CHM 4900 Problems in Chemistry	1-4 s.h.		
	9-12 s.h.		
Required Support Courses (20-21 s.h.):			
CSC 2250 JavaScript Programming or			
MIS 2800 Introduction to Visual Basic Programming	3-4 s.h.		
MTH 2510 Calculus with Analytic Geometry I	5 s.h.		
MTH 2520 Calculus with Analytic Geometry II	4 s.h.		
PHY 2530 General Physics I or			
PHY 2630 Physics for Scientists and Engineers I*	4 s.h.		
PHY 2540 General Physics II or			
PHY 2640 Physics for Scientists and Engineers II*	4 s.h.		
<u>'</u>	20-21 s.h.		
*Students planning graduate study are advised to select PHY 2	2630 and		
PHY 2640 in their plans.			

NOTE: Students seeking teacher certification are also required to take (1) CHM 3610, Biochemistry I, as part of the major, and (2) ESS 2160, Earth Science, or ESS 3290, Principles of Astronomy, as a support course.

Chemistry Minor (20 s.h.)

Required Minor Courses:	
CHM 1110 General Chemistry I	4 s.h.
CHM 1120 General Chemistry II	4 s.h.
CHM 2210 Organic Chemistry I	4 s.h.
CHM 2220 Organic Chemistry II or	
CHM 3610 Biochemistry I	4 s.h.
CHM 3310 Quantitative Analysis	<u>4 s.h.</u>
	20 s h

Environmental Science Minor for Chemistry majors (24 s.h.)

(= : =::::)				
REQUIRED MINOR COURSES:				
BIO 1030	General Biology I	4 s.h.		
BIO 1040	General Biology II	4 s.h.		
ENV 3210	Limnology: The Study of Lakes	3 s.h.		
ENV 3320	Environmental Analysis	4 s.h.		
ENV 4710	Environmental Pollutions	4 s.h.		
ESS 3260	Meteorology	4 s.h.		
	Minor electives (see major for choices)	<u>1 s.h.</u>		
		24 s.h.		
PEGUIDED CURRENT COURSE.				

REQUIRED SUPPORT COURSE:

MTH 2350 Probability and Statistics	4 s.h.
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Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

CHILD DEVELOPMENT

Transfer students seeking to further their studies in a Child Development program may have their prior course work evaluated by the department.

For a program that leads to Michigan teacher certification, see the listing under EARLY CHILDHOOD EDUCATION.

Child Development Major: Bachelor of Science (45-47 s.h.)

REQUIRED MAJOR COURSES:

KEQUIKED .	MAJOR COURSES:	
CD 2160	Child Development: Birth through Age Eight	3 s.h.
ECE 2250	Programming for Infants and Toddlers	3 s.h.
NFS 2380	Child Nutrition	3 s.h.
ECE 2650	The Role of Play in Early Childhood Curriculum	3 s.h.
ECE 3100	Language Development and Emergent Literacy	3 s.h.
ECE 3160	Administration of Child Care Centers	3 s.h.
FCS 3530	Marriage and the Family	4 s.h.
ECE 3580	Early Childhood Curriculum Development	3 s.h.
ECE 3710	Programming for Infants, Toddlers, and Preschoole	rs
	with Special Needs	3 s.h.
CD 3940	Preschool Practicum with Seminar	1-3 s.h.
ECE 4130	Home/School Partnerships to Support Learners	3 s.h.
ECE 4160	Assessing Young Children	3 s.h.
CD 4500	Issues Challenging Children and Families	3 s.h.
CD 4920	Directed Teaching Seminar: Child Development	1 s.h.
CD 4930	Directed Teaching: Child Development*	4 s.h.
CD 4950	Senior Seminar	2 s.h.
	45	5-47 s.h.

^{*} Students with an associate degree in Child Development may be approved to substitute CD 4940 for 2 s.h., in combination with

transfer credits, for CD 4930 for 4 s.h. See the Program Director to request an evaluation of prior credits.

Interim Occupational Certificate (Vocational Authori-

zation) for high school teaching of Child Care is available with a major in Child Development and appropriate work experience. See OCCUPATIONAL TEACHER CERTIFICATION on page 102.

Child Development Major: Associate of Science (28-30 s.h.)

REQUIRED	MAJOR	Courses:
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CD 2160	Child Development: Birth through Age Eight	3 s.h.
ECE 2250	Foundations of Early Childhood Education	3 s.h.
NFS 2380	Child Nutrition	3 s.h.
ECE 2650	The Role of Play in Early Childhood Curriculum	3 s.h.
ECE 3100	Language Development and Emergent Literacy	3 s.h.
ECE 3160	Administration of Child Care Centers	3 s.h.
ECE 3580	Early Childhood Curriculum Development	3 s.h.
CD 3940	Preschool Practicum with Seminar	1-3 s.h.
	Major electives	6 s.h.
		$28-\overline{30}$ s.h.

Child Development Minor (22-24 s.h.)

REQUIRED MINOR COURSES:

MINOR COURSES:	
Child Development: Birth through Age Eight	3 s.h.
Preschool Practicum with Seminar	1-3 s.h.
Foundations of Early Childhood Education	3 s.h.
The Role of Play in Early Childhood Curriculum	3 s.h.
Language Development and Emergent Literacy	3 s.h.
Early Childhood Curriculum Development	3 s.h.
Programming for Infants, Toddlers, and Preschoole	rs
with Special Needs	3 s.h.
Child Nutrition	3 s.h.
22	2-24 s.h.
	Child Development: Birth through Age Eight Preschool Practicum with Seminar Foundations of Early Childhood Education The Role of Play in Early Childhood Curriculum Language Development and Emergent Literacy Early Childhood Curriculum Development Programming for Infants, Toddlers, and Preschoole with Special Needs Child Nutrition

Infant-Toddler Caregiver Certificate of Completion (9 s.h.)

CERTIFICATE REQUIREMENTS:

ECE 2250	Programming for Infants and Toddlers	3 s.h.
ECE 3100	Language Development and Emergent Literacy	3 s.h.
ECE 3710	Programming for Infants, Toddlers, and Preschoolers	
	with Special Needs	3 s.h.
	•	9 s.h.

CHINESE

Chinese Language and Culture Certificate of Completion** (15 s.h.)

CERTIFICATE REQUIREMENTS:

AHIS 3350 A	Asian Art: India, China, Japan <i>or</i>	
HIS 4632	Global Studies: Modern Asia or	
RST 1460	Survey of Eastern Religions	3 s.h.
CHN 1010 I	Beginning Mandarin Chinese I or	
CHN 1100 M	Mandarin Chinese for Business	3 s.h.
CHN 1020 I	Beginning Mandarin Chinese II	3 s.h.
CHN 2010 I	Intermediate Mandarin Chinese I	3 s.h.
CHN 2020 1	Intermediate Mandarin Chinese II	3 s.h.
		15 s.h.

**Currently on hold. Please check with Language, Literature, Communication and Writing Department for details.

CHURCH MUSIC

See listing under MUSIC.

CLINICAL IMAGING SCIENCES

See listing under PRE-CLINICAL IMAGING SCIENCES

CLINICAL LABORATORY SCIENCES

See BIOMEDICAL SCIENCES: HEALTH SCIENCES

COMMUNICATION ARTS FOR SECONDARY TEACHERS

This major is designed for students planning to enter the grades 6-12 Teacher Education Program. Consult advisors in the College of Arts and Humanities to review the full range of majors in related areas.

Communication Arts Major for Secondary Teachers: Bachelor of Arts (40 s.h.)

REQUIRED MAJOR COURSES:

3 s.h.
3 s.h.
3 s.h.
3-4 s.h.
3 s.h.
4 s.h.
3 s.h.
5-6 s.h.

40 s.h.

Students must complete an English minor for teacher certification with this major.

COMMUNICATION STUDIES

Communication Studies Major: Bachelor of Arts (36 s.h.)

REQUIRED MAJOR COURSES:

REQUIRED WAJOR COURSES.	
COM 1050 Communication Concepts and Contexts	3 s.h.
COM 2120 Interpersonal Communication	3 s.h.
COM 2140 Argumentation and Persuasion	3 s.h.
COM 2350 Public Speaking: Theory and Practice	3 s.h.
COM 3100 Small Group Communication	3 s.h.
COM 4010 Mass Communication (JRN*)	3 s.h.
COM 4950 Senior Seminar: Applied Communication Theory	3 s.h.
Required concentration, select one concentration	
from (see below):	15 s.h.
Public Advocacy or	
Public Communication or	

Public Communication *or*Oral Communication *or*Organizational Communication

36 s.h.

ORAL COMMUNICATION CONCENTRATION (15 S.H.)

Choose 15 s.h. from the following		COM 4750 Special Topics in Communication	
BCA 2810 Field Production and Editing I	3 s.h.	(3 s.h.)	
COM 2330 Interviewing Techniques	3 s.h.	24	1-25 s.h.
COM 2550 Oral Interpretation of Literature (ENG)	3 s.h.	Speech Communication Minor (24 s.h.)	
COM 3410 Acting Techniques I	4 s.h.	NOTE: For teacher certification in Speech, it is the	
COM 3440 Talent and Performance for Television and Radio		Speech Communication minor that must be completed	
(BCA*)	3 s.h.	-	
COM 4750 Special Topics in Communication	3 s.h.	Required Minor Courses:	
COM 4000 Rhetorical Theory and Criticism (WRT*)	4 s.h.	COM 1050 Communication Concepts and Contexts	3 s.h.
COM 4910 Cooperative Education in Communication	3 s.h.	COM 2350 Public Speaking: Theory and Practice	3 s.h.
COM 4930 Communication Practicum	3 s.h.	COM 2550 Oral Interpretation of Literature (ENG)	3 s.h.
MUAP 2610 Lyric Theatre	1-3 s.h.	COM 3100 Small Group Communication*	3 s.h.
SW 2160 Empathy Listening Skills	1 s.h.	COM 4010 Mass Communication (JRN*/BCA)	3 s.h.
WRT 2050 Creative Writing	3 s.h.	Minor electives, to be chosen from:	9 s.h.
Elective course work agreed with the		COM 2330 Interviewing Techniques (3 s.h.)	
Communication advisor	1-6 s.h.	COM 2140 Argumentation and Persuasion (3 s.h.	ı.)
Public Advocacy Concentration (15 s.h.)		COM 2610 Television Production I (BCA*)	
AGE 4000 Proposal Writing and Grant Administration (SC	OC) 2 s.h.	(3 s.h.)	
JRN 2050 Public Relations Writing	3 s.h.	COM 3000 Children's Literature and	
IDS 3000 Social Change and Challenges or		Drama (ENG*)(4 s.h.)	
SOC 2210 Social Problems or		COM 3410 Acting Techniques I (4 s.h.)	
RST 3100 Franciscan Values, Social Justice, and Service	3-4 s.h.	COM 3420 Acting Techniques II (4 s.h.)	
SOC 1300 Introduction to Community Leadership	1 s.h.		24 s.h.
Individualized Theme Studies: course work		* NOTE: If the Speech minor is being developed specifically fo	
agreed with the Communication advisor	6 s.h.	dorsement of an Elementary (K-8) teaching certificate, the stu-	dent
		may choose to substitute an elective for COM 3100.	
Public Communication Concentration (15 s.h.)			
COM 2550 Oral Interpretation of Literature (ENG) or		Career Communication Certificate of Completio	n
COM 3410 Acting Techniques I	3-4 s.h.	(18 s.h.)	
JRN 2050 Public Relations Writing <i>or</i>		CERTIFICATE REQUIREMENTS:	
WRT 3260 Business and Professional Writing	3 s.h.	COM 1050 Communication Concepts and Contexts	3 s.h.
Individualized Theme Studies (Course work agree		COM 2140 Argumentation and Persuasion	3 s.h.
with the Communication Advisor)	8-9 s.h.	COM 2350 Public Speaking: Theory and Practice	3 s.h.
ORGANIZATIONAL COMMUNICATION CONCENTRATION (15 S.H	r.)	COM 3100 Small Group Communication	3 s.h.
COM 3520 Organizational Communication	3 s.h.	Select 6 s.h. from the following:	6 s.h.
RST 4080 Moral Issues in Business	3 s.h.	JRN 1320 News Reporting (WRT) (3 s.h.)	
WRT 3260 Business and Professional Writing	3 s.h.	JRN 2050 Public Relations Writing (3 s.h.)	
Choose 6 credits from the following:	6 s.h.	WRT 2440 Technical Writing (3 s.h.)	
COM 4000 Rhetorical Theory and Criticism	0 5.11.	WRT 3260 Business and Professional Writing (3 s.	h.)
(WRT*) (4 s.h.)		COM/JRN 3910/4910 Co-op/Internship (1-3 s.h.)	,
COM 4750 Special Topics in Communication (3 s.h.)		1 , ,	18 s.h.
COM 4910 Cooperative Education in		COMPLITED INFORMATION OVOTENO	
Communication (3 s.h.)		COMPUTER INFORMATION SYSTEMS	
COM 4930 Communication Practicum (3 s.h.))	See listing under MANAGEMENT INFORMATION SYSTE	EMS.
JRN 1320 News Reporting (3 s.h.)	,	•	
JRN 2050 Public Relations Writing (3 s.h.)			
SW 2160 Empathy Listening Skills (1		COMMUNITY LEADERSHIP	
s.h.) WRT 2440 Technical Writing (3 s.h.)		Community Leadership Certificate of Completion	,
			1
Communication Studies Minor (24-25 s.h.)		(10 s.h.)	
Required Minor Courses:		Required Certificate Courses:	
COM 1050 Communication Concepts and Contexts	3 s.h.	SOC 1300 Introduction to Community Leadership	1 s.h.
COM 2120 Interpersonal Communication	3 s.h.	SOC 3120 Diversity, Discrimination, and Social Justice	3 s.h.
COM 2140 Argumentation and Persuasion	3 s.h.	SW 4700 Practice Methods IV: Communities (SOC)	3 s.h.
COM 2350 Public Speaking: Theory and Practice	3 s.h.	SOC 4890 Seminar in Community Leadership	3 s.h.
COM 3100 Small Group Communication	3 s.h.		10 s.h.
COM 4010 Mass Communication (JRN*)	3 s.h.	Required Support Course:	
Two of the following courses:	6-7 s.h.	SOC 1010 Introduction to Sociology	4 s.h.
COM 2550 Oral Interpretation of Literature			
(ENG) (3 s.h.)		RECOMMENDED SUPPORT COURSE:	
COM 3520 Organizational Communication		RST 3100 Franciscan Values, Social Justice, and Service	3 s.h.
(3 s.h.)			J 5.11.
COM 4000 Rhetorical Theory and Criticism			
(WRT*) (4 s.h.)		COMPUTER SCIENCE	
. , , ,		Computer Science Major Pachelon of Science	

Computer Science Major: Bachelor of Science

(38 s.h.)

REQUIRED	Major Cours	ES:	
CSC 2080	Computer Scie	ence I	3 s.h.
CSC 2480	Computer Scie	ence II	3 s.h.
CSC 3030	Operating Syst	tems	3 s.h.
CSC 3050	Computer Arc	hitecture	3 s.h.
	Analysis of Al		3 s.h.
CSC 3290	Programming	Language Concepts	3 s.h.
CSC 4850	Seminar: Com	puters and Society	2 s.h.
	Electives (sele	ct minimum of 18 s.h.):	18 s.h.
	CSC 2010,	Web Fundamentals (2 sh.)	
	CSC 2250	JavaScript Programming (3 s.h.)	
	CSC 2350	Web Programming (3 s.h.)	
	CSC 2450	Introduction to Mobile Applications	
		Programming (3 s.h.)	
	CSC 3350	Object-Oriented Programming (3 s.h.)
	CSC 3490	Artificial Intelligence (3 s.h.)	
	CSC 3550	Mobile Game Programming (3 s.h.)	
	CSC 3910	Cooperative Education in Soft-	
		ware (1-3 s.h.)	
	ICSC 4130	Language Theory (3 s.h.)	
	MTH 3410	Linear Algebra (3 s.h.)	
	MTH 3510	Calculus with Analytical Geometry	
		III (4 s.h.)	
	PHY 4510	Electronics: Digital Techniques (4 s.h	.)
			38 s.h.

IComputer Science majors planning to apply to graduate school are advised to include CSC 4130 in their electives.

REQUIRED SUPPORT COURSES:

MTH 2510 Calculus with Analytic Geometry I*	5 s.h.
MTH 2520 Calculus with Analytic Geometry II*	4 s.h.
* Both sounded must be sounded with a sunder of C (20) on both	

^{*} Both courses must be completed with a grade of C (2.0) or better within the first 20 hours of the Computer Science major.

Computer Science Major: Associate of Science (30-32 s.h.)

30-32 hours from required courses listed above.

Computer Science Minor (21 s.h.)

REQUIRED	MINOR COURS.	ES:	
CSC 2080	Computer Scientification	ence I	3 s.h.
CSC 2480	Computer Scient	ence II	3 s.h.
CSC 3030	Operating Sys	tems <i>or</i>	
CSC 3050	Computer Arc	chitecture	3 s.h.
	Electives, sele	ect courses from:	12 s.h.
		Web Fundamentals (2 s.h.)	
	CSC 2250	JavaScript Programming (3 s.h.)	
	CSC 2350	Web Programming (3 s.h.)	
	CSC 2450	Introduction to Mobile Applica-	
		tions Programming (3 s.h.)	
	CSC 3030	Operating Systems (3 s.h.)	
	CSC 3050	Computer Architecture (3 s.h.)	
	CSC 3290	Programming Language Concepts	
		(3 s.h.)	
	CSC 3350	Object-Oriented Programming (3 s.h	.)
	CSC 3550	Advanced Mobile Applications Pro-	
		gramming (3 s.h.)	
	CSC 3550	Mobile Game Programming (3 s.h.)	
	MTH 2520	Calculus with Analytic	
		·	
	Geometry I	I(4 s.h.)	
	•		21 s.h.
REQUIRED	Support Coul	RSE:	

COMPUTER TECHNOLOGY

Computer Technology Major: Associate of Science (30 s.h.)

REQUIRED MAJOR COURSES:	
ACC 2010 Principles of Accounting I	3 s.h.
CIS 2380 Introduction to Computers	3 s.h.
ECN 2720 Principles of Microeconomics	3 s.h.
MIS 2400 Introduction to Management Information Syste	ems 3 s.h.
MIS 2800 Introduction to Visual Basic Programming	4 s.h.
MIS 2910 Internship I	1 s.h.
Major electives*	13 s.h.
	30 s.h.

^{*}For major electives, see choices under MANAGEMENT INFORMA-TION SYSTEMS.

Computer Technology and Entrepreneurship Certificate of Achievement (31 s.h.)

Certifica	te of Achievement (3 i s.n.)	
CERTIFICAT	TE REQUIREMENTS:	
CSC 1820	Introduction to Programming	3 s.h.
MIS 1150	Technology Entrepreneurship	3 s.h.
MIS 2010	Social Media Marketing (MKT)	3 s.h.
MIS 2030	Introduction to Mobile Computing	3 s.h.
MIS 2110	3D Design and Printing	3 s.h.
MIS 2690	Project Seminar	3 s.h.
MIS 2850	Web Design for Business Applications	3 s.h.
MKT 2440	Principles of Marketing	3 s.h.
SOC 1300	Introduction to Community Leadership	1 s.h.
WRT 1010	College Composition I	3 s.h.
WRT 1020	College Composition II	3 s.h.
		31 s.h.
REQUIRED	Support Course:	

CRIME LABORATORY TECHNICIAN

See listing under FORENSIC SCIENCE.

CIS 2380 Introduction to Computers

CRIMINAL JUSTICE

NOTE: With the exception of CJ 4950, Senior Seminar, all required courses are offered online as well as in classroom format. Many electives are offered online throughout the year.

3 s.h.

STUDENT DECORUM AND ETHICS: Professional behavior, criminal record, and appropriate attitude are considered when determining admittance to or continuation in the Criminal Justice program. This includes adherence to Madonna University's Student Conduct Code.

If at any time a Criminal Justice faculty member has a concern about the decorum and/or ethical conduct of a Criminal Justice student, she/he may request the convening of a Criminal Justice faculty review committee, with the student, to determine if the student will remain in the Criminal Justice program and the conditions of continuation in the program. This committee will consist of the department chair and at least one additional full time Criminal Justice faculty member.

Criminal Justice Major: Bachelor of Science (45 s.h.)

REQUIRED MAJOR COURSES:

5 s.h.

CJ 1020	Introduction to Criminal Justice	3 s.h.
CJ 1210	Introduction to Corrections	3 s.h.
CJ 1550	Police Process and Community Relations	3 s.h.
CJ 2010	Criminal Justice Organization and Administration	3 s.h.
CJ 2350	American Judicial Process	3 s.h.
CJ 2650	Criminal Law	3 s.h.
CJ 3050	Criminal Procedure	3 s.h.
CJ 3210	Principles of Criminology	3 s.h.

MTH 2510 Calculus with Analytic Geometry I

CJ 3230	Juvenile Justice	3 s.h.	(15 s.h.	.)	
CJ 4110	Ethics in Criminal Justice	3 s.h.	•	CERTIFICATE COURSES:	
CJ 4450	Interviewing and Investigative Report Writing	3 s.h.	CJ 1020	Introduction to Criminal Justice	3 s.h.
CJ 4950	Senior Seminar	3 s.h.	CJ 3210	Principals of Criminology	3 s.h.
	Major electives, to be chosen from:	9 s.h.	CJ 3500	Homeland Security and Terrorism	3 s.h.
	CJ 1240 Introduction to Private Investigations		CJ 4150	Criminal Investigation	3 s.h.
	CJ 1250 Introduction to Private Security (3 s.l		CJ 4450	Interviewing and Investigative Report Writing	<u>3 s.h.</u>
	CJ 3500 Homeland Security and Terrorism (3	s.h.)			15 s.h.
	CJ 3550 Parole and Probation (3 s.h.)		Drivato	Investigation Certificate of Completion	n
	CJ 3820 Forensic Psychology (PSY*) (3 s.h.)		(15 s.h.		
	CJ 4050 Constitutional Law (3 s.h.) CJ 4120 Organized Crime and Gangs in			O CERTIFICATE COURSES:	
	America (3 s.h.)		CJ 1020	Introduction to Criminal Justice	3 s.h.
	CJ 4140 Drugs, Crime, and the Justice System	(3 s h)	CJ 1020 CJ 1240	Introduction to Criminal Justice Introduction to Private Investigations	3 s.n.
	CJ 4150 Criminal Investigation (3 s.h.)	(5 5.11.)	CJ 2350	American Judicial Process	3 s.h.
	CJ 4230 Homicide Investigation (3 s.h.)		CJ 4150	Criminal Investigation	3 s.h.
	CJ 4750 Special Topics in Criminal Justice (3	s.h.)	CJ 4450	Interviewing and Investigative Report Writing	3 s.h.
		45 s.h.			15 s.h.
At least 21	hours of criminal justice courses, including CJ 495	0, Crimi-	Duivata	Converte Contificate of Completion (A	a b)
	Senior Seminar, must be completed at Madonna Un			Security Certificate of Completion (9	S.H.)
				CERTIFICATE COURSES:	2 1
Crimina	ll Justice Major: Associate of Science		CJ 1020	Introduction to Criminal Justice	3 s.h.
(24 s.h.			CJ 1250	Introduction to Private Security	3 s.h.
Required	MAJOR COURSES:		CJ 4450	Interviewing and Investigative Report Writing	3 s.h. 9 s.h.
CJ 1020	Introduction to Criminal Justice	3 s.h.			<i>y</i> 5.11.
CJ 1210	Introduction to Corrections	3 s.h.	Forensi	c Accounting Certificate of Completion	1
CJ 1550	Police Process and Community Relations	3 s.h.	(16 s.h.	.):	
CJ 2350	American Judicial Process	3 s.h.	REQUIRED	CERTIFICATE COURSES:	
CJ 2650	Criminal Law	3 s.h.	CJ 4150	Criminal Investigation	3 s.h.
CJ 3210 CJ 3230	Principles of Criminology Juvenile Justice	3 s.h. 3 s.h.	CJ 4450	Interviewing and Investigative Report Writing	3 s.h.
CJ 4450	Interviewing and Investigative Report Writing	3 s.h.		Principles of Accounting I	3 s.h.
C3 7730	interviewing and investigative Report writing	24 s.h.		Accounting Information Systems	3 s.h.
		2 1 5111	ACC 4800	*Forensic Accounting	3 s.h. 15 s.h.
Crimina	ll Justice Minor (21 s.h.)		*1 4	talana at Madama Tininamita	13 8.11.
	MINOR COURSES:			taken at Madonna University.	
CJ 1020	Introduction to Criminal Justice	3 s.h.		more than two of the courses in the certificate prog	gram will
CJ 1210	Introduction to Corrections	3 s.h.	be accepte	d as transfer credit.	
CJ 1550	Police Process and Community Relations	3 s.h.	Eoronei	c Psychology Certificate of Completion	n
CJ 2350	American Judicial Process	3 s.h.			
CJ 3210	Principles of Criminology	3 s.h.	(17 s.h.		
CJ 3230	Juvenile Justice	3 s.h.	CJ 1020	O CERTIFICATE COURSES: Introduction to Criminal Justice	2 a h
CJ 4450	Interviewing and Investigative Report Writing	3 s.h.	CJ 1020 CJ 3210	Principles of Criminal Justice Principles of Criminal Justice	3 s.h. 3 s.h.
		21 s.h.		Abnormal Psychology	3 s.n. 4 s.h.
Animal	Couplify Importing tion Contificate of			Forensic Psychology (CJ)	4 s.n. 3 s.h.
	Cruelty Investigation Certificate of			Theories of Personality	4 s.h.
	tion (10 s.h.)		131 4220	Theories of Tersonality	17 s.h.
-	Certificate Courses:	2 - 1-			1 / 5.11.
CJ 4150 CJ 4450	Criminal Investigation	3 s.h.	DE:-		
	Interviewing and Investigative Report Writing 10 Do Animals Matter? (SSC)	3 s.h.	DEAF	COMMUNITY STUDIES	
110101 31	10 Do Allillais Matter: (SSC)	4 s.h. 10 s.h.	See listing	g under SIGN LANGUAGE STUDIES.	
		10 3.11.		-	
			D = 1 = -	NITIA CADE	
Crimo S	cene Practice Certificate of		DEME	NTIA CARE	

Crime Scene Practice Certificate of Completion (16 s.h.)

REQUIRED CERTIFICATE COURSES:

CJ 1020	Introduction to Criminal Justice	3 s.h.
CJ 3050	Criminal Procedures (FOR)	3 s.h.
CJ 4280	Homicide Investigation	3 s.h.
CJ 4450	Interviewing and Investigative Report Writing	3 s.h.
FOR 1010	Introduction to Forensic Science	4 s.h.
		16 c h

Homeland Security Certificate of Completion

DEMENTIA CARE

See listing under AGING STUDIES.

DIAGNOSTIC MEDICAL SONOGRAPHY

See listing under PRE-CLINICAL IMAGING SCIENCES.

DIETETICS

The Madonna University Didactic Program in Dietetics is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND). The curriculum is designed to meet the Foundation Knowledge and Learning Outcomes for ACEND-accredited didactic programs. Students who successfully complete the program are given a verification statement.

ADMISSIONS PROCESS: Students interested in the Dietetics Program can declare a Pre-Dietetics major upon admission to Madonna University. Students seeking admission to the Dietetics Program must apply by July 1st for fall admissions or November 1st for winter admissions. To be accepted into the program, the applicant must meet the following requirements:

- 1. a minimum of 56 semester hours, completed at or successfully transferred to Madonna University, with a cumulative grade point average of 3.0 or higher over all Madonna and transfer courses;
- successful completion of the equivalent of all of the following courses—NFS 2250, Human Nutrition; WRT 1010; WRT 1020; BIO 2240, Human Physiology; BIO 2260 or 2270, Microbiology; and CHM 2210, Organic Chemistry—with a cumulative grade point average of 3.0 or higher over these six courses.

ADMISSION OF TRANSFER STUDENTS TO PRE-DIETETICS: To be admitted with the intent to pursue the pre-dietetics path, transfer students with over 74 semester hours completed at other institutions and post-degree students must have a cumulative G.P.A. of at least 3.0, have completed at least 2/3 of all course work attempted, and be in good academic and personal standing at prior institutions.

ACADEMIC EXCELLENCE POLICY: Students must earn grades of C or higher in all dietetics major and major support courses. A student who receives two grades below C (2.0) in any major or major support course, will automatically be dismissed from the program. Students are allowed to repeat one of the major or major support courses one time and count the second grade. After one repeat, the original grade below C (2.0) counts in relation to this policy.

Dietetics Major (ACEND-Accredited / Didactic Program): **Bachelor of Science (42 s.h.)**

K EQUIRED .	MAJOR COURSES:	
NFS 2000	Professional Issues in Dietetics	2 s.h.
NFS 2250	Human Nutrition	4 s.h.
NFS 2260	Introductory Food Science	3 s.h.
NFS 2760	Food Service Sanitation	2 s.h.
NFS 3220	Nutrition Assessment	2 s.h.
NFS 3250	Medical Nutrition Therapy I	3 s.h.
NFS 3380	Nutrition Education and Counseling	3 s.h.
NFS 3460	Food Service Management I	3 s.h.
NFS 4250	Advanced Human Nutrition	4 s.h.
NFS 4380	Community Nutrition	2 s.h.
NFS 4420	Medical Nutrition Therapy II	3 s.h.
NFS 4460	Food Service Management II	3 s.h.
NFS 4960	Experimental Food and Research	3 s.h.
	Major electives*	-5 s.h.
		42 s.h.

^{*} Major electives may be selected from all NFS courses except NFS 2220 or NFS 2380.

REQUIRED SUPPORT COURSES:

BIO 2240	Basic Human Physiology	4 s.h.
BIO 2260	Microbiology or	
BIO 2270	Microbiology for Health Sciences	3-4 s.h.
CHM 1110	General Chemistry I	4 s.h.
CHM 2210	Organic Chemistry I	4 s.h.
CHM 3610	Biochemistry I	4 s.h.
MGT 2360	Principles of Management	3 s.h.
MTH 2350	Probability and Statistics	4 s.h.
SOC 1010	Introduction to Sociology	4 s.h.
		30-31 s.h.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics

programs.)

DNA ANALYSIS

See listing under BIOLOGY or FORENSIC SCIENCE.

EARLY CHILDHOOD EDUCATION

This program is for those who desire a K-8 teaching certificate with an early childhood specialization. The Early Childhood Education major is to be undertaken in conjunction with both the Professional Education sequence (see the Education pages of this Catalog) and the Comprehensive Elementary Education major (Elementary Education, pages 76-78).

Those who do not want teacher certification are directed to the Child Development program.

Early Childhood Education Major: Bachelor of Science (34 s.h.)

REQUIRED	MAJOR COURSES:	
CD 2160	Child Development: Birth through Age Eight	3 s.h.
ECE 2250	Foundations of Early Childhood Education	3 s.h.
ECE 3100	Language Development and Emergent Literacy	3 s.h.
ECE 3160	Administration of Child Care Centers	3 s.h.
ECE 3580	Early Childhood Curriculum Development	3 s.h.
ECE 3710	Programming for Infants, Toddlers, and Preschoolers	3
	with Special Needs	3 s.h.
ECE 3930	Preschool Practicum with Seminar	2 s.h.
ECE 4130	Home/School Partnerships to Support Learners	3 s.h.
ECE 4160	Assessing Young Children	3 s.h.
ECE 4210	Design of Instruction for Children with Exceptional	
	Learning Needs	3 s.h.
ECE 4700	Directed Teaching: Early Childhood	4 s.h.
ECE 4810	Directed Teaching Seminar: Early Childhood	1 s.h.
		34 s.h.

NOTE: Students who complete all K-8 certification requirements, the Early Childhood Education major, and MTTC examination 106, Early Childhood, earn the Early Childhood Education (general and special education) (ZS) endorsement.

E-COMMERCE

See listing under MANAGEMENT INFORMATION SYSTEMS.

EDUCATION

The Madonna University elementary and secondary teacher preparation programs are approved by the Michigan Department of Education and accredited by the National Council for Accreditation of Teacher Education (NCATE). The University recommends students for provisional (initial) certification and for additional endorsements to existing certificates. The University also recommends students for Occupational Certificates in Career and Technical areas, Health Occupations, and Family and Consumer Sciences. (See Occupational Teacher Certification on page 102.)

Madonna University reserves the right to change program requirements to remain in compliance with changes in the State certification code.

Initial (Provisional) Teacher Certification Programs

Students may complete requirements for either Michigan elementary provisional certification (K-5 or K-8) or Michigan secondary provisional certification (6-12).

Students who are contemplating a teaching career are required to meet with an education department advisor immediately after being

admitted to the University. The following four sets of course requirements must be met:

- 1. General education and University core requirements (see pages
- 2. A teaching major, selected from the list of MDE-approved majors.
- 3. A teaching minor, selected from the list of MDE-approved minors.
- 4. The Professional Education sequence of courses.

The separate discussions for elementary and secondary teaching certificates give more detail on these requirements. Note that degree plans with teacher certification are longer than the minimum 120 s.h. required for the degree alone. Students are advised to review courses in the selected major and minor that may also meet general education and University core goals. (See also the information on page 45, When Courses May Satisfy More Than One Requirement.)

Transfer students are evaluated on an individual basis but must complete a minimum of 20 semester hours at Madonna University before being recommended for initial certification.

Elementary Provisional Teaching Certificate Programs

The full plan of study for an elementary teaching certificate must include the following:

1. GENERAL EDUCATION AND UNIVERSITY CORE (see pages 60-61). The following required courses, which can be used to meet general education goals, are Required Support Courses to the Professional Education Sequence for elementary candidates, requiring a minimum grade of C (2.0) or better:

PSC 2510	American Government* or	
GEO 3010	World Regional Geography	4 s.h.
PSY 1010	General Psychology	3 s.h.
SOC 1010	Introduction to Sociology	4 s.h.
*Note: element	tary candidates who did not attend	high school
in the United	d States must complete PSC 2510,	American
	Government.	

Special note: elementary candidates only may fulfill University core Goal UC-3B. with the course ENG*/COM 3000, Children's Literature and Drama, 4 s.h.

2. and 3. TEACHING MAJOR AND TEACHING MINOR for elementary certification: The following plan choices have been approved by the Michigan Department of Education (MDE).

> General Science major with Elementary Curriculum minor. Language Arts major with Elementary Curriculum minor. Mathematics for Elementary Certification major with Elementary Curriculum minor.

Social Studies major with Elementary Curriculum minor. Comprehensive Elementary Education major with Early Childhood Education major.

Comprehensive Elementary Education major with ASL Education minor or major.

Comprehensive Elementary Education major with Spanish for Teacher Certification minor or major.

The Elementary Curriculum Minor (23-31 s.h.) consists of the following courses:

AED 3160	Art for the Elementary School Teacher	2 s.h.
ENG 3000	Children's Literature and Drama (COM)*	
	(Language Arts majors count this course in	
	the major)	4 s.h.
EDU 3350	Language Arts and Linguistics Foundations	3 s.h.
HED 3050	HED 3050 Health for the Elementary Classroom Teacher	
MTH 2330	Learning and Teaching Number Concepts	
	(meets Goal GE-4A; Mathematics for Elemen	ı-
	tary majors count this course in the major)	3 s.h.
MTH 2340	Learning and Teaching Geometric and Statis-	

	tical Concepts (not required of students with a	
	major or minor in Mathematics for Elementary)	3 s.h.
MUS 3090	Music for the Classroom Teacher	2 s.h.
NSC 3730	Science Foundations I: Chemistry and Life	
	Science (meets Goal GE-4B; not required of	
	General Science majors)	4 s.h.
NSC 3740	Science Foundations II: Earth Science,	
	Physics, and Astronomy (meets Goal GE-4C;	
	not required of General Science majors)	4 s.h.
PED 3030	Physical Education for the Elementary Teacher	2 s.h.
SSC 3070	Social Studies Foundations	3 s.h.
	23-3	1 s.h.

tical Concerts (not required of students with a

4. The **PROFESSIONAL EDUCATION SEQUENCE** for elementary certification consists of the following courses:

EDU 2000 Introduction to Professional Education	
Experiences	3 s.h.
Note: during EDU 2000, the student must	
complete and sign a Consent for Criminal	
Background Check. See advisors in the Education	
office for a sample form.	
EDU 3120 Educational Psychology	3 s.h.
EDU 3210 Theory and Principles of Reading Instruction	3 s.h.
EDU 3300 The Exceptional Learner in the Classroom	3 s.h.
EDU 3460 Instructional Media	3 s.h.
EDU 4220 Reading in the Content Areas	3 s.h.

EDU 4500 Theory and Techniques of Instruction: Elementary School (K-8) 4 s.h. 8* s.h. EDU 4700 Directed Teaching: Elementary School (K-8) EDU 4800 Foundations of Education 3 s.h.

Behavior Management in the Classroom

EDU 4810 Seminar: Directed Teaching 1 s.h. 36 s.h.

*Early Childhood Education candidates take EDU 4700 for 6 s.h., because they also complete ECE 4700, Directed Teaching, Early Childhood, 4 s.h.

Secondary Provisional Teaching Certificate Programs

EDU 4400

The full plan of study for a secondary teaching certificate must include the following:

1. GENERAL EDUCATION AND UNIVERSITY CORE (see pages 60-61). The following required courses, which can be used to meet general education goals, are Required Support Courses to the Professional Education Sequence for secondary candidates, requiring a minimum grade of C (2.0) or better:

PSY 1010 General Psychology 3 s.h. SOC 1010 Introduction to Sociology 4 s.h. Special note: secondary candidates only may fulfill University core

Goal UC-3B. with the course ENG 4380, Literature for Young Adults, 4 s.h.

- 2. and 3. TEACHING MAJOR AND TEACHING MINOR for secondary certification: Secondary candidates must select a major and minor from the chart of approved programs in this section. Exception: if one of the comprehensive majors is selected, an accompanying minor is not required. Comprehensive majors available are: Integrated Science, Music Education K-12, or Visual Arts Education K-12.
- 4. The **Professional Education Sequence** for secondary certification consists of the following courses:

EDU 2000 Intro to Professional Education Experiences 3 s.h. Note: during EDU 2000, the student must complete and sign a Consent for Criminal Background Check. See advisors in the Education office for a sample form. EDU 3120 Educational Psychology 3 s.h.

2 s.h.

^{*} For elementary certification candidates only, ENG*/COM 3000 meets University core Goal UC-3B.

MADONNA UNIVERSITY TEACHER EDUCATION PROGRAMS

Approved by the Michigan Department of Education Accredited by the National Council for Accreditation of Teacher Education

Approved Secondary Majors, and approved minors

Secondary certificate candidates must prepare to be certified in two subjects: usually an approved major and an approved minor, but selecting two approved majors is an option. Those completing comprehensive majors need no second subject.

, , , , , , , , , , , , , , , , , , , ,		,	•			-	•		,			,	
	ASL Education minor	Biology minor	Chemistry minor	English minor	Health Educ. minor	History minor	Journalism minor	Mathe- matics minor	Physical Educ. 6-12 minor	Physics minor	Political Science minor	Spanish for Teach. minor	Speech minor
ASL (American Sign Lan-													
guage) Education major	r	Χ	X	X	Χ		Χ	Χ	Χ	X		X	Χ
Biology major	Х		X	Х	X		X	X	X	X		X	Х
Chemistry major	X	X		X	X		X	X	X	X		X	X
Communication Arts major	a	а	а	R	а			а	а	а		а	
English major	Х	Х	Х		Х		X	Х	Χ	Х		Х	Х
Family and Consumer													
Sciences major	X	X	X	X	X		X	X	Χ	X		X	X
Mathematics major	X	X	X	X	X		X		X	X		X	X
Physical Education K-12 ma	jor X	X	Χ	X	X		X	X		X		X	X
Social Studies major	X	X	X	X	X	X	X	X	X	X	X	X	X
Spanish for Teachers major	Х	X	Х	Х	X		Х	X	Х	X			Х
Approved Secondary Com	prehens	ive Ma	jors—no	o secon	d subje	ct requ	ired						
Integrated Science major	а			а	а		а	а	а			а	а
Music Education K-12 majo	or a	а	а	а	а		а	а	а	а		а	а
Visual Arts Art Education													
major a	а	а	а	а	а		а	а	а	а		а	
X = app	proved mi	nor	R = re	quired i	minor	a =	approved	l option	nal additio	nal min	or		

Approved Elementary Majors, with approved majors/minors

Elementary certificate candidates must complete one of the majors in the left column accompanied by an approved subject (marked by $\bf R$ or $\bf X$) from one of the other columns. Approved "additional" subjects may be added before or after certification.

	Elementar y Curriculu	Early Child- hood Education Education r		Spanish for Teachers major/mino	Mathematics for Elementary	English major/minor; Journalism minor;	Family and Consumer Sciences
Comprehensive Elementary							
Education major		Χ	Χ	Χ	а	а	а
General Science major	R		а	а	а	a	а
Language Arts major	R		а	а	а		а
Mathematics for Elementary major	R		а	а		а	а
Social Studies major	R		а	а	а	a	а
X = approved major/minor	R =	required mind	or a	= approved of	optional addit	tional minor/major	

EDU 3210 Theory and Principles of Reading Instruction (K-12 candidates only)	(3 s.h.)
EDU 3300 The Exceptional Learner in the Classroom	3 s.h.
EDU 3460 Instructional Media	3 s.h.
EDU 4250 Literacy Education in the Secondary School	
EDU 4400 Behavior Management in the Classroom	2 s.h.
Theory and Techniques of Instruction, to be chosen from:	4
s.h.	
EDU 4510 Theory and Techniques of Instruction:	
Art (K-12) (4 s.h.)	
EDU 4520 Theory and Techniques of Instruction:	
English and Communication Arts	
(6-12) (4 s.h.)	
EDU 4530 Theory and Techniques of Instruction:	
Foreign Languages (6-12) (4 s.h.)	
EDU 4540 Theory and Techniques of Instruction:	
Vocational Family and Consumer	
Sciences (6-12) (4 s.h.)	
EDU 4550 Theory and Techniques of Instruction:	
Mathematics (6-12) (4 s.h.)	
EDU 4560 Theory and Techniques of Instruction:	
Music (K-12) (4 s.h.)	
EDU 4570 Theory and Techniques of Instruction:	
Science (6-12) (4 s.h.)	
EDU 4580 Theory and Techniques of Instruction:	
Social Sciences (6-12) (4 s.h.)	
EDU 4590 Theory and Techniques of Instruction:	
Vocational Subjects (9-12) (4 s.h.)	
EDU 4620 Theory and Techniques of Instruction:	
Physical Education (K-12) (4 s.h.)	0 1
Directed Teaching, to be chosen from:	8 s.h.
EDU 4670 Directed Teaching: Physical Education (K-1)	2)
(8 s.h.)	
EDU 4710 Directed Teaching: Art (K-12) (8 s.h.)	
EDU 4720 Directed Teaching: English and Communica	tion
Arts (6-12) (8 s.h.)	
EDU 4730 Directed Teaching: Foreign Languages	
(6-12) (8 s.h.)	
EDU 4740 Directed Teaching: Vocational Family and	
Consumer Sciences (6-12) (8 s.h.)	
EDU 4750 Directed Teaching: Mathematics	
(6-12) (8 s.h.)	
EDU 4760 Directed Teaching: Music (K-12) (8 s.h.)	
EDU 4770 Directed Teaching: Science (6-12) (8 s.h.)	
EDU 4780 Directed Teaching: Social Sciences (6-12)	
(8 s.h.)	
EDU 4790 Directed Teaching: Vocational/Technical	
(9-12) (8 s.h.)	
EDU 4800 Foundations of Education	3 s.h.
EDU 4810 Seminar: Directed Teaching	1 s.h.
	-37 s.h.

Certificates Available in Teacher Education

For more information on the two certificates described here, see the Teacher Certification Officer in the College of Education office.

Essentials of Instruction Certificate of Completion (15 s.h.)

TE R	EOUIRI	EMENTS
TE K	<i>EQUIRI</i>	ľ

CERTIFICATE REQUIREMENTS	
EDU 2000 Introduction to Professional Education Experiences	3 s.h.
EDU 3120 Educational Psychology	3 s.h.
EDU 3210* Theory and Principles of Reading Instruction	3 s.h.
EDU 3300 The Exceptional Learner in the Classroom	3 s.h.
EDU 3460 Instructional Media	3 s.h.
	15 s.h.

^{*}Required whether in elementary or secondary teaching track.

Instruction of English Language Learners K-12 Certificate of Completion (9-10 s.h.)

	,	
CERTIFICAT	TE REQUIREMENTS*:	
EDU 3120	Educational Psychology	3 s.h.
EDU 4400	Behavior Management in the Classroom	2 s.h.
EDU 3350	Language Arts and Linguistic Foundations	
	(elementary) or	
EDU 4250	Literacy Education in the Secondary School	
	(secondary)	3-4 s.h.

9-10 s.h.

The above courses are required for teacher certification. By completing these courses a student also earns the Instruction of English Language Learners K-12 Certificate of Completion, which is awarded by Madonna University with the processing of an Application for Undergraduate Certificate.

Note that this certificate does not fulfill the requirements for an endorsement in English as a Second Language (NS) on a Michigan teaching certificate. For the NS endorsement, see the Madonna University Graduate Catalog, the Master of Arts in Teaching English to Speakers of Other Languages.

K-12 Programs: Visual Arts Education, Music Education, and Physical Education

All candidates for certification in Visual Arts Education, Music Education, and the Physical Education major must fulfill requirements for K-12 endorsement on a secondary certificate and therefore must have experiences in theory and techniques of instruction and directed teaching experiences at both levels. The theory and techniques of instruction course and directed teaching for these three programs are K-12.

K-12 Programs: ASL Education and Spanish

Candidates for certification in ASL Education or Spanish may elect to fulfill K-12 endorsement requirements on either an elementary or a secondary certificate. For K-12 endorsement, the student completes additional course work in theory and techniques of instruction and an additional half-semester of directed teaching beyond that required for the basic certificate. Please see an Education advisor for full details.

Admission to the Teacher Education Program:

Students planning to pursue a program in teacher education take the following steps:

- Declare intention of preparing for the profession of teaching either on the elementary or secondary level at the time of application to the University.
- Apply for admission to the Teacher Education program during the semester of enrollment in EDU 2000 (the third or fourth semester for full-time students).
- Meet the following criteria for admission to and retention in the program:
 - 2.75 or higher grade point average, cumulative and in the major, in the minor, and in the professional education sequence;
 - 2. completion of WRT 1010, WRT 1020, and PSY 1010 (or equivalents) with a grade of C (2.0) or better;
 - 3. completion of EDU 2000 with a grade of C (2.0) or better;
 - successful completion of the Professional Readiness Examination (PRE) of the Michigan Tests for Teacher Certification (MTTC), recommended to be taken during the semester of enrollment in EDU 2000;
 - 5. completed application form;
 - 6. two recommendation forms testifying to personal integrity and social and academic competence:
 - (a) one from a University professor in your major (students in the Comprehensive Elementary Education major

^{*}Since this certificate is based on specific units built into its courses, all certificate courses must be taken at Madonna University.

must choose a content area professor outside the College of Education);

- (b) one from any University professor other than from the College of Education or a professional reference outside the University:
- (c) recommendations from friends or relatives are not acceptable.
- 7. plan of study signed by major-field academic advisor.

Applications for admission to the Teacher Education Program are reviewed and approved by the Teacher Education Committee.

Admission to Directed Teaching:

The student applies for admission to Directed Teaching two semesters in advance, according to posted deadlines. At this time the student must submit evidence of the following:

- 1. academic competency as evidenced by a grade point average of 2.75 or better, both cumulative and in the major;
- 2. attainment of a grade of C (2.0) or better in professional education courses, major, minor, or planned program (note that completion of four of the required professional education courses requires prior admission to the Teacher Education program);
- 3. evidence of growth in professional teaching competence; and
- written recommendation from major advisor and departmental approval.

Applications for admission to Directed Teaching are reviewed and approved by the Teacher Education Committee.

Admission to the Teacher Education Program and admission to directed teaching do not guarantee eventual recommendation for a certificate. Students must maintain satisfactory standards, and a grade point average of 2.75 or better, to be retained in the program, and they must be recommended for certification by the Teacher Education Committee. Completion of the relevant subject area tests of the Michigan Tests for Teacher Certification (MTTC), and of the state-mandated CPR/First Aid certification, is also required.

Application for Michigan Provisional Teaching Certificate

Students completing teaching certificate requirements must apply for their certificates on the Michigan Online Educator Certification System (MOECS). Ater submitting the application through this system, it is reviewed by the Certification Officer at Madonna University for approval and recommendation to the State of Michigan. Full information about the application process is available in the Education office.

Completion of the relevant subject area tests of the Michigan Tests for Teacher Certification (MTTC) is required before a certificate application may be processed.

Completion of the state-mandated CPR/First Aid certification is also required.

Programs for Certified Teachers

The following programs are of particular interest to those certified teachers who wish to add another teaching endorsement to their current teaching certificate:

- 1. EARLY CHILDHOOD EDUCATION (ZS) ENDORSEMENT. See the Graduate Catalog for a description of this program.
- LEVEL CHANGES. To add elementary certification to a secondary certificate or secondary certification to an elementary certificate, the student must the complete requirements of the requested endorsement. See the Certification Officer for more information.
- 3. ADDITIONAL MAJOR OR MINOR. An additional major or minor may be planned in any academic area certifiable through Madonna University (see table for Teacher Education Programs). The relevant subject area test of the Michigan Tests for Teacher Certification (MTTC) is required when the major or minor is being completed.

- 4. EDUCATIONAL TECHNOLOGY (NP) ENDORSEMENT. See the Graduate Catalog for a description of this program.
- 5. LEARNING DISABILITIES (SM) ENDORSEMENT. See the Graduate Catalog for a description of this program.
- 6. AUTISM SPECTRUM DISORDERS (SV) ENDORSEMENT. See the Graduate Catalog for a description of this program.
- READING SPECIALIST K-12 (BR) ENDORSEMENT. See the Graduate Catalog under Literacy Education for a description of this program.
- 8. ENGLISH AS A SECOND LANGUAGE (NS) ENDORSEMENT. See the Graduate Catalog under English Program, Teaching English to Speakers of Other Languages, for a description of this program.
- SCHOOL ADMINISTRATOR PROGRAMS. See the Graduate Catalog under Educational Leadership and under Catholic School Leadership for a description of these programs.

For all Planned Programs, the student must take a minimum of 12 s.h. in residence at Madonna University in order for the University to make the certificate recommendation to the Michigan Department of Education. Transfer credits from accredited four-year institutions are evaluated on an individual basis.

Students in Planned Programs are expected to maintain a grade point average of 2.5 or better, and must earn a C (2.0) or better in each course used in the planned program, major, or minor.

Teachers in many of our planned programs are admitted to Madonna University as post-degree students and pay undergraduate tuition (except for the graduate reading course mentioned below).

Either RDG 5510 or RDG 5520, Reading Process, Assessment, and Instruction, 3 s.h., is required for the Professional Education certificate. See the Graduate Catalog for these courses.

All teachers are referred to the Graduate Catalog for a full listing of graduate programs suitable for teachers working toward the Professional Education certificate. Teachers who earned their Michigan Provisional certificate through Madonna University pay undergraduate tuition for master degree programs.

ELDERCARE PRACTICE

See listing under AGING STUDIES.

ELEMENTARY CURRICULUM MINOR

See within EDUCATION listing, pages 76-80.

ELEMENTARY EDUCATION

This elementary education major is the one to be selected with the Early Childhood Education major, the ASL Education major or minor, or the Spanish for Teacher Certification major or minor. The Comprehensive Elementary Education major can be elected only in conjunction with both the Professional Education sequence (see the Education pages of this Catalog) and one of these programs. Students seeking elementary teacher certification with General Science, Language Arts, Mathematics for Elementary, or Social Studies do not complete this plan. See pages 76-80 for more information.

Comprehensive Elementary Education Major: Bachelor of Arts (45 s.h.)

REQUIRED MAJOR COURSES:

£	
PSY 1010* Introduction to Psychology	3 s.h.
SOC 1010* Introduction to Sociology	4 s.h.
MTH 2330*Learning and Teaching Number Concepts	3 s.h.
MTH 2340 Learning and Teaching Geometric and Statistical	
Concepts	3 s.h.
WL 2710 Language Acquisition	2 s.h.
FNG 3000* Children's Literature and Drama (COM)*	4 s h

GEO 3010* World Regional Geography	4 s.h.	credit, 9	
PED 3030 Physical Education for the Elementary Teacher	2	s.h.)	44 s.h.
s.h. HED 3050 Health for the Elementary Classroom Teacher	1		
s.h.		Required Support Courses:	
SSC 3070 Social Studies Foundations	3 s.h.	BIO 2240 Basic Human Physiology	4 s.h.
MUS 3090 Music for the Classroom Teacher	2 s.h.	CHM 1110 General Chemistry I	4 s.h.
AED 3160 Art for the Elementary School Teacher EDU 3350 Language Arts and Linguistics Foundations	2 s.h. 3 s.h.	FOR 1010 Introduction to Forensic Science	4 s.h.
NSC 3730* Science Foundations I: Chemistry and Life Science		MTH 1050 College Algebra	4 s.h.
NSC 3740* Science Foundations II: Earth Science, Physics,	C 4 S.II.	MTH 2350 Probability and Statistics	$\frac{4 \text{ s.h.}}{20 \text{ l.}}$
Astronomy	4 s.h.		20 s.h.
EDU 4950 Senior Seminar for Elementary Educators	1 s.h.	RECOMMENDED ELECTIVES:	
	0-5 s.h.	COM 1050 Communication Concepts and Contexts	3 s.h.
COM 1050, Communication Concepts and		PHL 4000 Moral Issues in Business (RST) or	
Contexts (3 s.h.)		PHL 4090 Environmental Ethics (RST) <i>or</i> PHL 4110 Medical Ethics (RST)	3 s.h.
EDU 4180 workshops (see College of		PSC 3010 International Relations	4 s.h.
Education for choices.)		PSC 4510 State and Local Government	4 s.h.
ENG 2620*, Language and Culture (3 s.h.)		Science and mathematics courses taken more than seven years	
HIS 2750, Michigan History (2 s.h.)	iaa	ously may need to be repeated, at the discretion of the program	
HIS 4631*, 4632*, 4633*, or 4634*, Global Stud (PSC) (3 s.h.)	ies	tor. (This policy is general across all College of Science and	direc-
PSC 2510*, American Government ** (4 s.h.)		Mathematics programs.)	
150 2510 , rimerican Government (15.11.)	45 s.h.	1 0 /	
* Starred courses meet general education or University core goa		Emergency Management Certificate of Complet	ion
Please meet with your advisor for efficient planning of your co		(18 s.h.)	
work.		REQUIRED CERTIFICATE COURSES:	
**Note: Elementary candidates who did not attend high school i	n the	EM 2010 Foundations of Emergency Management	3 s.h.
United States must complete PSC 2510, American Government		EM 2410 Emergency Communication	2 s.h.
		EM 2420 Disaster Exercise Planning	1 s.h.
		EM 3010 Resource Allocation and Planning EM 3020 Industrial Espionage and Operations Security	3 s.h. 3 s.h.
EMERGENCY MANAGEMENT		EM 3020 Industrial Espionage and Operations Security EM 3490 Psychology of Traumatic Experiences (PSY*)	3 s.n. 1 s.h.
Emergency Management Major: Bachelor of Scio	ence	EM 3500 Homeland Security and Terrorism (CJ*)	3 s.h.
(44 s.h.)		EM 4000 Proposal Writing and Grant Administration (AGE ³	
REQUIRED CORE COURSES:			18 s.h.
CJ 1020 Introduction to Criminal Justice	3 s.h.	F	
EM 1010 Introduction to Fire Protection and Prevention (FS*)	3 s.h.	Emergency Management Certificate of Achiever	nent
EM 2010 Foundations of Emergency Management	3 s.h.	(30 s.h.)	
EM 2410 Emergency Communication	2 s.h.	REQUIRED CERTIFICATE COURSES:	2 1
EM 2420 Disaster Exercise Planning	1 s.h.	WRT 1010 College Composition I	3 s.h.
EM 3010 Resource Allocation and Planning	3 s.h.	CJ 1020 Introduction to Criminal Justice EM 1010 Introduction to Fire Protection and Prevention (FS	3 s.h.
EM 3020 Industrial Espionage and Operations Security	3 s.h.	EM 2010 Foundations of Emergency Management	3 s.h.
EM 3490 Psychology of Traumatic Experiences (PSY*) EM 3500 Homeland Security and Terrorism (CJ*)	1 s.h. 3 s.h.	EM 2410 Emergency Communication	2 s.h.
EM 4000 Proposal Writing and Grant Administration (AGE*)	2 s.h.	EM 2420 Disaster Exercise Planning	1 s.h.
EM 4510 Hazardous Materials I (FS/OSH*)	3 s.h.	EM 3010 Resource Allocation and Planning	3 s.h.
EM 4950 Senior Seminar	2 s.h.	EM 3020 Industrial Espionage and Operations Security	3 s.h.
MGT 2360 Principles of Management	3 s.h.	EM 3490 Psychology of Traumatic Experiences (PSY*)	1 s.h.
MGT 3020 Organizational Behavior	3 s.h.	EM 3500 Homeland Security and Terrorism (CJ*)	3 s.h.
Electives, chosen from	9 s.h.	EM 4000 Proposal Writing and Grant Administration (AGE	
CJ 2650, Criminal Law (3 s.h.)		EM 4510 Hazardous Materials I (FS/OSH*)	3 s.h.
CJ 3050, Criminal Procedure (3 s.h.)			30 s.h.
CJ 4110, Ethics in Criminal Justice (3 s.h.)			
CJ 4150, Criminal Investigation (3 s.h.)		ENGLISH	
FS 4250, Fire and Arson Investigation (4 s.h.) FS 4400, Tactics and Strategy (3 s.h.)		See also offerings in English/Journalism, Journalism an	d Dublia
FS 4400, factics and Strategy (5 s.n.) FS 4900, Fire Service Management (OSH)		Relations, Language Arts, Professional and Technical W	
(3 c h)		and Writing	

(3 s.h.)

(3 s.h.)

(3 s.h.)

MIS 3440, Information Security (3 s.h.)

OSH 2150, Building Construction (FS)

OSH 3110, Industrial Safety and Health

OSH 3520, Industrial Hygiene I (3s.h.) OSH 3980, Industrial Hygiene II (3 s.h.) OSH 4520, Hazardous Materials II (3 s.h.) EMT/Paramedic licensure (prior learning

and Writing.

English Major: Bachelor of Arts

(36 s.h., 28 s.h. in literature)					
REQUIRED .	Major Courses:				
ENG 2230	Ideas in World Literature				
ENG 2950	Critical Writing and Literary Analysis				

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ENG 2230	Ideas in World Literature	3 s.h.
ENG 2950	Critical Writing and Literary Analysis	4 s.h.
ENG 3010	Major American Writers: Beginnings to 1900 or	
ENG 3020	Major American Writers: 1900 to Present	4 s.h.
ENG 3610	Major British Writers: Chaucer to Johnson or	

ENG 3620 Major British Writers: Blake to Eliot	4 s.h.	ENGLISH LANGUAGE LEARNERS K-1	2
ENG 3540 American Folklore and Literature or		See listing under EDUCATION.	_
ENG 4540 Classics of African-American Literature <i>or</i>		See listing under EDOC/TTOTY.	
ENG 4550 Voices of Pluralism in American Literature	4 s.h.		
ENG 4750 Studies in Literature	4 s.h.	ENTREPRENEURSHIP	
ENG 4950 Senior Seminar	3 s.h. 10 s.h.	Non-business majors are invited to this certificate: develop you	ır own
Major electives <i>to be chosen from</i> : ENG 2090 Approaches to Grammar (4 s.h.) *	10 8.11.	business around your passion and skills.	ai Owii
ENG 2550 Oral Interpretation of Literature		business around your passion and sams.	
(COM*) (3 s.h.)		Entrepreneurship Certificate of Completion (1	8 s.h.)
ENG 2620 Language and Culture (3 s.h.)		CERTIFICATE REQUIREMENTS:	,
ENG 3000 Children's Literature and Drama		ACC 2010 Principles of Accounting I	3 s.h.
(4 s.h.) **		MGT 2360 Principles of Management	3 s.h.
ENG 3540 American Folklore and Literature (4	s.h.)	MKT 2440 Principles of Marketing	3 s.h.
ENG 3550 Women in Literature (4 s.h.)		MIS 2850 Web Design for Business Applications	3 s.h.
ENG 3710 Contemporary Literature (4 s.h.)		MKT 3100 Professional Selling	3 s.h.
ENG 4170.xx- 4190.xx Workshops in English (1	s.h.)	MGT 3690 Entrepreneurship	3 s.h.
ENG 4210 Time and Literature (4 s.h.)		Drawner Cymnang Caynan	18 s.h.
ENG 4240 Cultural Issues in Contemporary		REQUIRED SUPPORT COURSE:	3 s.h.
Literature and Film (1 s.h.) ENG 4380 Literature for Young Adults (4 s.h.)		CIS 2380 Introduction to Computers	3 S.N.
ENG 4540 Classics of African-American Literat	ture		
(4 s.h.)	ture	ENVIRONMENTAL SAFETY AND HEA	LTH
ENG 4550 Voices of Pluralism in American Lite	erature	PROGRAM (ESHP)	
(4 s.h.)		See listing under OCCUPATIONAL SAFETY AND HEAL	TII
JRN 1320 News Reporting (WRT) (3 s.h.)		See listing under OCCUPATIONAL SAFETY AND HEAD	лп.
WRT 2050 Creative Writing (3 s.h.)			
WRT 2440 Technical Writing (3 s.h.)		ENVIRONMENTAL SCIENCE	
WRT 3100 Advanced Composition (3 s.h.)			
WRT 3260 Business and Professional Writing 3		Environmental Science Major: Bachelor of Sci	ence
WRT 3440 Advanced Technical Writing (3 s.h.)	36 s.h.	(54 s.h.)	
		REQUIRED MAJOR COURSES:	4 1
* Required for students seeking elementary or secondary certific	cation.	BIO 1030 General Biology I	4 s.h.
** Required for students seeking elementary certification.		BIO 1040 General Biology II	4 s.h.
English Minor (20 s.h.)		CHM 1110 General Chemistry I CHM 1120 General Chemistry II	4 s.h. 4 s.h.
Required Minor Courses:		CHM 2210 Organic Chemistry I	4 s.h.
ENG 2950 Critical Writing and Literary Analysis	4 s.h.	CHM 2220 Organic Chemistry II	4 s.h.
Electives in literature (see major literature choices)		ENV 3210 Limnology: The Study of Lakes	3 s.h.
,	20 s.h.	ENV 3320 Environmental Analysis	4 s.h.
NOTE: Candidates for teacher certification must add an addition	nal	ENV 4710 Environmental Pollutions	4 s.h.
course, ENG 2090, Approaches to Grammar, 4 s.h., to the above	e-listed	ENV 4950 Senior Seminar	2 s.h.
20 s.h. of requirements.		ESS 3260 Meteorology	4 s.h.
		PHY 2530 General Physics I or	
ENGLICH/IOLIDNALICM		PHY 2630 Physics for Scientists and Engineers I*	4 s.h.
ENGLISH/JOURNALISM		PHY 2540 General Physics II or	4 - 1-
English/Journalism Major: Bachelor of Arts (36	6 s.h.)	PHY 2640 Physics for Scientists and Engineers II* Major electives, to be chosen from:	4 s.h. 5 s.h.
REQUIRED MAJOR COURSES:		BIO 2260 Microbiology (4 s.h.)	3 8.11.
ENG 2950 Critical Writing and Literary Analysis	4 s.h.	BIO 3170 Parasitology (4 s.h.)	
JRN 1320 News Reporting (WRT)	3 s.h.	CHM 3610 Biochemistry I (4 s.h.)	
JRN 3570 Editing and Design	3 s.h.	ENV 2930, 3930 Internship in Environmental	
ENG 4950 Senior Seminar Major electives in English 12	3 s.h.	Science (1-4 s.h.)	
ū ū	2-13 s.h. 0-11 s.h.	ENV 3310 Environmental Food and Nutrition	
iriajoi electives ili Journansiii <u>I</u> l	36 s.h.	(NFS*) (2 s.h.)	
	20 3.II.	ENV 4700 Environmental Investigation (1-4	s.h.)
English/Journalism Minor (24 s.h.)		ESS 2160 Earth Science (4 s.h.)	
Required Minor Courses:		NFS 2760 Food Service Sanitation (2 s.h.)	
ENG 2950 Critical Writing and Literary Analysis	4 s.h.	OSH 4510 Hazardous Materials I (EM/FS) (3	s.h.)
JRN 1320 News Reporting (WRT)	3 s.h.	WRT 2440 Technical Writing (3 s.h.)	54 c h

3 s.h.

8 s.h.

<u>6 s.h.</u>

24 s.h.

REQUIRED SUPPORT COURSES:

Minor electives in English

Minor electives in Journalism

JRN 3570 Editing and Design

^{*}MTH 2510, Calculus with Analytic Geometry I, 5 s.h., is a prerequisite to PHY 2630 and PHY 2640. Students planning graduate study are advised to select PHY 2630 and PHY 2640 in their plans.

MTH 2510 Calculus with Analytic Geometry I	5 s.h.	Goal 6:	
MTH 2350 Probability and Statistics	4 s.h.	HIS 4320 Foreign Policy Histo	ry of the U.S. <u>3 s.h.</u>
	9 s.h.		19 s.h.
RECOMMENDED SUPPORT COURSES:		REQUIRED MAJOR COMPLETION	Courses (17 s.h.)
Environmental Science majors are encouraged to select the following	lowing	ENV 3210 Limnology-Study of	Lakes 3 s.h.
courses in fulfilling University core requirements:		ENV 4700 Environmental Inves	tigations 2 s.h.
RST 3100 Franciscan Values, Social Justice, and Service *	3 s.h.	ENV 4710 Environmental Pollu	tions 4 s.h.
RST 4090 Environmental Ethics (PHL) **	3 s.h.	ENV 4950 Senior Seminar	2 s.h.
* RST 3100 partially fulfills Goal UC-2 of graduation required	nents	ESS 3260 Meteorology	4 s.h.
** RST*/PHL 4090 fulfills Goal GE-3B. or partially fulfills Go		NSC 4050 Science and Social R	esponsibility 2 s.h.
of graduation requirements.	.a. 00 2		17 s.h.

Environmental Science Minor for Biology majors (24 s.h.)

REQUIRED	Minor Courses:	
CHM 2210	Organic Chemistry I	4 s.h.
CHM 2220	Organic Chemistry II	4 s.h.
ENV 3210	Limnology: The Study of Lakes	3 s.h.
ENV 3320	Environmental Analysis	4 s.h.
ENV 4710	Environmental Pollutions	4 s.h.
ESS 3260	Meteorology	4 s.h.
	Minor electives (see major for choices)	<u>1 s.h.</u>
		24 s.h.

Environmental Science Minor for Chemistry majors (24 s.h.)

K EQUIRED	MINOR COURSES:	
BIO 1030	General Biology I	4 s.h.
BIO 1040	General Biology II	4 s.h.
ENV 3210	Limnology: The Study of Lakes	3 s.h.
ENV 3320	Environmental Analysis	4 s.h.
ENV 4710	Environmental Pollutions	4 s.h.
ESS 3260	Meteorology	4 s.h.
	Minor electives (see major for choices)	<u>1 s.h.</u>
		24 s.h.

REQUIRED SUPPORT COURSE:

MTH 2350 Probability and Statistics 4 s.h.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

Degree Completion for Chinese Diploma Graduates

This program is designed as a degree-completion program for Chinese Nationals who are graduates of specific three-year diploma programs in the People's Republic of China. The program is limited to students admitted from the specified programs.

Environmental Science Major: Bachelor of Science (Degree Completion, 36 s.h.)

GENERAL EDUCATION/UNIVERSITY CORE REQUIREMENTS (19 S.H.):

S.H.):		
University	REQUIREMENT:	
ESL 1020	Orientation to American Higher Education	1 s.h.
GOAL 1:		
ESL 3120	Advanced Reading and Writing for Business	3 s.h.
GOAL 2:		
RST 1450	Survey of Western Religions	3 s.h.
RST 4090	Environmental Ethics	3 s.h.
GOAL 3:		
HUM 3030	American Culture through Literature, Music, Art	3 s.h.
GOAL 5:		
SOC 3130	Sociology of the Family	3 s.h.

FAMILY AND CONSUMER SCIENCES

Family and Consumer Sciences Major: Bachelor of Science (38 s.h.)

REQUIRED	Major Courses:		
FCS 1250	Health Problems (NSC*)	4 s.h.	
FCS 2250	Human Nutrition (NFS*)	4 s.h.	
FCS 2260	Introductory Food Science (NFS*)	3 s.h.	
FCS 2700	Child Psychology (PSY*)	4 s.h.	
FCS 3130	Adolescent Psychology (PSY*)	4 s.h.	
FCS 3530	Marriage and the Family (RST*/SOC)	4 s.h.	
FCS 3700	Lifecycle Financial Planning (FIN*)	3 s.h.	
FCS 3750	Human Shelter and Environment (MRM)	4 s.h.	
FCS 4500	Issues Challenging Children and Families (CD*)	3 s.h.	
FCS 4530	Teaching Personal Development and Career		
	Planning	3 s.h.	
FCS 4950	Senior Seminar	2 s.h.	
		38 s.h.	
Required Support Course:			
SOC 1010	Introduction to Sociology	4 s h	

SOC 1010 Introduction to Sociology

The Family and Consumer Sciences major may be added as a grades 6-8 endorsement to an existing Elementary teaching certificate. However, it may not chosen for the initial Elementary teaching certificate.

Secondary Teacher Certification and Occupational Certification

Majors in Family and Consumer Sciences who use this major in a plan for Secondary teacher certification must add the requirements for an Interim Occupational Certificate (IOC) to their program.

To the major must be added an additional four semester hours of practicum experience and an additional vocational education course beyond the full Professional Education Sequence, as listed below.

REQUIRED OCCUPATIONAL EDUCATION COURSES:

Required Practicum Courses:

FCS 2930	Practicum in Children and Youth Services	1 s.h.
FCS 2940	Practicum in Educational Services	1 s.h.
FCS 3930	Practicum in Family Services	1 s.h.
FCS 3940	Practicum in Consumer Services	1 s.h.
		4 s.h.
Required Sp	pecific Vocational Education Courses:	
EDU 4450	Foundations of Vocational Education	2 s.h.
EDU 4540	Theory and Techniques of Instruction: Vocational	
	Family and Consumer Sciences (6-12)*	4 s.h.
		10 1

^{*} Note: the course EDU 4540 is also a required part of the Professional Education Sequence.

Family and Consumer Sciences Minor (22 s.h.)

REQUIRED MINOR COURSES:

FCS 2250 Human Nutrition (NFS*)

4 s.h.

FCS 2260	Introductory Food Science (NFS*)	3 s.h.
FCS 2700	Child Psychology (PSY*)	4 s.h.
FCS 3130	Adolescent Psychology (PSY*)	4 s.h.
FCS 3700	Lifecycle Financial Planning (FIN*)	3 s.h.
FCS 3750	Human Shelter and Environment (MRM)	<u>4 s.h.</u>
		22 s.h.

Note: Teacher certification is not available with this minor.

FILM MUSIC SCORING

See listing under MUSIC.

FILM PRODUCTION

See BROADCAST AND CINEMA ARTS.

FINE ARTS

See listing under ART.

FIRE SCIENCE

Fire Science Major: Bachelor of Science (30 s.h.) REQUIRED MAJOR COURSES:

KEQUIKED	WAJOR COURSES.	
FS 1010	Introduction to Fire Protection and Prevention	3 s.h.
FS 2150	Building Construction (OSH)	3 s.h.
FS 2910	Cooperative Education I* or	
FS 2930	Internship I*	1-3 s.h.
FS 3500	Hydraulics and Water Supply (OSH)	3 s.h.
FS 3680	Fire Protection Systems I (OSH)	3 s.h.
FS 3690	Fire Protection Systems II (OSH)	3 s.h.
FS 3910	Cooperative Education II** or	
FS 3930	Internship II**	1-3 s.h.
FS 4400	Tactics and Strategy (OSH)	3 s.h.
FS 4510	Hazardous Materials I (EM/OSH*)	3 s.h.
FS 4950	Senior Seminar	2 s.h.
	Major electives	<u>1-5 s.h.</u>
		30 s.h.
REQUIRED	Support Courses:	

REQUIRED SUPPORT COURSES:	
CHM 1110 General Chemistry I	4 s.h.
MTH 1050 and 1060 College Algebra and Trigonometry or	
MTH 1210 Precalculus	5-7 s.h.
PHY 2530 General Physics I	4 s.h.
PHY 2540 General Physics II	4 s.h.
	17-19 s.h.

Fire Science Major: Associate of Science (24 s.h.) REQUIRED MAJOR COURSES:

3 s.h.			
3 s.h.			
1-3 s.h.			
3 s.h.			
3 s.h.			
3 s.h.			
3 s.h.			
3 s.h.			
<u>0-2 s.h.</u>			
24 s.h.			
Required Support Courses:			
4 s.h.			
MTH 1050 and 1060 College Algebra and Trigonometry or			

*Required for preservice associate and baccalaureate students.

Fire Science Minor (20 s.h.)

REQUIRED MINOR COURSES:

		20 s.h.
	Minor electives	_5 s.h.
FS 4510	Hazardous Materials I (EM/OSH*)	3 s.h.
FS 3680	Fire Protection Systems I (OSH)	3 s.h.
FS 3500	Hydraulics and Water Supply (OSH)	3 s.h.
FS 2150	Building Construction	3 s.h.
FS 1010	Introduction to Fire Protection and Prevention	3 s.h.

17-19 s.h.

Fire Science Certificate of Achievement (30 s.h.)

REQUIRED CERTIFICATE COURSES:

WRT 1010	College Composition I	3 s.h.
FS 1010	Introduction to Fire Protection and Prevention	3 s.h.
FS 2150	Building Construction (OSH)	3 s.h.
FS 3500	Hydraulics and Water Supply (OSH)	3 s.h.
FS 3680	Fire Protection Systems I (OSH)	3 s.h.
FS 3690	Fire Protection Systems II (OSH)	3 s.h.
FS 4510	Hazardous Materials I (EM/OSH*)	3 s.h.
	Certificate electives	<u>9 s.h.</u>
		30 s.h.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

FORENSIC ACCOUNTING

See listing under ACCOUNTING or CRIMINAL JUSTICE.

FORENSIC PSYCHOLOGY

See listing under PSYCHOLOGY or CRIMINAL JUSTICE.

FORENSIC SCIENCE

Forensic Science Major: Bachelor of Science (41 s.h.)

Students interested in a Forensic Science major must complete a preforensic science block of courses with a minimum of a 2.75 GPA in the block, in order to be eligible to apply for acceptance into the Forensic Science Program.

Transfer students with over 60 semester hours completed at other institutions and post-degree students, to be admitted with the intent to pursue the pre-forensics path, must have a cumulative GPA of at least 2.8, have completed at least 2/3 of all course work attempted, and be in good academic and personal standing at prior institutions.

PRE-FORENSIC	SCIENCE	Courses

BIO 1030	General Biology I	4 s.h.
CHM 1110	General Chemistry I	4 s.h.
CHM 1120	General Chemistry II	4 s.h.
CHM 2210	Organic Chemistry I	4 s.h.
FOR 1010	Introduction to Forensic Science	4 s.h.
MTH 2350	Probability and Statistics	4 s.h.
MTH 2510	Calculus with Analytic Geometry I	5 s.h.
WRT 1020	College Composition II	<u>3 s.h.</u>
		32 s.h.
Drownen I	A ron Coungra	

REQUIRED MAJOR COURSES:

5-7 s.h.

4 s.h.

4 s.h.

BIO 1030	General Biology I	4 s.h.
BIO 2430 A	Anatomy and Physiology I	3 s.h.

PHY 2530 General Physics I

PHY 2540 General Physics II

MTH 1210 Precalculus

^{**}Required for preservice baccalaureate students.

BIO 3010	Genetics	4 s.h.
BIO 4410	Molecular Biology	3 s.h.
FOR 1010	Introduction to Forensic Science	4 s.h.
FOR 3310	Impression and Trace Evidence Analysis	3 s.h.
FOR 3320	Firearm and Tool Mark Analysis	3 s.h.
FOR 4620	Methods in Forensic Biology	3 s.h.
FOR 4630	Methods in Forensic Chemistry	3 s.h.
FOR 3330	Introduction to Forensic Anthropology or	
FOR 4640	Toxicology	3 s.h.
FOR 4650	Ethics and Expert Testimony	3 s.h.
FOR 4950	Senior Seminar	2 s.h.
	Electives, selected from	3 s.h.
	CHM 3510 Advanced Inorganic Chemistry (4 s.h	.)
	CHM 3620 Biochemistry II (4 s.h.)	
	CHM 4510 Instrumental Analysis (4 s.h.)	
	CJ 2650 Criminal Law (3 s.h.)	
	FOR 3210 Criminology (CJ*/SOC) (3 s.h.)	
	FOR 3330 Introduction to Forensic Anthro-	
	pology (3 s.h.)	
	FOR 4010 Population Genetics (BIO*) (3 s.h.)	
	FOR 4640 Toxicology (3 s.h.)	
	FOR 4910, 4920, Co-op (2-6 s.h.)	
	FOR 4930 Internship (1-4 s.h.)	
	MTH 2520 Calculus with Analytic Geo-	
	metry II (4 s.h.)	
	_	41 s.h.

REOUIRED	SUPPORT	Courses
NEUUIKED	SUPPUKI	COURSES.

REQUIRED	JULIUKI COUKSES.	
CHM 2220	Organic Chemistry II	4 s.h.
CHM 3610	Biochemistry I	4 s.h.
FOR 3050	Criminal Procedure (CJ*)	3 s.h.
MTH 2510	Calculus with Analytic Geometry I	5 s.h.
MTH 2350	Probability and Statistics	4 s.h.
PHY 2630	Physics for Scientists and Engineers I	4 s.h.
PHY 2640	Physics for Scientists and Engineers II	<u>4 s.h.</u>
		28 s.h.

Note: students who complete a Criminal Justice major or minor in conjunction with the Forensic Science major may not include CJ courses in the Forensic Science major. Review the rule "When Courses May Satisfy More Than One Requirement" on page 45.

REQUIRED MINOR:

A minor in Chemistry is required with the Forensic Science major. NOTE: To complete a Chemistry minor, one more course beyond those listed above is required:

CHM 3310 Quantitative Analysis 4 s.h.

ADDITIONAL PROGRAM REQUIREMENTS:

- Hepatitis A/B immunization
- · Background check
- Participation in a national standardized assessment examination (e.g., American Board of Criminalistics) prior to graduation.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

DNA Analysis Certificate of Completion (21 s.h.)

REQUIRED CERTIFICATE COURSES:

REQUIRED	CERTIFICATE COCKSES.	
BIO 3010	Genetics	4 s.h.
BIO 4010	Population Genetics (FOR)	3 s.h.
BIO 4410	Molecular Biology	3 s.h.
CHM 3610	Biochemistry I (BIO)	4 s.h.
FOR 4620	Methods in Forensic Biology (BIO)	3 s.h.
MTH 2350	Probability and Statistics	4 s.h.
		21 s.h.

Crime Laboratory Technician Certificate of Achievement (30-31 s.h.)

CERTIFICATE R	EOUIREMENTS:

CERTIFICAL	E REQUIREMENTS.	
WRT 1010	College Composition I	3 s.h.
FOR 1010	Introduction to Forensic Science	3-4 s.h.
FOR 3310	Impression and Trace Evidence Analysis	3 s.h.
FOR 3320	Firearm and Tool Mark Analysis	3 s.h.
FOR 3330	Forensic Anthropology <i>or</i>	
FOR 4640	Toxicology	3 s.h.
FOR 4620	Methods in Forensic Biology (BIO)	3 s.h.
FOR 4630	Methods in Forensic Chemistry (CHM)	3 s.h.
FOR 4650	Ethics and Expert Testimony	3 s.h.
	Certificate electives <i>chosen from</i>	6 s.h.
	CJ 2650 Criminal Law (3 s.h.)	
	FOR 3050 Criminal Procedures (CJ*) (3 s.h.)	
	FOR 3210 Principles of Criminology (CJ*/SOC))
	(3 s.h.)	
	FOR 3330 Introduction to Forensic Anthro-	
	pology (3 s.h.)	
	FOR 4150 Criminal Investigation (CJ*) (3 s.h.)	
	FOR 4640 Toxicology (3 s.h.))	
	30)-31 s.h.

Crime Scene Practice Certificate of Completion (16 s.h.)

REQUIRED CERTIFICATE COURSES:

CJ 3050	Criminal Procedures (FOR)	3 s.h.
CJ 4280	Homicide Investigation	3 s.h.
CJ 4450	Interviewing and Investigative Report Writing	3 s.h.
FOR 1010	Introduction to Forensic Science	4 s.h.
		16 s h

Forensic Science Post-Bachelor Certificate of Achievement (minimum 30 s.h.)

The Post-Bachelor Certificate of Achievement in Forensic Science is available to degree-holding students whose prior degree majors are too heavy in science to allow a Second Bachelor program in Forensic Science.

REQUIRED CERTIFICATE COURSES:

Each student's plan is individually written to cover those courses of the total 86 s.h. listed that were not taken for the original bachelor degree. The plan requires all of the following courses not previously completed with a grade of C (2.0) or better:

Forensic Science Required Major Courses	42 s.h.
Forensic Science Required Support Courses	28 s.h.
Chemistry Required Minor Courses	20 s.h.
RST 4110 Medical Ethics (PHL) or	
RST 4140 Life/Death Issues	3-4 s.h.

minimum 30 s.h.

While the minimum requirement for the certificate is 30 s.h. postbachelor at Madonna University, meeting all requirements makes the plans of some students longer. For those for whom the plan might be short, additional courses to fulfill the 30 s.h. residency requirement are available from the Forensic Science electives group.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

GENERAL MUSIC

See listing under MUSIC.

GENERAL SCIENCE

General Science Major: Bachelor of Science (42 s.h.)

The degree of Bachelor of Science with a major in General Science is available only at the completion of all requirements for the Elementary (K-8) Provisional Teaching Certificate. A student who begins the program for teacher certification but does not complete it for any reason must change to another major to complete degree requirements.

Students completing the Bachelor of Science degree using the General Science major must add the course EDU 4470, Theory and Techniques of Science Instruction: Elementary School, 1 s.h., to the Professional Education requirements listed in the Education section of this Catalog.

REQUIRED MAJOR COURSES:

BIO 1030	General Biology I	4 s.h.
BIO 1040	General Biology II	4 s.h.
BIO 2240	Basic Human Physiology	4 s.h.
CHM 1110	General Chemistry I	4 s.h.
CHM 1610	Introduction to Life Chemistry	4 s.h.
ESS 2160	Earth Science	4 s.h.
ESS 3030	Oceans: Our Continuing Frontier	4 s.h.
ESS 3290	Principles of Astronomy	4 s.h.
PHY 2530	General Physics I	4 s.h.
PHY 2540	General Physics II	4 s.h.
GSC 4950	Senior Seminar	2 s.h.
		42 s.h.

REQUIRED SUPPORT COURSES:

MTH 1050 and 1060 College Algebra and Trigonome	etry <i>or</i>
MTH 1210 Precalculus	5-7 s.h.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

GENERAL STUDIES

See instead INTERDISCIPLINARY STUDIES.

GERONTOLOGY

See instead AGING STUDIES.

GRAPHIC DESIGN

See listing under ART.

Health Care Informatics

See listing under HEALTH SCIENCES.

HEALTH CARE MANAGEMENT / HEALTH SERVICES ADMINISTRATION

See concentration under BUSINESS ADMINISTRATION

HEALTH EDUCATION

Health Education Minor (20 s.h.)

iicuitii L	ducution willor (20 3.11.)	
HED 2410	Concepts: Physical Activity, Nutrition, Mental/	
	Emotional Health	3 s.h.
HED 2420	Concepts: Safety, Violence Prevention, Environ-	
	mental Health	3 s.h.
HED 2430	Concepts: Personal/Social Health/Diseases Com-	

	municable and Non-Communicable	3 s.h.
HED 2440	Concepts: Drug Use and Abuse	3 s.h.
HED 3460	Human Sexuality	2 s.h.
HED 4410	Curriculum in Health Education*	3 s.h.
HED 4510	Assessment in Health Education*	3 s.h.
		20 s.h.

^{*}course requires Admission to the Teacher Education Program.

HEALTH SCIENCES

Health Sciences Major: Bachelor of Science (46-47 s.h.)

`	,	
REQUIRED	MAJOR COURSES:	
HSC 3450	Evidence-Based Practice	2 s.h.
HSC 3500	Navigating the U.S. Health Care System	3 s.h.
HSC 4900	Professional Role Seminar	2 s.h.
HSC 4930	Internship in Health Sciences I	3 s.h.
HSC 4940	Internship in Health Sciences II	3 s.h.
MIS 3350	Health Care Informatics	3 s.h.
MTE 1010	Medical Terminology	2 s.h.
MTE 2010	Introduction to Health Care Professions	2 s.h.
WL 2100	Communication and Culture for Health Care	
	Professionals	3 s.h.
	Concentration: select either Population Health C	are
	Management or Health Care Informatics and	
	Quality Systems Management	23-24 s.h.
		46-47 s.h.

CONCENTRATION IN POPULATION HEALTH CARE MANAGEMENTAGE 2300Programs and Services for Older Adults3 s.h.AGE 3850Documentation and Assessment3 s.h.AGE 3900Care Management for Older Adults3 s.h.HSC 4700Health Promotion3 s.h.

HSP 3310	Management of the Bereavement Process	3 s.h.
NFS 3380	Nutrition Education and Counseling or	
PSY 3100	Health Psychology	3 s.h.
SOC 3620	Society and Health: Sociological Perspectives	3 s.h.
HSC 4950	Senior Seminar	2 s.h.
		23 s.h.

CONCENTRATION IN HEALTH CARE INFORMATICS AND QUALITY SYSTEMS MANAGEMENT USC 4060. Spring Springs

HSC 4960	Senior Seminar	2 s.h.
MGT 3160	Human Behavior and Leadership	3 s.h.
MIS 2400	Introduction to Management Information Systems	3 s.h.
MIS 2700	System Analysis and Design	3 s.h.
MIS 3470	Health Care Data Analytics	3 s.h.
MIS 3700	Information Systems Project Management	3 s.h.
HSC 3610	Safety Across Health Care Settings	3 s.h.
HSC 3650	Quality and Clinical Transformation	4 s.h.

24 s.h.

REQUIRED SUPPORT COURSES:

BIO 2240	Basic Human Physiology or	
BIO 2430	Human Anatomy and Physiology I	3-4 s.h.
CIS 2380	Introduction to Computers	3 s.h.
COM 2120	Interpersonal Communication	3 s.h.
HSP 3500	Spiritual and Ethical Considerations in End-of-Life	
	Care (RST)	3 s.h.
MTH 2350	Probability and Statistics	4 s.h.
NFS 2220	General Nutrition for the Health Professional	2 s.h.
PSY 1010	General Psychology	3 s.h.
PSY 2450	Life Span Developmental Psychology	4 s.h.
RST 4110	Medical Ethics (PHL)	3 s.h.
SOC 1010	Introduction to Sociology or	

SOC 3120 I	Diversity, Discrimination, and Social Justice	3-4 s.h. 31-32 s.h.	HSP 4850 Hospice/Palliative Care Field Experience II 2 s.h. HSP 4950 Hospice/Palliative Care Senior Seminar 2 s.h.
	ne course WL 2100 meets general education Go	al GE-6	31 s.h.
for Health	Sciences students and BSN students (only).		REQUIRED SUPPORT COURSES:
			RST 4140 Life/Death Issues 4 s.h. SOC 2160 Empathy Listening Skills (SW*) 1 s.h.
HISTO	RV		SOC 2160 Empathy Listening Skills (SW*) 1 s.h. 5 s.h.
	ajor: Bachelor of Arts (36 s.h.) er certification candidates are referred to the maj	ior in	Hospice and Palliative Studies Minor (21 s.h.)
	es, rather than History, for a teaching certificate		REQUIRED MINOR COURSES: HSP 2210 Introduction to Palliative/End-of-Life Care Concepts 3 s.h.
	AAJOR COURSES:	3	HSP 3310 Management of the Bereavement Process <i>or</i>
	Ancient World <i>or</i>		HSP 4750 Emerging Issues in Palliative/End-of-Life Care 3 s.h.
	Medieval World	4 s.h.	HSP 3480 Psychosocial Domains of Palliative/End-of-Life
	United States to 1900 or		Care (PSY) 3 s.h.
	American Civil War	4 s.h.	HSP 3500 Spiritual and Ethical Considerations in Palliative/ End-of-Life Care (RST) 3 s.h.
	Early Modern World <i>or</i> Modern World	4 s.h.	HSP 3530 Palliative/End-of-Life Comfort and Care 3 s.h.
	Minority Groups in America	4 s.h.	HSP 4620 Palliative/End-of-Life Care Management I 3 s.h.
	United States in the Modern Era	4 s.h.	HSP 4650 Hospice/Palliative Care Field Experience I <u>3 s.h.</u>
HIS 4631 (Global Studies: Modern Africa or		21 s.h.
	Global Studies: Modern Asia or		RECOMMENDED COURSE:
	Global Studies: Modern Latin America or	2 1	RST 4140 Life/Death Issues 4 s.h
	Global Studies: Modern Middle East History and Social Science Seminar	3 s.h. 4 s.h.	Hospice and Palliative Studies Major: Associate of
	Major electives	9 s.h.	Science (28 s.h.)
		36 s.h.	Required Major Courses:
Hietom/ Mi	inor (26 s.h.)		HSP 2210 Introduction to Palliative/End-of-Life Care Concepts 3 s.h.
-	Inor Courses:		HSP 3310 Management of the Bereavement Process 3 s.h.
~	Ancient World <i>or</i>		HSP 3480 Psychosocial Domains of Palliative/End-of-Life
HIS 2450	Medieval World	4 s.h.	Care (PSY) 3 s.h. HSP 3500 Spiritual and Ethical Considerations in Palliative/
HIS 2310	United States to 1900 or		End-of-Life Care (RST) 3 s.h.
	American Civil War	4 s.h.	HSP 3530 Palliative/End-of-Life Comfort and Care 3 s.h.
	Early Modern World <i>or</i>		HSP 4620 Palliative/End-of-Life Care Management I 3 s.h.
	Modern World	4 s.h.	HSP 4650 Hospice/Palliative Care Field Experience I 3 s.h.
	Minority Groups in America United States in the Modern Era	4 s.h. 4 s.h.	HSP 4750 Emerging Issues in Palliative/End-of-Life Care 3 s.h.
	Global Studies: Modern Africa or	4 5.11.	Major electives $\frac{4 \text{ s.h.}}{28 \text{ s.h.}}$
	Global Studies: Modern Asia or		Required Support Courses:
	Global Studies: Modern Latin America or		RST 4140 Life/Death Issues 4 s.h.
HIS 4634	Global Studies: Modern Middle East	3 s.h.	SOC 2160 Empathy Listening Skills (SW*) <u>1 s.h.</u>
	Minor electives	<u>3 s.h.</u>	5 s.h.
		26 s.h.	Essentials in End-of-Life Care Certificate of
			Completion (15 s.h.)
	eacher certification, this minor must be paired w		REQUIRED CERTIFICATE COURSES:
-	ial Studies; and HIS 2310, United States to 1900), must be	HSP 2210 Introduction to Palliative/End-of-Life Care Concepts 3 s.h.
completed.			HSP 3310 Management of the Bereavement Process 3 s.h.
HUSDI	ICE AND DALLIATIVE		HSP 3480 Psychosocial Domains of Palliative/End-of-Life
HUSPI	ICE AND PALLIATIVE		Care (PSY) 3 s.h. HSP 3500 Spiritual and Ethical Considerations in Palliative/
STUDI	ES		End-of-Life Care (RST) 3 s.h.
	nd Palliative Studies Major: Bachelo	or of	HSP 4750 Emerging Issues in Palliative/End-of-Life Care 3 s.h.
Science (3			15 s.h.
	AJOR COURSES:		Hospice and Palliative Studies Certificate of
	ntroduction to Palliative/End-of-Life Care Cond	-	Achievement (31 s.h.)
	Management of the Bereavement Process	3 s.h.	Required Certificate Courses:
HSP 3480 F	Psychosocial Domains of Palliative/End-of-Life	3 c h	WRT 1010 College Composition I 3 s.h.
HSP 3500 S	Care (PSY) Spiritual and Ethical Considerations in Palliative	3 s.h.	HSP 2210 Introduction to Palliative/End-of-Life Care Concepts 3 s.h.
	End-of-Life Care (RST)	3 s.h.	HSP 3310 Management of the Bereavement Process 3 s.h.
	Palliative/End-of-Life Comfort and Care	3 s.h.	HSP 3480 Psychosocial Domains of Palliative/End-of-Life Care (PSY) 3 s.h.
	Palliative/End-of-Life Care Management I	3 s.h.	HSP 3500 Spiritual and Ethical Considerations in Palliative/
	Hospice/Palliative Care Field Experience I	3 s.h.	End-of-Life Care (RST) 3 s.h.
	Emerging Issues in Palliative/End-of-Life Care Palliative/End-of-Life Care Management II	3 s.h. 3 s.h.	
1151 402U F	amanyo/Did-or-Dife Care ividilagement II	J 8.11.	

HSP 3530 Palliative/End-of-Life Comfort and Care HSP 4620 Palliative/End-of-Life Care Management I HSP 4650 Hospice/Palliative Care Field Experience I HSP 4750 Emerging Issues in Palliative/End-of-Life Care RST 4140 Life/Death Issues	3 s.h. 3 s.h. 3 s.h. 3 s.h. 4 s.h. 31 s.h.
HOSPITALITY AND TOURISM	
MANAGEMENT	
Hospitality and Tourism Management Major:	
Bachelor of Science (40 s.h.)	
REQUIRED MAJOR COURSES:	
HMG 2400 Principles of Retailing (MRM*)	3 s.h.
HMG 2550 Consumer Behavior (MKT*/NFS)	3 s.h.
HMG 3210 Meeting and Event Management	3 s.h.
HMG 3260 Travel and Tourism	3 s.h.
HMG 3360 Lodging Management I	3 s.h.
HMG 3630 Architectural Style and Interior Design (MRM*)	4 s.h.
HMG 4360 Lodging Management II	2 s.h.
HMG 4370 Marketing Hospitality Services (MKT)	3 s.h.
HMG 4910 Internship	3 s.h.
HMG 4950 Senior Seminar	2 s.h.
3	11 s.h.
HMG 2250, Human Nutrition (NFS*) (4 s.h.)	
HMG 2260, Introductory Food Science (NFS*)	
(3 s.h.) HMG 2760, Food Service Sanitation (NFS*)	
(2 s.h.)	
HMG 3100, Facility Design and Event	
Management (SM*) (3 s.h.)	
HMG 3460, Food Service Management I	
(NFS*) (3 s.h.)	
HMG 3660, Market Field Study (NFS) (2 s.h.)	
HMG 4260, Club Management (MGT/SM)	
(3 s.h.)	
HMG 4460, Food Service Management II	

40 s.h.

REQUIRED MINOR:

A minor in Business Administration (24 s.h.) is required with the Hospitality and Tourism Management major.

(NFS*) (3 s.h.)

Hospitality and Tourism Management Minor (20 s.h.)

REQUIRED MINOR COURSES:

		20 s.h.
	Electives*	9 s.h.
HMG 4370	Marketing Hospitality Services (MKT)	3 s.h.
HMG 4360	Lodging Management II	2 s.h.
	Lodging Management I	3 s.h.
	Principles of Retailing (MRM*)	3 s.h.

^{*} Electives may be selected from any HMG courses.

HUMAN RESOURCES MANAGEMENT

The program in Human Resources Management is offered only to students in our outreach center in China and limited to students admitted through Madonna University's partners for the program. Other students are referred to the Business Administration major with a concentration in Human Resources Management.

Human Resources Management Major: Associate of

Science (21 s.h.)

	•	
REQUIRED .	MAJOR COURSES:	
BL 3500	Employment Law	3 s.h.
FIN 3150	Business Finance	3 s.h.
MGT 3020	Organizational Behavior	3 s.h.
MGT 3100	Strategic Human Resource Planning	3 s.h.
MGT 3270	Human Resources Development	3 s.h.
MGT 4350	Compensation	3 s.h.
MGT 3210	Operations Management	<u>3 s.h.</u>
		21 s.h.
REQUIRED .	Support courses:	
ACC 2010	Principles of Accounting I	3 s.h.
ACC 2020	Principles of Accounting II	3 s.h.
CIS 2380	Introduction to Computers	3 s.h.
ECN 2720	Principles of Microeconomics	3 s.h.
ECN 2730	Principles of Macroeconomics	3 s.h.
MGT 2360	Principles of Management	3 s.h.
MKT 2440	Principles of Marketing	3 s.h.
MTH 2300	Business Calculus	4 s.h.
QS 3550	Applied Business Statistics	<u>3 s.h.</u>

28 s.h.

HUMANE STUDIES

See listing under SOCIOLOGY.

HUMANITIES

Humanities Minor (24 s.h.)

REQUIRED MINOR COURSES:

REQUIRED WINOR COURSES.	
8 s.h. must be in upper division courses.	
HUM 2010 The Medium and the Message or	
HUM 2020 Humanities through the Arts or	
HUM 3050 The Idea of Justice	4 s.h.
HUM 3080 The Nature and Scope of Inquiry or	
HUM 3090 Holocaust: Issues and Themes in the Genocide	
of European Jewry	4 s.h.
Minor electives, from a minimum of four	
Humanities disciplines*	16 s.h.
	24 s.h.

^{*} Minor electives to be chosen from the following disciplines: Art, Art History, Communication Studies, English, Humanities, Journalism, Music, Philosophy, Religious Studies, Sign Language Studies, World Languages, and Writing (excluding WRT 1010 and WRT 1020).

INFANT-TODDLER CAREGIVER

See listing under CHILD DEVELOPMENT.

INSTRUCTION OF ENGLISH LANGUAGE LEARNERS K-12

See listing under EDUCATION.

INSTRUMENTAL PERFORMANCE

See listing under MUSIC.

INTEGRATED SCIENCE

The Integrated Science major is especially intended for the Secondary (grades 6-12) science teacher. It is a comprehensive major and does not require a minor for teacher certification.

Students selecting an interdisciplinary science major as preparation for professional and graduate studies are referred to the Natural Science major.

Integrated Science Major: Bachelor of Science (61-65 s.h.)

The student must complete (a) all the required core and required Mathematics support courses, (b) all the courses listed for one of the three groups Biology emphasis, or Chemistry emphasis, or Physics emphasis, and (c) a starred (*) course from one of the other two emphasis groups.

REQUIRED	Core	Courses:
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BIO 1030	General Biology I	4 s.h.
BIO 1040	General Biology II	4 s.h.
BIO 2240	Basic Human Physiology	4 s.h.
BIO 3210	General Ecology	3 s.h.
ESS 2160	Earth Science	4 s.h.
ESS 3030	Oceans: Our Continuing Frontier	4 s.h.
ESS 3290	Astronomy	4 s.h.
CHM 1110	General Chemistry I	4 s.h.
CHM 1120	General Chemistry II	4 s.h.
CHM 2210	Organic Chemistry I	4 s.h.
PHY 2530	General Physics I or	
PHY 2630	Physics for Scientists and Engineers I**	4 s.h.
PHY 2540	General Physics II or	
PHY 2640	Physics for Scientists and Engineers II**	<u>4 s.h</u> .
		47 s.h.
Selected * c	course	4 s.h.
Selected En	nphasis group	<u>10-14 s.h.</u>
		61-65 s.h.

BIOLOGY EMPHASIS COURSES:

CHEMISTRY	EMPHASIS COURSES:	
MTH 2350	Probability and Statistics	4 s.h.
BIO 4950	Senior Seminar	2 s.h.
BIO 3010	Genetics	4 s.h.
*BIO 2260	Microbiology	4 s.h.

*CHM 2220	Organic Chemistry II or	
*CHM 3610	Biochemistry	4 s.h.
CHM 3310	Quantitative Analysis	4 s.h.
CHM 4950	Senior Seminar	2 s.h.

Physics Emphasis** Courses:

PHY 2710	Fundamental Electronics	4 s.h.
PHY 3510	Modern Physics: Atomic and Nuclear	4 s.h.
*PHY 4510	Electronics: Digital Techniques	4 s.h.
NSC 4950	Senior Seminar	2 s.h.
**Students	completing the Integrated Science major with a Physic	• •

emphasis must select PHY 2630 and PHY 2640 in the Core courses and MTH 2510 in the Required Support Courses.

REQUIRED SUPPORT COURSES:

MTH 1050 and 1060 College Algebra and Trigonometry or

MTH 1210 Precalculus or

MTH 2510 Calculus with Analytic Geometry I 5-7 s.h.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

INTERDISCIPLINARY STUDIES

Interdisciplinary Studies Major: Bachelor of Arts

The Bachelor of Arts degree with a major in Interdisciplinary Studies (IDS) provides an opportunity for students to develop a personalized program of study integrating their interests, professional and career goals, and a wide variety of courses. In consultation with the IDS Program Director, the personalized program of study is developed around a theme, problem, or issue that can be addressed through an interdisciplinary approach. Examples of themes include, but are not limited to, Asian Studies, Human Diversity, Sustainability Studies, Catholic Social Justice, or Environmental Communication.

Objectives of the program include:

- Integration of personal development, liberal arts, and professional/ career studies in an individualized program of study.
- Development of writing skills.
- Development of critical thinking skills.
- Development of interdisciplinary problem-solving skills.
- Emphasis on breadth of academic experience rather than development of a traditional major.
- Inclusion of applied research and interdisciplinary projects.
- Emphasis on global and multicultural perspectives.

Interdisciplinary Studies students are expected to incorporate clearly articulated educational and career goals into an individual plan of study and rationale that includes the required major courses and additional courses from the University Catalog addressing the specific theme, problem, or issue. The plan of study must be approved by the Interdisciplinary Studies Director; each student then presents her or his plan at a meeting of the Interdisciplinary Studies Faculty Advisory Committee for final approval.

REQUIRED IDS CORE COURSES:

HUM 3050 The Idea of Justice or

HUM 3080 The Nature and Scope of Inquiry or

HUM 3090 Holocaust: Issues and Themes in the Genocide of

European Jewry or HUM 3110 Do Animals Matter? (SSC) or

110111 3110	Bo i minute i (BBC) of	
	Approved upper-division elective	3-4 s.h.
IDS 3000	Social Change and Challenges	3 s.h.
IDS 3020	Introduction to Interdisciplinary Studies	3 s.h.
IDS 4950	Senior Seminar	3 s.h.
WRT 3100	Advanced Composition	3 s.h.

In addition, students must complete a minimum of 45 s.h. at the upper division (3000- or 4000-level) as part of the 120 s.h. required for the degree. This includes all courses taken at the 3000- or 4000-level, including general education courses, University core courses, required IDS Core courses, courses in the Plan of Study, and electives. The plan of study may include approved certificate programs.

INTERNATIONAL BUSINESS

The program in International Business and Economics is a degree-completion program for students in our outreach center in Dubai and limited to students admitted through Madonna University's partners for the program. On-campus students are referred to the Business Administration major with a concentration in International Business.

International Business and Economics Major: Bachelor of Science (31 s.h.)

REQUIRED MAJOR COURSES: BUS 3950 Business Ethics

3 s.h.

ECN 3940	Economic Geography	3 s.h.
FIN 3150	Business Finance	3 s.h.
INB 3140	International Business	3 s.h.
INB 4350	International Trade Structures and Systems	3 s.h.
INB 4450	International Management	3 s.h.
INB 4500	International Business and Culture Experience	3 s.h.
INB 4930	Internship	2 s.h.
PSC 3010	International Relations	4 s.h.
PSC 3210	Comparative Politics	<u>4 s.h</u> .
		31 s.h.
REQUIRED .	Business Foundation Courses (18 s.h.)	
ACC 2010	Principles of Accounting I	3 s.h.
ACC 2020	Principles of Accounting II	3 s.h.
BL 3330	Business Law I	3 s.h.
MGT 4950	Business Capstone	3 s.h.
MKT 2440	Principles of Marketing	3 s.h.
QS 3550	Applied Business Statistics	3 s.h.
		18 s.h.
REQUIRED	Support Courses:	
CIS 2380	Introduction to Computers	3 s.h.
ECN 2720	Principles of Microeconomics	3 s.h.
ECN 2730	Principles of Macroeconomics	3 s.h.
FIN 3700	Life Cycle Financial Planning	3 s.h.
	Principles of Management	3 s.h.
	Organizational Behavior	3 s.h.
	Strategic Human Resource Planning	3 s.h.
	Entrepreneurship	3 s.h.
MKT 3730	Principles of Advertising	3 s.h.
MTH 2350	Probability and Statistics	<u>4 s.h.</u>
		31 s.h.

INTERNATIONAL STUDIES

International Studies Certificate of Achievement (30 s.h.)

CERTIFICATE REQUIREMENTS:

- Experience abroad, which may be embedded in a course or courses or be a separate documented, approved experience.
- Proficiency in a language other than English, demonstrated through college course work, proficiency examination, or other approved experiences.
- A minimum of 30 s.h. of course work, as listed.

REQUIRED CERTIFICATE COURSES:

WRT 1010	College Composition I	3 s.h.
INT 2100	International Studies Foundations	1 s.h.
GEO 3010	World Regional Geography or	
PSC 3010	International Relations	4 s.h.
HIS 4320	Foreign Policy History of the United States or	
HIS 4631	Global Studies: Modern Africa (PSC) or	
HIS 4632	Global Studies: Modern Asia (PSC) or	
HIS 4633	Global Studies: Modern Latin America (PSC) or	
HIS 4634	Global Studies: Modern Middle East (PSC)	3 s.h.
INB 3140	International Business or any other approved	
	profession-related course	3 s.h.
INT 4950	International Studies Seminar	3 s.h.
	Certificate electives, including study abroad, foreign	
	language, approved international studies course	
	electives*	13 s.h.
		30 s.h.

^{*} All electives should be discussed with an advisor in advance of regis- tration.

NOTE: For advisors for the International Studies Certificate, please see the History Department.

JOURNALISM AND PUBLIC RELATIONS

Journalism and Public Relations Major: Bachelor of Arts (46 s.h.)

Arts (46 s.h.)			
REQUIRED .	Major Cours	ES:	
JRN 1210	Introduction to	o Graphic Design (ART*)	4 s.h.
JRN 1320	News Reporti	ng	3 s.h.
JRN 2050	Public Relatio	ns Writing	3 s.h.
JRN 2860	Editorial and l	Feature Writing	3 s.h.
JRN 3130	Photography I	(ART)	3 s.h.
JRN 3160	News Product	ion	2 s.h.
JRN 3570	Editing and D	esign	3 s.h.
JRN 4010	Mass Commu	nication (BCA/COM)	3 s.h.
JRN 4160	Advanced Nev	ws Production	2 s.h.
JRN 4750	Special Topics	in Journalism/Public Relations	1-3 s.h.
JRN 4910	Journalism/Pu	blic Relations Practicum/	
	Cooperative	e Education	3-12 s.h.
ENG 4950	Senior Semina	nr	3 s.h.
	Major elective	es, to be chosen from:	13 s.h.
	ART 1030	Painting Foundations for Art Designation	gn (3 s.h.)
	ART 2680	Graphic Design II (4 s.h.)	
	ART 3100	Advertising Design (4 s.h.)	
	ART 4250	Advanced Graphic Design (4 s.h.)	
	ENG 2090	Approaches to Grammar (4 s.h.)	
	ENG 2620	Language and Culture (3 s.h.)	
	JRN 2100	Media Relations in Sport (SM*) (3 s.h.)
	JRN 2610	Television Production I (BCA*/C0 (3 s.h.)	OM)
	JRN 3140	Photography II (ART) (3 s.h.)	
	JRN 3150	Photoshop (ART*) (3 s.h.)	
	JRN 3610	Television Production II (BCA*/C (3 s.h.)	COM)
	JRN 4050	Advanced Public Relations (3 s.h.)
	MIS 2850	Web Design for Business Applicat (3 s.h.)	
	MKT 2440	Principles of Marketing (3 s.h.)	
		Consumer Behavior (HMG/NFS)	(3 s.h.)
		Sales Management (3 s.h.)	
		Marketing Management (3 s.h.)	
		Creative Writing (3 s.h.)	
		Technical Writing (3 s.h.)	
		Business and Professional Writing	(3 s.h.)
		Č	

46 s.h.

3 s.h.

minimum 6 s.h.

Journalism and Public Relations Major: Associate of Arts (24 s.h.)

REQUIRED MAJOR COURSES

KEQUIRED	MAJOR COURSES:		
JRN 1320	News Reporting	3	s.h.
JRN 2860	Editorial and Feature Writing	3	8 s.h.
JRN 3130	Photography I (ART)	3	8 s.h.
JRN 3160	News Production	2	2 s.h.
JRN 3570	Editing and Design	3	8 s.h.
	Major electives in Journalism	10) s.h.
		24	s.h.
REQUIRED	Support Courses (6 s.h. to be chosen from):		
ART 1030	Painting Fundamentals for Art Design	3	s.h.
JRN 1210	Introduction to Graphic Design (ART*)	4	s.h.
,	3910 Practicum/Cooperative Education	1-6	s.h.
MKT 2440	Principles of Marketing	3 s	.h.

Journalism Minor (20 s.h.)

MKT 2550 Consumer Behavior (HMG/NFS)

Required Minor Courses:				
JRN 1320	News Reporting	3 s.h.		
JRN 2860	Editorial and Feature Writing	3 s.h.		
JRN 3160	News Production	2 s.h.		
JRN 3570	Editing and Design	3 s.h.		
JRN 4160	Advanced News Production	2 s.h.		
	Minor electives	<u>7 s.h</u> .		
		20 s.h.		

Students seeking teacher certification in Journalism are required to complete JRN 3130, Photography I, 3 s.h., and JRN 4010, Mass Communication, 3 s.h., with 1 s.h. needed in electives. Note that teacher certification candidates may not include public relations-focused courses in their electives.

LANGUAGE ARTS

The Language Arts major is specifically designed for the Elementary Grades (K-8) English Language Arts teacher. See the EDUCATION listing for full information on teacher certification requirements. Students desiring an English/Language Arts major as preparation for graduate study or employment other than teaching should consult with an Arts and Humanities advisor about alternative majors.

Language Arts Major: Bachelor of Arts (40 s.h.)

REQUIRED	MAJOR	Courses:
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REQUIRED MANGOR COCKSES.			
COM 1050 Communication Concepts and Contexts or			
COM 2350	Public Speaking: The	ory and Practice	3 s.h.
COM 2550	Oral Interpretation of	Literature (ENG)	3 s.h.
ENG 2090	Approaches to Grami	nar	4 s.h.
ENG 2620	Language and Cultur	e	3 s.h.
ENG 2950	Critical Writing and L	iterary Analysis	4 s.h.
ENG 3000	Children's Literature	and Drama (COM)	4 s.h.
ENG 3540	American Folklore an	d Literature <i>or</i>	
ENG 4540	Classics of African-A	merican Literature <i>or</i>	
ENG 4550	Voices of Pluralism ir	American Literature	4 s.h.
ENG 4380	Literature for Young	Adults	4 s.h.
JRN 4010	Mass Communication	(BCA/COM)	3 s.h.
	Creative Writing <i>or</i>		
WRT 3100	Advanced Composition	on	3 s.h.
ENG 4950	Senior Seminar		3 s.h.
	Electives, chosen from	n	2 s.h.
	BCA 1010 Survey	of Broadcast, Film, and	
	Digit	al Media (JRN) (3 s.h.)	
	BCA 2610 Televis	sion Production I	
	(COI	M/JRN) (3 s.h.)	
		Group Communication (3 s.h.)	
		Techniques I (4 s.h.)	
		American Writers: Beginnings 00 (4 s.h.)	
	ENG 3020 Major	American Writers: 1900 esent (4 s.h.)	
		can Folklore and Literature (4 s.	h)
		es of African-American	,
		ature (4 s.h.)	
		of Pluralism in American Litera	ature
	(4 s.ł	n.)	

LEGAL ASSISTANT

Listing is now under PARALEGAL STUDIES and NURSE PARALEGAL.

LONG TERM CARE ADMINISTRATION

All students working toward an associate degree or bachelor degree in Long Term Care Administration are required to complete a series of approved professional contacts. This assures that each student has been introduced to a wide range of current programs, services, and organizations available in the field of long term care.

Long Term Care Administration Major: Bachelor of Science (52 s.h.*)

REQUIRED .	Major Courses:	
ACC 2000	Survey of Accounting	3 s.h.
AGE 1070	Introduction to the Aging Experience	3 s.h.
AGE 2300	Programs and Services for Older Adults	3 s.h.
AGE 3070	Psychology of Midlife and Aging (PSY)	3 s.h.
AGE 3150	How and Why the Body Ages	3 s.h.
AGE 3700	Legal Issues for Older Adults	3 s.h.
AGE 4150	Societies and Aging or	
AGE 4250	Public Policy and Resources in Aging	2 s.h.
AGE 4770	Professional Development Seminar	2 s.h.
AGE 4850	Gerontology Management	3 s.h.
AGE 4950	Gerontology Senior Seminar	2 s.h.
MGT 2360	Principles of Management	3 s.h.
MGT 3020	Organizational Behavior	3 s.h.
MGT 3100	Strategic Human Resources Planning	3 s.h.
MGT 3690	Entrepreneurship	3 s.h.
MKT 2440	Principles of Marketing	3 s.h.
	Required Concentration courses: select from	
	Nursing Home Administration or Care	
	Management (see below)	<u>10 s.h</u> .

^{*}A minimum of 16 s.h. of the major must be taken at Madonna University.

In addition to the above required courses, Long Term Care Administration majors at the baccalaureate level must select a 10 semester-hour concentration in either Nursing Home Administration or in Care Management, as indicated below.

CONCENTRATION IN NURSING HOME ADMINISTRATION:

AGE 4760	Internship in Aging Studies	4 s.h.
AGE 4870	Nursing Home Administration I	3 s.h.
AGE 4880	Nursing Home Administration II	<u>3 s.h.</u>
		10 s.h.
CONCENTRA	ATION IN CARE MANAGEMENT:	
AGE 3850	Documentation and Assessment	3 s.h.
AGE 3900	Care Management for Older Adults	3 s.h.
AGE 4760	Internship in Aging Studies	<u>4 s.h.</u>
		10 s.h.

Long Term Care Administration Major: Associate of Science (29 s.h.)

REQUIRED	MAJOR COURSES:	
ACC 2000	Survey of Accounting	3 s.h.
AGE 2300	Programs and Services for Older Adults	3 s.h.
AGE 3150	How and Why the Body Ages	3 s.h.
AGE 3700	Legal Issues for Older Adults	3 s.h.
AGE 4250	Public Policy and Resources in Aging	2 s.h.
AGE 4760	Internship in Aging Studies	4 s.h.
AGE 4770	Professional Development Seminar	2 s.h.
AGE 4850	Gerontology Management	3 s.h.
AGE 4870	Nursing Home Administration I	3 s.h.
AGE 4880	Nursing Home Administration II	3 s.h.

REQUIRED	SUPPORT	Courses:
NEUUIKED	SUPPUKI	COUKSES.

40 s.h.

GE 1070	Introduction to the Aging Experience	3 s.h.
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29 s.h.

52 s.h.

	Principles of Management	3 s.h.	Networki		
MKT 2440	Principles of Marketing	3 s.h.	MIS 3950	Advanced Networking	3 s.h.
		9 s.h.		Experiential learning/network certifications	1-4 s.h.
Nursing	Home Administration Pre-Licensure			NARS (maximum of 4 s.h.)	
_	te of Completion (9 s.h.)			Brunch with an Expert	1 s.h.
		2 a b		Literature Review Seminar	1-3 s.h.
	Gerontology Management Nursing Home Administration I	3 s.h. 3 s.h.		Research Seminar	1-3 s.h.
	Nursing Home Administration II	3 s.h.		General Topic Seminar	1-3 s.h.
AGE 4000	Nursing Home Administration II	9 s.h.	MIS 4750	Leadership Seminar	1 s.h.
		J 5.11.		minimun	<i>t</i> 23 S.II.
Na4a. All 4	ACE	J	REQUIRED	Business Foundation Courses (13 s.h.)	
	AGE courses have been approved for continuing e			Principles of Accounting I	3 s.h.
License.	in the renewal of the Nursing Home Administrat	or	ACC 3400	Accounting Information Systems	4 s.h.
Liceise.			MKT 2440	Principles of Marketing	3 s.h.
			QS 3550	Applied Business Statistics	3 s.h.
LPN to	RSN				13 s.h.
	under NURSING.		REQUIRED	SUPPORT COURSES:	
See fishing	under NURSING.		CIS 2380	Introduction to Computers	3 s.h.
				Principles of Microeconomics	3 s.h.
ΜΔΝΔ(GEMENT			Principles of Macroeconomics	3 s.h.
	NESS ADMINISTRATION.			Principles of Management	3 s.h.
see BOSIN	NESS ADMIINIS I KA HUN.			College Algebra	4 s.h.
			MTH 2350	Probability and Statistics	4 s.h.
	CEMENT INFORMATION				20 s.h.
WANA	IGEMENT INFORMATION		Manadei	nent Information Systems Minor (24 s.	h)
SYSTI	FMQ			Minor Courses:	••••
				Principles of Accounting I	3 s.h.
	ment Information Systems Major: Bach	eior		Introduction to Computers	3 s.h.
	ce (43 s.h.)			Introduction to Management Information Systems	
	MAJOR COURSES:			Introduction to Visual Basic Programming	4 s.h.
	Introduction to Management Information Systems	3 s.h.	MIS 2910		1 s.h.
	Database Design and Management	3 s.h.		Minor electives	10 s.h.
	Systems Analysis and Design	3 s.h.			24 s.h.
	Introduction to Visual Basic Programming	4 s.h.			
MIS 2910 MIS 2950	Internship I	1 s.h. 3 s.h.	CNA, CN	E, or MCSE Elective Credit Option (1-4 s.h) A
MIS 4950	Networking Essentials and Data Communications Information Systems Senior Seminar	3 s.h.		an MIS program who brings validated certification as	
WIIS 4930	Major electives (see below)	23 s.h.		ovell Administrator (CNA), Certified Novell Engine	
	Wajor electives (see below)	43 s.h.		Microsoft Certified Systems Engineer (MCSE) may a	
M. ron nr		75 5.11.		prior learning credit of 1 to 4 semester hours, which	
	ECTIVES (23 s.H., TO BE CHOSEN FROM*):	1		e as MIS elective credit. (See the University Policies	
	are indicated for information; students may choose fro	eeiy	of the Cata	log, pages 42-44, for information on Prior Learning	credit.)
among ele			o Comm	ones Contificate of Completion (O a h)	
	ON MANAGEMENT:			erce Certificate of Completion (9 s.h.)	
	Business Presentations	3 s.h.		CERTIFICATE COURSES:	2 1
	Computer Ethics	3 s.h.		Foundations of e-Commerce	3 s.h.
	Information Security	3 s.h.		Web Design for Business Applications	3 s.h.
	e-Commerce Information Technology	3 s.h.	MG1 4300	Strategic Planning in an e-Commerce Environment	
	TECHNOLOGIES:	2 1			9 s.h.
	Database Programming—SQL	3 s.h.	See also (COMPUTER TECHNOLOGY, Associate of	
	Advanced Database Topics	3 s.h.	Science.		
MIS 4500	Syconomic Aniar sycho.				
MIS 4500 Business S	Systems Analysis: Information Systems Project Management	3 c h			
MIS 4500 Business S MIS 3700	Information Systems Project Management	3 s.h.	MADI	/FTIMO	
MIS 4500 Business S MIS 3700 MIS 3740	Information Systems Project Management Software Development and Testing	3 s.h.	MARI	KETING	
MIS 4500 BUSINESS S MIS 3700 MIS 3740 MIS 4320	Information Systems Project Management Software Development and Testing Audit and Control of Information Systems			KETING BUSINESS ADMINISTRATION major, Marketing	con-
MIS 4500 BUSINESS S MIS 3700 MIS 3740 MIS 4320 PROGRAMM	Information Systems Project Management Software Development and Testing Audit and Control of Information Systems IING SKILLS:	3 s.h. 2 s.h.			con-
MIS 4500 BUSINESS S MIS 3700 MIS 3740 MIS 4320 PROGRAMM MIS 2850	Information Systems Project Management Software Development and Testing Audit and Control of Information Systems IING SKILLS: Web Design for Business Applications	3 s.h. 2 s.h. 3 s.h.	See also the centration.	e BUSINESS ADMINISTRATION major, Marketing	
MIS 4500 Business S MIS 3700 MIS 3740 MIS 4320 PROGRAMM MIS 2850 MIS 3800	Information Systems Project Management Software Development and Testing Audit and Control of Information Systems IING SKILLS: Web Design for Business Applications Intermediate Visual Basic Programming	3 s.h. 2 s.h. 3 s.h. 3 s.h.	See also the centration. Marketir	e BUSINESS ADMINISTRATION major, Marketing ag Major: Associate of Science (30 s.h.)	
MIS 4500 BUSINESS S MIS 3700 MIS 3740 MIS 4320 PROGRAMM MIS 2850 MIS 3800 MIS 3850	Information Systems Project Management Software Development and Testing Audit and Control of Information Systems IING SKILLS: Web Design for Business Applications Intermediate Visual Basic Programming XML Programming for Business Applications	3 s.h. 2 s.h. 3 s.h.	See also the centration. Marketir <i>Required</i>	e BUSINESS ADMINISTRATION major, Marketing ng Major: Associate of Science (30 s.h.) Major Courses:)
MIS 4500 BUSINESS S MIS 3700 MIS 3740 MIS 4320 PROGRAMM MIS 2850 MIS 3800 MIS 3850 MIS 4800	Information Systems Project Management Software Development and Testing Audit and Control of Information Systems IING SKILLS: Web Design for Business Applications Intermediate Visual Basic Programming XML Programming for Business Applications Advanced Applications Programming	3 s.h. 2 s.h. 3 s.h. 3 s.h. 3 s.h.	See also the centration. Marketir <i>Required</i> ACC 2010	e BUSINESS ADMINISTRATION major, Marketing ng Major: Associate of Science (30 s.h.) <i>Major Courses:</i> Principles of Accounting I	3 s.h.
MIS 4500 BUSINESS S MIS 3700 MIS 3740 MIS 4320 PROGRAMM MIS 2850 MIS 3800 MIS 3850 MIS 4800 CSC 2250	Information Systems Project Management Software Development and Testing Audit and Control of Information Systems IING SKILLS: Web Design for Business Applications Intermediate Visual Basic Programming XML Programming for Business Applications	3 s.h. 2 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h.	See also the centration. Marketir <i>Required</i> ACC 2010 CIS 2380	e BUSINESS ADMINISTRATION major, Marketing ng Major: Associate of Science (30 s.h.) <i>Major Courses:</i> Principles of Accounting I Introduction to Computers	3 s.h. 3 s.h.
MIS 4500 BUSINESS S MIS 3700 MIS 3740 MIS 4320 PROGRAMM MIS 2850 MIS 3800 MIS 3850 MIS 4800 CSC 2250 CSC 2350	Information Systems Project Management Software Development and Testing Audit and Control of Information Systems ING SKILLS: Web Design for Business Applications Intermediate Visual Basic Programming XML Programming for Business Applications Advanced Applications Programming JavaScript Programming	3 s.h. 2 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h.	See also the centration. Marketir REQUIRED ACC 2010 CIS 2380 ECN 2720	e BUSINESS ADMINISTRATION major, Marketing ng Major: Associate of Science (30 s.h.) MAJOR COURSES: Principles of Accounting I Introduction to Computers Principles of Microeconomics	3 s.h. 3 s.h. 3 s.h.
MIS 4500 BUSINESS S MIS 3700 MIS 3740 MIS 4320 PROGRAMM MIS 2850 MIS 3800 MIS 3850 MIS 4800 CSC 2250 CSC 2350	Information Systems Project Management Software Development and Testing Audit and Control of Information Systems ING SKILLS: Web Design for Business Applications Intermediate Visual Basic Programming XML Programming for Business Applications Advanced Applications Programming JavaScript Programming Web Programming	3 s.h. 2 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h.	See also the centration. Marketir REQUIRED ACC 2010 CIS 2380 ECN 2720 MGT 2360	e BUSINESS ADMINISTRATION major, Marketing ng Major: Associate of Science (30 s.h.) MAJOR COURSES: Principles of Accounting I Introduction to Computers Principles of Microeconomics Principles of Management	3 s.h. 3 s.h. 3 s.h. 3 s.h.
MIS 4500 BUSINESS S MIS 3700 MIS 3740 MIS 4320 PROGRAMM MIS 2850 MIS 3800 MIS 3850 MIS 4800 CSC 2250 CSC 2350	Information Systems Project Management Software Development and Testing Audit and Control of Information Systems ING SKILLS: Web Design for Business Applications Intermediate Visual Basic Programming XML Programming for Business Applications Advanced Applications Programming JavaScript Programming Web Programming Object-Oriented Programming	3 s.h. 2 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h.	See also the centration. Marketir REQUIRED ACC 2010 CIS 2380 ECN 2720 MGT 2360 MRM 2400	e BUSINESS ADMINISTRATION major, Marketing ng Major: Associate of Science (30 s.h.) MAJOR COURSES: Principles of Accounting I Introduction to Computers Principles of Microeconomics	3 s.h. 3 s.h. 3 s.h.

Marketing electives (School of Business courses)	9 s.h. 30 s.h.
Marketing Minor (21 s.h.)	
Required Minor courses:	
MGT 2360 Principles of Management	3 s.h.
MKT 2440 Principles of Marketing	3 s.h.
MKT 2550 Consumer Behavior (HMG/NFS)	3 s.h.
Marketing electives	<u>12 s.h</u> .
	21 s.h.

MATHEMATICS

Mathematics Major: Bachelor of Science (31 s.h.)

Required Major Courses:	
MTH 2350 Probability and Statistics	4 s.h.
MTH 2510 Calculus with Analytic Geometry I	5 s.h.
MTH 2520 Calculus with Analytic Geometry II	4 s.h.
MTH 3300 Modern Algebra	3 s.h.
MTH 3410 Linear Algebra	3 s.h.
MTH 3510 Calculus with Analytic Geometry III	4 s.h.
MTH 4510 Introduction to Real Analysis	3 s.h.
MTH 4650 Foundations of College Geometry	3 s.h.
MTH 4950 Senior Seminar	2 s.h.
	31 s.h.
Required Support Course (3 s.h.)	
CSC 2080 Computer Science I or	
CSC 2250 JavaScript Programming	3 s.h.

Mathematics Minor (22 s.h.)	
Required Minor Courses:	
MTH 2350 Probability and Statistics	4 s.h.
MTH 2510 Calculus with Analytic Geometry I	5 s.h.
MTH 2520 Calculus with Analytic Geometry II	4 s.h.
*MTH 3300 Modern Algebra	3 s.h.
*MTH 3410 Linear Algebra	3 s.h.
*MTH 4650 Foundations of College Geometry	<u>3 s.h.</u>
	22 s.h.

^{*}Required for secondary mathematics teacher preparation; students not in preparation for teaching may consult with a Mathematics advisor about electives.

REQUIRED SUPPORT COURSE (3 S.H.)

CSC 2080	Computer Science I or	
CSC 2250	JavaScript Programming	3 s.h

Mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

MATHEMATICS FOR ELEMENTARY CERTIFICATION

Mathematics for Elementary Certification Major: Bachelor of Science (31 s.h.)

The degree of Bachelor of Science with a major in Mathematics for Elementary Certification is available only at the completion of all requirements for the Elementary (K-8) Provisional teaching certificate. A student who begins the program for teacher certification but does not complete it for any reason must change to another major to complete degree requirements.

REQUIRED MAJOR COURSES:

MTH 1210 Precalculus	5 s.h.
MTH 2510 Calculus with Analytic Geometry I	5 s.h.
MTH 2330 Teaching and Learning of Number Concepts	3 s.h.
MTH 2350 Probability and Statistics*	4 s.h.

MTH 3330 Algebraic Thinking and Proportional Reasoning	4 s.h.
MTH 3340 Geometry for Elementary Teachers*	4 s.h.
MTH 4330 Reasoning and Proof in the Elementary	
Mathematics Classroom	2 s.h.
MTH 4340 Technology in the Elementary Mathematics	
Classroom	2 s.h.
MTH 4960 Senior Seminar: Issues in Elementary	
Mathematics Education	2 s.h.
	31 s.h.

Mathematics for Elementary Certification Minor (25 s.h.)

REQUIRED MINOR COURSES:

MTH 1210 Precalculus	5 s.h.
MTH 2510 Calculus with Analytic Geometry I	5 s.h.
MTH 2330 Teaching and Learning of Number Concepts	3 s.h.
MTH 2350 Probability and Statistics*	4 s.h.
MTH 3330 Algebraic Thinking and Proportional Reasoning	4 s.h.
MTH 3340 Geometry for Elementary Teachers*	4 s.h.
	25 s.h.

^{*} Students who have completed both MTH 2350 and MTH 3340 do not need to take MTH 2340 for the Elementary Curriculum minor or for general education.

Mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

MEDICAL TECHNOLOGY

See instead BIOMEDICAL SCIENCES.

MENTAL HEALTH

See listing under PSYCHOLOGY.

MERCHANDISING AND RETAIL MANAGEMENT

See concentration under BUSINESS ADMINISTRATION.

MUSIC

Music Major: Bachelor of Arts (43-49 s.h.)

General Music concentration or **Music Management concentration**

Music Major: Bachelor of Music (62-65 s.h.)

Church Music concentration or Film Music Scoring concentration or Instrumental Performance concentration or Piano Performance concentration or Vocal Performance concentration or **Music Education concentration**

Certificate of Achievement (30 s.h.)

Piano Pedagogy

Music Minor (24 s.h.)

Certificate of Completion (16 s.h.)

Film Music Scoring

All music majors are required to pass an applied music audition in their primary instrument/voice, except in the Music Management concentration. We recommend that you meet this requirement before beginning the program. Music management concentrators must show sufficient skill in their chosen applied area to be able to succeed in the Theory sequence and the upper division music courses.

All music students must pass a basic theory skills test before registering for MUS 1130, Theory I. In the event that you express interest in the music program but do not have at least two years' music experience, we recommend that you take applied piano and tutoring in basic theory and ear training skills (reading treble and bass clefs, constructing major and minor scales, reading meter signatures, etc.) before taking MUS 1130 and MUS 1140, Theory I and Sight-singing and Ear Training I.

All Music majors complete a 26 s.h. core curriculum in addition to an area of concentration as listed above. Students selecting a concentration in Church Music or in Music Management must also complete specified required support courses.

Each music concentration requires a minimum of four semesters of group performance credit. We strongly urge you to participate in a group performance experience each semester that you are enrolled (excepting spring-summer) as part of a rich college-music life.

We enthusiastically welcome music minors into the music program. Applied music requirements for this area are determined by each faculty member individually. We recommend that you take your eight hours of applied music in one instrument; if you choose to study in more than one area, then a majority of the eight hours must be in one instrument.

Advanced placement or credit by evaluation is based upon assessment of prior musical training.

Written approval of the Music Department, prior to registration, is required for all piano and voice courses.

Music Core Required in all concentrations:

All Music major concentrations have a common core consisting of 20 s.h. of music theory courses and 6 s.h. of history of music literature. See the individual plans of study for details.

MUS 3330, 3340 satisfies the fine arts component of general education, Goal GE-3A.

General Music Concentration: Bachelor of Arts (49 s.h.)

(49 S.II.)		Church Music Concentration: Bachelor of Music	
Required Music Core Courses (26 s.h.)			,
Theoretical Studies:		(65 s.h.)	
MUS 1130 Theory I	3 s.h.	REQUIRED MUSIC CORE COURSES (26 S.H.)	
MUS 1140 Sight-singing and Ear Training I	1	Theoretical Studies:	
s.h.			
MUS 1330 Theory II	3 s.h.	MUS 1130 Theory I	3 s.h.
MUS 1340 Sight-singing and Ear Training II	1 s.h.	MUS 1140 Sight-singing and Ear Training I	1 s.h.
MUS 1800 Introduction to Music Technology	2 s.h.	MUS 1330 Theory II	3 s.h.
MUS 2130 Theory III	3 s.h.	MUS 1340 Sight-singing and Ear Training II	1 s.h.
MUS 2140 Sight-singing and Ear Training III	1 s.h.	MUS 1800 Introduction to Music Technology	2 s.h.
MUS 2330 Theory IV	3 s.h.	MUS 2130 Theory III	3 s.h.
MUS 2340 Sight-singing and Ear Training IV	1 s.h.	MUS 2140 Sight-singing and Ear Training III	1 s.h.
MUS 4020 Contrapuntal Techniques	2 s.h.	MUS 2330 Theory IV	3 s.h.
HISTORICAL ANALYSIS:		MUS 2340 Sight-singing and Ear Training IV	1 s.h.
MUS 3330*History of Music Literature I	3 s.h.	MUS 4020 Contrapuntal Techniques	2 s.h.
MUS 3340*History of Music Literature II	3 s.h.	Historical Analysis:	
•	26 s.h.	MUS 3330*History of Music Literature I	3 s.h.
REQUIRED CONCENTRATION COURSES (23 S.H.):		MUS 3340*History of Music Literature II	3 s.h.
MUS 3110 and MUS 3120 Diction or			26 s.h.
MUS 4040 Conducting and Performing Techniques or		REQUIRED CONCENTRATION COURSES (39 S.H.):	
MUS 4070 Choral Techniques	2 s.h.	MUS 4030 Form and Analysis	2 s.h.
MUS 4030 Form and Analysis	2 s.h.	MUS 4070 Choral Techniques	2 s.h.
MUS 4960 Senior Seminar in Music	1 s.h.	MUS 4170 Church Music (RST)	2 s.h.
MUAP 4010 Orchestration or		MUS 4960 Senior Seminar in Music	1 s.h.
MUAP 4100 Applied Composition	2 s.h.	MUAP Major Applied Music electives (keyboard)	16 s.h.
MUAP Applied Music electives (instrumental/vocal)	12 s.h.	MUAP Minor Applied Music electives (instrumental/vocal)	8 s.h.
MUAP Group Performance	<u>4 s.h.</u>	MUAP Group Performance (a minimum 6 s.h. must be	
	23 s.h.	MUAP 1080, Chorale)	8 s.h.
	49 s.h.		39 s.h.
			65 s.h.

Music Management Concentration: Bachelor of Arts

3 s.h.

1 s.h.

3 s.h.

1 s.h.

2 s.h.

3 s.h.

1 s.h.

3 s.h.

1 s.h.

2 s.h.

3 s.h.

3 s.h.

26 s.h.

2-4 s.h.

2 s.h.

1 s.h.

8 s.h.

3 s.h.

3 s.h.

3 s.h.

3 s.h.

3 s.h.

3 s.h.

18 s.h.

17-19<u>s.h.</u>

43-45 s.h.

4 s.h.

REQUIRED MUSIC CORE COURSES (26 S.H.)

MUS 1140 Sight-singing and Ear Training I

MUS 1340 Sight-singing and Ear Training II

MUS 1800 Introduction to Music Technology

MUS 2140 Sight-singing and Ear Training III

MUS 2340 Sight-singing and Ear Training IV

MUS 4020 Contrapuntal Techniques

MUS 3330*History of Music Literature I

MUS 3340*History of Music Literature II

REQUIRED CONCENTRATION COURSES (17-19 S.H.):

MUAP Major Applied Music electives (instrumental/vocal)

MUS 3910, 4910 Music Management Cooperative

Education I, II

Group Performance

MUS 4950 Music Management Seminar

MUS 4960 Senior Seminar in Music

ACC 2010 Principles of Accounting I

ACC 2020 Principles of Accounting II

Business Law I

MKT 2550 Consumer Behavior (HMG/NFS)

MGT 2360 Principles of Management

MKT 2440 Principles of Marketing

REQUIRED SUPPORT COURSES:

(43-45 s.h.)

THEORETICAL STUDIES:

MUS 1130 Theory I

MUS 1330 Theory II

MUS 2130 Theory III

MUS 2330 Theory IV

HISTORICAL ANALYSIS:

MUAP

BL 3330

Film Music Scoring Concentration: Bachelor of Music (58 s.h.)

music (55 siii.)	
REQUIRED MUSIC CORE COURSES (26 S.H.)	
Theoretical Studies:	
MUS 1130 Theory I	3 s.h.
MUS 1140 Sight-singing and Ear Training I	1 s.h.
MUS 1330 Theory II	3 s.h.
MUS 1340 Sight-singing and Ear Training II	1 s.h.
MUS 1800 Introduction to Music Technology	2 s.h.
MUS 2130 Theory III	3 s.h.
MUS 2140 Sight-singing and Ear Training III	1 s.h.
MUS 2330 Theory IV	3 s.h.
MUS 2340 Sight-singing and Ear Training IV	1 s.h.
MUS 4020 Contrapuntal Techniques	2 s.h.
HISTORICAL ANALYSIS:	
MUS 3330*History of Music Literature I	3 s.h.
MUS 3340*History of Music Literature II	3 s.h.
	26 s.h.
REQUIRED CONCENTRATION COURSES (36 S.H.):	
BCA 2020 Cinema Studies (COM)	3 s.h.
MUS 4030 Form and Analysis	2 s.h.
MUS 4040 Conducting	2 s.h.
MUS 4960 Senior Seminar	1 s.h.
MUAP 4010 Orchestration	2 s.h.
MUAP 4100 Applied Composition	4 s.h.
MUAP 4770 Film Scoring I**	2 s.h.
MUAP 4780 Film Scoring II	2 s.h.
MUAP 4790 Film Scoring III	2 s.h.
MUAP Applied Piano electives	8 s.h.
MUAP Group Performance	4 s.h.
	22 a b
	32 s.h.
	58 s.h.

^{**}NOTE: A piano proficiency test is required prior to MUAP 4770.

Instrumental Performance Concentration: Bachelor of Music (65 s.h.)

of Music	(65 s.h.)	
REQUIRED I	Music Core Courses (26 s.h.)	
THEORETICA	L STUDIES:	
MUS 1130		3 s.h.
MUS 1140	Sight-singing and Ear Training I	1 s.h.
MUS 1330	Theory II	3 s.h.
MUS 1340	Sight-singing and Ear Training II	1 s.h.
MUS 1800	Introduction to Music Technology	2 s.h.
MUS 2130	Theory III	3 s.h.
MUS 2140	Sight-singing and Ear Training III	1 s.h.
MUS 2330	Theory IV	3 s.h.
MUS 2340	Sight-singing and Ear Training IV	1 s.h.
MUS 4020	Contrapuntal Techniques	2 s.h.
HISTORICAL	Analysis:	
	History of Music Literature I	3 s.h.
MUS 3340*	History of Music Literature II	3 s.h.
		26 s.h.
REQUIRED	Concentration Courses (39 s.h.):	
MUS 4030	Form and Analysis	2 s.h.
MUS 4040	Conducting and Performing Techniques	2 s.h.
	Special Topics in Music	2 s.h.
MUS 4960	Senior Seminar in Music	1 s.h.
MUAP 4010	0 Orchestration	2 s.h.
MUAP	Major Applied Music electives (instrumental)	16 s.h.
MUAP	Minor Applied Music electives (instrumental/voca	<i>l</i>) 6 s.h.
MUAP	Group Performance	8 s.h.
		39 s.h.
		65 s.h.

Piano Performance Concentration: Bachelor of Music (65 s.h.)

REQUIRED MUSIC CORE COURSES (26 S.H.)

THEORETICAL STUDIES:

MUS 1130	Theory I	3 s.h.
MUS 1140	Sight-singing and Ear Training I	1 s.h.
MUS 1330	Theory II	3 s.h.
MUS 1340	Sight-singing and Ear Training II	1 s.h.
	Introduction to Music Technology	2 s.h.
MUS 2130	Theory III	3 s.h.
MUS 2140	Sight-singing and Ear Training III	1 s.h.
MUS 2330		3 s.h.
	Sight-singing and Ear Training IV	1 s.h.
MUS 4020	Contrapuntal Techniques	2 s.h.
HISTORICAL	A NAI VSIS:	
	History of Music Literature I	3 s.h.
	History of Music Literature II	3 s.h.
11100 00 10	Thistory of Music Entertaine in	$\frac{3 \text{ s.h.}}{26 \text{ s.h.}}$
REQUIRED	Concentration Courses (39 s.h.):	
	Piano Pedagogy I	2 s.h.
	Piano Pedagogy II	2 s.h.
	Form and Analysis	2 s.h.
MUS 4750	Special Topics in Music	2 s.h.
MUS 4960	Senior Seminar in Music	1 s.h.
MUAP	Applied Piano electives	16 s.h.
MUAP	Minor Applied Music electives (instrumental/voca	<i>l</i>) 6 s.h.
MUAP	Group Performance	8 s.h.
		39 s.h.
		65 s.h.

Note: Junior and senior recitals are required of all performance majors.

Vocal Performance Concentration: Bachelor of Music (65 s.h.)

REQUIRED MUSIC CORE COURSES (26 S.H.)	
Theoretical Studies:	
MUS 1130 Theory I	3 s.h.
MUS 1140 Sight-singing and Ear Training I	1 s.h.
MUS 1330 Theory II	3 s.h.
MUS 1340 Sight-singing and Ear Training II	1 s.h.
MUS 1800 Introduction to Music Technology	2 s.h.
MUS 2130 Theory III	3 s.h.
MUS 2140 Sight-singing and Ear Training III	1 s.h.
MUS 2330 Theory IV	3 s.h.
MUS 2340 Sight-singing and Ear Training IV	1 s.h.
MUS 4020 Contrapuntal Techniques	2 s.h.
HISTORICAL ANALYSIS:	
MUS 3330*History of Music Literature I	3 s.h.
MUS 3340*History of Music Literature II	3 s.h.
·	26 s.h.
REQUIRED CONCENTRATION COURSES (39 S.H.):	
MUS 3110 Diction 1: English and Italian	1 s.h.
MUS 3120 Diction 2: French and German	1 s.h.
MUS 4030 Form and Analysis	2 s.h.
MUS 4070 Choral Techniques	2 s.h.
MUS 4750 Special Topics in Music	2 s.h.
MUS 4960 Senior Seminar in Music	1 s.h.
MUAP Applied Voice electives	16 s.h.
MUAP Minor Applied Instrument electives	6 s.h.
MUAP Group Performance, MUAP 2610, Lyric Theater	4 s.h.
MUAP Group Performance, other	<u>4 s.h</u> .
-	39 s.h.
	65 s.h.

Note: Junior and senior recitals are required of all performance	e majors.	MUS 3550 Piano Pedagogy II	2 s.h. 33 s.h.
Music Education Concentration: Bachelor of M	lusic		33 8.11.
(65 s.h.)	14010	Music Minor (24 s.h.)	
REQUIRED MUSIC CORE COURSES (26 S.H.)		REQUIRED MINOR COURSES:	
THEORETICAL STUDIES:		MUS 1130 Theory I	3 s.h.
MUS 1130 Theory I	3 s.h.	MUS 1140 Sight-singing and Ear Training I MUS 1330 Theory II	1 s.h. 3 s.h.
MUS 1140 Sight-singing and Ear Training I	1 s.h.	MUS 1340 Sight-singing and Ear Training II	3 s.n. 1 s.h.
MUS 1330 Theory II	3 s.h.	MUS 3330* History of Music Literature I	3 s.h.
MUS 1340 Sight-singing and Ear Training II	1 s.h.	MUS 3340* History of Music Literature II	3 s.h.
MUS 1800 Introduction to Music Technology MUS 2130 Theory III	2 s.h.	MUAP Applied Music electives (majority of hours to be	
MUS 2140 Sight-singing and Ear Training III	3 s.h. 1 s.h.	taken in one area)	8 s.h.
MUS 2330 Theory IV	3 s.h.	MUAP Group Performance	2 s.h.
MUS 2340 Sight-singing and Ear Training IV	1 s.h.		24 s.h.
MUS 4020 Contrapuntal Techniques	2 s.h.	Film Music Scoring Certificate of Completion	
HISTORICAL ANALYSIS:		(16 s.h.)	
MUS 3330*History of Music Literature I	3 s.h.	CERTIFICATE REQUIREMENTS:	
MUS 3340*History of Music Literature II	3 s.h.	MUAP Two semesters of Applied Piano	4 s.h.
	26 s.h.	MUAP 4010 Orchestration	2 s.h.
REQUIRED CONCENTRATION COURSES (39 S.H.):		MUAP 4770 Film Scoring I**	2 s.h.
MUS 3110 and MUS 3120 Diction or		MUAP 4780 Film Scoring II	2 s.h.
MUAP 4010 Orchestration	2 s.h.	MUAP 4790 Film Scoring III	2 s.h.
MUS 3630 Strings Pedagogy	2 s.h.	MUS 1800 Introduction to Music Technology	2 s.h.
MUS 3650 Woodwinds Pedagogy	2 s.h.	MUS 4030 Form and Analysis	2 s.h. 16 s.h.
MUS 3660 Brass Pedagogy	1 s.h.	REQUIRED SUPPORT COURSES:	10 5.11.
MUS 3670 Percussion Pedagogy	1 s.h.	MUS 1130 Theory I	3 s.h.
MUS 4030 Form and Analysis	2 s.h.	MUS 1140 Sight-singing and Ear Training I	1 s.h.
MUS 4040 Conducting and Performing Techniques	2 s.h.	MUS 1330 Theory II	3 s.h.
MUS 4800 Teaching of Music at the Elementary Level	2 s.h.	MUS 1340 Sight-singing and Ear Training II	1 s.h.
MUS 4850 Teaching of Music at the Secondary Level	2 s.h.	MUS 2130 Theory III	3 s.h.
MUS 4960 Senior Seminar in Music	1 s.h.	MUS 2140 Sight-singing and Ear Training III	1 s.h.
MUAP Applied Music electives (instrumental/vocal)	14 s.h.	MUS 2330 Theory IV	3 s.h.
MUAP Group Performance	8 s.h.	MUS 2340 Sight-singing and Ear Training IV MUAP 4010 Orchestration	1 s.h.
(2 semesters of MUAP 2610 required for vocal	-	MUAF 4010 Orchestration	2 s.h. 16 s.h.
	39 s.h. 65 s.h.	Recommended Support Course:	10 5.11.
RECOMMENDED SUPPORT COURSE (vocal specialists)	02 3.11.	MUS 4040 Conducting and Performing Techniques	2 s.h.
MUS 4070 Choral Techniques	2		
s.h. Note: Basic proficiency tests in theory, piano, and sightsing	nging are	* NOTE: A piano proficiency test is required prior to MUAP	4770.
required of all music education majors after the sophomore le	vel		
courses are completed.		NATURAL SCIENCE	
Note further : The Music major with Music Education concer			
in conjunction with the Teacher Education Program, results in		Natural Science Major: Bachelor of Science (54-57 s.h.)	
endorsement to teach Music Education K-12 on a Secondary I sional teaching certificate. Music endorsement is not available		Consists of courses in the pure sciences of Biology, Chemistry	and
initial teaching certificate that is Elementary.	on an	Physics distributed as follows: a core of minimum 22 s.h. in o	
Piano Pedagogy Certificate of Achievement (3	3 e h)	and a track of 16 s.h. in each of the other two. Students work	
	3 3.11.)	toward teacher certification should comply with the plan i	
REQUIRED CERTIFICATE COURSES: WRT 1010 College Composition I	3 s.h.	Integrated Science (for grades 6-12 certification) or with t	he plan
MUAP 1210 Piano	2 s.h.	for General Science (for grades K-8 certification).	
MUAP 1220 Piano	2 s.h.	Biology Core*:	
MUAP 2210 Piano	2 s.h.	BIO 1030 General Biology I	4 s.h.
MUAP 2220 Piano	2 s.h.	BIO 1040 General Biology II	4 s.h.
MUS 1130 Theory I	3 s.h.	BIO 2240 Basic Human Physiology	4 s.h.
MUS 1140 Sight-singing and Ear Training I	1 s.h.	BIO 2260 Microbiology BIO 3010 Genetics	4 .h. 4 s.h.
MUS 1330 Theory II	3 s.h.	BIO 3210 General Ecology	4 s.n. 3 s.h.
MUS 1340 Sight-singing and Ear Training II	1 s.h.	BIO 4950 Senior Seminar	2 s.h.
MUS 2130 Theory III MUS 2140 Sight-singing and Ear Training III	3 s.h.		25 s.h.
MUS 3330* History of Music Literature I	1 s.h. 3 s.h.	* MTH 2350, Probability and Statistics, 4 s.h., is required if the	
MUS 3340* History of Music Literature II	3 s.h.	Biology core is selected.	
MUS 3540 Piano Pedagogy I	2 s.h.	CHEMISTRY CORE:	
		CHEMISIKI CUKE.	

CHM 1110	General Chemistry I	4 s.h.
CHM 1120	General Chemistry II	4 s.h.
CHM 2210	Organic Chemistry I	4 s.h.
CHM 2220	Organic Chemistry II or	
CHM 3610	Biochemistry I	4 s.h.
CHM 3310	Quantitative Analysis	4 s.h.
CHM 4950	Senior Seminar	2 s.h.
		22 s.h.
Physics Co	ORE:	
PHYSICS Co	ORE: Physics for Scientists and Engineers I**	4 s.h.
PHY 2630		4 s.h. 4 s.h.
PHY 2630 PHY 2640	Physics for Scientists and Engineers I**	
PHY 2630 PHY 2640 PHY 2710	Physics for Scientists and Engineers I** Physics for Scientists and Engineers II**	4 s.h.
PHY 2630 PHY 2640 PHY 2710 PHY 3510	Physics for Scientists and Engineers I** Physics for Scientists and Engineers II** Fundamental Electronics	4 s.h. 4 s.h.

^{**}MTH 2510, Calculus with Analytic Geometry I, 5 s.h., is a prerequisite to PHY 2630 and PHY 2640.

To complete a natural science major with a core in any of the above areas, students must also choose two of the following tracks which are different from the core.

BIOLOGY TRACK:

BIO 1030	General Biology I	4 s.h.
BIO 1040	General Biology II	4 s.h.
BIO 2240	Basic Human Physiology	4 s.h.
BIO 2260	Microbiology	<u>4 s.h.</u>
		16 s.h.
CHEMISTRY	TRACK:	
CHM 1110	General Chemistry I	4 s.h.
CHM 1120	General Chemistry II	4 s.h.
CHM 2210	Organic Chemistry I	4 s.h.
CHM 3610	Biochemistry I	4 s.h.
		16 s.h.
PHYSICS TRACK:		
PHY 2530	General Physics I or	
PHY 2630	Physics for Scientists and Engineers I**	4 s.h.

REQUIRED SUPPORT COURSES:

PHY 2540 General Physics II or

MTH 1050 *and* 1060 College Algebra *and* Trigonometry *or* MTH 1210 Precalculus *or* MTH 2510 Calculus with Analytic Geometry I

PHY 2640 Physics for Scientists and Engineers II**

PHY 3510 Modern Physics: Atomic and Nuclear

PHY 4510 Electronics: Digital Techniques

**MTH 2510, Calculus with Analytic Geometry I, 5 s.h., is a prerequisite to PHY 2630 and PHY 2640. Students planning graduate study are advised to select PHY 2630 and PHY 2640 in their plans.

Natural Science Major: Associate of Science (30 s.h.)

REQUIRED MAJOR COURSES:

Biology course	4 s.h.
Chemistry course	4 s.h.
Physics course	4 s.h.
Major electives	<u>18 s.h.</u>
-	30 s.h.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

Associate of Science in Natural Science is available in with a

focus toward **Pre-Nuclear Medicine Technology, Pre-Radiography, Pre-Radiation Therapy, and Pre-Diagnostic Medical Sonography:** see listing under PRE-CLINICAL IMAGING SCIENCES.

Natural Science Minor (24 s.h.)

24 s.h., including courses selected from Biology, Chemistry, and/or Physics with a minimum of $8 \ s.h.$ in any one of the above areas and independent of courses in the major field.

NUCLEAR MEDICINE TECHNOLOGY

See listing under PRE-CLINICAL IMAGING SCIENCES.

NURSE PARALEGAL

Nurse Paralegal Post-BSN Certificate of Achievement (30 s.h.*)

REQUIRED CERTIFICATE COURSES:

22 s.h.

4 s.h.

4 s.h.

4 s.h.

16 s.h.

5-7 s.h.

~	
LAW 1000 Introduction to Paralegal Studies	3 s.h.
LAW 1010 Legal Research and Writing I	3 s.h.
LAW 2560 Legal Research on the Internet	3 s.h.
LAW 2570 Litigation	3 s.h.
LAW 3210 Legal Research and Writing II	3 s.h.
LAW 4220 Torts: An Overview of Negligence	3 s.h.
LAW 4230 Medical-Legal Concepts and Medical Records	3 s.h.
LAW 4270 Evidence	3 s.h.
LAW 4930 <i>or</i> 4940 Internship	1-3 s.h.
LAW 4950 Legal Seminar	3 s.h.
LAW electives	0-2 s.h.
	30 s.h.

^{* 10} semester hours of legal specialty courses must be in traditional classroom format.

THE MADONNA UNIVERSITY PARALEGAL STUDIES PROGRAM IS APPROVED BY THE AMERICAN BAR ASSOCIATION

Completion of the Nurse Paralegal Certificate requirements DOES NOT AUTHORIZE graduates to practice law as an attorney.

Admission to courses other than LAW 1000 requires departmental approval.

Two letters of recommendation attesting to the applicant's abilities and integrity are required.

The last twenty semester hours of legal courses, including LAW 4950, Legal Seminar, must be completed at Madonna University.

NURSING

Madonna University offers a Bachelor of Science in Nursing (BSN) degree for beginning nursing students, and degree-completion programs for licensed practical nurses (LPNs) and registered nurses (RNs). (Note that the College of Nursing and Health also offers a Health Sciences major for entry into related health careers. See page 86.)

The nursing program was accredited from 1970-2006 by the National League for Nursing Accreditation Commission (NLNAC), and has been accredited by the Commission on Collegiate Nursing Education (CCNE) from 2006 to the present.

The University also offers the Master of Science in Nursing (MSN) degree with majors in Nursing Administration and several Nurse Practitioner specialties and the Doctor of Nursing Practice (DNP). Also offered are several post-master certificates. See the Graduate Catalog for information about these programs.

Program Description

A covenant of caring and learning is the foundation of the undergraduate nursing curriculum model. The curricular model concepts of profes-

sional nursing practice, holistic caring, and dynamics of systems converge in a background of a learner-centered community and relation-ship-centered care. The covenant stresses integrity, compassion, spirituality, and ethical behavior.

Theory portions of some undergraduate nursing courses are offered in an online format/hybrid. There are also increasing opportunities to take some general education and University core courses online.

Health Sciences Pre-Nursing Admission

Admission to Nursing is a two-step process. Step 1 is Admission to Health Sciences Pre-Nursing, which occurs year-round. Step 2 is Admission to the Nursing Major, which occurs twice yearly, in February for Fall admissions and August for Winter admissions.

Step 1: Admission Requirements for First-Year students applying to Health Sciences Pre-Nursing

- 1. A minimum 3.0 grade point average in high school college preparatory courses.
- ACT, Enhanced ACT, or SAT scores indicating strong potential to succeed in the program (minimum 20 ACT Composite score or equivalent SAT score).
- 3. At least one year each of high school algebra, biology, and chemistry with a grade of C (2.0) or higher; two years of high school algebra strongly recommended.

Possible Direct-from-High-School Admission

Current high school students applying to the nursing program may be offered direct-from-high-school admission to the nursing major if they meet the following criteria:

- minimum cumulative high school GPA of 3.65 or higher;
- completion of one year biology and chemistry and two years of algebra with grades of B or better;
- ACT composite score of 24 or higher or equivalent SAT score;
- applications received by December 1 for the subsequent fall semester will receive priority decisions;
- Applications received after December 1 for the subsequent fall semester will be reviewed upon receipt and decisions made on a space available basis;
- Within 4 weeks of direct admission offer, students will accept or decline admission.

In order to maintain direct-to-nursing admission status, the student must:

- maintain his/her high school GPA at 3.65 or higher through graduation:
- enroll at Madonna University in the fall semester for which accepted;
- successfully pass all Madonna University courses with grades of C (2.0) or higher;
- maintain GPA of 3.30 or higher at Madonna University;
- complete prerequisite courses to the nursing major and be ready for the nursing major within two years of enrollment.

Step 1: Admission Requirements for Transfer students applying to Health Sciences Pre-Nursing

- A minimum cumulative GPA of 3.0 from all colleges and/or universities.
- 2. At least one year each of high school algebra, biology, and chemistry with a grade of C (2.0) or higher (documented by official high school transcript), or at least one semester of each at the college level with a grade of C (2.0) or higher.
- 3. Certain required support courses are part of the nursing department's academic excellence policy (see "required support courses" in the program listing below). Students with more than one grade below C (2.0) in courses included in the academic excellence poli-

cy, are not considered for the upper division major, even after the courses have been repeated for higher grades. Students whose record indicates lack of success in another nursing program are also not considered.

See page 19 of this Catalog for additional details on the admission of transfer students.

Step 2: Admission Requirements for the Nursing Major

Students should apply for Admission to the Nursing Major by January 31st for Fall entrance to the major; by July 31st for Winter entrance. (Admission application deadlines may be subject to change.) Late applications for a requested semester will not be considered. The following are minimum requirements for consideration:

- Already accepted to Health Sciences pre-nursing as of January 31 for September nursing admission and as of July 31 for January nursing admissions.
- 2. Expect to complete all prerequisite courses as listed with the major (see below), and complete the Madonna University Writing Assessment and any required writing course work, the semester prior to desired admission. A delay in completion of prerequisites would delay consideration for admission to the major. Note that prerequisite courses transferred from other institutions must be transcripted to the Madonna University record by June 1 if beginning the nursing major in September and by September 1 if beginning the major in January.
- Notify the Nursing Admissions Committee in writing by the appropriate deadline date of desire and intent to begin the nursing major.
- 4. Overall Madonna GPA of 3.0 or higher. Students who entered Madonna directly from high school and meet eligibility for the major are considered first. Applicants who hold bachelor or higher degrees are considered next. Next priority for admission is given to transfer students.
- 5. Grade of C (2.0) or higher in all required support courses. Any grade below C (2.0) in a required support course must be repeated at Madonna University for a grade of C (2.0) or better.
- 6. Certain required support courses are part of the nursing department's academic excellence policy (see "required support courses" in the program listing below). Students with more than one grade below C (2.0), at any institution in any courses included in the academic excellence policy are not considered for the upper division major, even after the courses have been repeated for higher grades.
- Satisfactory score on a standardized entrance test. Students admitted to Madonna University directly from high school with ACT composite scores of 20 or higher are not required to take an entrance test.

NOTES:

Acceptance to the Nursing major is contingent on a satisfactory Criminal Background Check and Sex Offenders Registry Check. Students are required to submit documentation of health status and immunizations prior to enrolling in the major.

Once a student begins upper-level nursing courses, the student must earn a grade of C (2.0) or higher in all nursing (NUR) courses. Nursing Department policy states that two grades below C (2.0) in nursing (NUR) courses or those support courses included in the academic excellence policy results in automatic dismissal from the nursing program. This policy still applies when original grades are replaced. There is also a limit on the number of withdrawals permitted from nursing courses.

Admission Requirements for LPNs applying to the Nursing program

LPNs are admitted directly to the Nursing major if they meet the above-listed requirements for Pre-Nursing, with the addition of:

- 1. Current unencumbered Michigan LPN license.
- 2. Résumé of professional work experience.

Minimum cumulative GPA of 3.0 from all colleges and/or universities.

NOTE: There is potential for LPNs to earn some required NUR credits by evaluation/examination.

Admission Requirements for RNs applying to the Nursing program

RNs are admitted directly to the Nursing major if they meet the following requirements:

- Submission of official transcripts from all colleges or postsecondary institutions attended.
- Minimum cumulative GPA of 2.50 from all colleges and/or universities.
- 3. Current unencumbered Michigan RN license.
- 4. Résumé of professional work experience.

Prerequisites to Nursing Major:

BIO 2260	Microbiology <i>or</i>	
BIO 2270	Microbiology for Health Sciences	3-4 s.h.
BIO 2430	Anatomy and Physiology I	3 s.h.
BIO 2440	Anatomy and Physiology II	3 s.h.
BIO 3710	Pathophysiology	3 s.h.
CHM 1610	Life Chemistry	4 s.h.
CIS 2250 of	r 2380 Introduction to Computers	2-3 s.h.
MTH 2350	Probability and Statistics	4 s.h.
NFS 2220	General Nutrition for the Health Professional	2 s.h.
NFS 2230	Therapeutic Nutrition for the Health Professional	2 s.h.
PSY 1010	General Psychology	3 s.h.
PSY 2450	Life Span Developmental Psychology	4 s.h.
SOC 1010	Introduction to Sociology	4 s.h.
WL 2100 *	Communication and Culture for Health Care	
	Professionals	3 s.h.
WRT 1010	College Composition I	3 s.h.
WRT 1020	College Composition II	3 s.h.
	40	5-48 s.h.

^{*} Note that the course WL 2100 meets general education Goal GE-6 for BSN students and Health Sciences students (only), and may be taken concurrently with NUR 2810 and NUR 2830.

Nursing Major: Bachelor of Science in Nursing

(Basic/generic students and LPN-to-BSN students) (53 s.h.)

REQUIRED MAJOR COURSES:

NUR 2810	Introduction to Professional Nursing	3 s.h.
NUR 2830	Health Assessment and Promotion	3 s.h.
NUR 3420	Pharmacology	3 s.h.
NUR 3460	Holistic Mental Health Nursing Care	4 s.h.
NUR 3480	Holistic Nursing Care Adults and Families I	5 s.h.
NUR 3960	Evidence-Based Scholarship and Practice	2 s.h.
NUR 3970	Population-Focused Older Adult and Family	5 s.h.
NUR 3980	Holistic Nursing Care Adults and Families II	4 s.h.
NUR 4410	Holistic Nursing Care of Children and Families	4 s.h.
NUR 4430	Population-Focused Professional Nursing	5 s.h.
NUR 4450	Holistic Nursing Care of Women and Families	4 s.h.
NUR 4820	Holistic Care Immersion	5 s.h.
NUR 4840	Dynamic Nursing Leadership	3 s.h.
NUR 4950	Transitions to Professional Nursing Praxis	3 s.h.
		53 s.h.

REQUIRED	Support	Courses	(see	footnote	regarding	courses	in
bold):							

BIO 2260	Microbiology or	
BIO 2270	Microbiology for Health Sciences	3-4 s.h.
BIO 2430	Anatomy and Physiology I	3 s.h.
BIO 2440	Anatomy and Physiology II	3 s.h.
BIO 3710	Pathophysiology	3 s.h.
CHM 161	0 Introduction to Life Chemistry	4 s.h.

CIS 2250 o	r 2380 Introduction to Computers	2-3 s.h.
HSP 3500	Spiritual and Ethical Considerations in Palliative/	
	End-of-Life Care (RST) or	
HSP 3802	Palliative/End-of-Life Issues: A Lourdes Experience	e
	(RST)	3 s.h.
MIS 3350	Health Care Informatics	2-3 s.h.
MTH 2350	Probability and Statistics	4 s.h.
NIEC 2220	General Nutrition for the Health Professional	2 . 1.
NFS 2220	General Nutrition for the Health Professional	2 s.h.
	Therapeutic Nutrition for the Health Professional	
NFS 2230		
NFS 2230 PSY 2450	Therapeutic Nutrition for the Health Profession	al 2 s.h.
NFS 2230 PSY 2450 RST 4110	Therapeutic Nutrition for the Health Profession Life Span Developmental Psychology	al 2 s.h. 4 s.h.
NFS 2230 PSY 2450 RST 4110 SOC 1010	Therapeutic Nutrition for the Health Profession Life Span Developmental Psychology Medical Ethics (PHL)	al 2 s.h. 4 s.h. 3 s.h.
NFS 2230 PSY 2450 RST 4110 SOC 1010	Therapeutic Nutrition for the Health Profession Life Span Developmental Psychology Medical Ethics (PHL) Introduction to Sociology	al 2 s.h. 4 s.h. 3 s.h.

NOTE: Courses in **bold** are included in the nursing department's academic excellence policy. Students are not considered for the upper division nursing major if grades below C (2.0) are earned in two or more of this group of courses. A grade below C (2.0) in any required support course must be repeated at Madonna for a grade of C (2.0) or better.

An efficiently planned BSN program is typically 120-125 s.h. of credit. However, individual circumstances, including the completion of extra electives or of optional additional minors or certificates, may require additional credits beyond the minimum.

Only students admitted into the Nursing major may enroll in NUR courses.

Progress in the Nursing Major

Admitted Nursing major students must maintain the following:

- Minimum grade of C (2.0) in all nursing and required support courses, and a minimum cumulative GPA of 2.0.
 NOTE: Two grades below C (2.0) in nursing major courses or in those designated by the department's academic excellence policy, whether earned in pre-nursing status or after admission to the nursing major, result in automatic dismissal from the nursing major. Please see the current edition of the Department of Nursing Undergraduate Student Handbook for a full discussion of dismissal
- 2. Proficiency in communication skills.

and appeal policies.

3. Evidence of personal integrity, emotional stability, social competence, and a positive attitude. The University reserves the right to request a student's withdrawal from the program or nursing course because of unsatisfactory performance in the theory or clinical phases of the program and/or for inappropriate behavior.

NOTE:

The nursing curriculum may be completed on a part-time basis.

Degree Completion Plan for RNs

The Department of Nursing provides educational opportunities for Registered Nurses. Building on the competencies acquired in their educational programs, RNs are expected to broaden their nursing theory base and to acquire and demonstrate synthesis of the natural and behavioral sciences. The program will prepare them for nurse leadership roles across the continuum of care and ready them for advanced study in nursing and related fields.

Degree completion students must meet all general education, University core, and support courses as required by the University. These courses may be transferred or the student may choose to earn additional credits by examination in psychology, anatomy/physiology, microbiology, sociology, art or music, and English literature.

Time to complete will vary with enrollment pattern, depending upon individual background and personal goals. The BSN requires a minimum total of 124 semester hours for graduation.

BSN Degree Completion Plan for Registered Nurses

(RNs) (22 s.h.)

After completing 12 s.h. at Madonna University, RN students are eligible for additional transcripted credits based on licensure. This does not include the maximum of 74 s.h. transferred from community colleges.

REQUIRED	MAIOR	Courses:

REQUIRED	MAJOR COURSES.	
NUR 3010	Transitions in Professional Nursing	3 s.h.
NUR 3040	Health Assessment for RNs	2 s.h.
NUR 3800	Health Promotion, Risk Reduction, and Disease	
	Prevention	3 s.h.
NUR 3950	Evidence-Based Nursing Practice	2 s.h.
NUR 4120	Issues in Gerontological Nursing and Palliative Care	3 s.h.
NUR 4300	Population-Based Care	4 s.h.
NUR 4740	Nursing Leadership for Promoting Quality and Safety	3 s.h.
NUR 4960	Emerging Issues Seminar for Professional Nursing	2 s.h.
	2	22 s.h.

Completion time will vary based on individual transferable credit and circumstances, with options for prior learning credit.

NURSING HOME ADMINISTRATION

See listing under LONG TERM CARE ADMINISTRATION.

NUTRITION AND FOOD SERVICE MANAGEMENT

Nutrition and Food Service Management Major: Bachelor of Science (41-42 s.h.)

REQUIRED	Major Courses:	
NFS 2250	Human Nutrition	4 s.h.
NFS 2260	Introductory Food Science	3 s.h.
NFS 2760	Food Service Sanitation	2 s.h.
NFS 3220	Nutrition Assessment	2 s.h.
NFS 3250	Medical Nutrition Therapy I	3 s.h.
NFS 3460	Food Service Management I	3 s.h.
NFS 4250	Advanced Human Nutrition	4 s.h.
NFS 4460	Food Service Management II	3 s.h.
NFS 4950	Senior Seminar	2 s.h.
	Electives in NFS*	4 s.h.
	Required Concentration (either Older Adults or	
	Young Child (see below)	11-12 s.h.
		41 42 - L

^{*} Major electives may be selected from all NFS courses except NFS 2220 or NFS 2380.

REQUIRED SUPPORT COURSES:

BIO 2240	Basic Human Physiology	4 s.h.
BIO 2270	Microbiology for Health Sciences	3 s.h.
CHM 1610	Introduction to Life Chemistry	4 s.h.
MGT 2360	Principles of Management	3 s.h.
		14 s.h.
EARLY CHI	IDHOOD CONCENTRATION	

CD 2160 Child Development: Birth through Age 8

ECE 2250 Foundations in Early Childhood Education

ECE 3160	Administration of Child Care Centers	3 s.h.
NFS 3120	Nutrition Through the Life Cycle	<u>3 s.h.</u>
or		12 s.h.
OLDER AD	ULTS CONCENTRATION	
AGE 1070*	Introduction to the Aging Experience	3 s.h.
AGE 3070*	Psychology of Midlife and Aging	3 s.h.
AGE 3150*	How and Why the Body Ages	3 s.h.
NFS 2420	Nutrition for the Aging	<u>2 s.h.</u>

^{*} Completing these three courses earns the Certificate of Completion in Aging and Older Adults.

Nutrition and Food Service Management Major: Associate of Science (25 s.h.)

REQUIRED	Major Courses:	
NFS 2250	Human Nutrition	4 s.h.
NFS 2260	Introductory Food Science	3 s.h.
NFS 2420	Nutrition for the Aging (AGE)	2 s.h.
NFS 2760	Food Service Sanitation	2 s.h.
NFS 3120	Nutrition through the Life Cycle	3 s.h.
NFS 3460	Food Service Management I	3 s.h.
NFS 4950	Senior Seminar	2 s.h.
	Major electives*	<u>6 s.h.</u>
		25 s.h.

^{*} Major electives may be selected from all NFS courses except NFS 2220 or NFS 2380.

REQUIRED SUPPORT COURSES:

BIO 2240	Basic Human Physiology	4 s.h.
MGT 2360	Principles of Management	<u>3 s.h.</u>
		7 s.h.

Nutrition and Food Service Management Minor (21 s.h.)

REQUIRED MINOR COURSES:

NFS 2250	Human Nutrition	4 s.h.
NFS 2260	Introductory Food Science	3 s.h.
NFS 2760	Food Service Sanitation	2 s.h.
NFS 3120	Nutrition through the Life Cycle	3 s.h.
NFS 3460	Food Service Management I	3 s.h.
	NFS electives*	<u>6 s.h.</u>
		21 s.h.

^{*} Minor electives may be selected from all NFS courses except NFS 2220 or NFS 2380.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

NUTRITIONAL SCIENCES

Nutritional Sciences Major: Bachelor of Science (30 s.h.)

REQUIRED MAJOR COURSES:

NFS 4960 Experimental Foods and Research	3 s.h.
NFS 4420 Medical Nutrition Therapy II NFS 4960 Experimental Foods and Research	
	4 s.n. 3 s.h.
NFS 4250 Advanced Human Nutrition	4 s.h.
NFS 3250 Medical Nutrition Therapy I	3 s.h.
NFS 3220 Nutrition Assessment	2 s.h.
NFS 2260 Introductory Food Science	3 s.h.
NFS 2250 Human Nutrition	4 s.h.

^{*} Major electives may be selected from all NFS courses except NFS 2220 or NFS 2380.

REQUIRED SUPPORT COURSES:

3 s.h.

3 s.h.

11 s.h.

BIO 2260	Microbiology	4 s.h.
BIO 2430	Human Anatomy and Physiology I	3 s.h.
BIO 2440	Human Anatomy and Physiology II	3 s.h.
CHM 111	0 General Chemistry I	4 s.h.
CHM 112	0 General Chemistry II	4 s.h.
CHM 221	0 Organic Chemistry I	4 s.h.
CHM 36	10 Biochemistry I (BIO)	<u>4 s.h.</u>
		26.1

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program direc-

OCCUPATIONAL SAFETY AND HEALTH

Occupational Safety and Health Minor (24 s.h.)

Occupan	iviiai Saiety aliu Healtii Millivi' (24 S.I	I. <i>)</i>
REQUIRED	MINOR COURSES:	
OSH 1020	Standards and Regulations	3 s.h.
OSH 3220	Inspection and Survey of Facilities (FS)	3 s.h.
OSH 3310	Safety Program Management	3 s.h.
OSH 3520	Industrial Hygiene I	3 s.h.
OSH 3980	Industrial Hygiene II	3 s.h.
OSH 4510	Hazardous Materials I(EM/FS)	3 s.h.
	Minor electives	6 s.h.
		24 s.h.
REQUIRED	Support Courses:	
BIO 2240	Basic Human Physiology* or	
NSC 1250	Health Problems*	4 s.h.
CHM 1110	General Chemistry I	4 s.h.
CHM 1610	Introduction to Life Chemistry	4 s.h.
MTH 1050	and 1060 College Algebra and Trigonometry or	
MTH 1210	Precalculus	5-7 s.h.
PHY 2530	General Physics I	<u>4 s.h</u> .
		21-23 s.h.

^{*} Students with current EMT licenses may apply for alternative credit for this requirement.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

Occupational Safety and Health Certificate of Achievement (30 s.h.)

KEQUIRED	CERTIFICATE COURSES:	
WRT 1010	College Composition I	3 s.h.
OSH 1020	Standards and Regulations	3 s.h.
OSH 3220	Inspection and Survey of Facilities (FS)	3 s.h.
OSH 3310	Safety Program Management	3 s.h.
OSH 3520	Industrial Hygiene I	3 s.h.
OSH 3980	Industrial Hygiene II	3 s.h.
OSH 4510	Hazardous Materials I (EM/FS)	3 s.h.
	Certificate electives	<u>9 s.h.</u>
		30 s.h.

OCCUPATIONAL SAFETY, HEALTH, AND FIRE SCIENCE

Occupational Safety, Health, and Fire Science Major: **Bachelor of Science (42 s.h.)**

REQUIRED MAJOR COURSES:

FS 1010	Introduction to Fire Protection and Prevention	3 s.h.
FS 2150	Building Construction (OSH*)	3 s.h.
FS 2910	Cooperative Education I* or	
FS 2930	Internship I*	1-3 s.h.
FS 3220	Inspection and Survey of Facilities (OSH*)	3 s.h.
FS 3680	Fire Protection Systems I	3 s.h.
FS 3690	Fire Protection Systems II	3 s.h.
FS 3910	Cooperative Education II** or	
FS 3930	Internship II**	1-3 s.h.
FS 4900	Fire Service Management	3 s.h.
OSH 1020	Standards and Regulations	3 s.h.
OSH 3110	Industrial Safety and Health or	

OSH 3520 OSH 3980 OSH 4510	Safety Program Management Industrial Hygiene I Industrial Hygiene II	3 s.h. 3 s.h. 3 s.h.
OSH 4950	Hazardous Materials I (EM/FS) Senior Seminar Major electives	2 s.h. 1-7 s.h. 42 s.h.
	Support Courses: Basic Human Physiology*** or	
BIO 2430 a	nd 2440 Anatomy and Physiology I and II*** or	
NSC 1250	Health Problems***	4-6 s.h.
CHM 1110	General Chemistry I	4 s.h.
CHM 1610	Introduction to Life Chemistry	4 s.h.
MTH 1050	and 1060 College Algebra and Trigonometry or	

²⁵⁻²⁹ s.h. * Required for preservice associate and baccalaureate students.

Occupational Safety, Health, and Fire Science Major: Associate of Science (30 s.h.)

REQUIRED MAJOR COURSES

MTH 1210 Precalculus

PHY 2530 General Physics I

PHY 2540 General Physics II

KEQUIKED	MAJOR COURSES.	
FS 1010	Introduction to Fire Protection and Prevention	3 s.h.
FS 2150	Building Construction (OSH*)	3 s.h.
FS 2910	Cooperative Education I* or	
FS 2930	Internship I*	1-3 s.h.
FS 3220	Inspection and Survey of Facilities (OSH*)	3 s.h.
FS 3680	Fire Protection Systems I	3 s.h.
FS 3690	Fire Protection Systems II	3 s.h.
OSH 1020	Standards and Regulations	3 s.h.
OSH 3310	Safety Program Management or	
FS 4900	Fire Service Management	3 s.h.
OSH 3520	Industrial Hygiene I	3 s.h.
OSH 4510	Hazardous Materials I (EM/FS)	3 s.h.
	Major electives	<u>0-2 s.h.</u>
		30 c h

	30 S.n.
REQUIRED SUPPORT COURSES:	
BIO 2240 Basic Human Physiology*** or	
BIO 2430 and 2440 Anatomy and Physiology I and II*** or	
NSC 1250 Health Problems***	4-6 s.h.
CHM 1110 General Chemistry I	4 s.h.
CHM 1610 Introduction to Life Chemistry	4 s.h.
MTH 1050 and 1060 College Algebra and Trigonometry or	
MTH 1210 Precalculus	5-7 s.h.
PHY 2530 General Physics I	4 s.h.
PHY 2540 General Physics II	4 s.h.
	25-29 s.h.

^{*} Required for preservice associate and baccalaureate students.

Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

Environmental Safety and Health Program (ESHP) Certificate of Completion (17 s.h.)

REQUIRED CERTIFICATE COURSES: Fire Protection Systems II

3 s.h.

5-7 s.h.

4 s.h.

4 s.h.

^{**} Required for preservice baccalaureate students.

^{***} Students with current EMT licenses may apply for alternative credit for this requirement.

^{**} Required for preservice baccalaureate students.

^{***} Students with current EMT licenses may apply for alternative credit for this requirement.

OSH 1020	Standards and Regulations	3 s.h.
OSH 3110	Industrial Safety and Health	3 s.h.
OSH 3210	Construction Safety	2 s.h.
OSH 3220	Inspection and Survey of Facilities (FS)	3 s.h.
OSH 3980	Industrial Hygiene II	3 s.h.
		17 s.h.

OCCUPATIONAL TEACHER CERTIFICATION

(formerly called Vocational Authorization)

Interim Occupational Certification (19 s.h.)

Individuals who have worked two years (4,000 hours) in a particular occupation included in the list below may earn an Interim Occupational Certificate (IOC; formerly called a Temporary Vocational Authorization or TVA), valid for teaching in State-reimbursed vocational classrooms grades 9-12, provided that they also complete a bachelor degree program and have a major, minor, or equivalent training in the occupational area.

Madonna can recommend students for an Interim Occupational Certificate in the following occupational areas:

Automobile Technician

Child and Custodial Care Services

Construction Trades

Cosmetology

Drafting and Design Technology

Family and Consumer Sciences

Graphics and Printing Technology and Communications

Personal and Culinary Services

Public Safety/Protective Services: Criminal Justice, Fire Science

Radio and Television Broadcasting Technology Therapeutic Services: Nursing Occupations

Alongside meeting the requirements related to occupational training, occupational work experience, and the bachelor degree, the student must complete an application to the Teacher Education Program. Admission requirements include completing EDU 2000, Introduction to Professional Educational Experiences, with a grade of C or better, passing the Professional Readiness Examination of the Michigan Tests for Teacher Certification (MTTC), passing the Praxis I Pre-Professional Skills Test, and maintaining a 2.75 GPA. The admission process to the teacher education program is described in detail in the EDUCATION portion of this Catalog.

A student can begin the IOC required courses before the admission process is complete but no 4000-level EDU course may be registered for prior to admission to the teacher education program.

In addition, the courses listed below are required:

REQUIRED IOC COURSES:

EDU 2000	Introduction to Professional Education Experiences	3 s.h.
EDU 3120	Educational Psychology	3 s.h.
EDU 3460	Instructional Media	3 s.h.
EDU 4250	Literacy Education in the Secondary School	4 s.h.
EDU 4450	Foundations of Vocational Education	2 s.h.
EDU 4590	Theory and Techniques of Instruction: Vocational	
	Education (9-12)	4 s.h.
		19 s.h.

Students are also required to receive training in adult and child CPR and first aid before being recommended for the IOC.

IOC with a Secondary Provisional Teaching Certificate in Family and Consumer Sciences:

Students completing requirements for a Secondary Provisional teaching certificate with a major in Family and Consumer Sciences must meet

the FCS-specific requirements for the Interim Occupational Certificate. The above-mentioned 4,000 hours of paid employment is replaced by the four FCS practica (FCS 2930, FCS 2940, FCS 3930, and FCS 3940) and the candidate must complete EDU 4450, Foundations of Vocational Education, 2 s.h., along with all required Professional Education courses. See the listing under FAMILY AND CONSUMER SCIENCES.

Occupational Education Certification

To advance from an Interim Occupational Certificate to an Occupational Education Certificate (OEC) requires the following:

- three years of successful teaching experience under the IOC; and
- the state-required reading diagnostic course (see RDG 5520 below); and
- one of the following*:
 - > 6 s.h. in a planned course of study (which can include the reading diagnostic course), *or*
 - > 180 SCECH's (State Continuing Education Clock Hours), or
 - > 150 clock hours of DPPD (District Provided Professional Development), *or*
 - > a combination of the three above to equal a total of 180 (30 SCHECH's = 1 semester hour = 30 clock hours of DPPD).

*all course work and professional development must be appropriate to the grade level and endorsement(s) of the certificate.

REQUIRED OEC COURSE:

RDG 5520 Reading Process, Assessment, and Instruction
(for secondary teachers) 3 s.h.

RECOMMENDED OEC COURSES:

If a candidate chooses to fulfill the planned course of study with semester-hour credit, courses from the following list, chosen in consultation with the Certification Officer, may be used to earn the Occupational Education Certificate:

EDU 3300	Exceptional Learner in the Classroom	3 s.h.
EDU 4250	Literacy Education in the Secondary Classroom	4 s.h.
EDU 4400	Behavior Management in the Classroom	2 s.h.
EDU 4450	Foundations of Vocational Education	2 s.h.
EDU 4800	Educational Foundations	3 s.h.
	Selected Education workshops	1-3 s.h.
	Course work in a graduate degree program	
	offered by the College of Education	

* Electives may be earned in a post-bachelor or graduate-level program. A full list of master's degree programs offered by the College of Education can be found in the Graduate Catalog. Teachers should meet with the Certification Officer to determine the appropriate course work for the OEC.

PARALEGAL STUDIES

The mission of the Paralegal Studies department is to prepare two-year, four-year, and post-baccalaureate students for careers as paralegals. The program teaches practical paralegal skills in conjunction with a liberal arts education. This allows graduates to serve a modern, multicultural society with a valuable skill. The mission also includes educating B.S.N.-credentialed nurses to become nurse paralegals (see listing under NURSE PARALEGAL).

The objectives of the Paralegal Studies department are to produce an extremely competent and well-rounded individual who is able to assist an attorney in various areas of the law. These objectives are met through carefully designed academic requirements and extensive academic advising.

Paralegal Studies Major: Bachelor of Science

(42 s.h.*)

REQUIRED MAJOR COURSES:	
LAW 1000 Introduction to Paralegal Studies	3 s.h.
LAW 1010 Legal Research and Writing I	3 s.h.
LAW 2560 Legal Research on the Internet	3 s.h.
LAW 2570 Litigation	3 s.h.
LAW 3210 Legal Research and Writing II	3 s.h.
LAW 4930 <i>or</i> 4940 Internship	1-3 s.h.
LAW 4950 Legal Seminar	3 s.h.
LAW electives	21-23 s.h.
	42 s.h.

^{* 10} semester hours of legal specialty courses must be in traditional classroom format.

Paralegal Studies Major: Associate of Science (30 s.h.*)

REQUIRED MAJOR COURSES:	
LAW 1000 Introduction to Paralegal Studies	3 s.h.
LAW 1010 Legal Research and Writing I	3 s.h.
LAW 2560 Legal Research on the Internet	3 s.h.
LAW 2570 Litigation	3 s.h.
LAW 3210 Legal Research and Writing II	3 s.h.
LAW 4930 <i>or</i> 4940 Internship	1-3 s.h.
LAW 4950 Legal Seminar	3 s.h.
LAW electives	<u>9-11 s.h.</u>
	30 s.h.

^{* 10} semester hours of legal specialty courses must be in traditional classroom format.

Paralegal Studies Post-Baccalaureate Certificate of Achievement (30 s.h.*)

REQUIRED CERTIFICATE COURSES:	
LAW 1000 Introduction to Paralegal Studies	3 s.h.
LAW 1010 Legal Research and Writing I	3 s.h.
LAW 2560 Legal Research on the Internet	3 s.h.
LAW 2570 Litigation	3 s.h.
LAW 3210 Legal Research and Writing II	3 s.h.
LAW 4930 <i>or</i> 4940 Internship	1-3 s.h.
LAW 4950 Legal Seminar	3 s.h.
LAW electives	9-11 s.h.
	30 s.h.

^{*10-}semester hours of legal specialty courses must be in traditional classroom format.

THE MADONNA UNIVERSITY PARALEGAL STUDIES PROGRAM IS APPROVED BY THE AMERICAN BAR ASSOCIATION

Completion of the Paralegal Studies Program degree requirements DOES NOT AUTHORIZE graduates to practice law as an attorney.

Admission to courses other than LAW 1000 requires departmental approval.

Two letters of recommendation attesting to the applicant's abilities and integrity are required.

The last twenty semester hours of legal courses, including LAW 4950: Legal Seminar, must be completed at Madonna University.

PASTORAL MINISTRY

Application for candidacy to the Pastoral Ministry program includes a formal meeting with the Religious Studies Department chairperson. Formal admission as a major or minor takes place upon completion of the student's second semester of study at Madonna University.

Pastoral Ministry majors and minors are encouraged to further enhance their areas of service with a second major or minor. Madonna University offers a wide range of programs, including those for persons currently serving in ministerial roles.

Academic credit may be obtained through the process of evaluation of previous learning experiences. For further information, see the discussion under the Religious Studies listing.

Pastoral Ministry Major: Bachelor of Arts (33 s.h.)

rasiviai	ministry major: Dachelor of Arts (33	5.11. <i>)</i>
REQUIRED .	Major Courses:	
RST 2240	Theology of Ministry	3 s.h.
RST 2560	Old Testament: Torah and Historical Writings	3 s.h.
RST 2570	Old Testament: Prophets and Wisdom Literature	3 s.h.
RST 2580	New Testament: The Four Gospels	3 s.h.
RST 2590	New Testament: Acts, Epistles, and Revelation	3 s.h.
RST 2990	Principles of Catholic Social Doctrine (PHL)	3 s.h.
RST 3150	Christian Spirituality	3 s.h.
RST 3490	Worship and Sacraments	3 s.h.
RST 3610	Pastoral Counseling	3 s.h.
RST 4080	Moral Issues in Business (PHL) or	
RST 4090	Environmental Ethics (PHL) or	
RST 4110	Medical Ethics (PHL)	3 s.h.
RST 4950	Senior Seminar: Sharing Your Faith	3 s.h.
		33 s.h.
REQUIRED	Support Courses:	
	Communication Concepts and Contexts	3 s.h.
PHL 1010		3 s.h.
PHL	Second Philosophy course	3 s.h.
SOC 2160	Empathy Listening Skills (SW*)	_1 s.h.
		10 s.h.
RECOMMEN	DED SUPPORT COURSES:	
COM 2330	Interviewing Techniques	3 s.h.
D4I	Minister Miner (Od L.)	
	Ministry Minor (21 s.h.)	
~	MINOR COURSES:	
RST 2240	Theology of Ministry	3 s.h.
RST 2560	Old Testament: Torah and Historical Writings	3 s.h.
RST 2580	New Testament: The Four Gospels	3 s.h.
RST 3150		3 s.h.
RST 3490	Worship and Sacraments	3 s.h.
RST 3610	Pastoral Counseling	3 s.h.
RST 4080	Moral Issues in Business (PHL) or	
RST 4090	Environmental Ethics	2 a b
RST 4110	Medical Ethics (PHL)	3 s.h. 21 s.h.
DEOLUBES	Support Courses.	21 S.N.
	Support Courses: Communication Concepts and Contexts	3 s.h.
PHL 1010		3 s.n. 3 s.h.
	Empathy Listening Skills (SW*)	3 s.n. 1 s.h.
50C 2100	Empany Listening Skins (SW-)	7 s.h.
		/ 5.11.

PHARMACY

See PRE-PROFESSIONAL PROGRAMS.

PHII OSOPHY

Philosophy Minor (21 s.h.)

Required	MINOR COURSES:	
PHL 1010	Introduction to Philosophy	3 s.h.
PHL 2010	Logic	3 s.h.

PHL 3650	Philosophy of Knowledge	3 s.h.
PHL 4080	Moral Issues in Business (RST*) or	
PHL 4090	Environmental Ethics (RST*) or	
PHL 4110	Medical Ethics (RST*)	3 s.h.
PHL 4230	Metaphysics	3 s.h.
	Electives (Philosophy courses)	<u>6 s.h.</u>
		21 s.h.

PHYSICAL EDUCATION

Physical Education K-12 Major: Bachelor of Science (35 s.h.)

REQUIRED	MAJOR COURSES:	
BIO 2240	Basic Human Physiology	4 s.h.
PED 2000	History and Principles of Physical Education	2 s.h.
PED 2280	First Aid and Safety	2 s.h.
PED 2350	Kinesiology	2 s.h.
PED 2500	Fitness Principles	1 s.h.
PED 3250	Motor Development	2 s.h.
PED 3350	Adapted Physical Education	2 s.h.
PED 3400	Physiology of Exercise	3 s.h.
PED 3500	*Curriculum and Instruction in Physical Education	3 s.h.
PED 3810	*Assessment: Team Sports	2 s.h.
PED 3820	*Assessment: Individual Sports	2 s.h.
PED 3830	Movement Education for Elementary Physical	
	Education	1 s.h.
PED 4610	*Instructional Methods of Teaching Elementary PE	3 s.h.
PED 4620	*Instructional Methods of Teaching Secondary PE	3 s.h.
PED 4650	*Measurement and Evaluation in Physical	
	Education	3 s.h.
		35 s.h.

^{*} Note: Admission to the Teacher Education Program is prerequisite to enrollment in this course.

Physical Education/Secondary 6-12 Minor (23 s.h.)

REQUIRED MINOR COURSES:

BIO 2240	Basic Human Physiology	4 s.h.
PED 2000	History and Principles of Physical Education	2 s.h.
PED 2350	Kinesiology	2 s.h.
PED 2500	Fitness Principles	1 s.h.
PED 3250	Motor Development	2 s.h.
PED 3350	Adapted Physical Education	2 s.h.
PED 3810	*Assessment: Team Sports	2 s.h.
PED 3820	*Assessment: Individual Sports	2 s.h.
PED 4620	*Instructional Methods of Teaching Secondary PE	3 s.h.
PED 4650	*Measurement and Evaluation in Physical	
	Education	3 s.h.
		23 s.h.

^{*} Note: Admission to the Teacher Education Program is prerequisite to enrollment in this course.

PHYSICS

Physics Minor (20 s.h.)

REQUIRED .	Minor Courses:
PHY 2630	Physics for Scientists and Engineers I
PHY 2640	Physics for Scientists and Engineers II

PHY 2630	Physics for Scientists and Engineers I	4 s.h.
PHY 2640	Physics for Scientists and Engineers II	4 s.h.
PHY 2710	Fundamental Electronics	4 s.h.
PHY 3510	Modern Physics: Atomic and Nuclear	4 s.h.
PHY 4510	Electronics: Digital Techniques	4 s.h.
		20 s.h.

REQUIRED SUPPORT COURSE:

MTH 2510 Calculus with Analytic Geometry I 5 s.h.

Science and mathematics courses taken more than seven years previ-

ously may need to be repeated, at the discretion of the program director. (This policy is general across all College of Science and Mathematics programs.)

PIANO PEDAGOGY / PIANO PERFORMANCE

See listings under MUSIC.

POLITICAL SCIENCE

Political Science Minor (20 s.h.)

KEQUIRED	MINOR COURSES:	
PSC 2510	American Government	4 s.h.
PSC 3010	International Relations or	
PSC 3210	Comparative Politics	4 s.h.
PSC 4510	State and Local Government	4 s.h.
	Minor electives	8 s.h.
		20 s.h.

NOTE: For those students seeking teacher certification, this minor must be paired with the major in Social Studies; and PSC 3010, International Relations, and PSC 3210, Comparative Politics, are both required.

PRE-CLINICAL IMAGING **SCIENCES**

This Associate of Science in Natural Science program prepares the student to enter a clinical program in radiography accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), or a clinical program in nuclear medicine technology accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT), or a clinical program in diagnostic medical sonography (ultrasound) accredited by JRCDMS.

Pre-Radiography/Pre-Radiographic Therapy/Pre-**Nuclear Medicine Technology/Pre-Diagnostic Medical** Sonography (Natural Science Major): Associate of Science (30 s.h.)

REQUIRED MAJOR COURSES: BIO 2260 Microbiology 4 s.h. BIO 2430 Anatomy and Physiology I 3 s.h. BIO 2440 Anatomy and Physiology II 3 s.h. CHM 1010 or 1110 General Chemistry I 4 s.h. CHM 1610 Introduction to Life Chemistry 4 s.h. 2 s.h. MTE 1010 Medical Terminology MTE 2010 Introduction to Health Care Professions 2 s.h. PHY 2530 General Physics I 4 s.h. PHY 2540 General Physics II 4 s.h. 30 s.h.

REQUIRED FOR PRE-DIAGNOSTIC MEDICAL SONOGRAPHY ONLY: BIO 3710 Pathophysiology 3 s.h.

REQUIRED SUPPORT COURSES:			
CIS 2380	Introduction to Computers	3 s.h.	
MTH 1050	College Algebra	4 s.h.	
MTH 1060	Trigonometry	3 s.h.	
		10 s.h.	

ADDITIONAL PROGRAM REQUIREMENTS:

- · Hepatitis immunization
- TB test
- Background check

Path of Entry to Allied Health Professional Careers Entering these occupations is not simply a matter of completing the Associate of Science degree. The required path includes all of the following steps:

- 1. Successful completion of the 62-66 s.h. of degree course work in general education, the University core, and the major.
- 2. Application to the clinical placement(s) of choice, a process prepared for in annual fall workshops sponsored by the program and carried out early in the second year (or 11 months prior to the first clinical year). Note: Clinical placements are competitive and not guaranteed. Students who do not maintain a cumulative GPA of 3.0 or higher may not succeed in being accepted to a clinical program even though they have earned the A.S. degree. Each clinical site has its own application and tuition requirements.
- Successful completion of the (unpaid) clinical placement (which is 24 months for radiography, up to 24 months for radiation therapy and nuclear medicine technology, 18-24 months for diagnostic medical sonography).
- 4. Successful completion of the national certification examination that is associated with the clinical being completed. The examination is scheduled at the end of the clinical placement. Certification is a requirement in job application.

Clinical internships are processed through the Biological Sciences Department advisor. These are full-time 40-hour-per-week (unpaid) positions. Clinical placements are competitive and are not guaranteed. They may require more than one application sequence. Note further that each clinical site has its own tuition requirements. Students may elect an out-of-state internship with departmental approval.

Students register for internship credit while on clinical rotation: for the three radiologic tracks, RT 1100, RT 1150, RT 1500, and RT 2000 (8 s.h. each); or for the DMS internship, DMS 1100, DMS 1150, DMS 1500, and DMS 2000 (8 s.h. each).

NOTE: Science and mathematics courses taken more than seven years previously may need to be repeated, at the discretion of the program director. (*This policy is general across all College of Science and Mathema-tics programs.*)

PRE-ENGINEERING

Students may earn an engineering degree through special arrangements between Madonna University and the University of Detroit Mercy. The program enables students to begin their education at Madonna University and complete their studies for a designated bachelor of engineering degree (including Architectural, Civil, Electrical, or Mechanical) at the University of Detroit Mercy. It is designed for the transfer of the Madonna component to UDM.

Students begin the program by attending Madonna University for approximately 1-2 years of full-time study, then transfer to University of Detroit Mercy for approximately $3\frac{1}{2}$ years. Following a planned program fulfilling the degree requirements of each institution, the student may earn a Bachelor of Science degree from Madonna University and a Bachelor of Engineering degree from the University of Detroit Mercy.

The following course requirements apply specifically to the Madonna University/University of Detroit Mercy agreement:

UDM GENERAL EDUCATION/CORE:

COM 2350	Public Speaking: Theory and Practice	3 s.h.
PHL 1010	Introduction to Philosophy	3 s.h.
RST	Religious Studies (any)	3 s.h.
PHL 1050-4	4240 or RST (any)	3 s.h.
WRT 1020	College Composition II	3 s.h.
WRT 2440	Technical Writing	3 s.h.
	UDM Objective 5A,B,C, select two courses from:	6-8 s.h.
	COM 3410, Acting Techniques I, (4 s.h.)	
	ENG 4540, Classics of African-American	

Literature (4 s.h.) HIS 1080, 2450, 3300, 3330, World History	
(4 s.h.)	
HIS 2310, 3810, 4530, U. S. History (4 s.h.)	
HIS*/PSC 4631, 4632, 4633 Global Studies	
(3 s.h.)	
UDM Objective 5D, select one course from:	3-4 s.h.
GEO 3010, World Regional Geography	
(4 s.h.)	
HIS*/PSC 4631, Global Studies: Modern	
Africa (3 s.h.)	
PSC 3210, Comparative Politics (4 s.h.)	
Any Foreign Language Course (CHN, JPN,	
SPA)	

MATHEMATICS AND SCIENCE COURSES:

4 s.h.
4 s.h.
3 s.h.
5 s.h.
4 s.h.
4 s.h.
3 s.h.
4 s.h.
4 s.h.

Other Engineering schools and programs vary in requirements. Students should consult the Program advisor in the Department of Physical and Applied Sciences to become familiar with the exact requirements of the pro- gram(s) to which application will be made.

PRF-I AW

Law schools do not prescribe particular curricula for admission. Madonna University, therefore, approaches the preparation for law on an individual basis, tailoring the program of each student to individual needs and desires. Thus, students may major in communication studies, English, history, paralegal studies, political science, psychology, or other liberal arts. Students are advised to meet with the pre-law advisor (in the History Department) from their first semester in college to discuss their individual career plans.

PRE-NUCLEAR MEDICINE TECHNOLOGY

See listing under PRE-CLINICAL IMAGING SCIENCES.

PRE-PROFESSIONAL PROGRAMS

Pre-Dentistry, Pre-Medicine, Pre-Optometry, Pre-Osteopathy, Pre-Pharmacy, Pre-Physician Assistant, Pre-Podiatry, Pre-Veterinary (Baccalaureate level)

Students preparing for a health professions career may major in any area whose free electives allow completion of the basic courses being required by the professional schools they will be applying to.

In addition to reviewing the plans below, students are advised to begin meeting with the Pre-Professional advisor (in the College of Science and Mathematics) at first enrollment at Madonna to discuss your individual career plans and tailored academic plans.

Pre-Dentistry

Courses professional schools ask for:

BIO 1030	General Biology I	4 s.h.
BIO 1040	General Biology II	4 s.h.
CHM 1110	General Chemistry I	4 s.h.

CHM 2210 Organic Chemistry	CHM 1120 Conoral Chamistry II	4 s.h.	CHM 1110 General Chemistry I	4 s.h.
CHM 2220 Organic Chemistry 1	CHM 120 General Chemistry II		•	
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PHY 2450 General Physics II or PHY 2450 Physics for Scientists and Engineers I		4 a b		
PHY 2640 Physics for Scientists and Engineers 4.sh		4 8.11.		o s.n.
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BUS 1010 or MCTI 2300 clousiness course; meets Goal GE-548 3 s.h.		4 1		11
CHM 3610 Biochemistry 1 (BIO) Minimal Statistics 4 sh.				поот
	,	*	to which you will apply.	
Second Column Secondary	3		Pre-Physician Assistant	
PSY 1010 General Psychology 4 s.h.				
PSY 2450 Life Span Developmental Psychology 4 s.h.				3 s h
Pre-Medicine or Pre-Osteopathy Scriems of Stress (1965) Say Fore Stress (1965) Say Fore Say Stress (1965) Say Fore Say Stress (1965) Say Stress (19	SOC 1010 Introduction to Sociology	4 s.h.		
BIO 240 Human Anatomy and Physiology	Pre-Medicine or Pre-Osteonathy			
BIO 1040 General Biology				
HO 1040 General Chemistry		4 a b		
CHM 1110 General Chemistry I				
CHM 1120 General Chemistry I 4 s.h. MTH 2350 Probability and Statistics 4 s.h. CHM 2210 Organic Chemistry I 4 s.h. 7 s.h. CHM 2220 Organic Chemistry II 4 s.h. 7 s.h. PHY 2530 General Physics I or PHY 2540 General Physics for Scientists and Engineers II 4 s.h. 8 llo 1030 General Biology I 4 s.h. PHY 2540 Physics for Scientists and Engineers II 4 s.h. 8 llo 1050 General Biology I 4 s.h. PROCRAM ADVISOR): 4 s.h. 8 llo 5550 Advanced Human Physiology 3 s.h. FORD R CHAST PROFESSIONAL SCHOOLS ASK FOR: 8 s.h. 18 llo 5550 Advanced Human Physiology 2 s.h. FORD R CHAST PROFESSIONAL SCHOOLS ASK FOR: 8 s.h. 18 llo 1040 General Biology II 4 s.h. BIO 1030 General Biology II 4 s.h. 18 llo 1040 General Biology II 4 s.h. BIO 1040 General Chemistry I 4 s.h. 18 llo 1040 General Chemistry I 4 s.h. CHM 2110 Organic Chemistry II 4 s.h. 18 llo 1040 General Chemistry I 4 s.h. CHM 2210 Organic Chemistry II 4 s.h. 18 llo 1040 General Chemistry I 4 s.h. CHM 2210 Organic Chemistry II 4 s.h.			•	
CHM 12210 Organic Chemistry 1				
CHM 2220 Organic Chemistry I			WITH 2550 Probability and Statistics	
PHY 2530 General Physics for Scientists and Engineers I			V / /	
PHY 2540 General Physics II or PHY 2540 General Physics II or PHY 2540 Physics for Scientists and Engineers II 0		4 s.h.		WITH
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PHY 2640 Physics for Scientists and Engineers II	•	4 s.h.		
MTE 1010	PHY 2640 Physics for Scientists and Engineers II			
PROCREM ADVISOR): NFS 2220 General Nutrition for the Health Professional 2 s.h. 2 s.h. CHM 3610 Is lochemistry (BIO) 4 s.h. NFS 2230 Therapeutic Nutrition for the Health Professional 2 s.h. 2 s.h. Pre-Opto-wetry Pre-Podiatric Therapeutic Nutrition for the Health Professional 2 s.h. 2 s.h. COURSES PROFESSIONAL SCHOOLS ASK FOR: Pre-Podiatry BIO 1030 General Biology II 4 s.h. BIO 1030 General Biology II 4 s.h. BIO 1040 General Chemistry I 4 s.h. BIO 1040 General Chemistry I 4 s.h. CHM 1110 General Chemistry I 4 s.h. CHM 1110 General Chemistry I 4 s.h. CHM 2210 Organic Chemistry II 4 s.h. CHM 2210 Organic Chemistry II 4 s.h. CHM 2220 Organic Chemistry II 4 s.h. CHM 2210 Organic Chemistry II 4 s.h. CHM 2230 Probability and Statistics 4 s.h. PHY 2530 General Physics I or PHY 2540 General Physics II or 4 s.h. PHY 2530 Physics for Scientists and Engineers I 4 s.h. PHY 2640 Physics for Scientists and Engineers II 4 s.h. ADDITION II General Physics I or PHY 2640 General Biology I 4 s.h. </td <td></td> <td></td> <td></td> <td></td>				
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Pre-Opto-stry Courses Four-Post				
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Pre-Podiatry				
Seminar Sem	Dra-Ontomatry		RST 4110 Medical Ethics (PHL)	3 s.h.
BIO 1040 General Biology II				3 s.h.
BIO 2260 Microbiology (with laboratory) 4 s.h.	Courses professional schools ask for:	4 a b	Pre-Podiatry	3 s.h.
CHM 1110 General Chemistry I	Courses professional schools ask for: BIO 1030 General Biology I		Pre-Podiatry Courses professional schools ask for:	
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MTH 2350 Probability and Statistics 4 s.h. PHY 2630 Physics for Scientists and Engineers I 4 s.h. MTH 2510 Calculus with Analytic Geometry I 5 s.h. PHY 2540 General Physics II or PHY 2640 Physics for Scientists and Engineers II 4 s.h. PHY 2630 Physics for Scientists and Engineers I PHY 2640 Physics for Scientists and Engineers II or 7 Pre-Veter inary 7 Pre-Veter inary 3 s.h. PHY 2640 Physics for Scientists and Engineers II or 4 s.h. BIO 1030 General Biology I 4 s.h. ADDITIONAL COURSES RECOMMENDED IN YOUR PROGRAM: 8 s.h. BIO 1030 General Biology II 4 s.h. BIO 2430 Anatomy and Physiology I 3 s.h. BIO 2260 Microbiology 4 s.h. BIO 3010 Genetics 4 s.h. CHM 1110 General Chemistry I 4 s.h. BIO 3010 Genetics 4 s.h. CHM 2210 Organic Chemistry I 4 s.h. CHM 3610 Biochemistry I (BIO) 4 s.h. CHM 2210 Organic Chemistry I (BIO) 4 s.h. Pre-Pharmacy NFS elective 9 Physics for Scientists and Engineers I 4 s.h. Pre-Pharmacy PHY 2630 Physics for Scientists and Engineers I 4 s.h. Pre-Pharmacy PHY 2630 Physics fo	COURSES PROFESSIONAL SCHOOLS ASK FOR: BIO 1030 General Biology I BIO 1040 General Biology II BIO 2260 Microbiology (with laboratory) CHM 1110 General Chemistry I CHM 1120 General Chemistry II CHM 2210 Organic Chemistry I	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h.	Pre-Podiatry Courses professional schools ask for: BIO 1030 General Biology I BIO 1040 General Biology II CHM 1110 General Chemistry I CHM 1120 General Chemistry II CHM 2210 Organic Chemistry I	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h.
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PHY 2630 Physics for Scientists and Engineers I 4 s.h. PHY 2540 General Physics II or PHY 2640 Physics for Scientists and Engineers II 4 s.h. ADDITIONAL COURSES RECOMMENDED IN YOUR PROGRAM: ACC 2000 Survey of Accounting 3 s.h. BIO 2400 Anatomy and Physiology I 3 s.h. BIO 2440 Anatomy and Physiology II 3 s.h. BIO 3010 Genetics 4 s.h. BIO 3010 Genetics 4 s.h. CHM 3610 Biochemistry I (BIO) 4 s.h. MGT 2360 Principles of Management (meets Goal GE-5B) 3 s.h. Pre-Optometry students should also consider obtaining a Guest Pass to take advanced Cell Biology and Embryology at nearby institutions. BIO 1030 General Biology I of herein arrow and Physiology I have been deployed at the pre-Physics II or PHY 2630 Principles of Management (meets Goal GE-5B) S.h. BIO 1030 General Biology I have been deployed at nearby institutions. BIO 1030 General Biology I of hybrics for Scientists and Engineers I or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics for Scientists and Engineers II or PHY 2640 Physics II or	COURSES PROFESSIONAL SCHOOLS ASK FOR: BIO 1030 General Biology I BIO 1040 General Biology II BIO 2260 Microbiology (with laboratory) CHM 1110 General Chemistry I CHM 1120 General Chemistry II CHM 2210 Organic Chemistry I CHM 2220 Organic Chemistry II COM 2350 Public Speaking: Theory and Practice MTH 2350 Probability and Statistics	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 3 s.h. 4 s.h.	Pre-Podiatry Courses professional schools ask for: BIO 1030 General Biology I BIO 1040 General Biology II CHM 1110 General Chemistry I CHM 2210 General Chemistry II CHM 2220 Organic Chemistry II CHM 2230 General Physics I or PHY 2630 Physics for Scientists and Engineers I	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h.
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PHY 2640 Physics for Scientists and Engineers II 4 s.h. ADDITIONAL COURSES RECOMMENDED IN YOUR PROGRAM: ACC 2000 Survey of Accounting 3 s.h. BIO 2430 Anatomy and Physiology I 3 s.h. BIO 2440 Anatomy and Physiology II 3 s.h. BIO 3010 Genetics 4 s.h. BIO 3010 Genetics 4 s.h. CHM 1110 General Chemistry I General Geneitsty I 4 s.h. CHM 3610 Biochemistry I (BIO) 4 s.h. CHM 3610 Biochemistry I (BIO) 4 s.h. CHM 2210 Organic Chemistry I (BIO) 4 s.h. CHM 3220 Organic Chemistry I (BIO) 4 s.h. CHM 2220 Organic Chemistry I (BIO) 4 s.h. CHM 2230 Organic Chemistry I (BIO) 4 s.h. CHM 2240 Organic Chemistry I (BIO) 4 s.h. CHM 2250 Organic Chemistry I (BIO) 4 s.h. CHM	COURSES PROFESSIONAL SCHOOLS ASK FOR: BIO 1030 General Biology I BIO 1040 General Biology II BIO 2260 Microbiology (with laboratory) CHM 1110 General Chemistry I CHM 1120 General Chemistry II CHM 2210 Organic Chemistry I CHM 2220 Organic Chemistry II COM 2350 Public Speaking: Theory and Practice MTH 2350 Probability and Statistics MTH 2510 Calculus with Analytic Geometry I PHY 2530 General Physics I or	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 3 s.h. 5 s.h.	Pre-Podiatry Courses professional schools ask for: BIO 1030 General Biology I BIO 1040 General Biology II CHM 1110 General Chemistry I CHM 120 General Chemistry II CHM 2210 Organic Chemistry I CHM 2220 Organic Chemistry II PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2540 General Physics II or	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h.
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COURSES PROFESSIONAL SCHOOLS ASK FOR: BIO 1030 General Biology I BIO 2430 Anatomy and Physiology I 3 s.h. PHY 2640 Physics for Scientists and Engineers II 4 s.h. 43-44 s.h. It is also required that Pre-Veterinary applicants have a course in	COURSES PROFESSIONAL SCHOOLS ASK FOR: BIO 1030 General Biology I BIO 1040 General Biology II BIO 2260 Microbiology (with laboratory) CHM 1110 General Chemistry I CHM 1120 General Chemistry II CHM 2210 Organic Chemistry II CHM 2220 Organic Chemistry II COM 2350 Public Speaking: Theory and Practice MTH 2350 Probability and Statistics MTH 2510 Calculus with Analytic Geometry I PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2540 General Physics II or PHY 2640 Physics for Scientists and Engineers II Additional Courses Recommended in Your Program: ACC 2000 Survey of Accounting BIO 2430 Anatomy and Physiology I BIO 3010 Genetics CHM 3610 Biochemistry I (BIO) MGT 2360 Principles of Management (meets Goal GE-5B) Pre-Optometry students should also consider obtaining a Gue	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 3 s.h. 5 s.h. 4 s.h. 3 s.h. 4 s.h. 3 s.h. 5 s.h.	Pre-Podiatry Courses professional schools ask for: BIO 1030 General Biology I BIO 1040 General Biology II CHM 1110 General Chemistry I CHM 1120 General Chemistry II CHM 2210 Organic Chemistry II CHM 2220 Organic Chemistry II PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2640 Physics for Scientists and Engineers II Pre-Veterinary Courses professional schools look for: BIO 1030 General Biology I BIO 1040 General Biology II BIO 2260 Microbiology BIO 3010 Genetics CHM 1110 General Chemistry I CHM 2210 Organic Chemistry I CHM 2220 Organic Chemistry II CHM 3610 Biochemistry I (BIO) NFS elective PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I	4 s.h. 32 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 5 s.h. 4 s.h. 5 s.h. 6 s.h. 6 s.h. 7 s.h. 7 s.h. 8 s.h. 9 s.h.
BIO 2430 Anatomy and Physiology I 3 s.h. It is also required that Pre-Veterinary applicants have a course in	COURSES PROFESSIONAL SCHOOLS ASK FOR: BIO 1030 General Biology I BIO 1040 General Biology II BIO 2260 Microbiology (with laboratory) CHM 1110 General Chemistry I CHM 1120 General Chemistry II CHM 2210 Organic Chemistry II CHM 2220 Organic Chemistry II COM 2350 Public Speaking: Theory and Practice MTH 2350 Probability and Statistics MTH 2510 Calculus with Analytic Geometry I PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2540 General Physics II or PHY 2640 Physics for Scientists and Engineers II ADDITIONAL COURSES RECOMMENDED IN YOUR PROGRAM: ACC 2000 Survey of Accounting BIO 2430 Anatomy and Physiology I BIO 3010 Genetics CHM 3610 Biochemistry I (BIO) MGT 2360 Principles of Management (meets Goal GE-5B) Pre-Optometry students should also consider obtaining a Guetake advanced Cell Biology and Embryology at nearby institu	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 3 s.h. 5 s.h. 4 s.h. 3 s.h. 4 s.h. 3 s.h. 5 s.h.	Pre-Podiatry Courses professional schools ask for: BIO 1030 General Biology I BIO 1040 General Biology II CHM 1110 General Chemistry I CHM 1120 General Chemistry II CHM 2210 Organic Chemistry II CHM 2220 Organic Chemistry II PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2540 General Physics II or PHY 2640 Physics for Scientists and Engineers II Pre-Veterinary Courses professional schools look for: BIO 1030 General Biology I BIO 1040 General Biology II BIO 2260 Microbiology BIO 3010 Genetics CHM 1110 General Chemistry I CHM 2210 Organic Chemistry I CHM 2210 Organic Chemistry II CHM 3610 Biochemistry I (BIO) NFS elective PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2540 General Physics II or	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 32 s.h. 4 s.h. 5 s.h. 6 s.h. 6 s.h. 7 s.h. 8 s.h. 9 s.h. 9 s.h.
BIO 2430 Anatomy and Physiology I 3 s.h. It is also required that Pre-Veterinary applicants have a course in	COURSES PROFESSIONAL SCHOOLS ASK FOR: BIO 1030 General Biology I BIO 1040 General Biology II BIO 2260 Microbiology (with laboratory) CHM 1110 General Chemistry I CHM 1120 General Chemistry II CHM 2210 Organic Chemistry II CHM 2220 Organic Chemistry II COM 2350 Public Speaking: Theory and Practice MTH 2350 Probability and Statistics MTH 2510 Calculus with Analytic Geometry I PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2540 General Physics II or PHY 2640 Physics for Scientists and Engineers II ADDITIONAL COURSES RECOMMENDED IN YOUR PROGRAM: ACC 2000 Survey of Accounting BIO 2430 Anatomy and Physiology I BIO 3010 Genetics CHM 3610 Biochemistry I (BIO) MGT 2360 Principles of Management (meets Goal GE-5B) Pre-Optometry students should also consider obtaining a Guetake advanced Cell Biology and Embryology at nearby institu	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 3 s.h. 5 s.h. 4 s.h. 3 s.h. 4 s.h. 3 s.h. 5 s.h.	Pre-Podiatry Courses professional schools ask for: BIO 1030 General Biology I BIO 1040 General Biology II CHM 1110 General Chemistry I CHM 1120 General Chemistry II CHM 2210 Organic Chemistry II CHM 2220 Organic Chemistry II PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2540 General Physics II or PHY 2640 Physics for Scientists and Engineers II Pre-Veterinary Courses professional schools look for: BIO 1030 General Biology I BIO 1040 General Biology II BIO 2260 Microbiology BIO 3010 Genetics CHM 1110 General Chemistry I CHM 2210 Organic Chemistry I CHM 2210 Organic Chemistry II CHM 3610 Biochemistry I (BIO) NFS elective PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2540 General Physics II or PHY 2540 Physics for Scientists and Engineers II	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 32 s.h. 4 s.h. 5 s.h. 5 s.h.
	COURSES PROFESSIONAL SCHOOLS ASK FOR: BIO 1030 General Biology I BIO 1040 General Biology II BIO 2260 Microbiology (with laboratory) CHM 1110 General Chemistry I CHM 1120 General Chemistry II CHM 2210 Organic Chemistry II CHM 2220 Organic Chemistry II COM 2350 Public Speaking: Theory and Practice MTH 2350 Probability and Statistics MTH 2510 Calculus with Analytic Geometry I PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2540 General Physics II or PHY 2640 Physics for Scientists and Engineers II ADDITIONAL COURSES RECOMMENDED IN YOUR PROGRAM: ACC 2000 Survey of Accounting BIO 2430 Anatomy and Physiology I BIO 3010 Genetics CHM 3610 Biochemistry I (BIO) MGT 2360 Principles of Management (meets Goal GE-5B) Pre-Optometry students should also consider obtaining a Guetake advanced Cell Biology and Embryology at nearby institu	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 3 s.h. 5 s.h. 4 s.h. 3 s.h. 4 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h. 4 s.h. 5 s.h. 4 s.h. 6 s.h. 6 s.h. 6 s.h. 6 s.h. 6 s.h. 6 s.h. 7 s.h. 8 s.h. 9 s.h.	Pre-Podiatry Courses professional schools ask for: BIO 1030 General Biology I BIO 1040 General Biology II CHM 1110 General Chemistry I CHM 1120 General Chemistry II CHM 2210 Organic Chemistry II CHM 2220 Organic Chemistry II PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2540 General Physics II or PHY 2640 Physics for Scientists and Engineers II Pre-Veterinary Courses professional schools look for: BIO 1030 General Biology I BIO 1040 General Biology II BIO 2260 Microbiology BIO 3010 Genetics CHM 1110 General Chemistry I CHM 2210 Organic Chemistry I CHM 2220 Organic Chemistry II CHM 3610 Biochemistry I (BIO) NFS elective PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2540 General Physics II or PHY 2540 Physics for Scientists and Engineers II	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 32 s.h. 4 s.h. 5 s.h. 5 s.h. 6 s.h. 6 s.h. 7 s.h. 8 s.h. 9 s.h.
	COURSES PROFESSIONAL SCHOOLS ASK FOR: BIO 1030 General Biology I BIO 1040 General Biology II BIO 2260 Microbiology (with laboratory) CHM 1110 General Chemistry I CHM 1120 General Chemistry II CHM 2210 Organic Chemistry II CHM 2220 Organic Chemistry II COM 2350 Public Speaking: Theory and Practice MTH 2350 Probability and Statistics MTH 2510 Calculus with Analytic Geometry I PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2540 General Physics II or PHY 2640 Physics for Scientists and Engineers II Additional Courses Recommended in Your Program: ACC 2000 Survey of Accounting BIO 2430 Anatomy and Physiology I BIO 3010 Genetics CHM 3610 Biochemistry I (BIO) MGT 2360 Principles of Management (meets Goal GE-5B) Pre-Optometry students should also consider obtaining a Guetake advanced Cell Biology and Embryology at nearby institute. Pre-Pharmacy Courses Professional Schools Ask For: BIO 1030 General Biology I BIO 2430 Anatomy and Physiology I BIO 2430 Anatomy and Physiology I	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 3 s.h. 5 s.h. 4 s.h. 3 s.h. 4 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h. 4 s.h. 5 s.h. 4 s.h. 4 s.h. 4 s.h. 5 s.h. 4 s.h. 6 s.h.	Pre-Podiatry Courses professional schools ask for: BIO 1030 General Biology I BIO 1040 General Biology II CHM 1110 General Chemistry I CHM 1120 General Chemistry II CHM 2210 Organic Chemistry II CHM 2220 Organic Chemistry II PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2540 General Physics II or PHY 2640 Physics for Scientists and Engineers II Pre-Veterinary Courses professional schools look for: BIO 1030 General Biology I BIO 1040 General Biology II BIO 2260 Microbiology BIO 3010 Genetics CHM 1110 General Chemistry I CHM 2210 Organic Chemistry I CHM 2220 Organic Chemistry II CHM 3610 Biochemistry I (BIO) NFS elective PHY 2530 General Physics I or PHY 2630 Physics for Scientists and Engineers I PHY 2540 General Physics II or PHY 2640 Physics for Scientists and Engineers II It is also required that Pre-Veterinary applicants have a course in	4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 4 s.h. 32 s.h. 4 s.h. 5 s.h. 6 s.h. 7 s.h. 8 s.h. 9 s.h.

procedures for taking the course at a neighboring institution.

Schools and programs vary in requirements for admission. Students should consult the Program advisor in the College of Science and Mathematics to become familiar with the exact requirements of the program(s) to which application will be made.

PRE-RADIOGRAPHY; PRE-NUCLEAR **MEDICINE TECHNOLOGY; PRE-DIAG-**NOSTIC MEDICAL SONOGRAPHY

See listing under PRE-CLINICAL IMAGING SCIENCES.

PRIVATE INVESTIGATION / PRIVATE SECURITY

See listings under CRIMINAL JUSTICE.

PROFESSIONAL AND TECHNICAL WRITING

The Professional and Technical Writing major prepares students for careers that require expertise in written communication. Corporations, health care industries, state and local governments, and technologybased businesses are examples of potential employers. A minor or certificate is required with this major (see below). For students interested in preparation as a general writer with other areas of focus, see the Writing program on page 115.

Professional and Technical Writing Major: Bachelor of Arts (38-41 s.h.)

		•
REQUIRED	MAJOR	Courses:

MAJOR COCREES.	
Mass Communication (BCA/JRN*)	3 s.h.
Language and Culture	3 s.h.
Public Relations Writing or	
Editorial and Feature Writing	3 s.h.
Editing and Design	3 s.h.
Technical Writing	3 s.h.
Advanced Technical Writing	3 s.h.
Publication Software for Technical Writers	3 s.h.
Cooperative Education in Writing or	
Writing Practicum	3 s.h.
Senior Seminar: Writing for Publication	3 s.h.
Major electives, five courses to be chosen from:	14-17 s.h.
choose major electives from list on next page	
	Mass Communication (BCA/JRN*) Language and Culture Public Relations Writing or Editorial and Feature Writing Editing and Design Technical Writing Advanced Technical Writing Publication Software for Technical Writers Cooperative Education in Writing or Writing Practicum Senior Seminar: Writing for Publication Major electives, five courses to be chosen from:

Major electives, five courses from:.

(3 s.h.)

WRT 1320 News Reporting (JRN*) (3 s.h.) WRT 2050 Creative Writing (3 s.h.)

WRT 3100 Advanced Composition (3 s.h.)

AGE 4000	Proposal Writing and Grant
	Administration (EM/SOC) (2 s.h.)
BCA 1010	Survey of Broadcast, Film, and
	Digital Media (JRN) (3 s.h.)
BCA 3030*	Writing for Radio, TV, and Film
	(JRN) (3 s.h.)
COM 2140	Argumentation and Persuasion
	$(\overline{3} \text{ s.h.})$
ENG 2950	Critical Writing and Literary
	Analysis (4 s.h.)
JRN 2050	Public Relations Writing (3 s.h.)
JRN 2860	Editorial and Feature Writing (3 s.h.)
MIS 2850*	Web Design for Business Application

WRT 3260 Business and Professional Writing (BUS) (3 s.h.) WRT 4750 Topics in Writing (1-4 s.h.)

38-41 s.h.

* Note:

BCA*/JRN 3030 requires a prerequisite of BCA*/JRN 2610, Television Production I, 3 s.h.

MIS 2850 requires a prerequisite of CIS 2380 rather than CIS 2250.

REQUIRED MINOR OR CERTIFICATE:

Students completing the major in Professional and Technical Writing must also complete a Minor or Certificate of Achievement. First-year students in Professional and Technical Writing might want to consider a double major. Refer to the chart on pages 11-15 or its updates for available minors, majors, or certificates. (The programs in English/ Journalism, Journalism and Public Relations, and Writing are excluded from being selected for this requirement.)

Professional and Technical Writing Minor (24-27 s.h.)

REQUIRED .	MINOR COURSES:	
COM 4010	Mass Communication (BCA/JRN*)	3 s.h.
JRN 2050	Public Relations Writing or	
JRN 2860	Editorial and Feature Writing	3 s.h.
JRN 3570	Editing and Design	3 s.h.
WRT 2440	Technical Writing	3 s.h.
WRT 3440	Advanced Technical Writing	3 s.h.
WRT 3490	Publication Software for Technical Writers	3 s.h.
	Minor electives, to be chosen from list	
	of	
	major courses and electives above.	6-9 s.h.
		24 27 ch

Professional and Technical Writing Post-Baccalaureate Certificate of Completion (20-24 s.h.)

Required Certificate Courses:				
COM 4010	4010 Mass Communication (BCA/JRN*) 3			
JRN 2050	JRN 2050 Public Relations Writing <i>or</i>			
JRN 2860	D Editorial and Feature Writing 3			
JRN 3570	Editing and Design	3 s.h.		
WRT 2440	Technical Writing	3 s.h.		
WRT 3440	Advanced Technical Writing	3 s.h.		
	Electives, to be chosen from the following	5-9 s.h.		
	AGE 4000 Proposal Writing and Grant			
	Administration (EM/SOC) (2	s.h.)		
	BCA 3030* Writing for Radio, TV, and Film	1		
	(JRN) (3 s.h.)			
	JRN 2050 Public Relations Writing (3 s.h.	.)		
	JRN 2860 Editorial and Feature Writing (3	3 s.h.)		
	MIS 2850* Web Design for Business Applic	cations		
	(3 s.h.)			
	WRT 1320 News Reporting (JRN*) (3 s.h.)			
	WRT 3260 Business and Professional Writin	ıg		
	(BUS) (3 s.h.)			
	WRT 3490 Publication Software for Technic	cal		
	Writers (3 s.h.)			
	WRT 4750 Topics in Writing (1-4 s.h.)			

* Note:

BCA*/JRN 3030 requires a prerequisite of BCA*/JRN 2610, Television Production I, 3 s.h. MIS 2850 requires a prerequisite of CIS 2380, rather than CIS 2250.

NOTE: See also the Writing major on page 115.

PSYCHOLOGY

Psychology Major: Bachelor of Science:

20-24 s.h.

	Concentration (36 s.h.)			Psychological Testing and Measurement	3 s.h.
	Concentration (46 s.h.)		PSY 2830	Research and Quantitative Methods I	4 s.h.
	Health Concentration (48-49 s.h.)		PSY 2840		4 s.h.
	Psychology majors declare as Psychology-Gen		PSY 3520	Industrial/Organizational Psychology	3 s.h.
	ation. After completing PSY 1020 and PSY 103		PSY 3660	Social Psychology	4 s.h.
	(3.0) or better, as well as the Madonna University		PSY 4220	Theories of Personality	4 s.h.
	a, a student may declare any of the concentration		PSY 4300	Cognitive Psychology	4 s.h.
	with his/her assigned Psychology Department	advisor or	PSY 4950	Seminar in Psychology	2 s.h.
remain in u	e gen- eral concentration.			Focus area: <i>choose</i> Group A, Human Resource F <i>or</i> Group B, Marketing Focus (<i>see below</i>):	
Psycholo	gy Major / General Concentration:			or Gloup B, Marketing Focus (see below).	9 s.h. 46 s.h.
	of Science (36 s.h.)		REQUIRED	Support Course:	
	MAJOR COURSES:			Probability and Statistics	4 s.h.
	Controversies in Psychology: A Critical Think	ing		·	
	Approach	4 s.h.		HUMAN RESOURCE FOCUS:	
PSY 1030		1 s.h.		Organizational Behavior	3 s.h.
PSY 2830	Research and Quantitative Methods I	4 s.h.		Strategic Human Resources Planning	3 s.h.
	Research and Quantitative Methods II	4 s.h.	MGT 3270	Human Resource Training and Development	3 s.h.
PSY 3420	Abnormal Psychology	4 s.h.	C D	14 E	9 s.h.
PSY 4220		4 s.h.		MARKETING FOCUS:	2 1
PSY 4300	2 , 2,			Principles of Marketing	3 s.h.
	Behavioral Neuroscience (BIO)	4 s.h.		Consumer Behavior (HMG/NFS)	3 s.h.
PSY 4950	Seminar in Psychology	2 s.h.	MK1 3/30	Principles of Advertising	3 s.h.
	Psychology Content Distribution Requirement				9 s.h.
	(see below)	9-12 s.h.	Psycholo	ogy Major / Mental Health Concentrat	ion
		36-39 s.h.		r of Science (49-50 s.h.)	
	Support Course:			MAJOR COURSES:	
MTH 2350	Probability and Statistics	4 s.h.		Controversies in Psychology: A Critical Thinkin	g
RECOMMEN	DED ELECTIVE:			Approach	4 s.h.
WRT 2440	Technical Writing	3 s.h.	PSY 1030	Tools for Success in Psychology	1 s.h.
				Life-Span Developmental Psychology	4 s.h.
** Р ЅҮСНОІ	OGY CONTENT DISTRIBUTION REQUIREMENT:		PSY 2760		3 s.h.
	the Psychology Content Distribution Requirem			Research and Quantitative Methods I	4 s.h.
	Psychology Major-General Concentration, st		PSY 2840	-	4 s.h.
	urse each from three of six areas, not including	Personality	PSY 3420	Abnormal Psychology	4 s.h.
	7-12 s.h.);			Introduction to Clinical Psychology	3 s.h.
	Psychology Minor, students select one course of	each from		Mental Health Treatment Theories	3 s.h.
	f the following seven areas (total 9-12 s.h.);		PSY 4500	Behavioral Neuroscience (BIO)	4 s.h.
(1) Biologi		`		Mental Health Field Placement and Seminar I	5 s.h.
	4500 Behavioral Neuroscience (BIO) (4 s.h.)	PSY 4710	Mental Health Field Placement and Seminar II	5 s.h.
(2) CLINICA			PSY 4950	Seminar in Psychology	2 s.h.
	2760 Psychological Testing and Measurement		PSY	Developmental Psychology elective -	
PSY	13720 Introduction to Clinical Psychology (3	s.h.)	- 22 -	choose one from:	3-4 s.h.
(3) Cognit	VE:			PSY 2700, Child Psychology (4 s.h.)	
PSY	4300 Cognitive Psychology (4 s.h.)			PSY 3070, Psychology of Midlife and Aging	
(4) Develo	PMENTAL:			(AGE*) (3 s.h.)	'
	2450 Life Span Developmental Psychology	(4 s.h.)		PSY 3130, Adolescent Psychology (FCS) (4	s.h.)
	2700 Child Psychology (4 s.h.)	()		•	49-50 s.h.
	3070 Psychology of Midlife and Aging (AG	E*) (3 s.h.)	REQUIRED	Support Course:	
	3130 Adolescent Psychology (FCS) (4 s.h.)	, , ,		Probability and Statistics	4 s.h.
	IAL/ORGANIZATIONAL:			NDED ELECTIVE:	
	7 3520 Industrial/Organizational Psychology ((3 s h)		Technical Writing	3 s.h.
	· · · · · · · · · · · · · · · · · · ·	(3 5.11.)	WKI 2440	lechnical writing	3 8.11.
(6) Person.			Psycholo	ogy Minor (20 s.h.)	
	Theories of Personality (4 s.h.)		(Not availal	ole for PSY majors)	
(7) Social			REQUIRED	MINOR COURSES:	
PSY	3660 Social Psychology (4 s.h.)		A minimum	of eight (8) s.h. must be taken at the 3000 or 400	0 level.
Dovobala	dy Majon / Dusiness Componinglis-		PSY 1020	Controversies in Psychology: A Critical Thinkin	g
-	gy Major / Business Concentration	•		Approach	4 s.h.
	of Science (46 s.h.)		PSY 1030	Tools for Success in Psychology	1 s.h.
	MAJOR COURSES:		PSY 4300	Cognitive Psychology or	
AS 3430	Addiction Studies: Focus on the Individual	1 s.h.	PSY 4500	Behavioral Neuroscience (BIO)	4 s.h.
	Principles of Management	3 s.h.		Psychology Content Distribution Requirement	
PSY 1020	Controversies in Psychology: A Critical Think	-		(see above under Psychology General major)	9-12 s.h.
	Approach	4 s.h.	PSY	Minor electives	0-2 s.h.
PSY 1030	Tools for Success in Psychology	1 s.h.	151		20 s.h.

Forensic Psychology Certificate of Completion (17 s.h.)

REQUIRED	Certificate Courses:	
CJ 1020	Introduction to Criminal Justice	3 s.h.
CJ 3210	Principles of Criminology (FOR/SOC)	3 s.h.
PSY 3420	Abnormal Psychology	4 s.h.
PSY 3820	Forensic Psychology (CJ)	3 s.h.
PSY 4220	Theories of Personality	<u>4 s.h.</u>

PUBLIC RELATIONS

See JOURNALISM AND PUBLIC RELATIONS.

QUALITY AND OPERATIONS LEADERSHIP

See listing under BUSINESS ADMINISTRATION.

RADIOGRAPHY

See listing under PRE-CLINICAL IMAGING SCIENCES.

RELIGIOUS STUDIES

Application for candidacy to the Religious Studies program includes a formal meeting with the Religious Studies Department chairperson. Formal admission to the major or minor takes place at the conclusion of the student's second semester at Madonna University.

Following evaluation by the RST/PHL Department, academic credit may be earned for completion of courses and programs offered through the Detroit Archdiocesan Department of Religious Education and the Detroit Area Consortium of Catholic Colleges, as well as Spectrum, Stephen Ministry, ministerial apprenticeship, chaplaincy, or pastoral service. The evaluation process is to be initiated by the student at the beginning of a semester, following a meeting with the Religious Studies Department chairperson. Highly personal experiences (retreats, sacramental life, spiritual direction, personal/shared prayer, etc.) are not included in the Life Experience evaluation process.

Religious Studies Major: Bachelor of Arts (31 s.h.)

REQUIRED	MAJOR COURSES:	,
RST 1500	Catholicism	3 s.h.
RST 2150	History of the Church	3 s.h.
RST 2560	Old Testament: Torah and Historical Writings or	
RST 2570	Old Testament: Prophets and Wisdom Literature	3 s.h.
RST 2580	New Testament: The Four Gospels <i>or</i>	
RST 2590	New Testament: Acts, Epistles, and Revelation	3 s.h.
RST 2990	Principles of Catholic Social Doctrine (PHL)	3 s.h.
RST 3150	Christian Spirituality	3 s.h.
RST 3490	Worship and Sacraments	3 s.h.
RST 4080	Moral Issues in Business (PHL) or	
RST 4090	Environmental Ethics (PHL) or	
RST 4110	Medical Ethics (PHL)	3 s.h.
RST 4160	Ecclesiology	3 s.h.
RST 4240	Christology	3 s.h.
RST 4960	Senior Thesis	<u>1 s.h.</u>
		31 s.h.
REQUIRED	Support Courses:	
PHL 1010	Introduction to Philosophy	3 s.h.

PHL 1050 Philosophy of Person

PHL 4150 Philosophy of Religion (RST)

Religious	Studies	Maior:	Associate	of	Arts	(24	s.h.
HUHSIVUS	Ottudios	mujo:	AGGOCIALO	v.	AI LO	\ —-	Gene

REQUIRED MAJOR COCKSES.	
RST 1500 Catholicism	3 s.h.
RST 2150 History of the Church	3 s.h.
RST 2560 Old Testament: Torah and Historical Writings or	
RST 2570 Old Testament: Prophets and Wisdom Literature	3 s.h.
RST 2580 New Testament: The Four Gospels <i>or</i>	
RST 2590 New Testament: Acts, Epistles, and Revelation	3 s.h.
RST 2990 Principles of Catholic Social Doctrine	3 s.h.
RST 3150 Christian Spirituality	3 s.h.
RST 3490 Worship and Sacraments	3 s.h.
RST 4080 Moral Issues in Business (PHL) or	
RST 4090 Environmental Ethics (PHL) or	
RST 4110 Medical Ethics (PHL)	_3 s.h.
	24 s.h.

Religious Studies Minor (21 s.h.)

PHL 1010 Introduction to Philosophy

REQUIRED SUPPORT COURSES:

REQUIRED MAJOR COURSES:

17 s.h.

Minor Courses:				
Catholicism	3 s.h.			
History of the Church	3 s.h.			
Old Testament: Torah and Historical Writings or				
Old Testament: Prophets and Wisdom Literature	3 s.h.			
New Testament: The Four Gospels <i>or</i>				
New Testament: Acts, Epistles, and Revelation	3 s.h.			
Christian Spirituality	3 s.h.			
Worship and Sacraments	3 s.h.			
Moral Issues in Business (PHL) or				
Environmental Ethics (PHL) or				
Medical Ethics (PHL)	3 s.h.			
	21s.h.			
REQUIRED SUPPORT COURSE:				
Introduction to Philosophy	3 s.h.			
	Catholicism History of the Church Old Testament: Torah and Historical Writings or Old Testament: Prophets and Wisdom Literature New Testament: The Four Gospels or New Testament: Acts, Epistles, and Revelation Christian Spirituality Worship and Sacraments Moral Issues in Business (PHL) or Environmental Ethics (PHL) or Medical Ethics (PHL)			

RETAIL MERCHANDISING

See Merchandising and Retail Management under BUSINESS ADMINISTRATION.

RN to BSN

See listing under NURSING.

SIGN LANGUAGE STUDIES

Sign Language Interpreting Studies Major (Bachelor of Arts)

Deaf Community Studies Major (Bachelor of Arts)

Deaf Community Studies Minor for Interpreting Studies or ASL Education Majors

ASL Education Major (Bachelor of Arts)

ASL Education Minor

3 s.h.

3 s.h.

9 s.h.

Sign Language Studies Minor

American Sign Language (ASL) is the language of the American Deaf Community. The Madonna University Sign Language Studies (SLS) Department strives to provide a quality educational experience which will allow students to fulfill their academic goals and function as an

3 s.h.

exemplar of the language and culture of Deaf people.

The key component of the program is language acquisition. Learning American Sign Language (ASL) is a complex process, requiring a mastery of vocabulary, grammatical structure, linguistic functions, syntax, culture, and history of the language. Emphasis is also placed on the sociocultural aspects of American Deaf culture and the right of Deaf children and adults to learn and use American Sign Language.

At the bachelor degree level, we offer three majors: Deaf Community Studies, Sign Language Interpreting Studies, and ASL Education.

Students studying ASL as a language for communication with the Deaf community may pursue a minor in Sign Language Studies. Students pursuing this program are encouraged to consider a second major in one of the many human services fields available at Madonna University. (See the chart of Madonna University majors on pages 11-15.)

Please direct all questions to the SLS/Interpreting department.

Transfer credit for courses in American Sign Language

Students with prior SLS-related experience are able to receive recognition for learning at other institutions and real-life experience. Madonna University SLS does not offer the option to transfer SLS-related courses as "course equivalents" until students are evaluated on an individual basis and are placed into the appropriate SLS course. Based on this placement, students then receive transfer credit for appropriate lower-level SLS courses.

Some SLS-related courses from other institutions may be used to satisfy general education requirements.

Transfer students are encouraged to contact the department to arrange for an evaluation and advising.

Admission to any Sign Language Studies Program (major, minor, certificate)

Adequate progress in American Sign Language course work is essential prior to enrollment in the Interpreting Studies, the Deaf Community Studies, or the ASL Education programs. Students admitted to Madon- na University for the Sign Language Studies programs (majors or minor), must apply for specific admission into the Sign Language Interpreting Studies major, the Deaf Community Studies major, or the ASL Education major or minor during SLS 1020, Beginning American Sign Language II. Transfer students placed above SLS 1020 during their evaluation must apply for admission to a Sign Language Studies program within their first semester in the program.

The application process includes an application form with a required essay and an interview with SLS faculty. Students will receive notification of their application result in writing from the department. A copy will be sent to the Office of the Registrar, to facilitate the student's change of declared major.

Students of the Sign Language Studies department must fulfill Madonna University's writing requirement, including taking the Writing Assessment and completing any required course work with a B (3.0) or better, before the end of their third semester of study.

Returning after suspending enrollment

Returning students of the SLS department who have previously suspended their course work for two consecutive semesters or more must be re-evaluated for placement into the program.

Continuation in any Sign Language Studies Program (major and minor)

Linguistic Competence: According to university policy, a grade earned in a major course that is lower than a C (2.0) is not a passing grade. SLS departmental policy states that a course may be taken a maximum of two (2) times. For example, a student who receives two withdrawal grades, or a withdrawal grade and a grade lower than a C (2.0), or two grades lower than a C (2.0), is not allowed to continue in the program.

STUDENT DECORUM: Professional behavior and appropriate attitude are considered when determining admittance or continuation in the program. This includes adherence to Madonna University's Student Conduct Code. If at any time a faculty member has a concern about the decorum of a student, she/he may request the convening of a faculty review committee, with the student, to determine the conditions of continuation in the program.

Continuation in the Interpreting Studies Major, specifically

ENGLISH LANGUAGE COMPETENCE: Students in the Interpreting Studies program must achieve a passing score on an English language assessment specified by the department prior to enrolling in SLS 3410.

ASL COMPETENCE: A student with a cumulative GPA in all SLS courses lower than 3.0 will not be allowed to enroll in SLS 3410, the first course in the interpreter course sequence. To continue in the SLS Interpreting Studies major, a student must maintain a minimum cumulative GPA of 3.00 for all SLS courses, and must demonstrate adherence to the NAD-RID Code of Professional Conduct.

Students who maintain a minimum GPA of 3.0 for all SLS courses have an interview with the SLS Review Committee during their enrollment in SLS 3010, to determine the student's potential for success in the interpreting profession.

Sign Language Interpreting Studies Major: Bachelor of Arts (60 s.h.)

PREREQUISITES TO THE MAJOR:

I KEKEQUIS	HES TO THE MIAJOR.	
SLS 1000	Sign Language in Society*	3 s.h.
SLS 1010	Beginning American Sign Language I*	4 s.h.
REQUIRED	Major Core Courses:	
SLS 1020	Beginning American Sign Language II	4 s.h.
SLS 2010	Intermediate American Sign Language I	4 s.h.
SLS 2020	Intermediate American Sign Language II	4 s.h.
SLS 2310	Deaf Culture*	3 s.h.
SLS 3010	Advanced American Sign Language I	3 s.h.
SLS 3020	Advanced American Sign Language II	3 s.h.
SLS 3290	Fingerspelling and Numbers in ASL	2 s.h.
SLS 3810	American Sign Language: Registers	3 s.h.
SLS 4010	American Sign Language: Discourse	3 s.h.
SLS 4220	Sign Language Structure	4 s.h.
SLS 4950	Senior Seminar	2 s.h.
		35 s.h.
REQUIRED	Interpreting Studies Courses:	
SLS 3410	Fundamentals of Interpretation and Transliteration	3 s.h.
SLS 4250	Contrastive Text Analysis: ASL and English for	
	Interpreters	3 s.h.
SLS 4450	Simultaneous Interpretation for Interpreters	3 s.h.
SLS 4610	Voice to Sign: Interpreting Laboratory	3 s.h.
SLS 4750	Interpreting in Specialized Settings (two different	
	topics required, 1 s.h. each)	2 s.h.
SLS 4810	Sign to Voice: Interpreting Laboratory	3 s.h.
SLS 4850	Advanced Interpreting Laboratory	2 s.h.
SLS 4900	Interpreter Assessment and Credentialing	2 s.h.
SLS 4930	Field Observation	2 s.h.
SLS 4940	Field Placement: ASL Interpreting	2 s.h.
	Total	60 s.h
RECOMMEN	IDED SUPPORT COURSES:	
COM 2350	Public Speaking: Theory and Practice	3 s.h.
	Approaches to Grammar	4 s.h.
NSC 1250	Health Problems*	4 s.h.
SLS 2110	Orientation to Deafness	3 s.h.
SLS 4710	Selected Topics	1-3 s.h.
* This cour	se satisfies a general education requirement.	

Deaf Community Studies Major: Bachelor of Arts

			
(59 s.h.)			s.h.
Prerequisites to the Major:			s.h.
SLS 1000 Sign Language in Society*	3 s.h.	\mathcal{C}	s.h.
SLS 1010 Beginning American Sign Language I*	4 s.h.	EDU 4630 Theory and Techniques of Instruction: Foreign	
Required Major Core Courses:		6 6 7	s.h.
SLS 1020 Beginning American Sign Language II	4 s.h.		s.h. s.h.
SLS 2010 Intermediate American Sign Language I	4 s.h.		s.h.
SLS 2020 Intermediate American Sign Language II	4 s.h.	IFor EDU 4630—Prerequisites: EDU 3120 <i>and</i> admission to the	S.II.
SLS 2310 Deaf Culture*	3 s.h.	Teacher Education Program. Prerequisite or corequisite: EDU	
SLS 3010 Advanced American Sign Language I	3 s.h.	4500 or EDU 4530.	
SLS 3020 Advanced American Sign Language II	3 s.h.		
SLS 3290 Fingerspelling and Numbers in ASL	2 s.h.	* This course satisfies a general education requirement.	
SLS 3810 American Sign Language: Registers	3 s.h.	101 51 41 111 (04 1)	
SLS 4010 American Sign Language: Discourse	3 s.h.	ASL Education Minor (21 s.h.)	
SLS 4220 Sign Language Structure	4 s.h.	Prerequisites to the Minor:	
SLS 4950 Senior Seminar	2 s.h.		s.h.
	35 s.h.		s.h.
REQUIRED DEAF COMMUNITY STUDIES COURSES:			s.h.
CD 2160 Child Development: Birth through Age Eight	3 s.h.	SLS 2020 Intermediate American Sign Language II 4	s.h.
SLS 2110 Orientation to Deafness	3 s.h.	Required Minor Courses:	
SLS 2450 Deafness and Community Resources	3 s.h.	~	s.h.
SLS 3470 Deaf People and the Law	2 s.h.		s.h.
SLS 4040 ASL Literature and Drama	3 s.h.		s.h.
SLS 4941 Field Placement: Deaf Community Studies	3 s.h.		s.h.
SOC 2210 Social Problems*	4 s.h.		s.h.
WRT 3260 Business and Professional Writing*	3 s.h.	e , e	s.h.
Total	24 s.h. 59 s.h.	EDU 4630 Theory and Techniques of Instruction: Foreign	
	39 8.11.		s.h.
RECOMMENDED SUPPORT COURSES:	2 1	WL 2710 Language Acquisition 2 s.	.h.
COM 2350 Public Speaking: Theory and Practice	3 s.h.	21	s.h.
ENG 2090 Approaches to Grammar	4 s.h.	IFor EDU 4630—Prerequisites: EDU 3120 and admission to the	
NSC 1250 Health Problems*	4 s.h.	Teacher Education Program. Prerequisite or corequisite: EDU	
SLS 4710 Selected Topics	1-3 s.h.	4500 or EDU 4530.	
* This course satisfies a general education requirement.		* This course satisfies a general education requirement.	
D - 6 0			
Deaf Community Studies Minor for Interpreting	ng	Sign Language Studies Minor (31 s.h.)	
Studies or ASL Education Majors (24 s.h.)			
REQUIRED MINOR COURSES:		REQUIRED MINOR COURSES: SLS 1000 Sign Language in Society 3	s.h.
CD 2160 Child Development: Birth through Age Eight	3 s.h.		s.h.
SLS 2110 Orientation to Deafness	3 s.h.	SLS 1020 Beginning American Sign Language II 4	s.h.
SLS 2450 Deafness and Community Resources	3 s.h.	SLS 2010 Intermediate American Sign Language I 4	s.h.
SLS 3470 Deaf People and the Law	2 s.h.		s.h.
SLS 4040 ASL Literature and Drama (for Interpreting Stud	dies		s.h.
majors) or	. ,		s.h.
SLS 4710 Selected Seminar Topics (three different topics r	-		s.h.
for ASL Education majors) SLS 4941 Field Placement: Deaf Community Studies	3 s.h. 3 s.h.		s.h.
SOC 2210 Social Problems*	3 s.n. 4 s.h.	$\overline{31}$ s	s.h.
WRT 3260 Business and Professional Writing*			
WINT 3200 Dublicos and Frotessional Willing.	3 s.h. 24 s.h.		
* This course satisfies a general education requirement.	24 5.11.		
This course suitshes a general education requirement.		SUCIAL STUDIES	
ASL Education Major: Bachelor of Arts (30 s.	h.)	SOCIAL STUDIES	
Prerequisites to the Major:	•	Social Studies Major: Bachelor of Arts (46 s.h.)	
SLS 1010 Beginning American Sign Language I*	4 s.h.	1. Requires 46 s.h. (26 s.h. upper division) distributed	
SLS 1020 Beginning American Sign Language II	4 s.h.	AS FOLLOWS:	
SLS 2010 Intermediate American Sign Language I	4 s.h.	 Course work must include classes from the 	
SLS 2020 Intermediate American Sign Language II	4 s.h.	following: HIS, PSC, ECN, and GEO.	
		• 24 s.h. core (13 s.h. upper division) in HIS or PSC only.	
REQUIRED MAJOR COURSES:		• SSC 4950, History and Social Science Seminar (4 s.h.).	
SLS 1000 Sign Language in Society	3 s.h.	2. CANDIDATES MUST ALSO INCLUDE THE FOLLOWING:	
SLS 2310 Deaf Culture	3 s.h.	HISTORY	
SLS 3010 Advanced American Sign Language I	3 s.h.	 Minimum of 14 s.h. in United States History, which must 	
SLS 3020 Advanced American Sign Language II	3 s.h.	include	
SLS 3290 Fingerspelling and Numbers in ASL	2 s.h.	HIS 2310 United States to 1900 (4 s.h.)	

HIS 2750 Michigan History (2 s.h.)

HIS 3410 Minority Groups in America (4 s.h.)

HIS 4530 United States in the Modern Era (4 s.h.)

• One of the following:

HIS 1080 Ancient World (4 s.h.)

HIS 2450 Medieval World (4 s.h.)

HIS 3300 Early Modern World (4 s.h.)

HIS 3330 Modern World (4 s.h.)

• One of the following:

HIS 4631 Global Studies: Modern Africa (PSC) (3 s.h.) HIS 4632 Global Studies: Modern Asia (PSC) (3 s.h.)

HIS 4633 Global Studies: Modern Latin America (PSC)

(3 s.h.)

HIS 4634 Global Studies: Modern Middle East (PSC) (3 s.h.)

• Both of the following:

HIS 4870 Global Themes in World History I (2 s.h.) HIS 4880 Global Themes in World History II (2 s.h.)

POLITICAL SCIENCE

• PSC 2510 American Government (4 s.h.)

• PSC 3010 International Relations (4 s.h.)

ECONOMICS

- ECN 2710 Economics for Human Services (3 s.h.)
- ECN 4510 Economic and Business History

of the U.S. (4 s.h.)

GEOGRAPHY

- GEO 1210 Introduction to Geography (3 s.h.)
- GEO 3010 World Regional Geography (4 s.h.)

SENIOR SEMINAR

• SSC 4950 History and Social Science Seminar (4 s.h.).

SOCIAL WORK

Madonna University offers a Bachelor of Social Work (B.S.W.) degree program which is accredited by the Council on Social Work Education. The B.S.W. program is designed to prepare students for entry-level professional employment and for graduate professional education.

Social Work involves enhancing the problem-solving and coping capacities of people; linking people with systems that provide them with resources, services, and opportunities; and promoting humane services, especially for oppressed and vulnerable populations. Emphasis is placed on the value and the strengths of diverse cultures.

The Social Work curriculum is founded on the premise that a social worker needs a well-integrated program of liberal arts content, specific professional content, a global perspective, and a professionally-guided field practicum. These experiences focus on the delivery of services to individuals, families, groups, organizations, and/or communities within Generalist Practice.

Admission to the B.S.W. Program

Students must apply for admission to the program after completing SW 2300 with a grade of C (2.0) or better and completion of the required support courses with a C (2.0) or better (see below). Applicants must also demonstrate aptitude for social work practice as evidenced in service-learning experiences and recommendations. A GPA of 2.5 or better and completion of at least 45 s.h. of general education/University core requirements are required at the time of admission. Applications to the social work program are accepted yearly in January. Only students formally admitted to the program are permitted to enroll in 4000-level SW classes.

Students may take SW 2300 as a corequisite with SW 3400 and SW 3450 provided that required support courses have been completed. These social work courses must be completed before students may continue in the sequence of the program.

Nondiscrimination Policy

The Social Work program provides a learning context that appreciates and recognizes the positive value of diversity and difference. With this as our guide, the program abides by the Nondiscrimination Policy of Madonna University. A complete statement of this policy can be found on page 7 of this Catalog.

Social Work Program at SWEEP

The Social Work Program offers its B.S.W. degree program to students in the Southwest [Detroit] Educational Empowerment Program (S.W.E.P.).

Social Work at SWEEP offers evening classes at 5716 Michigan Avenue in Southwest Detroit. The Southwest Detroit facility provides classrooms, a computer laboratory, a resource room, a Writing Center, and a faculty office.

Social Work Distance Learning Program—Gaylord

The Social Work Program offers its B.S.W. degree program to students in Northern Michigan over interactive television (two way audio/video) through the University Center at Gaylord. Designed for transfer students, the part-time program may be completed in 2-1/2 years with classes scheduled to accommodate the working adult student. The Gaylord Social Work Distance Learning Program replicates the main campus part-time degree completion program and is accredited by the Council on Social Work Education.

SOCIAL WORK

Social Work Major: Bachelor of Social Work (47 s.h.)

REQUIRED MAJOR COURSES:

SW 2290	Tools for Success in Social Work and	
	Sociology (SOC)	1 s.h.
SW 2300	Introduction to Social Work	4 s.h.
SW 3400	Human Behavior and the Social Environment I	3 s.h.
SW 3410	Human Behavior and the Social Environment II	3 s.h.
SW 3450	Practice Methods I: Individuals	3 s.h.
SW 3700	Practice Methods II: Groups and Families	4 s.h.
SW 3960	Social Research Methods (SOC)	4 s.h.
SW 4260	Social Welfare History and Policy	4 s.h.
SW 4350	Practice Methods III: Organizations	3 s.h.
SW 4700	Practice Methods IV: Communities (SOC)	3 s.h.
SW 4750	Senior Integrative Capstone	3 s.h.
SW 4800	Field Practicum I	4 s.h.
SW 4850	Field Practicum Seminar I	2 s.h.
SW 4900	Field Practicum II	4 s.h.
SW 4950	Field Practicum Seminar II	2 s.h.
		47 s.h.

These courses must be taken in sequence. Students must successfully complete a total of 60 hours of service learning at the sophomore and junior levels and 400 hours of field experience at the senior level.

REQUIRED SUPPORT COURSES:

BIO 1010	Introductory Biology or	
BIO 2240	Basic Human Physiology	4 s.h.
CIS 2250	Computer Fundamentals or	
CIS 2380	Introduction to Computers	2-3 s.h.
PSC 2510	American Government	4 s.h.
PSY 1010	General Psychology	3 s.h.
SOC 1010	Introduction to Sociology	4 s.h.
SW 2140	Conflict Resolution (SOC*)	1 s.h.
SW 2160	Empathy Listening Skills	1 s.h.
		19-20 s.h

Addiction Studies Certificate of Completion (12 s.h.)

The Certificate of Completion is a credential from Madonna University. A student planning to also be certified as a State of Michigan

Certified Alcohol and Drug Counselor (CADC) should meet with the Addiction Studies advisor prior to undertaking the Madonna certificate.

REQUIRED CERTIFICATE COURSES:

PSY 1010	General Psychology	3 s.h.
AS 2000	Addiction Studies: General Information	1 s.h.
AS 3430	Addiction Studies: Focus on the Individual	1 s.h.
AS 3440	Addiction Studies: Family Systems	1 s.h.
AS 4840	Ethical Professional Practices (PSY/SW)	1 s.h.
	Addiction Studies electives	<u>5 s.h.</u>
		12 s h

SOCIOLOGY

The Sociology major provides students with the opportunity to gain the necessary skills to succeed in the 21st century's labor market which is fast-changing, increasingly global and technologically-driven. Twenty-first century careers are also marked by constant change and, increasing diversity. Many of the jobs that students week after graduating are those that require analytic problemsolving, communication, collaboration, multicultural and global understandings, and effective writing skills. For students planning training in closely related fields such as social work, psychology, marketing, sign language studies, criminal justice, social services, counseling or personnel, course work in research methods, sociological theory, and other substantive areas will provide a solid foundation for admission to graduate school.

NOTE: All of the core courses in the Sociology major are offered online. Only SOC 1010, Introduction to Sociology, has an alternate on-ground section. Students may find many but not all of the degree requirements in general education and University core offered with significant online components.

Sociology Major: Bachelor of Arts (34 s.h.)

REQUIRED	Major Courses:	
SOC 1010	Introduction to Sociology	4 s.h.
SOC 2210	Social Problems	4 s.h.
SW 2290	Tools for Success in Social Work and Sociology	
	(SOC)	1 s.h.
SOC 3950	Social Theory	3 s.h.
SW 3960	Social Research Methods (SOC)	4 s.h.
SW 4700	Practice Methods IV: Communities (SOC)	3 s.h.
SOC 4900	Applied Social Research Methods	2 s.h.
SOC 4930	Sociology Internship	2 s.h.
SOC 4950	Sociology Seminar	2 s.h.
	Major electives*	<u>9 s.h.</u>
		34 s.h.

^{*} Electives may be chosen from remaining courses listed or crosslisted in Sociology (see Course Descriptions section of Catalog).

Students are encouraged to discuss expanding career opportunities in sociology with their sociology advisor.

Humane Studies Minor (21 s.h.) REQUIRED MINOR COURSES:

KE	QUIKED I	WINOR COURSES:	
AG	E 4000	Proposal Writing and Grant Administration	2 s.h.
HU	M 3110	Do Animals Matter? (SSC)	4 s.h.
HU	M 4300	Humane Studies	3 s.h.
PH	L 4090	Environmental Ethics	3 s.h.
RS'	Г 3100	Franciscan Values	3 s.h.
SO	C 1300	Introduction to Community Leadership	1 s.h.
SO	C 3120	Diversity, Discrimination and Social Justice	3 s.h.
SO	C 3710	Special Topics in Sociology	2 s.h.
			21 s.h.

Sociology Minor (20 s.h.)

Required Minor Courses:	
SOC 1010 Introduction to Sociology	4 s.h.
SOC 2210 Social Problems	4 s.h.
SOC 3120 Diversity, Discrimination, and Social Justice	3 s.h.
SOC 3620 Society and Health: Sociological Perspectives	3 s.h.
SW 4700 Practice Methods IV: Communities (SOC)	3 s.h.
Minor electives*	3 s.h.
	20 - 1

^{*} Electives may be chosen from remaining courses listed or cross-listed in Sociology (see Course Descriptions section of Catalog).

Community Leadership Certificate of Completion (10 s.h.)

The Sociology Program offers students the opportunity to earn a Certificate of Completion in Community Leadership while fulfilling general education and major course work. The overall goal of the certificate program is to prepare students for active, lasting, civic engagement, and community leadership roles. Through coursework and service- learning projects, gain the necessary knowledge and skills to work for the betterment of diverse communities. the Certificate is designed for those who wish to work in a variety of settings geared toward community development such as non-profit organizations, business, governmental agencies, churches, and edu-cational institutions. The program's focus on community change will enhance students' marketability for leadership positions in organizations seeking individuals with social action and community organizing skills.

REQUIRED CERTIFICATE COURSES:

SOC 3120 Diversity, Discrimination, and Social Justice SW 4700 Practice Methods IV: Communities (SOC) SOC 4890 Seminar in Community Leadership REQUIRED SUPPORT COURSE: SOC 1010 Introduction to Sociology RECOMMENDED SUPPORT COURSE:			
SW 4700 Practice Methods IV: Communities (SOC) SOC 4890 Seminar in Community Leadership REQUIRED SUPPORT COURSE: SOC 1010 Introduction to Sociology 4 SRECOMMENDED SUPPORT COURSE:	SOC 1300 Int	troduction to Community Leadership	1 s.h.
SOC 4890 Seminar in Community Leadership REQUIRED SUPPORT COURSE: SOC 1010 Introduction to Sociology 4 S RECOMMENDED SUPPORT COURSE:	SOC 3120 Di	versity, Discrimination, and Social Justice	3 s.h.
REQUIRED SUPPORT COURSE: SOC 1010 Introduction to Sociology RECOMMENDED SUPPORT COURSE:	SW 4700 Pr	actice Methods IV: Communities (SOC)	3 s.h.
REQUIRED SUPPORT COURSE: SOC 1010 Introduction to Sociology 4: RECOMMENDED SUPPORT COURSE:	SOC 4890 Se	minar in Community Leadership	3 s.h.
SOC 1010 Introduction to Sociology 4 : **Recommended Support Course:**			10 s.h.
RECOMMENDED SUPPORT COURSE:	REQUIRED SUPP	PORT COURSE:	
	SOC 1010 Intro	oduction to Sociology	4 s.h.
RST 3100 Franciscan Values, Social Justice, and Service 3 s	RECOMMENDED	Support Course:	
	RST 3100 Fran	nciscan Values, Social Justice, and Service	3 s.h.

SPANISH

Spanish Major: Bachelor of Arts (32 s.h. beyond

elementary level.*)

REQUIRED MAJOR COURSES:

KEQUIKED	MAJOR COURSES.	
SPA 2230	Intermediate Spanish I	3 s.h.
SPA 2240	Intermediate Spanish II	3 s.h.
SPA 3250	Cultures of Spain and Spanish America	3 s.h.
SPA 3260	Cultures of Latinos in the U.S.	3 s.h.
SPA 3310	Oral and Written Composition	4 s.h.
SPA 4300	Spanish Linguistics	3 s.h.
SPA 4400	Spanish Language and Culture in the U.S.	3 s.h.
	Electives in SPA and/or WL 4900	10 s.h.
		32 s.h.

Spanish majors are required to complete satisfactorily a Senior Comprehensive Examination prior to graduation. For the Senior Comprehensive, students take the Oral Proficiency Interview (OPI) of the American Council on the Teaching of Foreign Languages (ACTFL).

Spanish Minor (22 s.h. beyond elementary level.*)

REQUIRED MINOR COURSES:				
SPA 2230	Intermediate Spanish I	3 s.h.		
SPA 2240	Intermediate Spanish II	3 s.h.		
SPA 3250	Cultures of Spain and Spanish America or			
SPA 3260	Cultures of Latinos in the U.S.	3 s.h.		

SPA 3310	Oral and Written Composition	4 s.h.
SPA 4300	Spanish Linguistics <i>or</i>	
SPA 4400	Spanish Language and Culture in the U.S.	3 s.h.
	Electives in SPA and/or WL 4900	<u>6 s.h.</u>
		22 s.h.

SPA 1010, SPA 1020, are elementary level courses not applicable toward major or minor.

Spanish majors and minors are encouraged to inquire about oppor- tunities for study abroad.

Business Spanish Certificate of Completion (9 s.h.)

REQUIRED CERTIFICATE COURSES:	
*SPA 2230 Intermediate Spanish I	3 s.h.
*SPA 2240 Intermediate Spanish II	3 s.h.
SPA 3010 Business Spanish	3 s.h.
	9 s.h.

Spanish for Law Enforcement Certificate of Completion (14 s.h.)

K EQUIRED	CERTIFICATE COURSES:	
CJ 1020	Introduction to Criminal Justice	3 s.h.
*SPA 1010	Elementary Spanish I	4 s.h.
*SPA 1020	Elementary Spanish II	4 s.h.
SPA 1110	Spanish for Criminal Justice (CJ)	3 s.h.
		14 s.h.

Spanish for Medical Settings Certificate of Completion (11 s.h.)

Required Certificate Courses:	
*SPA 1010 Elementary Spanish I	4 s.h.
*SPA 1020 Elementary Spanish II	4 s.h.
WL 2100 Communication and Culture for Health Care	
Professionals	<u>3 s.h</u> .
	11 s.h.

^{*} Students who place into higher-level Spanish courses, or who would otherwise not reach 50% of certificate course work at Madonna University (see page 12 of this Catalog) are advised to substitute higher-level SPA courses into the certificates.

Spanish Major for Teacher Certification: Bachelor of **Arts (32 s.h.** beyond intermediate level.**)

REQUIRED MAJOR COURSES:			
SPA 3250	Cultures of Spain and Spanish America	3 s.h.	
SPA 3260	Cultures of Latinos in the U.S.	3 s.h.	
SPA 3310	Oral and Written Composition	4 s.h.	
SPA 4100	Survey of Literature in Spanish	4 s.h.	
SPA 4300	Spanish Linguistics	3 s.h.	
SPA 4400	Spanish Language and Culture in the U.S.	3 s.h.	
WL 2710	Language Acquisition	2 s.h.	
	Electives in SPA and/or WL 4900	<u>10 s.h.</u>	
		32 s.h.	

Spanish majors are required to complete satisfactorily a Senior Comprehensive Examination prior to graduation. For the Senior Comprehensive, students take the Oral Proficiency Interview (OPI) of the American Council on the Teaching of Foreign Languages (ACTFL).

Spanish Minor for Teacher Certification (22 s.h.

beyond intermediate level.**)

REQUIRED MINOR COURSES:

SPA 3250	Cultures of Spain and Spanish America <i>or</i>	
SPA 3260	Cultures of Latinos in the U.S.	3 s.h.
SPA 3310	Oral and Written Composition	4 s.h.
SPA 4100	Survey of Literature in Spanish	4 s.h.
SPA 4300	Spanish Linguistics or	
SPA 4400	Spanish Language and Culture in the U.S.	3 s.h.

WL 2710 Language Acquisition	2 s.h.
Electives in SPA and/or WL 4900	<u>6 s.h</u> .
	22 s h

Spanish minors for Teacher Certification are required to complete satisfactorily a Senior Comprehensive Examination prior to certification. For the Senior Comprehensive, students take the Oral Proficiency Interview (OPI) of the American Council on the Teaching of Foreign Languages (ACTFL).

**SPA 1010, and SPA 2230, SPA 2240 are intermediate-level courses, not applicable toward major or minor for teacher certification.

SPEECH COMMUNICATION

This is the program to select when seeking teacher certification in Speech.

Speech Communication Minor (24 s.h.)

COM 1050	Communication Concepts and Contexts	3 s.h.
COM 2350	Public Speaking: Theory and Practice	3 s.h.
COM 2550	Oral Interpretation of Literature (ENG)	3 s.h.
COM 3100	Small Group Communication*	3 s.h.
COM 4010	Mass Communication (JRN*/BCA)	3 s.h.
	Minor electives, to be chosen from:	9 s.h.
	COM 2330 Interviewing Techniques (3 s.h.)	
	COM 2140 Argumentation and Persuasion (3 s.h.)	
	COM 2610 Television Production I (BCA*)	
	(3 s.h.)	
	COM 3000 Children's Literature and	
	Drama (ENG*)(4 s.h.)	
	COM 3410 Acting Techniques I (4 s.h.)	
	COM 3420 Acting Techniques II (4 s.h.)	
	$\frac{1}{2}$	24 s.h.

^{*} NOTE: If the Speech minor is being developed specifically for endorsement of an Elementary (K-8) teaching certificate, the student may choose to substitute an elective for COM 3100.

See also the listings under Communication Studies.

SPORT MANAGEMENT

Sport Management Major: Bachelor of Science (39-41 s.h.)

REQUIRED MAJOR COURSES:

SM 1100	Introduction to Sport Management	3 s.h.
SM 2100	Media Relations in Sport	3 s.h.
SM 2300	Sport as Popular Culture	3 s.h.
SM 2930	Practicum in Sport/Recreation	1-3 s.h.
SM 3100	Facility Design and Event Management	3 s.h.
SM 3300	Sport Marketing	3 s.h.
SM 4100*	Legal and Ethical Aspects of Sport	3 s.h.
SM 4300*	Budgeting and Financing of Sport	3 s.h.
SM 4500*	Gender and Race in Sport	3 s.h.
SM 4930*	Sport Management Internship	3 s.h.
SM 4950*	Seminar in Sport Management	2 s.h.
	Required concentration: choose either	
	Ducinass	

Business

or Journalism (see below) 39-41 s.h.

REQUIRED SUPPORT COURSES.

REQUIRED SCITORI COURSES.	
BL 3330 Business Law I	3 s.h.
MKT 2440 Marketing	3 s.h.
·	6 s.h.

Business Concentration: Select 9 s.h. fro	om the following:
ACC 2000 Survey of Accounting	3
s.h. ECN 2720 Principles of Microeconomics s.h.	3
BUS 3260 Business and Professional Wi	riting 3
MIS 2850 Web Design for Business Apps.h.	ol. <u>3</u>
	minimum 9 s.h.
JOURNALISM CONCENTRATION: Select 9 s	.h. from the following:
JRN 2050 Public Relations Writing	3 s.h.
JRN 3160 News Production (sport report	rting) 2 s.h.

JKN 4030	Advanced Fublic Relations	-	5 8.11.
JRN 4160	Advanced News Production (sport edition	ig) 2	2 s.h.
JRN 4750	Special Topics: Sport Journalism		1 s.h.
		minimum 9) s.h.
Sport Ma	nagement Minor (24 s.h.)		
REQUIRED I	MINOR COURSES:		
SM 1100	Introduction to Sport Management	3	3 s.h.
SM 2100	Media Relations in Sport	3	3 s.h.
SM 2300	Sport as Popular Culture	3	3 s.h.
SM 3100	Facility Design and Event Management	3	3 s.h.
SM 3300	Sport Marketing	3	3 s.h.
SM 4100*	Legal and Ethical Aspects of Sport	3	3 s.h.
SM 4300*	Budgeting and Financing of Sport	3	3 s.h.

IRN 4050 Advanced Public Relations

SM 4500* Gender and Race in Sport

Province Conference Councies

Sport Management Post-Baccalaureate Certificate of Achievement (30 s.h.)

KEQUIRED	CERTIFICATE COURSES:	
SM 1100	Introduction to Sport Management	3 s.h.
SM 2100	Media Relations in Sport	3 s.h.
SM 2300	Sport as Popular Culture	3 s.h.
SM 2930	Sport Management Practicum	1 s.h.
SM 3100	Facility Design and Event Management	3 s.h.
SM 3300	Sport Marketing	3 s.h.
SM 4100*	Legal and Ethical Aspects of Sport	3 s.h.
SM 4300*	Budgeting and Financing for Sport	3 s.h.
SM 4500*	Gender and Race in Sport	3 s.h.
SM 4930*	Sport Management Internship	3 s.h.
SM 4950*	Seminar in Sport Management	<u>2 s.h.</u>
		30 s.h.

^{*}Note: Only declared majors, minors, and certificate students may take 4000-level courses.

TECHNICAL WRITING

See PROFESSIONAL AND TECHNICAL WRITING.

TELEVISION AND VIDEO COMMUNICATIONS

See BROADCAST AND CINEMA ARTS.

TOURISM

See HOSPITALITY AND TOURISM MANAGEMENT.

VISUAL ARTS EDUCATION

See listing under ART.

VISUAL COMMUNICATION

Visual Communication and Design Certificate of Completion (14-15 s.h.)

Non-Art students are invited to this certificate, which focuses on digitally-created design projects. (See also Graphic Design listings under ART.)

CERTIFICATE REQUIREMENTS:

ART 1210	Introduction to Graphic Design (JRN)	4 s.h.
ART 1700	Introduction to Computer Art	3 s.h.
	Electives	7-8 s.h.
	ART 2680, Graphic Design II (4 s.h.)	

ART 3100*, Advertising Design (4 s.h.) ART*/BCA/JRN 3150, Photoshop (3 s.h.) ART 3800*, Web Design for Graphic Arts (3 s.h.) JRN 2050, Public Relations Writing (3 s.h.) JRN*/ART 3130, Photography I (3 s.h.) JRN 3570, Editing and Design (3 s.h.) WRT 2440, Technical Writing (3 s.h.) WRT 3440, Advanced Technical Writing (3 s.h.) Other electives may be approved by Art Department

14-15 s.h.

VOCAL PERFORMANCE

See listing under MUSIC.

3 ch

3 s.h.

24 s.h.

VOCATIONAL AUTHORIZATION

See listing under OCCUPATIONAL TEACHER CERTIFICA-TION.

WRITING

Designed for the student who is pursuing or exploring a career as a writer, this general major provides a theoretical framework, intensive practice, and professional guidance. A broad choice of electives allows students to focus on their own areas of interest. For careers in corporations, health care industries, state and local governments, and technology-based businesses, see the Professional and Technical Writing program.

Writing Major: Bachelor of Arts (36-39 s.h.)

Required Major Courses:	
ENG 2620 Language and Culture	3 s.h.
JRN 2050 Public Relations Writing <i>or</i>	
JRN 2860 Editorial and Feature Writing	3 s.h.
WRT 2050 Creative Writing	3 s.h.
WRT 2440 Technical Writing or	
WRT 3260 Business and Professional Writing	3 s.h.
WRT 4000 Rhetorical Theory and Criticism (COM)	4 s.h.
WRT 4950 Senior Seminar: Writing for Publication	3 s.h.
Major electives, six courses chosen from the	
following:	17-20 s.h.
AGE 4000 Proposal Writing and Grant	
Administration (EM/SOC) (2 s	s.h.)
BCA 1010 Survey of Broadcast, Film, and	

Digital Media (JRN) (3 s.h.)

BCA 3030* Writing for Radio, TV, and Film (JRN) (3 s.h.)

COM 2140 Argumentation and Persuasion (3 s.h.)

COM 4010 Mass Communication (3 s.h.)

ENG 2950 Critical Writing and Literary Analysis (4 s.h.)

JRN 1320 News Reporting (3 s.h.)

JRN 2050 Public Relations Writing (3 s.h.)

JRN 2860 Editorial and Feature Writing (3 s.h.)

JRN 3570 Editing and Design (3 s.h.)

MIS 2850 Web Design for Business Applications (3 s.h.)

WRT 2440 Technical Writing (3 s.h.)

WRT 3100 Advanced Composition (3 s.h.)

WRT 3250 Writing Creative Nonfiction (4 s.h.)

WRT 3260 Business and Professional Writing

^{*} Note: ART 2680 is prerequisite to either ART 3100 or ART 3800.

(3 s.h.)

WRT 3490 Publication Software for Technical Writers (3 s.h.)

WRT 4750 Topics in Writing (1-4 s.h.) WRT 4910 Cooperative Education in Writing (3 s.h.)

WRT 4930 Writing Practicum (3 s.h.)

36-39 s.h.

* Note:

BCA*/JRN 3030 requires a prerequisite of BCA*/JRN 2610, Television Production I, 3 s.h.

Writing Minor (24-28 s.h.)

MINOR COURSES:	
Language and Culture	3 s.h.
Public Relations Writing or	
Editorial and Feature Writing	3 s.h.
Creative Writing	3 s.h.
Technical Writing or	
Business and Professional Writing	3 s.h.
Rhetorical Theory and Criticism (COM)	4 s.h.
Minor electives, chosen from major electives	8-12 s.h.
	24-28 s.h.
	Language and Culture Public Relations Writing or Editorial and Feature Writing Creative Writing Technical Writing or Business and Professional Writing Rhetorical Theory and Criticism (COM)

Course Planning: First Things First

Note four "first things":

FIRST, as a First-Year student, and into the Sophomore year, select only 1000- and 2000-level courses. By your Junior year, you should be moving into 3000- and 4000-level courses.

SECOND, check course prerequisites (listed in the course description, pages 119-174) as you plan course sequencing. Course prerequisites are often other courses, but sometimes other matters, such as program admission. If your major courses have a program admission process (see its listing in the Plans of Study section, pages 62-116), check how far in advance of course registration the admission processes must occur.

THIRD, plan for each semester to include courses that count in General Education or the University Core, Goals 1 through 6, and also courses that apply to your chosen major. If you are an "exploring student", then choose elective courses that let you explore some possible majors.

FOURTH, plan your course schedule before you plan your work schedule. In planning, school comes first.

And, don't forget to check the Four-Year Cycle of Courses on the Madonna website. From the home page, select **ACADEMICS** > **ACADEMIC ADVISING**, then on the upper right look for the link "Four-Year Cycle of Courses".

CHECK: Does the major have a program admissions process? What is the timeline? What are the requirements?

On these two pages, use pencil!

Semester FALL	Semester WINTER	Semester SPRING
Semester FALL	Semester WINTER	Semester SPRING
Semester FALL	Semester WINTER	
Semester FALL	Semester WINTER	Semester SPRING
Semester FALL	Semester WINTER	Semester SPRING

Section III:

Course Descriptions

Course Descriptions

What follows is a description of all undergraduate-level courses offered at Madonna University. Students are encouraged to see their academic advisors to review courses and to make course selections.

An asterisk (*) is included in parentheses after the rubric of a course which is cross-listed from another department; the asterisk indicates the department from which the course originates and in which the full course description can be found. Example:

FCS 2250 Human Nutrition (HMG/NFS*)

4 s.h

This course originates in the Nutrition and Food Science (NFS) Department. The full course description is found at NFS 2250.

COURSE NUMBERING GUIDELINES

The following guidelines for course numbering are intended to facilitate an understanding of and the consistent use of the course numbering system at Madonna University, particularly for student advisement and new course development.

1xxx = 1000 level courses are open to all students (e.g., PSY 1010).

2xxx = 2000 level courses are open to sophomores, juniors, seniors, and qualified first year students (e.g., HUM 2010).

3xxx = 3000 level courses are open to juniors, seniors, and other qualified students (e.g., NSC 3250).

4xxx = 4000 level courses are open to seniors and other qualified students (e.g., HIS 4810).

Although some courses at and above the 2000 level do not have explicit prerequisites, there is an implicit prerequisite of class standing or comparable level of academic preparation for such courses.

All students should be encouraged to work at the level of their ability. Although students in upper grade levels are permitted to take courses numbered in the lower sequences, they should be discouraged from doing so habitually.

The difficulty of course work increases with thousands place only (i.e., CHM 3610 is not necessarily more difficult than CHM 3310.)

SECONDARY DIVISIONS:

x180, x190 = Courses offered for the short term (e.g., BUS 4190)

x200, x600 = Independent Study (e.g., HUM 3600)

x802, x803 = Study Abroad

x910, x920 = Co-op or Internship coordinated through the Career Services Office (e.g., JRN 4910)

x930, x940 = Internship/Practicum through departmental arrangements (e.g., INB 4930)

4950 = Senior Seminar (e.g. SSC 4950)

Accounting (ACC)

ACC 2000 Survey of Accounting

3 s.h.

Survey for students in non-business majors and non-business minors. Introduction to both financial and managerial accounting concepts and topics: reading and interpreting a complete set of financial statements for an organization, the conceptual foundation and terminology of financial accounting, understanding the nature and role of an internal control system, and analyzing financial and non-financial data to assist managers in making operating decisions.

ACC 2010 Principles of Accounting I

3 s.h.

An introduction to the theory and concepts of financial accounting, including generally accepted accounting principles and issues as to classification, recognition, realization, measurement, and reporting. Emphasis on the accounting process, including preparation of basic financial statements and the accounting for and analysis of transactions affecting assets, selected liabilities, and equity. Prerequisites: MTH 1050 or equivalent and CIS 2380.

ACC 2020 Principles of Accounting II

3 s.h.

Continued study of the theory and concepts of financial accounting. Emphasis on accounting for and the analysis of transactions affecting selected liabilities, special topics, and types of entities. An introduction to managerial-cost accounting principles and techniques of analysis, including budgeting, cash flows, product and standard costing, short-term operational decisions, financial ratio analysis, and capital budgeting. Prerequisite: ACC 2010.

ACC 3030 Intermediate Accounting I

3 s.h.

An intermediate level examination of the basic accounting statements and underlying accounting principles. Topics include: present value concepts, current assets and liabilities, and tangible and intangible assets. Prerequisite: ACC 2020.

ACC 3040 Intermediate Accounting II

3 s.h.

A continuation of the intermediate level examination of the basic accounting statements and underlying accounting principles. Topics include: accounting for leases, pensions, income taxes, earnings per share, financial statement analysis, long-term liabilities, equity transactions, and cash flow statements. Prerequisite: ACC 3030. *Must be taken at Madonna University*.

ACC 3400 Accounting Information Systems

Involves a study of fundamental principles of accounting and information systems data and analysis related primarily to corporations and to cost and management accounting topics encountered by accounting and computer personnel. Design and control of systems for the origination, development, and use of accounting information systems are studied including an analysis of computer usage for accounting applications. Emphasis is placed on the inter-relationship among the components of accounting systems and the use of the personal computer in the maintenance and reporting of accounting information. Prerequisites: CIS 2380 and ACC 2010.

ACC 3410 Accounting Information Systems

Involves a study of fundamental principles of accounting and information systems data and analysis as they relate to business enterprises and processes. Design and control of systems for the origination, development, and use of accounting information systems are studied. Emphasis is placed on the inter-relationship among the components of accounting systems; the use of technology in the design, maintenance, and reporting of accounting information; and the importance of internal controls to mitigate risk.

ACC 3580 Taxation I

A study of the principles of taxation emphasizing the individual as a taxable entity. Included is a study of tax law as it pertains to inclusions in gross income, exclusions from gross income, and deductions available to the taxpayer. Prerequisites: ACC 2020 and BL 3330 or instructor's consent. Must be taken at Madonna University.

ACC 3590 Taxation

This course examines the United States tax laws and introduces the fundamental taxation concepts, including the definition of income, computation of tax liability, exclusions from income, basis, deductions available, and the assignment of income. Emphasis is placed on the taxation of individuals and various business entities.

ACC 3610 Taxation II

3 s.h.

Continued study of principles of taxation; emphasis on business entities, estates, and trusts. Prerequisite: ACC 3580.

ACC 3910 Cooperative Education

1 s.h.

ACC 4050 Advanced Accounting

3 s.h.

Advanced accounting theory as it applies to partnerships, consolidated financial statements, bankruptcy, and international accounting. Prerequisite: ACC 3040.

ACC 4060 Government and Non-Profit Accounting 3 s.h.

Emphasis placed on in-depth analysis of accounting principles and procedures applicable to governmental units and non-profit organizations. Prerequisite: ACC 3040.

ACC 4500 Auditing

Analysis of the audit process, the audit examination, and procedures for completing the audit test. Emphasis on generally accepted auditing standards and professional ethics. Prerequisite: ACC 3040.

ACC 4700 Advanced Managerial/Cost Accounting

Advanced study of various costing methodologies and their interrelationship to managerial issues for planning, managing, controlling, and evaluating business operations. Topics include standard costing and variance analysis, sales variances, process costing issues, allocation methods for service departments and joint/by-product costs, determination of cost functions, pricing, interrelationship with operations research, and strategic control systems. Prerequisites: FIN 3150 and OS 3550. Must be taken at Madonna University.

ACC 4710-4750 Seminars

1-3 s.h. (max. 4 s.h.)

Prerequisites for all seminars: Junior level or full-time work experience. Students are limited to a total of 4 s.h. of seminars.

ACC 4710	Brunch with an Expert Seminar	1 s.h.
ACC 4720	Literature Review Seminar	3 s.h.
ACC 4730	Research Seminar	3 s.h.
ACC 4740	General Topic Seminar	1-3 s.h.
ACC 4750	Leadership Seminar	1 s.h.

ACC 4800 Forensic Accounting

3 s.h.

The objectives and procedures associated with forensic accounting and fraud audits. Topics include audit procedures and responsibilities associated with fraud, criminal law issues and procedures, internal control and information systems design, the Sarbanes-Oxley Act, and issues associated with identity theft. Prerequisites: ACC 2010, ACC 3400, CIS 2380.

ACC 4900 Contemporary Issues in Cost Management

3 s.h. Current issues in management accounting practice and theory, includes activity-based management techniques, performance motivation and evaluation issues, and cost of quality. Critically evaluate the applicability of new ideas and strategies to the contemporary business environment.

ACC 4910 Internship

3 s.h.

Students are supervised by a faculty member in the School of Business. Students perform accounting related tasks that enhance their understanding of career opportunities in accounting.

Addiction Studies (AS)

Addiction Studies: General Information AS 2000

Introduction to the field of addiction studies and the scope of chemical dependency issues in the United States. Definition of terms, review of different theories of addiction, examination of the disease concept of chemical dependency, and of the continuum of care options for clients. Discussion of standards for ethical behavior in the field and opportunities for professional practice.

Addiction Studies: Special Populations AS 2120 1 s.h.

Examination of the special needs, issues, and interventions for diverse populations with chemical dependency problems: the scope of the problem, survey of ethnic and racial groups, cultural sensitivity, intervention approaches, and discussion of unique diversity issues in Southeastern Michigan.

Addiction Studies: Counseling Models

Overview of counseling models used in the field of chemical dependency treatment: empathic understanding, case management, problem solving, use of cognitive-behavioral, and solution-oriented and relapse prevention approaches.

AS 3390 Addiction Studies: Dual Diagnosis (PSY) 1 ch

An introduction to understanding the assessment and treatment of individuals who have a dual disorder of mental illness and chemical dependency, including presentation of specific intervention strategies and program designs.

AS 3430 Addiction Studies: Focus on the Individual 1 s.h.

Identification of the individual with a chemical dependency disorder: the stages of addiction, assessment instruments, care management, and relapse prevention.

AS 3440 Addiction Studies: Family Systems

Chemical dependency and the family: analysis of family roles, rules, relationships, and rituals. Discussion of the dynamics of codependency, adult children of chemically dependent families, family violence, and resources for recovery.

AS 3460 **Addiction Studies: Prevention** 1 s.h.

An overview of current strategies used in prevention programs. Introduction to school- based and community programs on the primary, secondary, and tertiary levels of prevention. Review of local, state, and national efforts including campus prevention.

AS 3540 Substance Users and HIV/AIDS 1 s.h.

An introduction to issues relevant to the chemical dependency treatment field as it encounters the impact of HIV/AIDS: factors related to treatment considerations, methods for reducing high risk behaviors, prevention measures, high risk groups, social interventions, and epidemiologic and psychiatric data. Also, pertinent information on the connection between drug usage and HIV/AIDS in the treatment field.

AS 3560 **Addiction Studies: Grief and Loss** 1 s.h.

The grief and loss issues that confront individuals in recovery: concerns such as family dysfunction, interpersonal loss, life review and repair, and life-style changes discussed in the context of chemical dependency treatment.

AS 3570 **Addiction Studies: Staff and Program**

An introduction to developing effective chemical dependency treatment programs. Emphasis on program design, grant writing, funding, human resource development, team building, conflict resolution, and supervision.

AS 3610 Addiction Studies: Recovery and Spirituality 1 s.h.

Spirituality as a key element of chemical dependency treatment. Themes such as healing, forgiveness, and acceptance discussed within the context of addiction and holistic recovery. Specific intervention strategies presented to deal with this vital therapeutic issue, including the Twelve Steps of Alcoholics Anonymous.

AS 3620 Addiction Studies: Adolescence

1 s.h.

Identification of issues unique to adolescent chemical dependence. Analysis of the stages of emotional growth and social development, effects on parents and siblings, and obstacles to treatment.

AS 3630 Addiction Studies: Older Adults (AGE) 1 s.h

The issues of chemical dependency and the older adult. Focus on assessment, psychosocial factors, treatment strategies, model program designs, and other community resources that address this high-risk client population.

AS 3650 Addiction Studies: Women 1 s.h.

Identification of the issues specifically related to women with addictions. Discussion include the emotional dynamics of guilt and shame, the impact of societal values, obstacles to treatment, and state-of-the-art intervention approaches.

AS 3760 Problem Gambling: Assessment and Treatment 1 s.h.

An introduction to the dynamics of gambling as an addictive behavior: the scope of the problem, types of gamblers, state-of-the-art testing instruments, intervention strategies, and multi-faceted family issues. Special populations, such as adolescents and older adults are highlighted.

AS 3870 Neurobiology of Drug Addiction (PSY) 1 s.h.

An overview of normal brain functioning and the influence of addictive drugs like heroin and cocaine on brain cells; the evidence for the brain's reward pathway as a crucial neural substrate for drug addiction; drug tolerance, dependence, and withdrawal defined in neurophysiological terms.

AS 4490 Addiction Studies: Planning and Treatment 1 s.h.

Introducing the procedures of planning and treatment in the field: assessment of problems, development of treatment plans, creation of behaviorally-specific goals and objectives, designing interventions, and planning for the termination of treatment. Students learn skills in clinical problem solving and the documentation of interventions and outcomes.

AS 4840 Ethical Professional Practices (PSY/SW) 1 s.h.

Issues that impact ethical decision making as carried out in counseling practice: the ethical standards set by professional associations, steps to making ethical decisions in professional practice, development of the counselor's ethical identity, a comprehensive analysis of cultural considerations as they relate to ethical decision making, and legal issues.

AS 4930 Addiction Studies: Practicum 1-4 s.h.

An opportunity to pursue field work directly related to chemical dependency treatment. The experience includes observation, data collection, and direct service. A capstone course that integrates the content of addiction studies courses with actual practice.

Aging Studies (AGE)

AGE 1070 Introduction to the Aging Experience 3 s.

Never before in human history have so many people lived into old age. This aging population impacts the aging individual, families, communities, and social policy. An overview of the field of aging, with attention to the cultural, social, psychological, and economic factors which influence the life of the older adult.

1 s.h.

AGE 2010 Introduction to Alzheimer's Disease and Other Dementias (PSY)

An overview of Alzheimer's disease and other causes of dementia in older adults. Topics include diagnosis and current approaches to managing these diseases. Course must precede AGE 3460.

AGE 2240 Supporting Family Caregivers

2 s.h.

An overview of the informal and formal resources available to the caregiver responsible for the mental, physical, and emotional well-being of an aged family member.

AGE 2300 Programs and Services for Older Adults 3 s.h

Focus on the continuum of care. Lectures by practitioners in gerontology on the range of programs, services, and resources available for older adults and family caregivers.

AGE 2420 Nutrition for the Aging (NFS*)

2 s.h.

AGE 3020 Program Development for Adult Education and Events (EDU) 3

Prepares students to design programs that respond to the learning potential and learning needs of older adults. Application of a comprehensive planning methodology which includes needs assessment, marketing, budgeting, optimal learning environment, learning objectives, lesson plans, and delivery strategies.

AGE 3030 Spirituality of Aging (RST)

s.h.

Explores the spiritual tasks of the later years with an emphasis on integrating an understanding of those tasks into the practitioner's own journey of aging and into their professional work with older adults.

AGE 3070 Psychology of Midlife and Aging (PSY) 3 s.h.

What does it really mean to be a grown up? Examine adult psychological development from midlife to later years, including behavior and coping strategies as well as the cognitive, personality, and intellectual changes that occur with aging. Prerequisite: PSY 1010.

AGE 3100 Enriching Life in Later Years 3 s.h.

Exploration of strategies to identify meaningful pursuits in later life and methods of facilitating life enrichment in a variety of settings with individuals of all levels of ability. Students apply concepts, theories, resources, engagement strategies, and standards of practice for successful activity programs.

AGE 3150 How and Why the Body Ages 3 s.h.

Study processes that affect normal aging of the human body, as well as age-related chronic diseases. Examination of strategies that contribute to health and vitality into later life. Focus on life choices through the life span to promote positive responses to physical aging.

AGE 3460 Addressing Behavior Changes in Dementia (PSY) 2 s.h.

Explores the causes of challenging behaviors in people with dementia and discusses strategies for addressing these behaviors. Prerequisite: AGE 2010.

AGE 3500 Mental Health and the Older Adult 3 s.h.

Basic engagement skills for working with older adults. Information and interventions related to common mental health issues in older people. Practice in empathic listening, basic interviewing, and problem-solving skills. Symptoms of some common mental health problems and strategies to obtain help for older individuals with those problems. Includes an academic service-learning experience.

AGE 3630 Addiction Studies: Older Adults (AS*)

1 s.h.

AGE 3700 Legal Issues for Older Adults 3 s.l

An overview of legal issues typically encountered by people in their later years with emphasis on laws and policies affecting management of their care, substitute decision making, public benefits, and medical treatment issues.

AGE 3850 Documentation and Assessment

3 s.h. An overview of documentation and assessment in the field of human services with a strong emphasis on the practice of ger-

ontology. Content includes the biopsychosocial assessment, behaviorally-specific care planning, care management, care path design, and other documentation required in settings that serve older adults.

AGE 3900 Care Management for Older Adults

3 s.h.

The theory and practice of care management. Content includes the five core functions, development of comprehensive care plans, monitoring of the client's progress toward achieving intervention goals, and discussion of ethical practice standards. The role of diversity, client rights, and professional values in the practice of care management also addressed.

AGE 4000 Proposal Writing and Grant Administration (EM/SOC)

The basic skills needed to develop and write a successful proposal to compete for funds from sources outside the control of the organization or agency. Topics include generating program ideas, researching funding sources, utilizing contacts, basic proposal format, self-funding, understanding the politics of grants, and the administration of and accounting for funds.

AGE 4150 Societies and Aging

Globally, societies are facing rapidly aging populations. Examination of the social and cultural forces that impact the process of aging and the status and roles of older adults in world societies. The course analyzes: social factors, such as race, gender and class that influence aging; the integration of older adults into society; and the way in which population aging affects a society as a whole.

AGE 4250 Public Policy and Resources in Aging

2 s.h.

Examination of public policies, legislation, and resources related to older people. Focus on the role of gerontology professionals in policy decision-making and the role of ethics. Analysis of structure and functions of service delivery systems and organizations.

AGE 4760 Internship in Aging Studies

4 s.h.

Professionally supervised practical experience (225 clock hours) in organizations that provide services and opportunities to benefit older adults. Must be taken concurrently with AGE 4770, Professional Development Seminar.

AGE 4770 Professional Development Seminar

2 s.h.

Uses the internship experience to apply principles of professional values, ethics, communication, and relationships. Students learn concepts in conflict resolution, leadership, and capacity building. In addition they apply job search strategies and activities. Must be taken concurrently with AGE 4760, Internship in Aging Studies.

AGE 4850 Gerontology Management

3 s.h.

Examination of gerontology management techniques. Focus on basic principles of management as they relate to human serv-

AGE 4870 Nursing Home Administration I

An overview of health, administrative, and leadership concerns in a nursing home. Topics include: Federal and State regulations in relation to dietetics, health policy and leadership, pharmacology, infection control, nursing, quality assurance, and accounting and budgeting.

AGE 4880 Nursing Home Administration II 3 s.h.

An overview of health, administrative, and leadership concerns in a nursing home. Topics include: Federal and State regulations in relation to life safety code, social services and activity therapy, physical plant, and occupational safety and health; normal aging; insurances; and the legal environment of a licensed nursing home.

AGE 4950 Gerontology Senior Seminar

Methodological and philosophical foundations of gerontology. Students prepare and present an original research paper and formulate an individual approach to aging. To be taken during the senior

Applied Science (APS)

APS 2910 Cooperative Education I

1-4 s.h.

Supervised work experience in a professional setting related to the student's area of specialization. Prerequisite: approval of advisor.

APS 2930 Internship I

1-4 s.h.

Supervised work experience in a professional setting related to the student's area of specialization. Prerequisite: approval of advisor.

APS 3020 Field Experience

Credit awarded to individuals for evidence of completion of licensure programs in a technical field and/or full-time employment of two or more years in applied technology. Documentation of competencies required.

APS 3910 Cooperative Education II

1-4 s.h.

Advanced semi-professional level assignments in on-thejob applications related to the student's area of specialization. Prerequisite: approval of advisor.

APS 3930 Internship II

Advanced semi-professional level assignments in on-thejob applications related to the student's area of specialization. Prerequisite: approval of advisor.

APS 4950 Senior Seminar

2 s.h.

Preparation and presentation of a library research paper or project that integrates knowledge gained in the technology core of the applied science discipline. Taken by students with senior status as a requirement for graduation; to be taken in the final six hours of the program.

Art (ART)

ART 1010 Drawing Foundations for Art and Design

3 s.h.

Introduction to drawing and two-dimensional design with a variety of media and approaches. Students explore observational and expressive drawing along with the elements and principles of art and design. No prior experience needed.

ART 1030 Painting Foundations for Art and Design 3 s.h.

Introduction to painting with a variety of acrylic and watercolor media. Students explore observational and expressive painting techniques and learn color theory along with the elements and principles of art and design. No prior experience needed.

ART 1040 Ceramics Foundations for Art and Design

Introduction to hand building clay vessels and sculptural forms using a variety of expressive methods. Students explore forming and glazing techniques along with art elements and design principles. No prior experience needed.

ART 1060 Printmaking Foundations for Art and Design

Introduction to printmaking with relief printing, silkscreen and intaglio. Students explore creative expression with each printmaking process, along with the elements and principles of art and

ART 1210 Introduction to Graphic Design (JRN)

design. No prior experience needed.

4 s.h.

Overview of the field of graphic design, with emphasis on

basic terminology, process, and procedure. The elements and principles of successful graphic design are introduced and practiced through various hand-rendered and digitally-created print projects.

ART 1700 Introduction to Computer Art 3 s.h. (max. 6 s.h.)

Introduction to and use of a specific graphic design computer program such as Illustrator or InDesign. Students master key program functions, including tools and palettes, in constructing graphic design projects. Prerequisite or corequisite: ART 1210.

ART 2010 Drawing II 3 s.h.

Drawing a variety of subjects, students continue to develop skills and personal approaches to creating expressive compositions while exploring tools and media. Includes introduction to drawing the human figure and alternative drawing methods. Prerequisite: ART

ART 2030 Painting II 3 s.h.

Introduction to using traditional materials, tools and methods of oil painting. Painting from a variety of subjects including the human figure, students continue to develop skills and personal approaches to creating expressive compositions. Prerequisite: ART 1030.

ART 2040 Ceramics II 3 s.h.

Forming clay using a variety of subjects, students contin- ue to develop skills and personal approaches to creating expressive sculptural forms and vessels while exploring tools and media. Course includes expansion of hand building and glazing techniques and learning the basics of wheel throwing and kiln firing. Prerequisite: ART 1040.

ART 2050 Typography 3 s.h.

An exploration of the history and current use of typography within the graphic design community. An introduction to terminologies, letterforms, and the various uses of typography as an art form are explored through the use of various hand-rendered and digital projects. Students are encouraged to use typography to meet specific graphic needs for specific target audiences.

ART 2060 Printmaking II

Drawing from a variety of subjects, students continue to develop skills and personal approaches to creating expressive compositions with more complex relief printing techniques. Course emphasizes quality printing, experimentation and relevant aesthetics. Prerequisite: ART 1060.

ART 2100 Illustration 3 s.h. (max. 6 s.h.)

An overview of the field of Illustration. Introduction of the use of research and reference materials. Projects exploring an awareness of composition and use of various media. Students are encouraged to develop conceptual solutions to specific needs and visually communicate those solutions to a target audience or purpose. Prerequisite: ART 1050; prerequisite or corequisite: ART 2070.

ART 2680 Graphic Design II

Exploration of various forms of graphic design. The elements and principles of successful graphic design are developed to an intermediate level of proficiency through design projects including direct mail, book and publication, packaging, and signage, with an introduction to web design. Prerequisite: ART 1210 and ART 1700 or permission of instructor.

ART 3010 Drawing III - Advanced Studio

Exploration of anatomy and drawing the human figure, with focus on proportion, gesture, and composition. Includes continued experimentation with drawing techniques and materials. Individualized goals to be determined with instructor at start of course. Prerequisite: ART 1010, ART 2010.

ART 3030 Painting III - Advanced Studio

Continue skill and concept development in water-based, oil

or alternative painting media and methods. May include approaches to collage and mixed media. Course continues painting the human figure. Individualized goals to be determined with instructor at start of course. Prerequisites: ART 1030, ART 2030.

ART 3040 Ceramics III - Advanced Studio

Individualized instruction in advanced technical and aesthetic skills in using the potter's wheel and more sophisticated hand building techniques to create functional or sculptural objects. Kiln firing and glaze mixing skills are expanded. Creative goals are determined with instructor at the start of the course. Prerequisites: ART 1040, ART 2040.

ART 3060 Printmaking III - Advanced Studio 3 s.h.

In-depth exploration of serigraphy (silkscreen) and techniques, with additional emphasis on quality printing, experimental and multi-screen printing, and aesthetics. Individualized goals to be determined with instructor at start of course. Prerequisites: ART 1060, ART 2060.

ART 3100 Advertising Design

4 s.h.

A third-level examination of advanced terminology, processes, and procedures in graphic design. Special emphasis on advertising campaigns and the different formats used in them, such as editorial series, outdoor and indoor signage, promotional packaging, and direct mail design, with an introduction to art direction through storyboarding. Prerequisite: ART 2680.

ART 3130 Photography I (JRN*)

3 s.h.

ART 3140 Photography II (JRN*)

3 s.h.

ART 3150 Photoshop (BCA/JRN)

3 s.h.

Introduction to a variety of image processing capabilities, with an emphasis on the development of original images related to art and publication design. Students learn to combine basic design, drawing, and composition techniques within the technical framework of computer design, including image conversion, color correction, manipulating layers, working with paths, websites, and print preparation. Prerequisite: ART 1700 or permission of instructor.

ART 3210 The Moving Image (Animation) (BCA)

The creation of movement and animation through the use of sequential images, drawing, and software tools. Methods of hand-drawn animation, rotoscoping, keyframe animation, and compositing. Students develop filmmaking skills from concept to finished work through group projects, classroom workshops, and individual projects. Prerequisites: ART 1050; ART 2070, and ART 3150; or permission of instructor.

ART 3800 Web Design for Graphic Designers

3 s.h. (max. 6 s.h.)

Study of a specific web-design program such as Flash or Dreamweaver. Students build on previous computer and design skills to master key program functions, including tools and palettes, in constructing graphic design projects. Prerequisite: ART 2680.

ART 3840 Visual Effects and Compositing I (BCA*) 3 s.h.

ART 3850 Visual Effects and Compositing II (BCA*) 3 s.h.

ART 4010 - Drawing IV - Advanced Studio 3 s.h.

Focused experimentation with materials, refinement of techniques and artistic problem solving are emphasized for developing a personal body of work. Independent drawing challenges and creative goals are determined with instructor at the start of the course.Prerequisites: ART 1010, ART 2010, ART 3010.

ART 4030 Painting IV - Advanced Studio

3 s.h.

Experimentation with materials, refinement of techniques and artistic problem solving are emphasized for developing a personal body of work. Independent painting challenges and creative goals are determined with instructor at start of course. Prerequisite: ART 1030, ART 2030, ART 3030.

ART 4040 Ceramics IV - Advanced Studio

3 s.h.

Experimentation with materials, refinement of tech-niques and artistic problem solving are emphasized for developing a personal body of work. Independent ceramic challenges and creative goals are determined with instructor at the start of the course. Prerequisites: ART 1040, ART 2040, ART 3040.

ART 4060 Printmaking IV - Advanced Studio

3 s.h.

Experimentation with materials, refinement of techniques and artistic problem solving are emphasized for developing a personal body of work. New planographic techniques are presented. Independent printmaking challenges and creative goals are determined with instructor. Prerequisites: ART 1060, ART 2060, ART 3060.

ART 4250 Advanced Graphic Design

4 s.h.

Advanced-level exploration of processes and procedures in graphic design. Special emphasis on branding and identity design is achieved through projects using research and conceptual skills. Development of an effective student career portfolio. Prerequisite: ART 2680; recommended ART 3100 or ART 3800.

ART 4400 Independent Studio A

2-3 s.h. (max. 9 s.h.)

Independent guided work in an expanded art discipline, experimental media or new techniques. Artistic challenges and creative goals are determined with instructor. Permission of Art Department Chair instructor required.

ART 4410 Independent Studio B

2-3 s.h. (max. 9 s.h.)

Independent guided work in an expanded art discipline, experimental media or new techniques. Artistic challenges and creative goals are determined with instructor. Permission of Art Department Chair and instructor required.

ART 4950 Senior Seminar

3 s.h.

All Art Department majors complete their programs with Senior Seminar research, critical reflection, and planning for professional presentation of a body of creative work, and require participation in producing the senior art exhibition.

Art Education (AED)

AED 3100 Visual Culture (AHIS)

3 s.h.

Course scans the increasingly visual phenomena that influence the lives of twenty-first century people. Analytic tools of semiotics are used to look beyond the surface of visual communications to underlying content and motivations.

AED 3160 Art for the Elementary School Teacher

2 s.h.

Study of elements of art with orientation to a variety of media and techniques, emphasizing preparation of innovative, motivating art lessons appropriate to elementary grades. (Specifically designed for non-art majors.)

AED 3800 Principles of Elementary Visual Arts Education

3 s.ł

Developmentally appropriate visual arts techniques, teaching strategies, lesson design and presentation, classroom observations, and the theories, history, and philosophy of visual arts education for the elementary age child. *Includes 15 hours of field placement.*

AED 3810 Principles of Secondary Visual Arts Education

3 s.h.

Visual arts techniques, teaching strategies, lesson design and portfolio presentation, classroom observations, and the theories, history, and philosophy of visual arts education for the secondary student. *Includes 15 hours of field placement*.

Art History (AHIS)

AHIS 2020 Monuments, Media and Culture in World Art 3 s.h.

This introduction to the visual arts provides a strong foundation for understanding, and appreciating human creativity across time and cultures. Students learn fundamental concepts about art, are exposed to a wide variety of artworks from around the world, and learn to observe how the visual arts reflect our respective cultures and impacts our daily lives. (Not for art majors.)

AHIS 3100 Visual Culture (AED*)

3 s.h.

AHIS 3250 Art History: Ancient to Renaissance

3 s.h.

Investigation of art making across cultures from over 250,000 years of prehistory through the time of the early Renaissance. Multicultural artistic innovations across the world are charted chronologically. Using art history as a framework, human history is reflected back to us.

AHIS 3260 Art History: Renaissance to 20th Century 3 s.h.

Investigation of innovations in artwork across world cultures from the time of the Renaissance in Italy to art made across the globe in the early 20th century.

AHIS 3280 Dynamic Detroit Architecture

3 s.h.

Study of Detroit architecture in the context of the development of American society and contemporary politics. Class work is supported by required field trips to significant architectural sites.

AHIS 3350 Asian Art: India, China, Japan

3 s.h

Focused study on the paintings, sculpture, buildings, and landscape architecture of India, China, and Japan. Artifacts and aesthetics are correlated with historic, social, and cultural forces. Emphasis is on investigation of continuing traditions and new stylistic content.

AHIS 4150 Art History: 20th Century to Contemporary 3 s.h.

Investigation of international art breakthroughs from the 20th century to the present day. Beginning with art movements that influenced the development of modernism and other "avant-garde" concepts, continuing through to contemporary expressions in thevisal arts, emphasis is placed on understanding historical and cultural contexts.

AHIS 4250 History of Modern Design

3 s.h

Investigation of the development and impact of modern design as it emerged through the Industrial Revolution of the 19th century and progressed through 20th century modernism, post-modernism, and the design trends of the 21st century. Aesthetics of modern design are analyzed, as are the philosophies and theories of the designers creating these. Students look at the relationship of design to technology, the needs of society, the environment, and industry.

AHIS 4750 Studies in Art History

2-3 s.h. (max. 9 s.h.)

Course allows independent research on a focused area of Art History study. Study topic, readings, research and meeting times are determined in collaboration with the instructor. Prerequisites: AHIS 3250, AHIS 3260.

Biology (BIO)

BIO 1010 Introductory Biology

4 s.h.

A course for non-science majors, presenting biological concepts influencing individual decisions affecting community structure and the state of the world. Lecture 3 hours, laboratory 3 hours.

BIO 1030 General Biology I

4 c k

Fundamental biological principles and problems as they apply to molecular, cellular, and organismic levels of the biosphere.

Lecture 3 hours, laboratory 3 hours. Prerequisite or corequisite: CHM 1110 or equivalent; one year each of high school biology and chemistry highly recommended.

BIO 1040 General Biology II

4 s.h.

Fundamental biological principles and problems as they apply to evolutionary theory, biosystematics, plant structure and function, animal behavior, and ecological concepts. Lecture 3 hours, laboratory 3 hours. Prerequisite: one year each of high school biology and chemistry highly recommended; BIO 1030 recommended but not required.

BIO 2240 Basic Human Physiology

4 s.h.

Non-laboratory study of the functioning of the body systems considering the integration and control of life processes in the cells, tissues, organs, and systems of the human body. Not applicable to Biology major but may be applied to Biology minor.

BIO 2260 Microbiology

4 s.h.

Fundamental principles of microbiology with emphasis on the biology of bacteria and other microbes (metabolism, genetics, growth, and death), their ecological relationships in natural and controlled environments, and the interactions of pathogenic microorganisms and their human and animal hosts. Lecture 3 hours, laboratory 3 hours. Prerequisites: CHM 1110 or CHM 1610; and, BIO 1030 or BIO 2240 or BIO 2430.

BIO 2270 Microbiology for Health Sciences

3 s.h.

A non-laboratory study of the fundamentals of microbiology geared to preparation of nurses and other health care professionals. The role of microbes as causative agents of infectious disease, focusing on humans and human disease processes, relative to humans and their diverse environments. Application of scientific understandings to health care settings and to food preparation and spoilage. Prerequisites: biology and chemistry course work, both (a) BIO 1010 or BIO 2240 or BIO 2430 or BIO 2440, and (b) CHM 1610 or CHM 2210.

BIO 2430 Human Anatomy and Physiology I

3 s.ł

Study of anatomical terminology, the cell, and the structure and function of the integumentary, skeletal, muscular, and nervous systems. Lecture 2 hours, laboratory 2 hours. Prerequisite: one year each of high school biology and chemistry.

BIO 2440 Human Anatomy and Physiology II 3 s.h.

Study of the sense organs, circulation, respiration, digestion, excretion, reproduction and development, the endocrine system, fluids and electrolytes, and acid-base balance. Lecture 2 hours, laboratory 2 hours. Prerequisite: one year each of high school biology and chemistry.

BIO 3010 Genetics 4 s.h.

Principles of genetic theory that provide a working knowledge of the three divisions of genetics: transmission genetics, molecular genetics, and population genetics. Topics include cell division, principles of heredity, statistical analysis, microbial genetics, cancer genetics, genetics in metabolism, development and behavior, and genetic engineering. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIO 1030 or BIO 2260; MTH 2350.

BIO 3150 Human Genetics and Society 3 s.h.

The new genetics affects us all and the ethical, legal, and social implications of this technology will impact society for years to come. Students research topics of contemporary significance using tools of classical genetics such as the pedigree and the genetic code as well as RFLP markers, PCR technology, and cytogenetics based on DNA probes. (For non-science majors; does not apply to Biology major or minor.)

BIO 3170 Parasitology (MTE)

4 s.h.

Study focuses upon the morphology, classification, and

clinical diagnosis of major human parasites. Laboratory emphasizes the identification of parasitic adult and larval forms as observed in clinical specimens. Lecture 2 hours, laboratory 6 hours. Prerequisite: BIO 2260.

BIO 3210 General Ecology

3 s.h.

Study of the principles of ecological interdependence and interaction between plants and animals with each other and with their environment. An overview of research methods used in field studies complements theoretical concepts in lecture. Lecture 2 hours, laboratory/field 3 hours. Prerequisite: 6 s.h. in biology; MTH 2350.

BIO 3280 Clinical Immunology and Serology (MTE) 4 s.h.

A lecture/laboratory course that introduces basic concepts and terminology of innate, humoral, and cellular immunity. Development and function of cellular response; basics of antigenicity. Students learn about immunity as it relates to transplantation, infectious disease, and autoimmune conditions. In laboratory practice, students become familiar with the purpose, principles, and performance of common methods of detection and measurement of the immune response, including techniques of ELISA, agglutination, and immunoprecipitation. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIO 2430 and BIO 2440; CHM 2210; recommend BIO 3010.

BIO 3450 Epidemiology

3 s.h.

The study of disease rates, distribution of disease, and prevention of diseases within human populations. General health promotion, experimental studies for both infectious and chronic disease and statistical methods in epidemiology will be examined. Prerequisites: BIO 1030; MTH 2350 recommended.

BIO 3500 Medical Mycology and Virology (MTE) 4 s.h.

Studies in the isolation and identification of medically important fungi and viruses with emphasis on the disease involved and on current diagnostic methods used in the laboratory. Laboratory sessions to consist of identification, specimen collection, and the processing of fungi and viruses. Lecture 2 hours, laboratory 6 hours. Prerequisite: BIO 2260.

BIO 3610 Biochemistry I (CHM*) 4 s.h.

BIO 3620 Biochemistry II (CHM*) 4 s.h.

BIO 3710 Pathophysiology 3 s.h.

Study of mechanisms of disease processes affecting hematologic, immune, cardiovascular, respiratory, neural, liver and biliary, gastrointestinal, and endocrine systems with associated manifestations, diagnosis, and treatment regimens. Prerequisite: BIO 2430 and BIO 2440.

BIO 3740 Cell Biology

3 s.h.

The study of structural details and the molecular functions of the different parts of the eukaryotic cell, with emphasis on endocytosis, intra-membrane transport, protein targeting, organelle biosynthesis, protein sorting, exocytosis, cell shape, motility, cell-to-cell interaction, signal transduction and cell cycling. Cellular functions that are required for cell growth and programmed cell death will be explored. Emphasis is placed on examination of experimental approaches taken to elucidate certain biology principles. Prerequisites: BIO 1030, BIO 2260, BIO 3010.

BIO 3750 Special Topics in Biology 1-3 s.h. (max. 6 s.h.)

Workshops or seminars include topics related to biology, such as evolution, animal behavior, cell biology, biometry, or related issues. (May be repeated for credit, as topics vary.) Students may apply up to 3 s.h. of BIO 3750 toward Biology major requirements. Addition- al topics credits are optional.

BIO 4010 Population Genetics (FOR)

3 s.h.

Theory and application of population genetics with emphasis on mathematical and statistical methods for describing specific populations, genetic make-up and diversity. 3 hours of lecture per

week. Prerequisites: BIO 3010, MTH 1210, and MTH 2350.

BIO 4270 Clinical Bacteriology

4 s.h.

Study of the qualitative and quantitative aspects of bacteriology in relation to diseases as found in humans. Methods of detection, isolation, and enumeration, toxin production, and techniques in the identification of pathogenic bacteria. Lecture 2 hours, laboratory 6 hours. Prerequisite: BIO 2260; BIO 3280 recommended.

BIO 4410 Molecular Biology

Introductory course in molecular biology, which includes a comprehensive overview of prokaryotic and eukaryotic genome structure and function examined through the lens of molecular biotechnology, with practical application of molecular biology techniques in the laboratory. 2 hours lecture; 3 hours laboratory per week. Prerequisites: BIO 3010, CHM 3610.

BIO 4500	Behavioral Neuroscience (PSY	Y*) 4 s.h.
BIO 4620	Forensic Biology (FOR*)	3 s.h.
BIO 4640	Toxicology (FOR*)	3 s.h.
BIO 4700	Biological Investigation	1-4 s.h. (max. 4 s.h.)

Independent research, directed reading, or special prob-

lems under the supervision of a faculty member. Prerequisites: recommendation of major advisor and problem director.

BIO 4950 Senior Seminar

2 s.h.

Preparation and presentation of a scientific paper. Taken by students with senior status as a requirement for graduation; to be taken in the final six hours of the program.

Broadcast and Cinema Arts (BCA)

BCA 1010 Survey of Broadcast, Film, and Digital Media (JRN)

An overview of the telecommunications industry, its technical and economic nature, and its consideration as both a product of social forces and as a social force itself.

BCA 1800 Final Cut Pro Level I Certification

Basic editing functions and features within Final Cut Pro software. Students complete basic setup, customize preferences and settings, capture video and audio, mark and edit clips, mix sounds, add titles, create transitions, and apply filters. At the end of the course students take the Apple Final Cut Pro Level 1 certification test.

BCA 2020 Cinema Studies (COM)

3 s.h.

Introduction to the language, art, and culture of film including the study of classic and contemporary films and their aesthetic, cultural, and social significance.

BCA 2310 Modern Radio Techniques I 1 s.h.

Introduction to the concepts and techniques of radio production, including basic recording, mixing, and editing techniques. Students produce station promos, ID's, interviews, and documentaries, and perform live as DJs or announcers.

BCA 2320 Modern Radio Techniques II 1 s.h.

Advanced concepts and techniques of radio production, including a focus on radio interviewing techniques and the art of sound editing. Students produce a short documentary, applying advanced techniques. Prerequisite: BCA 2310.

BCA 2610 Television Production I (COM/JRN) 3 s.h.

Basic studio production techniques, including set-up and

operation of cameras, microphones, recorders, lights, and control room equipment. Emphasis on hands-on team approach. Recommended for BCA majors during their first year.

BCA 2810 Field Production and Editing I (JRN)

Introduction to basic concepts and practices of single camera field production, including directing theory, camera technique, sound, lighting, and editing. Preferred prerequisite or corequisite: BCA 2610 or permission of instructor.

BCA 2850 Audio for Film, Broadcast, and Media

3 s.h.

Study and hands-on use of hardware and software for recording and manipulation of audio signals; creation of high-quality sound reproduction, and audio effects for film, television, and radio. Focus on field and studio recording and use of digital editing tools for music, voice, and sound effects.

BCA 3030 Writing for Radio, TV, and Film (JRN)

Theory and practice of writing scripts for radio, television, and film. Introduction to the techniques of storytelling, storyboarding, production tracking, and budgeting. Prerequisite: BCA 2610 or permission of instructor.

BCA 3150 Photoshop (ART*/JRN)

3 s.h.

BCA 3210 The Moving Image (Animation) (ART*) 3 s.h.

BCA 3440 Talent and Performance for Television and Radio (COM)

3 s.h.

Instruction and practice in performing for radio and television (as reporter, host, spokesperson, etc.), including voice, poise, and on-camera technique. Prerequisite or corequisite: BCA 2610 or BCA 2810 or permission of program director or course instructor.

BCA 3510 On-Location Team Experience1-3 s.h. (max. 6 s.h.)

Intensive participation in a film production: highly collaborative com- munity service using production, teamwork, and leadership skills. Out- of-town venues, such as Hollywood, require the student to pay for trav- el and lodging. Recommended prerequisites: BCA 2610 and BCA 2810. May be repeated for credit: a maximum of 3 s.h may be applied within a BCA major or minor; additional credits may be earned as free electives.

BCA 3610 Television Production II (COM/JRN)

Advanced studio production techniques, with emphasis on technical directing, camera techniques, lighting methods, and integration of field-produced tapes. Prerequisite: BCA 2610 or permission of instructor.

BCA 3750 Television News Reporting and Production 3 s.h.

The concepts and practices of field and remote video production in electronic news gathering with emphasis on broadcast standards and ethical decision-making. Prerequisites: BCA 2610, BCA 2810.

BCA 3820 Field Production and Editing II (JRN) 3 s.h.

Advanced field production and editing, with emphasis on visual and aural storytelling, creative camera and lighting techniques, shot continuity, audio, graphics, and special effects. Includes an academic service-learning experience. Prerequisite: BCA 2810.

BCA 3830 Post Production

3 s.h.

Advanced post-production tools, techniques, and special effects used in video and film editing to create a message, tell a story, or elicit a feeling or emotion. Prerequisite: BCA 2810.

BCA 3840 Visual Effects and Compositing I (ART) 3 s.h.

Aspects of visual effects and compositing for film and video: students solve problems faced when dealing with visual integration, discover solutions to working with poorly shot scenes, rotoscoping, 2D tracking, color grading, as well as wire and rig removal.

Prerequisites: BCA 2810; or ART 1050 and ART 1210; or permission of instructor.

BCA 3850 Visual Effects and Compositing II (ART) 3 s.h.

Advanced visual effects and compositing theory and techniques, including blue-screen compositing and 3D environments. Prerequisites: BCA 3840 or permission of instructor.

BCA 3910, 3920 Cooperative Education 1-4 s.h. (max. 4 s.h.)
Academically related work experience.

BCA 4010 Mass Communication (JRN*/COM) 3 s.h.

BCA 4630 Directing and Producing for Television (JRN)

The theory and practice of producing and directing television programs. Students produce and/or direct a program that meets broadcast standards. Prerequisites: BCA 2810 and BCA 3610 and permission of instructor.

BCA 4810, 4820, 4830 Capstone in Film Production 2 s.h. ea.

Creating a film as part of a production team, using the knowledge, skills, techniques, and theories of the industry. Emphasis on the creative process, the kinds of decision that are made, and the strategies that are developed in the production of a film. The student's final product is submitted for external judging. This course runs three consecutive semesters with a grade given at the end of the final semester. Prerequisites: BCA 2610, BCA 2810, and permission of instructor. No grade for BCA 4810 or BCA 4820 until the completion of BCA 4830.

BCA 4910, 4920 Cooperative Education 1-4 s.h. (max. 4 s.h.)
Academically related work experience.

Business Administration (BUS)

BUS 1010 Contemporary Society and the Organization 3 s.h.

The dynamics of contemporary administrative, social and political influences on the organization; laws and regulatory agencies and their impact on the organization; career opportunities in the organization. *General elective or general education only; does not apply toward Business majors.*

BUS 1100 Introduction to Sport Management (SM*) 3 s.h.

BUS 3260 Business and Professional Writing (WRT*) 3 s.h.

BUS 3520 Industrial/Organizational Psychology (PSY*) 3 s.h.

BUS 3530 Foundations of e-Commerce 3 s.h.

The core concepts of e-commerce management and strategy. Emphasis on the decision-making process used to begin, develop, and run an e-business and an organizational model which shows the relationship between management and human resource administration, marketing, accounting, finance, statistical analysis, consumer demand, and technology. Prerequisites: CIS 2380, MKT 2440, MGT 2360.

BUS 3950 Business and Society 3 s.h

A conceptual course which studies the historic and sociological relationship between business and society, the development of economic and management thought, and the social responsibility of business. Prerequisites: junior standing, MKT 2440 and MGT 2360.

BUS 3960 Business Ethics 3 s.h.

A conceptual course focused on the social and ethical issues facing business. Approaches to processes that foster ethical decision-making in today's complex global business environment are examined. A variety of means, including case studies, are used to examine such topics as corporate social responsibility, global citizenship, ethical corporate culture, working conditions, environmental impact issues, and codes of conduct. Prerequisites:

MKT 2440, MGT 2360; junior standing.

BUS 4010 Cultures and Languages of the European
Union 1951-2003 (ENG*) 1 s.h.

BUS 4020 Cultures and Languages of the European
Union 2004-Present (ENG*) 1 s.h.

BUS 4030 Contemporary French Culture through Film (ENG*)

BUS 4100 Legal and Ethical Aspects of Sport (SM*) 3 s.h.

BUS 4710-4750 Seminars 1-3 s.h. (max. 4 s.h.)

Prerequisites for all seminars: Junior level or full-time work experience. Students are limited to a total of 4 s.h. of seminars.

BUS 4710Brunch with an Expert Seminar1 s.h.BUS 4720Literature Review Seminar3 s.h.BUS 4730Research Seminar3 s.h.BUS 4740General Topic Seminar1-3 s.h.BUS 4750Leadership Seminar1 s.h.

BUS 4910 Internship 3 s.h.

Supervised professional work experience in the area of specialization. Completed in the last two semesters of the program.

BUS 4950 Business Capstone

3 s.h.

3 s.h.

1 s.h.

Capstone course; students bring to bear all the experience of their study in aspects of accounting, business administration, finance, economics, international business, legal environment of business, quantitative systems, and management information systems through developmental exercises and practice. Three major components comprise the course: the strategic analysis of an organization; development of an implementation plan that informs business policy, and completion of the Education Testing Services Major Field Test in Business. To be taken in last semester of Business major.

Business Law (BL)

BL 3330 Business Law I

3 s.h.

Study of the law and the legal process as it relates to business and society. Emphasis on the law of contracts, sales under the U.C.C., negotiable instruments, secured transactions, and agency. Basic concepts of the law of crimes and torts, including products liabilities and performing legal research. Prerequisite: MGT 2360 or consent of instructor.

BL 3500 Employment Law

3 s.h.

Recognizing those organizational policies and practices that may put the firm's assets at risk. Emphasis on the statutory, case, and regulatory approaches which business must understand in order to be successful.

BL 4330 Business Law II 3 s.h.

A continuation of Business Law 3330, with emphasis on the legal aspects of corporations and partnerships, property rights, debtor-creditor relations, and securities regulation. The general principles of governmental regulation of business and the legal aspects of international business transactions explored. Prerequisite: BL 3330.

Chemistry (CHM)

CHM 1010 Introductory Principles of Chemistry

4 s.h

A study of the basic principles of general chemistry and their applications including: systems of measurement; structure and

properties of atoms; the periodic table; chemical symbols and their equations; stoichiometry; introduction to chemical bonding; solutions; acids, bases, and salts. Lecture 3 hours, recitation 1 hour, laboratory 2 hours. Prerequisite: one year of high school algebra or MTH 1040 with grade of C (2.0) or better. (May be used to satisfy the physical science gen- eral education requirement with laboratory and the chemistry prerequisite for CHM 1110. Does not apply toward Chemistry major or minor.)

CHM 1110 General Chemistry I

4 s.h.

Principles of chemistry, including atomic structure and periodicity, chemical bonding, stoichiometry, gas laws, solution concepts, acid-base theory, redox processes, and equilibrium. Lecture 3 hours, laboratory 3 hours. Prerequisites: one year of high school chemistry or CHM 1010 with grade of C (2.0) or better; one year of high school algebra or MTH 1040 with grade of C (2.0) or better. Two years of high school algebra highly recommended, or MTH 1040 and 1050 with grades of C (2.0) or better.

CHM 1120 General Chemistry II

4 c h

Principles of thermodynamics, kinetics, equilibrium systems, proton transfer, electrochemistry, and nuclear chemistry. Laboratory projects related to each major subject area. Lecture 3 hours, laboratory 3 hours. Prerequisites: CHM 1110 or equivalent; MTH 1050 or equivalent.

CHM 1610 Introduction to Life Chemistry

4 s.h.

Integrated organic and biochemical principles related to normal functioning of the human body. Lecture 3 hours, laboratory 3 hours. Prerequisite: high school chemistry with graduation within the past two years, or CHM 1010 or CHM 1110 within the past two years, with a grade of C (2.0) or better, or chemistry placement test. (Does not apply toward chemistry major or minor.)

CHM 2210 Organic Chemistry I

4 s.l

Structure and classification of compounds of carbon, with stress on the aliphatics; IUPAC nomenclature; properties, characteristic reactions of the common functional groups, especially of the oxygen functions; concepts of stereochemistry; introduction to mechanisms; stress on Bronsted and Lewis acid/base processes. Laboratory exercises directed to demonstration of mechanistic processes. Lecture 3 hours, laboratory 3 hours. Prerequisite: CHM 1110 or equivalent; CHM 1120 highly recommended.

CHM 2220 Organic Chemistry II

4 s.h

More extensive study of reaction mechanisms, aromatics, spectroscopy, and polymerization. Laboratory exercises directed to aromatic substitution reactions, chromatography, and systematic identification of organic functional groups. Lecture 3 hours, laboratory 3 hours. Prerequisites: CHM 1110 and CHM 2210; CHM 1120 highly recommended.

CHM 3310 Quantitative Analysis

4 s.h.

Theory and techniques of classical quantitative analysis, including acquisition and evaluation of analytical data from gravimetry, titrimetry, potentiometry, and spectrophotometry techniques. Lecture 3 hours, laboratory 3 hours. Prerequisites: CHM 1110, CHM 1120, and CHM 2210; MTH 1210 or equivalent.

CHM 3510 Advanced Inorganic Chemistry

4 s.h.

Descriptive chemistry of the representative elements, transition metal complexes and organometallic compounds; ligand field theory, molecular orbital and valence bond theories, symmetry and group theory, nuclear chemistry. Prerequisites: CHM 1110, CHM 1120, MTH 1210 or equivalent.

CHM 3610 Biochemistry I (BIO)

4 s.h.

Principles of biochemistry; major metabolic and biosynthetic pathways; structure and conformation of biological molecules and their molecular biology. Laboratory exercises in enzyme kinetics,

electrophoresis, chromatography, and DNA isolation and manipulation. Lecture 3 hours, laboratory 3 hours. Prerequisites: CHM 1110, CHM 2210.

CHM 3620 Biochemistry II (BIO)

4 s.h.

Advanced treatment of modern topics, including DNA structure and function; gene control; recombinant techniques; and newer techniques of protein design and engineering. Laboratory exercises in molecular cloning, transformation, DNA transfer techniques, immunoprecipitation, and mutagenesis studies. Lecture 3 hours, laboratory 3 hours. Prerequisites: CHM 1110, CHM 2210, and CHM 3610.

CHM 3640 Clinical Chemistry (MTE*)

3 s.h.

CHM 4410 Physical Chemistry I

4 s.h.

Kinetics, mechanisms, rate laws, properties of solids, liquids, and gases; kinetic theory of gases, phase rules, thermodynamics, equilibria, chemical activity, and electrochemistry; introduction to statistical mechanics. Lecture 3 hours, laboratory 3 hours. Prerequisites: CHM 1120, CHM 2210; MTH 2510, MTH 2520; PHY 2530 or PHY 2630, PHY 2540 or PHY 2640.

CHM 4420 Physical Chemistry II

4 s.h.

Atomic and molecular structure, quantum theory and mechanics, analytical spectroscopy, selection rules, photochemistry. Lecture 3 hours, laboratory 3 hours. Prerequisites: CHM 4410; MTH 2510, MTH 2520; PHY 2530 or PHY 2630, PHY 2540 or PHY 2640.

CHM 4510 Instrumental Analysis

l s.h.

Theory and techniques of modern instrumental analysis including UV, visible, and IR spectrophotometry; NMR, EPR, and mass spectroscopies; electrochemistry; chromatography including HPLC; other current topics. Lecture 3 hours, laboratory 3 hours. Prerequisites: CHM 1110, CHM 1120, CHM 2210; MTH 1210 or MTH 2510 and MTH 2520; PHY 2530, PHY 2540.

CHM 4630 Forensic Chemistry (FOR*)

3 s.h.

CHM 4900 Problems in Chemistry

1-4 s.h. (max. 4 s.h.)

Advanced study in a special area of interest in laboratory or library research studies. Prerequisite: recommendation of major advisor.

CHM 4950 Senior Seminar

2 s.h.

Preparation and presentation of a scientific paper. Taken by students with senior status as a requirement for graduation; to be taken in the final six hours of the program.

Child Development (CD)

See also Early Childhood Education (ECE).

CD 2160 Child Development: Birth through Age Eight 3 s.h.

Growth and development of the young child from birth through age eight, including both typical and atypical characteristics and needs of young children, with a particular focus on theory and current research in the field. Exploration of ways to create learning environments that are healthy, respectful, responsive, supportive, and challenging for young children. Introduction of the Universal Education Vision and Principles.

CD 3930 Preschool Practicum with Seminar

2 s.h.

For child development students in the bachelor degree program who complete the entire major at Madonna University. Practicum of 120 clock hours in a child care center or a preschool. Cumulative assumption of responsibilities in the early childhood classroom. Prerequisites: ECE 2650 and ECE 3100; corequisite: ECE 3580. Observe posted deadlines for submission of application forms.

CD 3940 Preschool Practicum with Seminar

1-3 s.h.

Practicum of 90-180 clock hours in a child care center, with a seminar to support students in the experience. Cumulative assumption of responsibilities in the early childhood classroom. Prerequisites: ECE 2650 and ECE 3100. Corequisite: ECE 3580. Observe posted deadlines for submission of application forms.

CD 4500 Issues Challenging Children and Families (FCS) 3 s.h.

A survey of issues that present challenges to children and families. Students learn how current societal factors present stress to the family as it seeks to nurture the emotional/social and cognitive development of children. Assessment of community resources available for families.

CD 4920 Directed Teaching Seminar: Child Development 1 s.h.

The forum to reflect upon and discuss the student's practicum/directed teaching experiences. Introduction to action research as a tool for self-reflection and continued professional development.

CD 4930 Directed Teaching: Child Development 4 s.h

For child development majors who complete the entire major at Madonna University. Supervised teaching in a pre-K setting. Pre- requisites: CD 3930 and advisor approval. Observe posted deadlines for submission of application forms.

CD 4940 Directed Teaching: Child Development 2 s.h.

For students in the child development bachelor degree who transferred in an associate degree in child development, based on review by the program director of prior practicum course work. Supervised teaching in a pre-K setting. Prerequisites: final stage of the program and advisor approval. Observe posted deadlines for submission of application forms.

CD 4950 Senior Seminar

In-depth consideration of issues in a related field; integration and verification of exit-level competencies.

Chinese (CHN)

CHN 1010 Beginning Mandarin Chinese I

Introduction to speaking, listening, and reading in basic Mandarin Chinese, with the emphasis on speaking and listening. Students are expected to express the sound system (pinyin), engage in daily conversation, and use basic sentence patterns, and to learn to recognize approximately 100 Chinese written characters. Analysis of aspects of Chinese culture.

CHN 1020 Beginning Mandarin Chinese II

Practice in Mandarin Chinese speaking, listening, and reading to a high beginning level, with emphasis on speaking and listening. Learning to recognize an additional 100 Chinese written characters. Analysis of aspects of Chinese culture. Prerequisite: CHN 1010.

CHN 1100 Mandarin Chinese for Business 3 s.h

Development of business communication skills in Mandarin Chinese, including the effective use of: industry and workplace-specific vocabulary; expressions; and business-oriented situational dialogues. The comprehension and practice of basic social norms and modes of interaction in China. Assumes no prior background in Mandarin Chinese.

CHN 2010 Intermediate Mandarin Chinese I 3 s.h.

Developing proficiency in spoken and written Mandarin Chinese to a low intermediate level. Reading and writing of Chinese characters emphasized. Analysis of aspects of Chinese culture. Prerequisite: CHN 1020.

CHN 2020 Intermediate Mandarin Chinese II

Developing proficiency in spoken and written Mandarin

Chinese to an intermediate level. Emphasis on reading and writing. Analysis of aspects of Chinese culture. Prerequisite: CHN 2010.

Communication Studies (COM)

COM 1050 Communication Concepts and Contexts

Principles of communication applied to interpersonal, group, and public speaking situations. Emphasis on verbal and nonverbal communication, listening, persuasive techniques, delivery, and responding to messages. Opportunity to practice speaking skills.

COM 2020 Cinema Studies (BCA*)

3 s.h.

COM 2120 Interpersonal Communication

3 s.h. nal and

3 s.h.

Analysis of communications skills vital to personal and professional success. Examines the role of communication in interpersonal relationships from their inception through termination. Specific areas of focus include: listening, non-verbal behavior, empathy, assertiveness, relationship development, and conflict resolution skills.

COM 2140 Argumentation and Persuasion

The study of argument as a process of inquiry and advocacy and the communicative means to change attitudes, beliefs, behaviors, as well as motivate people to action. Practical experience in: evidence, analysis and reasoning; organization and case-building; refutation and cross-examination; and audience analysis. Students apply theory to a variety of topics and contexts.

COM 2330 Interviewing Techniques

2 s.h.

3 s.h.

3 s.h.

3 s.h.

Addresses theoretical principles and communication skills essential for professional careers. Includes informative, persuasive, journalistic, health, and employment interviews.

COM 2350 Public Speaking: Theory and Practice 3 s.h.

Focus on the building of public speaking skills needed in education, personal life, and careers in order to effectively communicate thoughts and feelings. Students evaluate the communication efforts of others and increase their critical listening skills.

COM 2550 Oral Interpretation of Literature (ENG) 3 s.h.

The skills of expressive reading to elicit listener response to the text, using vocal and physical expression. Prose, poetry, and drama analyzed for meaning and mood.

COM 2610 Television Production I (BCA*/JRN) 3 s.h.

COM 3000 Children's Literature and Drama (ENG*) 4 s.h.

COM 3100 Small Group Communication 3 s.h.

An analysis of communication interaction in small groups. Addresses group formation, decision making strategies, roles and norms, leadership, and conflict management. Students participate in classroom groups and evaluate group performance.

COM 3410, 3420 Acting Techniques I, II 4, 4 s.h.

Basic forms and methods of expression, including voice projection and diction; development of individual talents in pantomime, improvisation, acting, and oral interpretation. Lecture and laboratory.

COM 3440 Talent and Performance for Television and Radio (BCA*)

COM 3520 Organizational Communication

An introduction to the major theories of communication interaction in and between organizations. Specific topic areas include: communication networks, leadership, communication ethics, communication climate, organizational persuasion, organizational culture, communication and change, and conducting the communication audit.

COM 3610 Television Production II (BCA*/JRN)

3 s.h.

3 s.h.

3 s.h.

COM 4000 Rhetorical Theory and Criticism (WRT*)

COM 4010 Mass Communication (BCA/JRN*)

4 s.h. 3 s.h.

2 s.h.

COM 4750 Topics in Communication

3 s.h. (max. 6 s.h.)

A specialized course addressing a particular area of communication. May be repeated for credit with a new topic.

COM 4910 Cooperative Education in Communication 3 s.h.

On-campus or on-the-job experience in communication (paid). Prerequisite: departmental approval.

COM 4930 Communication Practicum 3 s.h.

On-campus or on-the-job experience in communication (unpaid). Prerequisite: departmental approval.

COM 4950 Senior Seminar: Applied Communication

3 s.h.

A capstone course for seniors. Analysis of several preeminent theories of human communication, with application to students' major areas of specialization within the field. Prerequisites: senior standing and COM 1050, COM 2120, COM 2140, COM 2350, COM 3100, COM 4010.

Computer Information Systems (CIS)

For related course work on a professional level, see listings under Management Information Systems (MIS).

CIS 2250 **Computer Fundamentals**

Introduction to the fundamentals of computers for the non-technical person. Study of the operating functions of both the hardware and software components of an information system. Emphasis on hands-on experiences with word processing, spreadsheet, and database management systems. Study of the evolution, application, and ethical aspects of computer systems. No credit toward majors in business or management information systems.

CIS 2380 Introduction to Computers

Study of the evolution of computers and the operating functions of the hardware, systems software, application software, data communications, and ethics of data storage and retrieval; exploration of the integration and application of information processing in the business environment and in the global society; hands-on experience with word processing, electronic spreadsheets, graphics, database management, and electronic mail.

Computer Science (CSC)

CSC 1820 Introduction to Programming

An introduction to the fundamentals of computer programming, with no knowledge of programming assumed. Students design, write, and debug computer programs in a widely used generalpurpose, high-level programming language. Topics include fundamentals of computation and algorithmic problem solving, data types, functions, control structures, and lists. Not applicable to Computer Science major, minor, or required support.

CSC 2010 Web Fundamentals

A comprehensive introduction to web design using XHTML and CSS, web-based applications, social networking, web searching, and commercial web authoring software. Designed for students who already have strong technology skills, including mastery of basic applications such as word processing, spreadsheets, databases, and presentation software. May be taken to satisfy the University core technology Goal UC-4.

CSC 2080 Computer Science I

3 s.h.

An introductory course in the field of computer science. Topics include fundamentals of computation and algorithmic problem solving, data types, procedures, control structures, arrays, and applications. Recommended as the first computer science course taken by students in mathematics and science, as well as by those wishing to concentrate in computer science.

CSC 2250 JavaScript Programming

3 s.h.

Designing and writing programs using the JavaScript language, which is accessible to students with no prior programming experience. Emphasis is placed on devising modular programs that are easy to read and modify. Topics include structured programming concepts, variables, control structures, functions, arrays, and JavaScript operators, objects, and event handlers. The JavaScript programs are used to create dynamic HTML web pages.

CSC 2350 Web Programming

3 s.h.

Students learn how to write server-side scripting programs using programming languages such as PHP and Perl. Using these languages, students will create dynamic web pages and write scripts to process HTML forms. Prerequisites: CSC 2080.

CSC 2450 Introduction to Mobile Applications

Programming

Introductory concepts of mobile device programming, with emphasis on developing applications for mobile devices that run on the Android platform. Creation of both standalone programs and program suites for mobile marketplace commerce systems where applications can be deployed. Prerequisite: CSC 2080 or consent of department.

CSC 2480 Computer Science II

A continuation of Computer Science I. Emphasis placed on object-oriented programming, covering topics such as classes, objects, instances, inheritance, etc. Other topics include abstract data types, pointers, recursion, searching, and sorting. Prerequisite: CSC

CSC 3030 Operating Systems

3 s.h.

Focuses on the major components of a computer operating system and the general operation of these components. Course concepts include: memory management, processor management, processes, communication and synchronization, shared resources, resource allocation, device management, file management, and security issues. Prerequisite: CSC 2080.

CSC 3050 Computer Architecture

3 s.h.

Study of: digital logic circuits and their components, numeric and character data representation within computer memory, instruction formats and addressing modes, register transfer and microoperations, micro-programmed control, the differences between CISC and RISC architectures, and pipelined and vector processing. Prerequisite: CSC 2080.

CSC 3280 Analysis of Algorithms

The study of data structures and their relationship to algorithms. Concepts include: algorithm and data abstraction, analysis of both iterative and recursive algorithms to determine time and space complexity, and various sorting, graph, and hashing algorithms. Students design programs to study algorithms and their application utilizing various data structures such as lists, queues, stacks, and trees. Prerequisite: CSC 2480.

CSC 3290 Programming Language Concepts

Focuses on the study of programming languages. Topics include the history of programming languages, virtual machines, the representation of data types, sequence and data control, type checking, memory management, programming language semantics, and parsing. Various current and historical programming languages are compared, including C++, Fortran, Pascal, Ada, Java, JavaScript, Python, Perl,

3 s.h.

CSC 3330 Software Engineering

3 s.h.

Overview of software engineering as a discipline. Topics include: software life cycle models, project management, requirements gathering and documentation, user interface design, system design and modeling, and software testing. Prerequisite: CSC 2080.

CSC 3350 Object-Oriented Programming

3 s.h.

Focuses on developing programming applications using object-oriented programming languages such as C++ and Java. Basic programming concepts studied include: control structures, arrays, methods, strings, and objects. Advanced topics such as graphics, user interface components, exception handling, multithreading, multimedia, and streaming applications are also covered. Prerequisite: CSC 2480.

CSC 3490 Artificial Intelligence

3 s.h.

Introduction to a wide range of issues and methods in artificial intelligence. Topics covered include: reasoning and problem solving, heuristic search, game playing, knowledge representation, natural language processing, logic, and expert systems. Students are also introduced to the LISP programming language. Prerequisite: CSC 3290.

CSC 3550 Mobile Game Programming

3 s.h

Creating games for mobile platforms using a systematic approach, focused on games that run on the Android platform. Weaving in audio and video and consideration of factors such as user inputs involved in playing a game. Prerequisite: CSC 2450 or consent of department.

CSC 3910 Cooperative Education in Software

1-3 s.h. (max 3 s.h.)

Cooperative education experience with emphasis on computer programming or software engineering. Non-lecture, interactive course designed to enable students to gain valuable on-the-job work experience. Prior to registration, student must obtain signature of advisor. Prerequisite: consent of advisor. May be repeated for credit.

CSC 4130 Language Theory

3 s.h.

A study of regular languages, grammars and expressions, finite-state automata and their relationship to regular languages, context-free languages and grammars, and language recognition with stack machines and parsers. Course includes introduction to properties of formal languages, computability, undecidability, and computational complexity. Prerequisite: CSC 3290.

CSC 4850 Seminar: Computers and Society

2 s.h

A research and seminar course. Students are expected to do research, form opinions, and express and defend those opinions in classroom discussions on the various topics covered by the course. Topics include the study of the positive and negative impacts of computers in society related to areas such as the Internet, automation, robotics, artificial intelligence, computer crime, computer ethics, and computer professionalism. Prerequisites: Senior status and major in Computer Science.

Criminal Justice (CJ)

CJ 1020 Introduction to Criminal Justice

3 s.h.

An overview of the criminal justice system in the United States. The history of law enforcement; the political, sociological, and philosophic background of police functions, the courts and corrections system; constitutional problems as they relate to the police function; and the use of recent technology in criminal justice is explored.

CJ 1110 Spanish for Criminal Justice (SPA*)

3 s.h.

CJ 1210 Introduction to Corrections

3 s.h.

An overview of the post-correctional process as a function of the criminal justice system in contemporary society; the development of correctional philosophy, theory, history and practice; a description of institutional operation, programming and management; special populations; the effects of institutionalization upon individuals; alternatives to incarceration; survey of career opportunities. Prerequisite: CJ 1020.

CJ 1240 Introduction to Private Investigations 3 s.h.

An overview of the private investigation industry, including but not limited to employment opportunities, history/evolution, methods and management of private investigation, sources of information, investigative technology, and ethical and public policy considerations related to private investigations.

CJ 1250 Introduction to Private Security

3 s.h.

An introduction to the historical, philosophical, and legal framework for security operations. An overview of the private security industry and analyzes specific processes and programs utilized in providing security. The role of private security in work place violence prevention and theft protection in retail establishments.

CJ 1550 Police Process and Community Relations 3 s.h.

An overview of the police function and responsibility at the local, state and federal level. Examination of the philosophy, history, character, structure, function, and complexity and limitations imposed on law enforcement in a democratic society. Police operations examined relative to effectiveness in crime control, delivery of service, and order maintenance. Prerequisite: CJ 1020.

CJ 2010 Criminal Justice Organization and Administration

3 s.h.

Organization and management of the various criminal justice agencies through the United States. Includes systems of management, substance abuse as a management problem, and systems analyses and their relationships.

CJ 2350 American Judicial Process (PSC) 3 s.h.

Analysis of the American state and federal court systems; history, traditions, and philosophy underlying the American system of justice; legal systems and law; court structures and roles: judges, prosecutors, attorneys, litigants; and the adjudication process: arrest to arraignment, trials, juries, and sentencing.

CJ 2650 Criminal Law

3 s.h.

History, purposes, and philosophy of criminal law, local, state, and federal law; development, application, and rights of the offender.

CJ 2910 Practicum/Cooperative Education in Criminal Justice

3 s.h.

Internship in an approved criminal justice setting designed to provide opportunities to synthesize theory with practice. Laboratory 32 hours for each semester hour, available for cooperative education.

CJ 3010 Basic Criminal Justice Training

3 s.h.

Credit awarded to those who have successfully completed an approved Michigan regional police or correctional academy, federal law enforcement academy, or equivalent CJ instruction.

CJ 3020 Field Experience

3 s.h.

Credit awarded by the chairperson for one year full-time experience in an appropriate area of the criminal justice system.

CJ 3050 Criminal Procedures (FOR)

3 s.h.

Procedural law for law enforcement officers. Law of arrest, evidence, and search and seizure.

CJ 3210 Principles of Criminology (FOR/SOC)

3 s.h.

Study of the incidence, type, causes, and theories of adult

deviant behavior. Emphasis is placed upon current crime trends and statistics and the processes involved in dealing with crime.

CJ 3230 **Juvenile Justice (SOC)**

3 s.h.

Theories of causation and prevention of delinquency; role of the courts, policy prevention programs, institutions in the control, and prevention of juvenile delinquency.

CJ 3500 Homeland Security and Terrorism (EM) 3 s.h.

Examination of the nature of the threat to the United States and how America is responding to the danger of terrorism, international and domestic. The policies, principles, strategies, organizations, and programs that are responsible for protecting the homeland. The efforts of the federal government, state, and local governments, as well as business and private citizens, are explored. Prerequisite: CJ 1020 or permission of instructor.

CJ 3550 **Parole and Probation**

Examination of the history and philosophy of probation, aftercare, parole, and other community-based programs for juvenile and adult clients; function and operation of parole authorities; statutory authorization; case law; current practices and trends. Prerequisites: CJ 1020 and CJ 1210.

CJ 3820 Forensic Psychology (PSY*)

3 s.h.

CJ 3910 Practicum/Cooperative Education in **Criminal Justice**

3 s.h.

Internship in an approved criminal justice setting designed to provide opportunities to synthesize theory with practice. Laboratory 32 hours for each semester hour, available for cooperative education.

CJ 4050 **Constitutional Law (PSC)**

3 s.h.

Introduction to constitutional law, political theory. Historical examination of the major Supreme Court decisions which have contributed to contemporary judicial interpretations of the Constitution.

CJ 4110 **Ethics in Criminal Justice**

3 s.h.

An examination of the multitude of ethical dilemmas encountered in the criminal justice system. Ethical issues inherent in a variety of practical situations identified and discussed. Focus on problem solving strategies, interpersonal skills, and professional considerations relevant to criminal justice practitioners. Course discussions and group work provide a foundation for ethical decision-making related to policing, the courts, corrections, interpersonal relations, and diversity.

Organized Crime and Gangs in America CJ 4120

An exploration of the history, scope, and methods of controlling organized crime and street gangs in America with emphasis on local, regional, and statewide crime control efforts. The social implications of both organized crime and gangs. Research and discussion of federal and state laws aimed at curbing this type of crime.

Drugs, Crime and the Justice System CJ 4140

Study of issues and problems relating to drug and alcohol abuse, impact of substance use on individual health and societal progress, identification and classification of abused drugs, problems faced by law enforcement efforts to control.

Criminal Investigation (FOR) CJ 4150

Integration of principles and procedures of criminal investigation; conduct at a crime scene; search, collection, and preservation of evidence; interviewing; methods used in crime laboratories; and planning for effective courtroom participation. Prerequisite: CJ 1020.

CJ 4230 **Homicide Investigation**

Study of many facets which comprise a thorough, sound, and reliable homicide investigation; inquiry into new investigative techniques as well as a review of State laws concerning homicide. Consideration of case preparation, warrant writing, arrests, arraignment, and preliminary examinations.

CJ 4450 **Interviewing and Investigative Report**

3 s.h.

The art of interviewing and interrogation and the comprehensive skills necessary for the integration and documentation of information that is obtained from a wide variety of sources. Prerequisite: CJ 1020.

Special Topics in Criminal Justice

1-3 s.h. (max. 9 s.h.)

A specialized course dealing, each time it is scheduled, with some particular aspect of criminal justice not usually included in other criminal justice course offerings. Examination of contemporary issues, problems, present status, future development, and the criminal justice response to a specific problem.

CJ 4910 Practicum/Cooperative Education in **Criminal Justice**

3 s.h.

Internship in an approved criminal justice setting designed to provide opportunities to synthesize theory with practice. Laboratory 32 hours for each semester hour, available for cooperative education.

CJ 4950 **Criminal Justice Seminar**

3 s.h.

Capstone course providing a critical analysis of contemporary criminal justice practices and procedures, current issues, trends, new programs, and court decisions affecting the criminal justice system. Topics such as multiculturalism, ethics, corruption, crime, civil/criminal liability, victimology, and public policy are considered. Prerequisite: senior standing and departmental approval.

Diagnostic Medical Sonography (DMS)

DMS 1100 Diagnostic Medical Sonography I

Clinical practice in CAAHEP diagnostic medical sonography program. Prerequisite: departmental approval.

DMS 1150 Diagnostic Medical Sonography II

8 s.h.

8 s.h.

Clinical practice in CAAHEP diagnostic medical sonography program. Prerequisite: departmental approval.

DMS 1500 Diagnostic Medical Sonography III

8 s.h.

Clinical practice in CAAHEP diagnostic medical sonography program. Prerequisite: departmental approval.

DMS 2000 Diagnostic Medical Sonography IV

Clinical practice in CAAHEP diagnostic medical sonography program. Prerequisite: departmental approval.

Early Childhood Education (ECE)

ECE 2250 Programming for Infants and Toddlers

Understanding typical and atypical development of infants and toddlers in order to create developmentally appropriate learning environments meeting Michigan Standards of Quality for Infant and Toddler Programs. Creating respectful, responsive, supportive, and challenging learning experiences and activities for all infants and toddlers. Strategies for partnering with families to support infant and toddler development.(no prerequisite)

Role of Play in Early Childhood Curriculum 3 s.h. ECE 2650

The importance of play as a vehicle for learning in early childhood curricula. The design, implementation, and assessment of play-based learning experiences based upon developmentally-appropriate practices and related standards in art, mathematics, literacy, social studies, movement, music, and science. Integration of play-based creative experiences in the content areas into daily and weekly plans for children's learning. Focus on developmentally-appropriate assessment so that planned activities promote development and learning for all children. Prerequisite: CD 2160. Prerequisite or corequisite: ECE 2250.

ECE 3100 Language Development and Emergent Literacy 3 s.h.

Theories and strategies that promote the emergent literacy and language development of infants, toddlers, and preschoolers. Students learn how to assess, evaluate, and develop appropriate activities for centers and classrooms to promote the development of and acquisition of language and literacy. Students develop activities targeted at supporting parents in fostering literacy in the home, including those for whom English is a second language. Prerequisite or corequisite: ECE 2250.

ECE 3160 Administration of Child Care Centers 3 s.h.

Requirements for infant, toddler, and early childhood care in center-based programs. Exploration of curriculum within centers for all groups. Leadership component highlights administrative skills, collaboration, planning, organizing, assembling resources, supervision of early childhood professionals, and advocacy for and support of young children and families. Prerequisite or corequisite: ECE 2650.

ECE 3580 Early Childhood Curriculum Development 3 s.h.

Theories and strategies to respond to differences between and within children; Bloom's taxonomy and learning differences in children. Adapting the science, social studies, and mathematics curriculum to meet the needs of all in students in an integrated curriculum and foster social competence in children. Techniques to include technology in the curriculum. The course highlights the Universal Education Vision and Principles. Prerequisite: ECE 2650, ECE 3100. Corequisite: ECE 3930.

ECE 3710 Programming for Infants, Toddlers, and Preschoolers with Special Needs 3 s.h.

Identification of infants, toddlers, and preschoolers with special needs, accessing services, planning activities, and adapting the environment in order to program effectively. Collaboration with parents and professionals to advocate for and provide individualized programs and services for very young children with special needs is also emphasized, including participation in Individualized Family Service Plans and Individualized Education Plans. Prerequisite: ECE 3100.

ECE 3930 Preschool Practicum with Seminar 2 s.l

Practicum of 120 clock hours in a child care center, with a seminar to support students in the experience. Cumulative assumption of responsibilities in the early childhood classroom. Prerequisites: ECE 2650 and ECE 3100. Corequisite: ECE 3580. Observe posted dead- lines for submission of application forms.

ECE 4130 Home/School Partnerships to Support Learners (EDU)

The role of the family in children's learning and development; the importance of forming positive home/school relationships with all families; strategies for working in partnership with parents, caregivers, and other professionals for the purpose of supporting the learning and development of children. Readings and experiences designed to foster the desire to and knowledge of ways to advocate for children and their families.

ECE 4160 Assessing Young Children 3 s.h

The goals, benefits, use, and misuse of assessment and the skills required for observation, documentation, and effective assessment strategies. Responsible assessment practices and partnering with parents and other professionals to positively influence children's devel opment and learning. Multiple types of developmentally-

appropriate assessment and their use in driving instruction. A field component is included. Prerequisite: ECE 3580.

ECE 4700 Directed Teaching: Early Childhood

Supervised teaching in a K-3 school setting. 240 clock hours over 12 weeks required. Prerequisite: approval of advisor and admission to directed teaching. Corequisite: ECE 4810. Note: the Early Childhood directed teaching application form is different from the College of Education directed teaching application form. The same deadlines for submission apply to both applications.

ECE 4810 Directed Teaching Seminar: Early Childhood 1 s.h.

The forum to reflect upon and discuss practicum experiences in a supervised setting. Implementation of Positive Behavioral Support. Action research as a tool for self-reflection and continued professional development. Corequisite: ECE 4700.

Earth/Space Science (ESS)

ESS 2160 Earth Science

4 s.h.

4 s.h.

Encompasses the rocky surface of our planet as related to the earth's mineral and energy resources, oceans, climate, interaction with the sun, history as a member of the solar system, and fate in the hands of humanity. Includes laboratory. *Interdisciplinary course designed for General Science, Integrated Science, and non-science majors.*

ESS 3030 Oceans: Our Continuing Frontier 4 s.h.

Introduction to the whole range of human involvement with the sea, emphasizing awareness of and possible solutions to technological problems inherent in exploring the sea. *Interdisciplinary course designed for General Science, Integrated Science, and non-science majors.*

ESS 3260 Meteorology

4 s.h.

Introduction to the fundamentals of weather and climate: understanding of the various atmospheric phenomena that interact to produce daily weather occurrences and global climate patterns; meteorological phenomena, and issues involving hurricanes, tornadoes, thunderstorms, floods, ozone depletion, potential global warming, and growing environmental concerns. Laboratory exercises directed to extracting and analyzing data from the Madonna weather station and exercises related to the above topics.

ESS 3290 Principles of Astronomy

4 s.h.

Provides a comprehensive introduction to astronomy. Topics include the solar system, stars, galaxies, cosmology, and history of astronomy. Astronomical laboratory investigations are part of the course. Interdisciplinary course designed for non-science majors and for majors in General and Integrated Science.

Economics (ECN)

ECN 2710 Economics for Human Services

3 s.h.

A survey of the discipline of economics with special reference to a market-driven economy. Attention given to economic policy in relation to social issues and problems, including government and the quality of life, distribution of wealth and income, unemployment, poverty, the disadvantaged, respect for the law, public health, and aid to the Third World. (No credit for School of Business majors.)

ECN 2720 Principles of Microeconomics

3 s.h.

Theories of production and cost, demand, supply, competition, consumer behavior, and distribution of income. Prerequisite: MTH 1050.

ECN 2730 Principles of Macroeconomics

3 s.h.

Measurement and determination of economic activities

and development, aggregate income, and employment. Emphasis on consumption, monetary policy, fiscal policy, taxes, government, investment, and expenditures. Prerequisites: ECN 2720 and MTH 1050.

ECN 3940 Economic Geography

3 s.h

Geography from an economic perspective: locations and locational changes in primary, secondary, and tertiary production services; a comparative analysis of global demography; role and rise of the city and the metropolis; effects of technology; nations and regional and strategic political and commercial alignments and realignments; natural and human resources; the less-developed, more-developed, and developing worlds; "core" and "periphery;" multinational corporations and the "global village." Prerequisites: ECN 2720, INB 3140, and MGT 2360.

ECN 4510 Economic and Business History of the United States (HIS*) 4 s.h.

Education (EDU)

EDU 2000 Introduction to Professional Education Experiences

3 s.h.

1 s.h.

Introduces the student to the realities of the teaching profession, the structure and operation of schools, current educational issues and trends, and the foundations of education. Course work includes observation and participation in classroom settings. Lecture 2 hours, laboratory 1 hour. Prerequisite: PSY 1010 and WRT 1020. Note: during EDU 2000, the student must complete and sign a Consent for Criminal Background Check. See advisors in the Education Office for a sample form.

EDU 2010 Introductory Education Field Experience

Observations and participation in classroom settings. Designed for students who have completed an introductory education course equivalent to EDU 2000, but do not have the required field experience.

EDU 2140	Conflict Resolution (SOC*/SW)	1 s.h.
EDU 2330	Learning and Teaching Number Concepts (MTH*)	3 s.h.
EDU 2340	Learning and Teaching Geometric and Statistical Concepts (MTH*)	3 s.h.
EDU 3020	Program Development for Adult Education and Events (AGE*)	3 s.h.
EDU 3030	Physical Education for the Elementary Classroom Teacher (PED*)	2 s.h.
EDU 3050	Health for the Elementary Classroom Teacher (HED*)	1 s.h.
EDU 3070	Social Studies Foundations (SSC*)	3 s.h.

EDU 3120 Educational Psychology 3 s.h.

EDU 3090 Music for the Classroom Teacher (MUS*) 2 s.h.

Focus on the learning process: role of the teacher in learning; efficiency of learning as it is affected by the developmental processes; psychological principles that are central to the learning process and their relationship to the teaching situation; variables in learning; and evaluation of the outcomes of learning. Application of learning theory and multicultural concepts in a field-based context. Includes a 1 hour field experience (30 clock hours). Prerequisites: PSY 1010 and EDU 2000.

EDU 3130 Field Experience for Educational Psychology 1 s.h.

Observations and participation in classroom settings. Designed for students who have completed an educational psychology

course equivalent to EDU 3120, but do not have the required field experience.

EDU 3160 Art for the Elementary School Teacher (AED*)

2 s.h.

EDU 3210 Theory and Principles of Reading Instruction

(*elementary and K-12*) **3 s.h.**

Study of theory and process in developmentally-appropriate, evidenced-based reading/writing instruction, including language and literacy acquisition, word recognition, comprehension and fluency, vocabulary, methods of instruction and assessment, program development, and planning for differentiated instruction. Prerequisites: PSY 1010, EDU 2000. Prerequisite or corequisite: EDU 3120.

EDU 3300 The Exceptional Learner in the Classroom 3 s.h

Development of a working knowledge of the historical perspective of present special education programs, the effects of litigation, and the continuum of special education services. Identifying, evaluating, and differentiating instruction for students with special needs by way of a continuum of services in the least-restrictive environment. Response-to-intervention; positive behavior support; collaboration with school personnel and parents; community resources. Fifteenclock-hour field experience required.

EDU 3350 Language Arts and Linguistics Foundations 3 s.h.

Application of linguistic theory to language arts education, including an overview of structural and transformational linguistics, and its impact on oral and written communication; techniques of handwriting, and an exploration of the theory and techniques of listening, speaking, and writing effectively in the English language. Prerequisite: EDU 3210.

EDU 3460 Instructional Media

3 s.h.

4 s.h.

Use of media and technology in the classroom to enhance teacher productivity and student learning. Development of objective-based lesson plans using technology to support a constructivist approach to establishing a learning environment. Demonstration of the ability to use commercially available software to prepare classroom presentations and instructional web sites. Issues related to "fair usage" and copyrights addressed.

EDU 3730 Science Foundations I: Chemistry and Life Science (NSC*)

EDU 3740 Science Foundations II: Earth Science,
Physics, and Astronomy (NSC*) 4 s.h.

EDU 4130 Home/School Partnerships to Support Learners (ECE*) 3 s.h.

EDU 4220 Reading in the Content Areas (elementary only) 3 s.h.

Study of the principles, techniques, and processes of evidence-based literacy instruction needed for students to be independent, strategic learners in the content areas taught in elementary and middle school. Application of learned principles and practices to teaching situations through the tutorial field experience. Lecture 2 hours; laboratory 1 hour. Prerequisites: EDU 3120, EDU 3210, and admission to the Teacher Education Program.

EDU 4250 Literacy Education in the Secondary School 4 s.h.

Introduction to the theoretical foundation for teaching reading and writing as cognitive processes essential for higher cognitive thinking, critical literacy, and mastery of the content areas taught in middle schools and high schools. Emphasis is placed on the principles, techniques, and processes of evidence-based literacy instruction to enable students to be independent, strategic learners in the secondary schools. Application of learned principles and practices in a one-on- one teaching situation. Lecture 3 hours, laboratory 1 hour. Prerequisite: EDU 3120 and admission to the Teacher Education Program.

EDU 4400 Behavior Management in the Classroom

Focus on understanding the role of the teacher in facilitating change in the classroom; the nature of, and factors affecting student behavior; the investigation and evaluation of classroom management models; and strategies for handling disruptive student behavior, with emphasis on prevention of classroom problems. Application of classroom management strategies, anti-bullying and classroom/student interventions in actual problem situations. Prerequisites: EDU 3120

and admission to the Teacher Education Program. **EDU 4421 Seminar for English Minors**

1 s.h.

1 s.h.

Methods and materials relevant for candidates who will be taking the Michigan Tests for Teacher Certification in secondary English. Of special interest to those with a minor in English and a major in a non-English language arts field.

EDU 4422 Seminar for Journalism Minors

Methods and materials relevant for candidates who will be taking the Michigan Tests for Teacher Certification in secondary Journalism. Of special interest to those with a minor in Journalism and a major in a non-English language arts field.

EDU 4423 Seminar for Speech Minors

Methods and materials relevant for candidates who will be taking the Michigan Tests for Teacher Certification in secondary Speech. Of special interest to those with a minor in Speech and a major in a non-English language arts field.

EDU 4430 Theory and Techniques of Instruction: Foreign Language (K-8)

2 s.h.

Theory of instruction, methods, and materials for foreign language in the elementary and middle school; observations of classroom procedures; and participation in simulation and micro-teaching. Emphasis on the application of effective instructional theory and practice, sound decision making, and multicultural education in a field-based context. Prerequisites: EDU 3120 and admission to the Teacher Education Program. Prerequisite or corequisite: EDU 4500.

EDU 4450 Foundations of Vocational Education 2 s.h.

Principles of vocational education; understanding the learning process in the vocational education classroom, particularly as applied to work-based learning; working with individual differences (developmental, cultural, motivational) as students are guided to increasingly complex work-based learning. Prerequisite: EDU 3120 and EDU 3300, and admission to the Teacher Education Program.

EDU 4470 Theory and Techniques of Science Instruction: Elementary School

Theories of instruction, methods, and materials for teaching science in the elementary school. Attention is focused on the special skills needed to manage science activities, including topics of safety and experimentation with live animals, the application of the scientific method to classroom inquiry and an awareness of social/economic impacts of science and technology. Lecture 1 hour. Prerequisites: EDU 2000, EDU 3120. Corequisite: EDU 4500.

EDU 4500 Theory and Techniques of Instruction: Elementary School (K-8)

Theory of instruction, methods, and materials in the elementary school curriculum; observation of classroom practice and procedures; and participation in a field placement in which students gain experience in planning, teaching, and assessment. Emphasis on the application of effective instructional theory and practice for diverse student populations. Students develop lesson plans that integrate their major disciplines into a multidisciplinary curriculum unit. They demonstrate competence using a variety of lesson planning, teaching, and assessment strategies to address student needs and optimize student outcomes.

Lecture 3 hours, laboratory 1 hour. Prerequisites: EDU 2000 and EDU 3120 and admission to the Teacher Education Program.

EDU 4510-4590 Theory and Techniques of Instruction: Major Field (Secondary)

4 s.h.

4 s.h.

Theory of instruction, methods, and materials in the secondary subjectmatter fields in which students expect to teach; observations of classroom procedures; and participation in a field placement in which students plan, teach, and assess student performance. Emphasis is on the application of effective instructional theory and practice for diverse student populations. Students develop unit plans within their disciplines that demonstrate their competence in lesson planning, while employing a variety of teaching and assessment strategies. Lecture 3 hours, laboratory 1 hour. Offered Fall only. Prerequisites: EDU 2000 and EDU 3120 and admission to the Teacher Education Program.

EDU 4510 Theory and Techniques of Instruction: Art (K-12)

EDU 4520 Theory and Techniques of Instruction:

English and Communication Arts (6-12) 4 s.h.

EDU 4530 Theory and Techniques of Instruction: Foreign Language (6-12) 4 s.h.

EDU 4540 Theory and Techniques of Instruction: **Vocational Family and Consumer Sciences**

4 s.h.

EDU 4550 Theory and Techniques of Instruction: Mathematics (6-12)4 s.h.

EDU 4560 Theory and Techniques of Instruction: Music (K-12) 4 s.h.

EDU 4570 Theory and Techniques of Instruction:

Natural Science (6-12) 4 s.h.

EDU 4580 Theory and Techniques of Instruction: Social Sciences (6-12)

EDU 4590 Theory and Techniques of Instruction: Vocational Subjects (9-12) 4 s.h.

EDU 4620 Theory and Techniques of Instruction: Physical Education, K-12 4 s.h.

EDU 4630 Theory and Techniques of Instruction: Foreign Language (K-12)

Theory of instruction, methods, and materials for foreign language in elementary, middle, and high schools; observations of classroom procedures; and participation in simulation and micro-teaching. Emphasis on the application of effective instructional theory and practice, sound decision making, and multicultural education in a field-based context. Prerequisites: EDU 3120 and admission to the Teacher Education Program. Prerequisite or corequisite: EDU 4500 or EDU 4530.05.

DIRECTED TEACHING

Applications for admission to Directed Teaching must be approved by the Teacher Education Committee. All candidates for initial teaching certificates must register for 8 s.h. of directed teaching and EDU 4810, Seminar: Directed Teaching, 1 s.h. Level-change candidates must register for a minimum of 4 s.h. of directed teaching.

EDU 4670 Directed Teaching, Physical Education (K-12)4. 8 s.h.

Observations and teaching in classroom situations; individual conferences and seminars.

EDU 4690 Directed Teaching: Middle School (5-9) 4. 8 s.h.

Observations and teaching in classroom situations and individual conferences.

EDU 4700 Directed Teaching: Elementary School (K-8)

4, 6, 8 s.h.

Observations and teaching in classroom situations; individual conferences and seminars.

EDU 4710-4790 Directed Teaching: Secondary School

Observations and teaching in classroom situations; individual conferences and seminars.

4, 8 s.h.

4, 8 s.h.

3 s.h.

1 s.h.

EDU 4710	Directed Teaching: Art (K-12)	4, 8 s.h.
EDU 4720	Directed Teaching: English and Communica-	
	tion Arts (6-12)	4, 8 s.h.
EDU 4730	Directed Teaching: Foreign Languages (6-12)	
		4, 8 s.h.
EDU 4740	Directed Teaching: Vocational Family and Co	nsumer
	Sciences (6-12)	4, 8 s.h.
EDU 4750	Directed Teaching: Mathematics (6-12)	4, 8 s.h.
EDU 4760	Directed Teaching: Music (K-12)	4, 8 s.h.
EDU 4770	Directed Teaching: Natural Science (6-12)	4, 8 s.h.
EDU 4780	Directed Teaching: Social Sciences (6-12)	4, 8 s.h.
EDU 4790	Directed Teaching: Vocational/Technical	

EDU 4800 Foundations of Education

(9-12)

Study of the scope and nature of education, primarily at the elementary and secondary levels, in the United States, as reflected in the historical, political, economic, sociological, and philosophical forces affecting the school and other social institutions, with emphasis on the origins and evolution of various current educational practices, policies, and issues. Prerequisites: EDU 2000 and EDU 3120 and admission to the Teacher Education Program.

EDU 4810 Seminar: Directed Teaching

Selected topics designed to orient students to the reality

of teaching, to guide and support them during the intensive student teaching internship, and to address topics that relate to students' shortterm interest in securing teaching positions and to their long-term career effectiveness. To be taken concurrently with Directed Teaching.

EDU 4950 Senior Seminar for Elementary Educators

This capstone experience for senior-level students in elementary education focuses on integration of planning for diverse, multi-subject classrooms and development in self-reflection. Technological literacy is demonstrated through professional electronic portfolios. To be taken in the final twenty semester hours of the degree program.

Emergency Management (EM)

Introduction to Fire Protection and EM 1010 Prevention (FS*) 3 s.h.

EM 2010 **Foundations of Emergency Management**

3 s.h. Philosophy and principles of emergency management, including homeland security, for private, public, and non profit sectors. Topics include planning, mitigation, response, and recovery procedures using the National Incident Management System and the Incident Command System.

Emergency Communication EM 2410

Principles of emergency management communication systems that affect the flow of information within the emergency operating event and the understanding of how to communicate to the general public with safety and security instructions. The role of the media to assist in gaining information and to disseminate messages of importance. Exploration of trends and technology of communication equipment and the use of social media as a direct link to emergency personnel and the public.

EM 2420 **Disaster Exercise Planning**

Exploration of the vital roles of local, state, and national preparedness enabling the student to test and evaluate plans and their capabilities. Table-top and/or coordinated full-scale disaster exercises prepare the student to design and develop, conduct, evaluate, and provide improvement planning through the exercise cycle.

EM 3010 **Resource Allocation and Planning**

Study of the development and implementation of a comprehensive site emergency plan to protect the organization's people and property in an on-site emergency. Analysis of the roles that public, private, and non profit sectors have played in past incidents and how lessons learned from these incidents help an organization prepare for future incidents. Emphasis on ethical issues regarding interaction among these four entities. Prerequisite: EM 2010.

EM 3020 **Industrial Espionage and Operations Security**

Methods for the Emergency Manager to analyze and conduct risk assessments of technical and physical protection systems through the identification of current trends in information gathering techniques and the range of methods available to prevent, detect, and protect against, breaches of proprietary information and assets. Prerequisite: EM 2010.

EM 3490	Psychology of Traumatic Experiences (PSY*)	1 s.h.
EM 3500	Homeland Security and Terrorism (CJ*)	3 s.h.
EM 4000	Proposal Writing and Grant Administration (AGE*/SOC)	2 s.h.
EM 4250	Fire and Arson Investigation (FS*/OSH)	4 s.h.
EM 4510	Hazardous Materials I (FS/OSH*)	3 s.h.
EM 4520	Hazardous Materials II (FS/OSH*)	3 s.h.
EM 4950	Senior Seminar	2 s.h.

Preparation and presentation of a library research paper that integrates knowledge gained in the major discipline. Taken by students with senior status as a requirement for graduation; to be taken in the final six hours of the program.

Emergency Medical Technology (EMT)

EMT 1550 Basic EMT

1-10 s.h.

3 s.h.

Experiential learning credits available to those who have current State of Michigan licensure. Application for credit is to be made through the Program Coordinator for Fire Science and Occupational Safety, Health, and Fire Science in the Department of Physical and Applied Sciences.

English (ENG)

Note: For some courses formerly listed under English (ENG), please see thelistings under Writing (WRT).

ENG 2090 Approaches to Grammar 4 s.h.

A linguistics course providing an historical sketch of the development of the English language and treating the interplay between theory of language and approaches to the study of grammar. By analyzing English phonology, graphology, morphology, syntax, semantics, and pragmatics, the course shows the changing nature of language and emphasizes how that change is influenced by politics and culture. The effects of dialect, register, and genre on communication in English are explored. Applications to teaching grammar in elementary and secondary settings are examined.

ENG 2230 Ideas in World Literature

An introduction to representative literary works, both Western and non-Western, reflecting the distinctive ideals, values, and attitudes of various eras and civilizations.

ENG 2620 Language and Culture

3 s.h.

4 s.h.

How and why people communicate in the ways they do. Habitual talking, listening, and writing behaviors of individuals and groups, as well as the influences of home, community, and culture on the language structures and language uses of individuals. Culture, as it influences linguistic preference, are considered, along with methods of semiotic and discursal analysis.

ENG 2950 Critical Writing and Literary Analysis 4 s.h.

A study and practice of the methods used to analyze the contents of a literary work; a review of major themes and schools of literary criticism. Prerequisite: WRT 1020.

ENG 3000 Children's Literature and Drama (COM) 4 s.h.

Classical and contemporary writing for children; dramatization of stories. Selection of materials with reference to the interest, needs, and abilities of children. (NOTE: This course fulfills the upper-division literature University core requirement for students in the Elementary Provisional Certificate program *only. Students who begin elementary certification and transfer out must fulfill Goal UC-3B. with a course listed on page 63.*)

ENG 3010 Major American Writers: Beginnings to 1900 4 s.h.

A study of those writers who expressed in distinctive styles the diverse elements of the American experience from early Amerindian folktales through the end of the nineteenth century, often including Thoreau, Poe, Hawthorne, Melville, Whitman, Dickinson, Twain, and Douglass.

ENG 3020 Major American Writers: 1900 to Present 4 s.h.

Critical examination of major writers in diverse genres who have explored the changing values and concerns of American society through the twentieth century and into the early years of the twenty-first century; minority and ethnic perspectives are expressly noted.

ENG 3540 American Folklore and Literature 4 s.h.

Study and practice of the methods used to analyze folklore, examine folkloristics as a discipline, and explore the relationship between folklore and literature. Students read and write about works of American literature in which folkloric phenomena have been simulated and transformed by American writers for literary purposes, and complete a collection project.

ENG 3550 Women in Literature

Study of representative prose and poetry by and about women which focuses on their search for independence and fulfillment.

ENG 3610 Major British Writers: Chaucer to Johnson 4 s.h.

A study of principal figures in British literature from the fourteenth through the eighteenth century; includes Chaucer, Spenser, Shakespeare, Donne, Milton, Swift, Pope, and Samuel Johnson.

ENG 3620 Major British Writers: Blake to Eliot 4 s.h.

An examination of major British authors from the Romantic period to the post World War I era; includes Blake, Wordsworth, Keats, Shelley, Coleridge, Byron, Tennyson, Browning, Dickens, George Eliot, Hardy, Conrad, Yeats, Joyce, and T.S. Eliot.

ENG 3710 Contemporary Literature 4 s.h.

A study of contemporary authors who may be classified as Modernist or Postmodern; figures may include principal ethnic and minority writers.

ENG 4010 Cultures and Languages of the European Union 1951-2003 (BUS) 1 s.h.

The cultures and languages of the original fifteen European nations, how each nation is distinct yet interconnected, and how, despite their

differences, a new sense of a shared vision of Europe is emerging that will help define their goals for the future.

ENG 4020 Cultures and Languages of the European Union 2004-Present (BUS)

The recent expansion of the European Union, the positive and negative impact of the expansion on the EU, as well as the mentality, expectations, and economic and cultural diversity that the new nations bring to the entity that is Europe.

ENG 4030 Contemporary French Culture through Film (BUS)

1 s.h.

1 s.h.

A primer on French culture focusing primarily on the French education system, child rearing, lifestyle, personal values, work ethic, communication, and interpersonal relationships. Scenes from French films are used to demonstrate common French attitudes and behaviors.

ENG 4100 Approaches to Teaching Classroom Classics

1 s. h. each (max. 6 s.h.)

The Approaches to Teaching offerings examine fiction and non-fiction literature as appropriate and relevant works for study in elementary, middle, and/or secondary school classrooms. Featured authors and works vary by semester. May be repeated for credit with new topic.

ENG 4210 Time and Literature (HIS) 4 s.h. (max. 8 s.h.)

Interdisciplinary analysis of a particular period, event, or personality in terms of the human dilemmas and choices which are confronted.

ENG 4230 Voices and Visions: Modern American Poets 4 s.h.

The lives and works of classic American modern poets, including Walt Whitman, Emily Dickinson, Wallace Stevens, Marianne Moore, William Carlos Williams, Elizabeth Bishop, and others, explored in relationship to our own lives and works. Emphasis on ways to appreciate and enjoy the art of poetry. Videos or DVDs from the Voices and Visions television series are an integral part of the course.

ENG 4240 Cultural Issues in Contemporary Literature and Film 1 s. h. each (max. 6 s.h.)

Interdisciplinary examinations of contemporary cultural issues through literature and film. May be repeated for credit with new topic. Four completed offerings accumulate to meet University core Goal UC-3B.

ENG 4380 Literature for Young Adults (EDU) 4 s.h.

Study of genres and themes presented by contemporary writers of literature for young people: violence in society, search for identity, family life, friendship, historical fiction, poetry, short stories, adventure, and fantasy. Emphasis is given to methods of connecting young adult literature to the target audience. NOTE: This course fulfills the upper-division literature University core requirement, UC-3B, for students in the Secondary Provisional Certificate program only.

ENG 4540 Classics of African-American Literature 4 s.h.

Focus on African-American literature in all three genres: prose, poetry, and drama. Course content includes significant African-American writers from the 18th-19th centuries (Jacobs, Douglass) but focuses primarily on 20th century works by Hughes, Hurston, Baldwin, Ellison, Wilson, Morrison, and others.

ENG 4550 Voices of Pluralism in American Literature 4 s.h.

Focus on minority literatures besides African-American literature. Course content includes, but is not limited to, Asian-American, Arab-American, Latino-American, and Native American literatures. Authors under study may include Tan, Kingston (Asian-American), Said (Arab-American), Rodriguez, Anzaldua (Latino-American), Erdrich, Silko (Native American).

ENG 4750 Studies in Literature 4 s.h. (max. 8 s.h.)

Topics in literature vary on a semester basis. Seminar is required of English majors but is open to all students.

ENG 4950 Senior Seminar

3 s.h

Capstone course for senior-level students. Students construct portfolios of their academic and professional work in their respective programs of study, reconsider their liberal arts education, and conduct research on topics in their majors as part of an information literacy curriculum. In keeping with the need for technological literacy, students create electronic portfolios. *Must be taken in final twenty hours of the degree program.*

English as a Second Language (ESL)

English as a Second Language for Academic Purposes is taught at Madonna University in an Intensive format. Students enroll in simultaneous units of speaking/listening, reading, writing, and grammar at one of three levels: Low-Intermediate, High-Intermediate, or Advanced. A 0-credit cultural immersion component is required with all levels

ESL American Culture and Language Immersion

0 s.h.

4 s.h.

This immersion experience is a component of each block of intensive English courses, an integral part of the Intensive English for Academic Purposes Program (IEAPP). Attendance is required for all students enrolled in the IEAPP. It combines rigorous academic instruction (writing activities, speech presentations) with cultural enrichment (field trips, discussion clubs).

ESL 1020 Orientation to American Higher Education 1 s.h.

Designed to provide first-time international students with knowledge about American university curricula, processes, and procedures. The curriculum spans an array of topics crucial to the academic success and emotional well-being of the non-native speaker who is unfamiliar with the expectations of American higher education. *Enrollment limited to international students in specific programs*.

ESL 2010 Low-Intermediate Academic Speaking/ Listening 4 s.h.

The speaking/listening module taught in conjunction with other low-intermediate skill modules. Beginning formal speaking and sustained factual listening experienced extensively. Short speeches reviewed and critiqued. Pronunciation practice is an integral part of the preparation for speech delivery. Colloquial versus formal language examined.

ESL 2020 Low-Intermediate Academic Reading 4 s.h.

The reading module taught in conjunction with other low-intermediate skill modules. Increasing paragraph reading comprehension. Acquiring high-frequency general academic vocabulary. Expanding dictionary skills.

ESL 2030 Low-Intermediate Academic Writing 4 s.h.

The writing module taught in conjunction with other low-intermediate skill modules. Expanding sentence structure and paragraph construction, including unity, transitional phrases, and grammatical cohesiveness.

ESL 2040 Low-Intermediate Academic Grammar 4 s.h

The grammar module taught in conjunction with other low-intermediate skill modules. Development of existing knowledge of grammar structures and acquisition of new ones. Emphasis is on the use of simple and some complex verb tenses, as well as auxiliary and modal verbs. These and other grammar structures are practiced through the performance of common language functions, such as making suggestions, requests, and invitations.

ESL 3010 High-Intermediate Academic Speaking/ Listening

The speaking/listening module taught in conjunction with other highintermediate skill modules. Continued development of listening and speaking skills in conversational and academic settings. Focus on various topics encountered in general education courses. Practice of word stress, connected speech, intonation, rhythm.

ESL 3020 High-Intermediate Academic Reading 4 s.

The reading module taught in conjunction with other high-intermediate skill modules. Transiting from ESL texts to authentic general education materials. Instruction in various reading strategies to increase reading comprehension. Acquiring low-frequency general academic vocabulary.

ESL 3030 High-Intermediate Academic Writing 4 s.

The writing module taught in conjunction with other high-intermediate skill modules. Introducing stages of the writing process. Expanding the knowledge of organizational patterns used in writing compositions and paragraphs. Integrated readings serve as models for the principal parts of compositions with focus on unity and grammatical cohesiveness.

ESL 3040 High-Intermediate Academic Grammar 4 s.h.

The grammar module taught in conjunction with other high-intermediate skill modules. Integrating reading and rhetoric to identify key structures and grammar rules that govern them. Focus on the use of complex tenses as well as the formation and manipulation of clauses in complex sentences and the sequence of verb tenses across clauses.

ESL 3120 Advanced Reading and Writing for Business 3 s.h.

An introduction to organizational patterns used in writing both compositions and paragraphs for business. Integrated readings serve as models for the principal parts of compositions, with a stress on coherence and unity. Students complete a variety of writing assignments designed to enhance their ability to apply grammar and vocabulary skills to elements of paragraph writing and reading comprehension necessary for successful business communications. *Enrollment limited to international students in specific programs*.

ESL 4010 Advanced Academic Speaking/Listening 4 s.h.

The speaking/listening module taught in conjunction with other advanced skill modules. Preparation for the demands of academic lecture comprehension, note-taking, as well as predicting, evaluating, and organizing academic lectures. Formal academic speeches pertinent to students' major disciplines are practiced and critiqued with focus on structure, delivery, and comprehensibility. May include an academic service-learning experience.

ESL 4020 Advanced Academic Reading 4 s.h.

The reading module taught in conjunction with other advanced skill modules. Authentic content-specific academic and literary readings are used to increase comprehension of difficult texts. Current articles of political, economic, and sociological importance, taken from journals and periodical literature, are read, analyzed, and written about. Morphological analysis and contexts clues are used to construct the meaning of unknown words. Focus on discipline-specific vocabulary.

ESL 4030 Advanced Academic Writing 4 s.h.

The writing module taught in conjunction with other advanced skill modules. Extensive practice in rhetorical strategies and techniques and a review of appropriate grammatical structures and verb tenses. Focus on writing various types of academic essays (descriptive, comparison, cause and effect, problem and solution, persuasive) using the writing process.

ESL 4040 Advanced Academic Grammar 4 s.h

The grammar module taught in conjunction with other high-intermediate skill modules. The study and analysis of the grammatical structures and their rhetorical functions within contemporary academic and literary prose. Focus on the use of passive voice, past modals, unreal conditionals, and subjunctives.

ESL 4230 **Research Paper Writing**

Focus on writing a research paper from organization to completion, with a segment on plagiarism. Both MLA and APA style are introduced, as are techniques on how to incorporate sources into the body of the paper. In addition to the research paper, students write abstracts, research proposals, and a reflection paper. All drafts and copies of courses are presented in a portfolio. This course is considered

to be the equivalent of WRT 1020, College Composition II. It therefore fulfills the University core requirement, UC-1, for WRT 1020.

NOTE: Credit hours of 4000-level ESL courses are applicable to the student's undergraduate degree.

Environmental Science (ENV)

ENV 2930 Internship in Environmental Science

FCS 2260

FCS 2700

FCS 2930

FCS 2940

FCS 3130

FCS 3530

FCS 3630

FCS 3700

FCS 3750

youth.

Field placement in governmental, industrial, or academic settings that provide experience in environmental science issues, e.g., water, soil, sewer, and/or sediment testing, community cleanup, park management, animal shelter.

ENV 3210 Limnology: The Study of Lakes

3 s.h.

A study of the influences of physical, chemical, and biological factors on the structure and function of inland lakes and ecosystems. Lecture 2 hours, laboratory 3 hours. Prerequisite: 6 s.h. in Biology.

ENV 3310 Environmental Food and Nutrition (NFS*)

1 s.h.

3 s.h.

4 s.h.

1 s.h.

1 s.h.

4 s.h.

4 s.h.

4 s.h.

3 s.h.

4 s.h.

ENV 3320 Environmental Analysis

2 s.h. 4 s.h.

Application of spectrophotometric and field-kit methods in the elucidation of quantitative and qualitative data from soil, water, algae, invertebrates, plants, and fish collections. Lecture and laboratory. Prerequisites: CHM 1120, CHM 2210, MTH 1210 or equivalent.

ENV 3930 Internship in Environmental Science

Field placement in governmental, industrial, or academic settings that provide experience in environmental science issues, e.g.,

water, soil, sewer, and/or sediment testing, community cleanup, park management, animal shelter.

ENV 4700 Environmental Investigation 1-4 s.h.

Independent research, directed reading, or special problems under the supervision of a faculty member. Prerequisites: recommendation of major advisor and problem director.

ENV 4710 Environmental Pollutions

Research investigations focused on a variety of pollution topics, e.g., mercury or metal concentration analysis of soil, water, invertebrates, fish, and plants; E coli colony studies of the nearby lakes and ponds; development of environmentally-friendly biocides; acid rain/air pollutants. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIO 1040, CHM 1120.

ENV 4950 Senior Seminar

4 s.h.

Preparation and presentation of a research paper. All seniors in the College of Science and Mathematics must complete this course with a grade of C(2.0) or better as a graduation requirement; to be taken within the last 6-8 hours of the major.

Family and Consumer Sciences

FCS 1250 Health Problems (NSC*/NFS) 4 s.h.

FCS 2250 **Human Nutrition (HMG/NFS*)** 4 s.h. FCS 3930 **Practicum in Family Services** Fifty hours of experience in a family service agency.

Introductory Food Science (HMG/NFS*)

Practicum in Children and Youth Services

Practicum in Educational Services

Marriage and the Family (RST*/SOC)

Architectural Styles and Interior Design

Human Shelter and Environment (MRM)

Emphasis on the impact of design and environment on

Life Cycle Financial Planning (FIN*)

individuals and families. Environments are studied as they relate to

social, psychological, economic, and legislative conditions in society. Interior design fundamentals and the impact of the designed environ-

ment on human behavior. Space planning, furnishing, and selection of

materials and components for interiors. (3 hours lecture, 1 hour aca-

Adolescent Psychology (PSY*)

(HMG/MRM*)

demic service-learning component.)

Fifty hours of experience working with children and/or

Fifty hours of experience in an educational setting.

Child Psychology (PSY*)

FCS 3940 **Practicum in Consumer Services** 1 s.h. Fifty hours of experience in consumer services.

FCS 4500 **Issues Challenging Children and Families** 3 s.h.

FCS 4530 **Teaching Personal Development and Career Planning**

Introductory course in the career development process. Students participate in an interactive learning experience that involves self-discovery, career investigations and planning, and the use of technological and community resources. An externship in an individual's pathway of choice is required.

FCS 4950 **Senior Seminar**

Integration of program competencies and deepening of students' practical understanding of positive influences on the social, emotional, physical, and economic well being of children and adolescents. A culminating action research project and presentation are designed to develop reflective practitioners who are attuned to significant issues in the field.

Financial Administration (FIN)

FIN 3150 **Business Finance**

2 s.h.

Study of the management of the financial affairs of a business enterprise in respect to planning and analysis of the financial decision making function. Topics include: time value of money, working capital management, leverage, ratio analysis, capital budgeting, capital structure decisions, dividend policy, and international financial management. Prerequisites: ACC 2020 and ECN 2720.

FIN 3700 **Life Cycle Financial Planning (FCS)** 3 s.h.

Basic planning of personal finances to satisfy personal and family life cycle goals. Topics include: budgeting, consumer credit, investments, insurance, personal residences and real estate, retirement plans, and individual income taxes. The life cycle of personal investment strategies is explored.

Fire Science (FS)

FS 1010 **Introduction to Fire Protection and** Prevention (EM)

3 s.h.

History of fire protection practices; problems of fire suppression and practices; aspects of fire protection and prevention, including basic field equipment, methods of fire suppression, fireground command structure, inspection procedures, codes, and the town grading schedule

FS 1030 **Basic Fire Protection Training**

FS 4510

FS 4520

FS 4900

FS 4950

Credit awarded for evidence of successful completion of a certified training program.

FS 2150 **Building Construction (OSH*)**

3 s.h.

FS 2910 Cooperative Education I 1-3 s.h. Field placement in either municipal, industrial, hospital, or similar settings that provide experience in fire protection for preservice students.

FS 2930 Internship I

1-3 s.h.

Field placement in either municipal, industrial, hospital, or similar settings that provide experience in fire protection for pre-service students.

FS 3020 Field Experience

3 s.h.

3 s.h.

3 s.h.

3 s.h.

Credit awarded individuals for evidence of full-time employment of two or more years in fire protection. Documentation of competencies required.

TO 2110	T 1 . 1 1 G 0 (O GTTH)
FS 3110	Industrial Safety and Health (OSH*)

Forensic Science (FOR)

FS 3220 Inspection and Survey of Facilities (OSH*) Introduction to the theory and application of modern

See listing under World Languages (WL).

FS 3500 **Hydraulics and Water Supply (OSH)**

FOR 1010 Introduction to Forensic Science 4 s.h.

Principles of hydraulics theory, grading of water supplies, water supply adequacy testing procedures, and computation of velocity friction loss related to tactical decision making. Prerequisites: PHY 2530 and PHY 2540.

forensic science techniques. Fundamental science concepts applied to crime scene evidence collection and analysis. 3 hours lecture, 3 hours of laboratory per week. Prerequisites: none. FOR 3050 Criminal Procedures (CJ*) 3 s.h.

ing investigative surveys. Preparation of case evidence for expert wit-

employed in fire suppression. Includes preplanning and analysis of

Hazardous Materials I (EM/OSH*)

Hazardous Materials II (EM/OSH*)

tion. Includes analysis of an organization as to its administrative, lead-

that integrates knowledge gained in the major discipline. Taken by stu-

dents with senior status as a requirement for graduation; to be taken

Fire Service Management (OSH)

emergency situations with emphasis on individual decision-making, the

Tactics and Strategy (OSH)

effective use of equipment, apparatus, and manpower.

ership, and management style in fire protection.

Senior Seminar

in the final six hours of the major.

Foreign Language

Prerequisites: FS 1010 and FS 2150.

ness and court testimony. Review of Michigan and national arson laws.

Study and evaluation of various methods and techniques

Principles of management and organization in fire protec-

Preparation and presentation of a library research paper

FS 3680 Fire Protection Systems I (OSH)

FOR 3210 Principles of Criminology (CJ*/SOC)

Survey of sprinkler systems covering design details, placement, inspection, and maintenance; practical application of current codes and standards for system utilizations. Prerequisite: MTH 1050 or its equivalent.

FOR 3310 Impression and Trace Evidence Analysis 3 s.h.

evidence analysis in forensic science from crime scene collection to

Theory and practical application of impression and trace

FS 3690 Fire Protection Systems II (OSH) crime laboratory processing. Fundamental science concepts used in the preservation, analysis, and interpretation of impression and trace evidence applied in the course work and through hands-on laboratory experiments. Lecture 2 hours, laboratory 3 hours per week. Prerequisites: admission to Forensic Science program and CHM 2220.

Principles of use and design of special hazards fire suppression systems; halons, halon replacements/clean agents, dry chemicals, foam, and alarm and detection systems. Prerequisite: MTH 1050 or its equivalent.

FOR 3320 Firearm and Tool Mark Analysis

3 s.h.

3 s.h.

3 s.h.

3 s.h.

3 s.h.

2 s.h.

FS 3910 **Cooperative Education II** Advanced semi-professional level assignments in on-thejob application of fire protection principles in either municipal, industrial, commercial, or institutional settings. Preservice students only.

Introduction to theory and application of firearm and tool mark analysis in forensic science. Fundamental science concepts used in the preservation, analysis, and interpretation of this evidence applied in the course work through hands-on laboratory experiments. Note: laboratory exercises are limited to disabled firearms using standard operating procedures for safety based on FBI laboratory protocols. Lecture 2 hours, laboratory 3 hours per week. Prerequisite: admission to Forensic Science program.

FS 3930 Internship II

1-3 s.h.

Advanced semi-professional level assignments in on-thejob application of fire protection principles in either municipal, industrial, commercial, or institutional settings. Preservice students only.

FOR 3330 Introduction to Forensic Anthropology 3 s.h.

Examination of bioanthropological methods to aid in cases of forensic or medicolegal importance. The role of the forensic anthropologist and history of the discipline. Overview of the goals, techniques, and broader applications of forensic anthropology. 2 hours lecture; 3 hours laboratory per week. Prerequisite: admission to Forensic Science program; BIO 2430 recommended.

FS 4250 Fire and Arson Investigation (EM/OSH)

FOR 4010 Population Genetics (BIO*)

Role of safety/fire science specialists in arson investigation; methods and mechanics of protecting, searching, and controlling the fire scene; interviewing process; recognition and preservation of evidence; interventions with troubled fire setters. Evaluation and application of methods and techniques for investigative determination of fire occurrences. Includes study of the origin of ignition and conduct-

3 s.h.

FOR 4620 Forensic Biology (BIO)

3 s.h.

Theory and application of modern forensic science biology, including molecular characterization and data analysis. 2 hours lecture and 3 hours of laboratory per week. Prerequisites: BIO 3010 and CHM 3610.

FOR 4630 Forensic Chemistry (CHM)

3 s.h.

Theory and application of modern forensic science chemistry including molecular characterization and data analysis. 2 hours lecture and 3 hours of laboratory per week. Prerequisite: CHM 3310.

FOR 4640 Toxicology (BIO)

Non-laboratory study of cellular and human pathophysiology as a result of toxic insult. Exploration of toxicants includes analy- sis of impact of human exposure and disease, as well as the forensic examination of samples for toxicants. Prerequisites: BIO 1030, CHM 2210; BIO 2240 or 2440 recommended.

FOR 4650 Ethics and Expert Testimony

3 s.h.

Investigative ethics and their implications for forensic science professionals. Overview of the laws governing expert testimony, including on-site case reviews in local courtrooms. The characteristics of an effective expert testimony are exhibited by students in capstone mock testimonies. 2 hours lecture, 3 hours field experience per week. Prerequisites: admission to Forensic Science program and CJ* 3050/FOR 3050.

FOR 4910	Cooperative Education	
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1 s.h.

FOR 4920 **Cooperative Education** 1 s.h.

FOR 4930 Internship in Forensic Science

1-4 s.h.

FOR 4950 Senior Seminar

Preparation and presentation of a scientific paper. Taken by Forensic Science students with senior status as a requirement for graduation; to be taken in the final six hours of the program.

General Science (GSC)

GSC 4950 Senior Seminar

Preparation and presentation of a scientific paper. Taken by general science majors with senior status as a requirement for graduation; to be taken in the final six hours of the program.

Gerontology

See instead AGING Studies.

Geography (GEO)

GEO 1210 Introduction to Geography

Basic concepts, terms, and methods of geography and the physical and cultural regions of the world, the United States, and Michigan; relationship between the diversity of humans and the physical environment; major world, regional, and local patterns and processes.

GEO 3010 World Regional Geography

4 s.h.

Regional study of the earth's realms; cultural and physical factors affecting people; effect of the demographic and industrial revo- lutions of the world.

Health Education (HED)

HED 2410 Concepts: Physical Activity, Nutrition, Mental/ **Emotional Health**

3 s.h.

Examination of physical activity, nutrition, and mental/emotional health and its relation to overall health. Topics include appropriate activities for optimal fitness, as well as nutritional needs for optimal health.

HED 2420 Concepts: Safety, Violence Prevention, Environmental Health

3 s.h.

An examination of topics and issues related to community, consumer, and environmental health, as well as personal safety and violence prevention.

HED 2430 Concepts: Personal/Social Health/Disease Communicable and Non-Communicable

3 s.h.

Personal and social health, as well as prevention methods for communicable and non-communicable diseases. Emphasis is placed on how to promote healthy lifestyles.

HED 2440 Concepts: Drug Use and Abuse

Examination of the historical impact of drug use, as well as social, psychological, and physiological factors related to drug abuse. Treatment and substance abuse prevention programs are also addressed.

HED 3050 Health for the Elementary Classroom Teacher (EDU)

Designed to prepare elementary classroom teachers to teach health in the elementary classroom. Topics include knowledge of health curriculum, state and national standards, risk behaviors, and instructional strategies and technologies. Prerequisites: EDU 2000 and EDU 3460.

HED 3460 Human Sexuality

Topics and issues related to healthy sexuality and to the program for sexuality education in the public education setting. Prerequisites: HED 2410, HED 2420, HED 2430, HED 2440.

3 s.h. **HED 4410** Curriculum in Health Education

Study of modern curriculum, philosophy, history, and its relation to overall secondary education. Professional issues and competencies of health educators are also addressed. Students learn to develop, implement, and modify curriculum using best practices. Prerequisites: HED 2410, HED 2420, HED 2430, HED 2440; admission to the Teacher Education Program; prerequisite or corequisite: Methods course in major.

HED 4510 Assessment in Health Education 3 s.h.

Examination of the development and use of assessment and evaluation strategies for health education, methods, and resources. Prerequisites: HED 2410, HED 2420, HED 2430, HED 2440; admission to the Teacher Education Program; prerequisite or corequisite: Methods course in major.

Health Sciences (HSC)

HSC 3450 Evidence-based Practice

2 s.h.

Students systematically locate, evaluate, and incorporate evidence-based information to assist clients/patients in making informed decisions. Includes examination of research methods and procedures for the health science professional. Prerequisite: MTH 2350.

HSC 3500 Navigating the U.S. Health Care System 3 s.h.

Examines current health care policies in the United States. Includes the analysis of how health care policy affects clients and health professionals. Critiques the structure, organization, and financing of the system and how to inform clients about options for care. Case studies provide an opportunity for application of what is learned in the classroom. Prerequisite or corequisite: MTE 2010.

HSC 3610 Safety Across Health Care Settings

3 s.h.

The multifaceted dimensions of health systems which impact safety in a variety of care settings. Students learn to identify areas of risk, assess its severity, and communicate their findings so as to positively impact a culture of quality and safety. Prerequisite: HSC 3500.

HSC 3650 Quality and Clinical Transformation

The processes involved in assessing and promoting quality care. Active identification, collection, and reporting of meaningful data so as to influence improvements in health care practice and outcomes. Prerequisite: HSC 3500.

HSC 4700 Health Promotion

3 c h

Examines the context of wellness and health promotion in health care in the United States. Several models and a variety of strategies for effective health promotion and disease prevention are examined. Emphasis is placed on designing and selecting evidence-based interventions to effect social and environmental change in mutual collaboration with individuals and families throughout the lifespan. Prerequisite: PSY 2450.

HSC 4900 Professional Role Seminar

2 s.h.

Using the first internship experience, students apply principles of professional values, ethics, communication, and professional relationships. Students explore concepts in teamwork, leadership, ethical practice, social justice, and professional communication in the context of their field experience. Prerequisite: permission of department. Corequisite: HSC 4930.

HSC 4930 Internship in Health Sciences I

3 s.h

3 s.h.

2 s.h.

An initial field experience to allow students to gain professionally supervised, practical experience in a health care or community service setting appropriate for his/her area of concentration. Students acquire knowledge and understanding of health care roles and practices, the network of resources and services, the health care information systems, and the coordination required for care transitions. Prerequisite: permission of department. Corequisite: HSC 4900.

HSC 4940 Internship in Health Sciences II

A field experience in a second health care setting or community service setting appropriate for the student's area of concentration, providing a different level of care or practice, to allow students to gain professionally supervised, practical experience. Students acquire knowledge and understanding of health care roles and practices, the network of resources and services, the health care information systems, and the coordination required for care transitions. Prerequisite: permission of department. Corequisite: HSC 4950 or HSC 4960.

HSC 4950 Senior Seminar

An in-depth examination and synthesis of the theoretical concepts, controversial issues, and trends in the Health Sciences major. Students present final projects that demonstrate integrated knowledge of the major and their achievement of program outcomes. Prerequisite: permission of department. Corequisite: HSC 4940. (To be taken in the student's last semester).

HSC 4960 Senior Seminar 2 s.

An in-depth examination and synthesis of the theoretical concepts, controversial issues, and trends in the Health Sciences major. Students present final projects that demonstrate integrated knowledge of the major and their achievement of program outcomes. Prerequisite: permission of department. Corequisite: HSC 4940. (To be taken in the student's last semester).

Health Services Administration

(HSA)

HSA 3750 Health Services Administration

3 s.h.

The organizational design and structure of health care organizations; methods for setting objectives and strategies as well as defining outcomes; the organizational dynamics of motivation, leadership, and communication techniques in various health care settings. Prerequisite: MGT 2360.

HSA 4250 Health Care Law

3 s.h.

Designed to address the needs of health professionals for information on the fundamentals of Michigan law. Legal terminology, organization of the court system, the source of law, and basic principles of civil and criminal liability as it relates to negligence and malpractice. Issues relative to confidentiality, documentation, informed consent, conflict of law, risk management, and advanced directives. Prerequisites: BL 3330 and HSA 3750.

HSA 4740 Health Care Finance

3 s.h.

Introduction to the theory and practice of health care finance addressing issues of medical cost, models of provider behaviors, regulatory constraint, technology assessment, and access to care. Prerequisites: ACC 2010 and ECN 2720.

HSA 4910 Internship

3 s.h.

Supervised professional work experience in the area of specialization. Completed in the last two semesters of the program.

History (HIS)

HIS 1010 World Problems (PSC)

3 s.h.

Analysis of the most significant contemporary world issues confronting the international community of nations and citizens of United States.

HIS 1080 Ancient World

4 s.h.

World history from prehistoric times to c. 500 C.E., including a study of the ancient civilizations of global culture realms. Special emphasis is placed on the beginning of human society, early civilizations, classical traditions, world religions, and the rise and fall of major empires.

HIS 2310 United States to 1900

4 s.h.

Political, social, economic, and cultural development of the United States; emphasis on the colonial period, the Civil War, and the rise of America to world power.

HIS 2450 Medieval World

4 s.h.

World history from around 500 c.e. to the emergence of the Spanish and Portuguese Empires around 1500, treating the various features of European and World society, politics, culture, thought, and religion in this period.

HIS 2750 Michigan History

2 s.h.

Significant people and events during Michigan's long history, including the roles of the Native Americans, the French, the British, the Toledo War, Civil War, Michigan's economic growth, the Great Depression, the roles of labor and minorities, and discussion of the several state constitutions.

HIS 3220 Race, Ethnicity, and Class in American Life 4 s.h.

Survey of historical and contemporary expressions, patterns, and consequences of intergroup tensions stemming from discrimination in American Life.

HIS 3300 Early Modern World

4 s.h.

World history in the period of European global expansion from the formation of the Spanish and Portuguese Empires in the Sixteenth Century to the end of the Napoleonic Wars, including a

study of politics, culture, ideas, and religion of Europe and the World.

HIS 3330 **Modern World**

World history from 1789 c.E. to the present, including a study of modern global culture realms. Special attention is given to global crises and achievements, the Cold War and its aftermath, and global, political, and economic development.

HIS 3410 **Minority Groups in America** 4 s.h.

Conflict between the revolutionary ideals of the American dream and the reality of majority-minority group relations from colonial America to the present.

American Civil Rights Movement

Study of the American Civil Rights Movement for African-Americans from the Second World War until the present. Various strategies for achieving social change are examined and assessed, with due attention to the complementary roles of leaders and of ordinary Americans. Emphasis on the powerful and defining influences of religion and law in American responses to the value dilemmas related to social justice and social change.

HIS 4100 Special Problems in History 1-3 s.h. (max. 9 s.h.) Study of selected topics of interest in History.

HIS 4210 Time and Literature (ENG*) 4 s.h. (max. 8 s.h.)

HIS 4320 Foreign Policy History of the United States

Influence of foreign policy on past and present life of the United States; emphasis on the nation as a world power, taking into account the viewpoints of the international community of nations.

Economic and Business History of the United States

Survey of major changes in the American economy, including transportation, industry, labor, finance, and marketing. Role of private business and government in economic change.

HIS 4530 **United States in the Modern Era** 4 s.h.

Development of the United States as a world power and its impact on the social, economic, cultural, and political changes in the contemporary era.

Global Studies: Modern Africa (PSC) HIS 4631 3 s.h.

Study of selected historical problems and themes related to modern sub-Saharan Africa, with attention to relationships with the non-African world.

HIS 4632 Global Studies: Modern Asia (PSC)

Study of selected historical problems and themes related to modern Asia, with an emphasis on China, Japan, and India, and attention to domestic developments and global relationships.

HIS 4633 Global Studies: Modern Latin America (PSC) 3 s.h.

Study of selected historical problems and themes related to modern Latin America, with attention to regional and global relationships.

HIS 4634 Global Studies: Modern Middle East (PSC)

Study of selected historical problems and themes related to the modern Middle East, with an emphasis on Arab and Islamic cultures, attention to the non-Arab and non-Islamic dimensions of the region and to global relationships.

HIS 4810 **American Civil War**

Examination of the American Civil War, the pivotal event in the American experience, emphasis on the causes of the Civil War, the course of the War from several angles, and an overview of Reconstruction.

Global Themes in World History I

Students analyze and explain thematically major devel-

opments in World History in different eras up to the time of the first emergence of European Colonial Empires, compiling their work in a portfolio. Prerequisite or corequisite: one of HIS 1080, 2450, 3300, 3330, 4631, 4632, 4633, or 4634.

Global Themes in World History II HIS 4880 2 s.h.

Students analyze and explain thematically major developments in World History in different eras from the time of the first emergence of European Colonial Empires until the present, compiling their work in a portfolio. Prerequisite or corequisite: one of HIS 1080, 2450, 3300, 3330, 4631, 4632, 4633, or 4634.

HIS 4950 History and Social Science Seminar (SSC) 4 s.h.

Theoretical and philosophical foundations of history and the social sciences, including a paper or project reflecting methodological skills. Prerequisite: senior status in the major.

Hospice and Palliative Studies (HSP)

HSP 2210 Introduction to Palliative/End-of-Life Care Concepts

An examination of the history of the hospice movement and the evolution of Palliative/End-of-Life (EOL) Care. Introduces core concepts of hospice philosophy, emphasizing its humanistic nature, family focus, and interdisciplinary and holistic practice. It is strongly recommended that majors in Hospice and Palliative Studies take this course as the prerequisite to all other hospice courses.

HSP 3310 Management of the Bereavement Process 3 s.h.

The foundations of the bereavement process following the loss of a significant person. An examination of stage theories and key concepts that describe the grief continuum and personal transformation through the process of grief. Cultural attitudes and myths regarding loss and bereavement are examined in the context of gender, ethnicity, age, and circumstances of death. Personal reflections on loss and bereavement are encouraged throughout.

HSP 3480 Psychosocial Domains of Palliative/End-of-Life Care (PSY) 3 s.h.

Exploration of the psychosocial domains of assessment across the life span of individuals and families in palliative/End-of-Life (EOL) care. Developing strategies for facilitating holistic care to patients and families. Effective communication skills for cultural competence. The impact of stress on the quality of life for the patient, family, and transdisciplinary team.

HSP 3500 Spiritual and Ethical Considerations in Palliative/Endof-Life Care (RST)

Examines dying as potentially the last stage of human development and spiritual growth. Enhances religious literacy through identification of the salient beliefs and practices regarding illness, dying, death, and burial rituals of major world religions. Ethical theories, principles, and steps that guide decision making for individuals, families, and caregivers in Palliative/End-of-Life (EOL) care.

HSP 3530 Palliative/End-of-Life Comfort and Care 3 s.h.

Identification of common problems associated with disease process in individuals receiving palliative and end-of-life (EOL) care. Ways of palliating symptoms commonly associated with specific diseases in EOL care. Examination of the holistic practice of transdisciplinary teams providing care to individuals and their families at EOL. Simulated practice provided when appropriate.

HSP 3802 Palliative/End-of-Life Issues: A Lourdes Experience (RST)

Examines suffering and dying as the last stage of human development

and spiritual growth. Distinguishes care needs around palliative/EOL issues. Moral and religious dimensions influencing decision making in palliative/EOL care are explored. Course combines on-campus study of end-of-life concerns with an academic service-learning experience at the Lourdes Sanctuary in France.

HSP 4620 Palliative/End-of-Life Care Management I 3 s.h

Evaluation of current and emerging theories of management with a focus on application to the delivery of palliative/EOL care. An examination of organizational behavior that supports innovative leadership, risk taking, crisis and conflict management, diversity, emotional competence, and transformative conflict.

HSP 4650 Hospice/Palliative Care Field Experience I 3 s.h.

Application of introductory concepts in palliative/end-oflife (EOL) care. Includes observation and experience with the delivery of palliative/EOL care in a hospice organization. Consists of 15 hours of seminar and 90 hours of practicum in selected agencies. Prerequisite: approval of Hospice advisor.

HSP 4750 Emerging Issues in Palliative/End-of-Life Care 3 s.h.

Current issues and emerging trends within the Palliative/End-of-Life (EOL) care continuum. Examination of access and barriers to EOL care and the role of health care leaders, policy makers, and key stakeholders in developing strategies for delivery of timely quality care and financing mechanisms. Exploration of beliefs, values, and practices that shape decision making regarding dying, death, and burial rituals.

HSP 4820 Palliative/End-of-Life Care Management II 3 s.h.

Application of 21st century leadership skill sets to management within various palliative/end-of-life (EOL) care settings. Examines the interdependence of multiple systems within innovative palliative/EOL care organizations. Prerequisite: HSP 4620.

HSP 4850 Hospice/Palliative Care Field Experience II 2 s.h.

Focuses on advanced field placement experiences in student-selected area of specialization. Includes observation and experience with the delivery of palliative/EOL (End-of-Life) care in a hospice organization. To be taken concurrently with HSP 4950 and only by students with senior status in Hospice and Palliative Studies.

HSP 4950 Hospice/Palliative Care Senior Seminar 2 s.h.

Synthesis of theory and practice. Preparation and presentation of a structured student portfolio that gives evidence of learning in palliative/End-of-Life (EOL) care throughout the program. To be taken concurrently with HSP 4850 and only by students with senior status in Hospice and Palliative Studies. A requirement for graduation.

Hospitality and Tourism Management (HMG)

s.h.
s.h.

HMG 3210 Meeting and Event Management 3 s.h.

The planning, development, management, and implementation of conferences, conventions, corporate meetings, exhibi-

tions, festivals, and private events. A conceptual framework is developed through definitions, models, the utilization of case studies, and participation in actual events. Event organization, impact assessment, feasibility studies, bid preparation, public and corporate sponsorship, negotiations, volunteer staff management, and event evaluation. Prerequisites: MRM 2400, MKT 2440.

HMG 3260 Travel and Tourism

Introduction to domestic and international tourism focusing on the socioeconomic effects of tourism, its industries and linkages to leisure services, hospitality and travel organizations, and businesses. Trends in tourism from the perspectives of travelers, destinations, and the operation of specialty businesses are explored as well as the general tourism system. Prerequisites: MRM 2400, MKT 2440.

HMG 3360 Lodging Management I (NFS/MGT) 3 s.h.

A study in general responsibilities of various departments within the rooms, the food and beverage, the marketing and sales, and the administrative divisions of a lodging property. Prerequisite: MGT 2360.

HMG 3460 Food Service Management I (NFS*) 3 s.h.

HMG 3630 Architectural Style and Interior Design (FCS/MRM*)

4 s.h. 2 s.h.

3 s.h.

HMG 3660 Market Field Study (NFS)

Three day on-site visit to a hospitality market and trade show where hospitality industry leaders offer valuable current educational sessions; and to hotels, restaurants, and private clubs in the same city that provide an inside look at the operation of selected hospitality venues.

HMG 4260 Club Management (MGT/SM) 3 s.h.

General administrative procedures in the management of private clubs. Study and analysis of club operations, club boards of directors, service excellence in clubs, leadership in club operations, quality management systems for clubs, club marketing, food and beverage operation in clubs, financial management, and fundamental features of specific categories of private clubs. Prerequisites: MGT 2360; CIS 2250 or CIS 2380.

HMG 4360 Lodging Management II (NFS/MGT) 2 s.h

A study of various organizational structures and systems in the lodging industry and the authority vested in the respective levels of management. Emphasis on operations analysis and problem solving. Prerequisites: HMG 3360 and MGT 2360.

HMG 4370 Marketing Hospitality Services (MKT) 3 s.h.

An in-depth look at the nature and scope of the meetings, convention and trade show markets, how to effectively service this market, and increase market share for properties. Prerequisite: MKT 2440.

HMG 4460 Food Service Management II (NFS*) 3 s.h.

HMG 4910 Internship 3 s.h.

Supervised professional work experience in the area of specialization. Completed in the last two semesters of the program.

HMG 4950 Senior Seminar 2 s.h.

Capstone course providing a framework to view the discipline, industry, and management from a perspective incorporating the economic, social, cultural, environmental, political, technological, and physical aspects. Emphasis on a broad managerial perspective to critically assess the issues facing the hospitality profession. Prerequisite: completion of a minimum of 34 s.h. in HMG courses and completion of the required business minor; senior standing.

Humanities (HUM)

HUM 2010 The Medium and the Message

4 s.h.

Interdisciplinary introduction to art, history, music, and literature, focusing on their means of communication and potential to express spiritual, humanistic, and aesthetic concepts.

HUM 2020 Humanities Through the Arts

4 c l

Telecourse introduction to artistic expression in the arts and humanities areas of: architecture, art history, drama, literature, music, painting, photography, and sculpture. Videotapes and texts, blended with monthly class sessions and writing projects.

HUM 3030 American Culture through Literature, Music, and Art 3 s.h.

An introduction to the distinguishing features of American culture as embodied in the arts. The approach is thematic, covering, among other topics, the role of religion in American intellectual and artistic life, the deep-seated democratic tendencies of the American people, individualism and the experience of immigrants to the United States. The themes are illustrated in a historical context with appropriate examples drawn from American literature, music, and art. *Enrollment limited to international students in specific programs*.

HUM 3050 The Idea of Justice

4 s.h.

An interdisciplinary study of justice based on an analysis of humanities texts from a variety of discourse communities in order to develop an appreciation of diverse concepts and expressions of justice.

HUM 3080 The Nature and Scope of Inquiry

3-4 s.h.

Theme-based, highly interactive interdisciplinary course designed to enable students to explore the different approaches and ways of knowing that contribute to understanding and resolving complex issues, problems, or dilemmas of contemporary life. The course focuses on a compelling theme and is designed to develop the commitment to intellectual inquiry, humanistic values, and service to others as embodied in the mission of Madonna University.

HUM 3090 Holocaust: Issues and Themes in the Genocide of European Jewry 4 s.h.

Examination of the social and political forces and actions that enabled the Nazi regime to plan and carry out the systematic extermination of European Jewry. Analysis of the Nazi genocidal agenda, utilizing materials from history, literature, film, music, and the fine arts. An overview of the roots of anti-Semitism and of how a modern authoritarian regime employed historic stereotypes and prejudices in effectively enlisting a majority of its citizens in active or passive criminal complicity. Examination of the institutions of mass murder, the silence of church and state, and, despite this silence, the forces of resistance. Prerequisite: Junior standing or permission of instructor.

HUM 3110 Do Animals Matter? (SSC) 4 s.h

Examination of religious, philosophical, cultural, aesthetic, and societal conceptualizations of animals and their impact on human-animal relations as well as on uses, treatment, and legal standing of animals. Issues are discussed through the lenses of humanities, religious studies, and social sciences within the framework of the Franciscan tradition. Includes an academic service-learning experience.

HUM 4300 Humane Studies (SSC) 3 s.h

An exploration of the interface between social justice, animal welfare, and environmental protection through the lenses of humanities and social sciences. Current issues are discussed within the framework of the Franciscan tradition.

Interdisciplinary Studies (IDS)

IDS 3000 Social Change and Challenges 3 s.h.
An interdisciplinary exploration of a topic or theme relat-

ed to global, technological, or societal issues, focusing on the pervasive long-term implications this issue will have for the future as well as the human dilemmas that will emerge. Emphasis on developing critical thinking and interdisciplinary problem-solving skills, particularly in the context of information access and management. A writing intensive course.

IDS 3020 Introduction to Interdisciplinary Studies 3 s.h.

Introduction to the field of interdisciplinary studies, the goals for the IDS major, the plan of study approval process, and of the capstone requirement for the major (portfolio or research project).

IDS 3410 Sustainability: Vision and Values (RST) 3 s.h.

Interdisciplinary overview of the concepts of sustainability, including its origins in spiritual traditions and its environmental, social, and economic dimensions. Allows for individualized exploration of topics such as food systems, climate, public policy, renewable energy, and green building.

IDS 4950 Senior Seminar

s.h

Culmination of the student's plan of study resulting in an interdisciplinary project, requiring a research paper or interdisciplinary/multi-genre portfolio and an oral presentation. Students must demonstrate competency in writing, critical thinking, interdisciplinary problem-solving, and information management. Prerequisites: IDS 3000, IDS 3020; WRT 3100 (can be corequisite); and senior standing.

International Business (INB)

INB 3140 International Business

s.n.

Foundational knowledge of the current forces influencing the conduct of international business, including cultural, political, legal, and economic forces. Exploration of market entry strategies, trade and trade agreements, international monetary system, business finance, and organizational design and management considerations.

INB 4350 International Trade Structures and Systems 3 s.h.

An examination of current theories and patterns of international trade and finance, including an exploration of the history, institutional framework, and structural patterns of international trade, and an analysis of exchange rate determination theories and balance of payment drivers. Prerequisites: ECN 2720, ECN 2730, and INB 3140.

INB 4450 International Management

Study of international management as a function of a nation's international trade practices, policies, and management systems and expectations. Prerequisites: INB 3140 and MGT 2360.

INB 4500 International Business and Culture

Experience

1-3 s.h. (max. 3 s.h.)

Students work with an advisor to select a country of travel, establish learning objectives, and develop guidelines to write a paper.

INB 4550 Advanced Analysis in International Business 3 s.h.

Work with an organization interested in becoming engaged in international business as it is identifying a suitable opportunity and assessing potential risks and benefits. *Taken during the last semester of the degree program*.

INB 4710-4750 Seminars

1-3 s.h. (max. 4 s.h.)

 $\label{lem:precedence} Prerequisites \ for \ all \ seminars: \ Junior \ level \ or \ full-time \\ work \ experience. \ Students \ are \ limited \ to \ a \ total \ of \ 4 \ s.h. \ of \ seminars.$

runch with an Expert Seminar	1 s.h.
iterature Review Seminar	3 s.h.
lesearch Seminar	3 s.h.
General Topic Seminar	1-3 s.h.
eadership Seminar	1 s.h.
	Brunch with an Expert Seminar Literature Review Seminar Besearch Seminar Beneral Topic Seminar Leadership Seminar

INB 4910 Internship

3 s.h.

Supervised professional work experience in the area of specialization. Completed in the last two semesters of the program.

International Studies (INT)

INT 2100 International Studies Foundations

1 s.h.

Through a series of readings, discussions, and lectures, students explore the dimensions of internationalization, and are exposed to a variety of international learning opportunities related to the overall plans of study; readings drawn from interdisciplinary sources.

INT 4950 International Studies Seminar

3 s.h.

Theme-based, culminating seminar affording students the opportunity to analyze and understand specific complex global issues and trends from multidisciplinary, cross-cultural, and comparative perspectives.

Japanese (JPN)

JPN 1010 Beginning Japanese I

4 s.h.

Introduction to the rudiments of spoken and written Japanese. Focus on the four language skills: speaking, listening, reading, and writing, particular emphasis on speaking and listening. Introduction of hiragana and katakana writing systems, as well as to a limited number of Chinese characters (Kanji). Close attention to the social and cultural context of Japanese language.

Journalism and Public Relations (JRN)

JRN 1010 Survey of Broadcast, Film, and Digital

Media (BCA*) 3 s.h.

JRN 1210 Introduction to Graphic Design (ART*) 4 s.h.

JRN 1320 News Reporting (WRT)

3 s.h.

Organization of the modern news organization; news values and news sources; structure of the news story; practical training in gathering and writing news stories for print and digital distribution.

JRN 2050 Public Relations Writing

3 s.h

Acquaints student with functions of public relations in our society and explains basic theories and principles in publicity writing and placement.

JRN 2100 Media Relations in Sport (SM*) 3 s.h.

JRN 2610 Television Production I (BCA*/COM) 3 s.h.

JRN 2810 Field Production and Editing I (BCA*) 3 s.h.

JRN 2860 Editorial Writing and Feature Writing 3 s.h.

Study of feature and opinion writing strategies; principles and ethics for print and digital media; the means of persuasion; nature, structure, and function of editorial and opinion articles. Prerequisite: JRN 1320 or departmental approval.

JRN 2910, 2920 Journalism/Public Relations Practicum/

JRN 3030

Cooperative Education 1-4 s.h. each

Writing for Radio, TV, and Film (BCA*) 3 s.h.

JRN 3130 Photography I (ART)

Basic digital photography; principles of light, lenses, and composition; participation in all phases of digital work flow from initial composition to final image. Required for students seeking teacher certification with a Journalism minor.

JRN 3140 Photography II (ART) 3 s.h.

Further exploration of photography including digital and chemical-based imaging. Digital and chemical printing, negative development, archival and fine art black-and-white printing. Class culminates with a portfolio project in either print or digital media. Prerequisite JRN 3130 or permission of instructor.

JRN 3150 Photoshop (ART*/BCA)

3 s.h.

JRN 3160 News Production

2 s.h.

Techniques and hands-on experience of covering beats, digging out stories, writing stories, and validating facts under pressure of deadlines through working on the school publication. Prerequisites: JRN 1320 and JRN 2860; or departmental approval.

JRN 3570 Editing and Design

3 s.h

3 s.h.

Principles of editing, headline writing, page design, use of graphics in print and digital publications. May include an academic service-learning experience. Prerequisite: JRN 1320 or departmental approval.

JRN 3610 Television Production II (BCA*/COM)

JRN 3750 Television News Reporting and Production

(BCA*) 3 s.h.

JRN 3820 Field Production and Editing II (BCA*) 3 s.h.

JRN 3910, 3920 Journalism/Public Relations Practicum/ Cooperative Education 1-4 s.h. each

On-campus or on-the-job experience in publications, publicity, or promotion work. One or more cooperative education experiences may substitute for the practicum. Prerequisite: JRN 1320, JRN 2860, and JRN 3570; or departmental approval.

JRN 4010 Mass Communication (BCA/COM) 3 s.h.

Theory of behavior in communications in general and the mass media in particular. The design and evaluation of public opinion studies and research topics in communications with emphasis on the effects that the various media have had on consumers. Required for students seeking teaching certification with a Journalism and Public Relations minor.

JRN 4050 Advanced Public Relations

3 s.h.

Development of a variety of public relations projects for internal and external audiences, including publicity generation, media relations, on-line and print publication creation, press releases, media kits, and crisis communication. Discussion of public relations strategies and tactics, case studies, and ethical decision-making. Prerequisite: JRN 2050 or departmental approval.

JRN 4160 Advanced News Production 2 s.h.

Writing opinion pieces; selecting stories and graphics; composing captions and headlines; designing print and online pages within constraints of news hole and budget; editing the school publication under actual deadline conditions. Prerequisite: JRN 1320, JRN 3160, and JRN 3570; or departmental approval.

JRN 4630 Directing and Producing for Television (BCA*)

3 s.h.

JRN 4750 Special Topics in Journalism/Public Relations 1 s.h. (max. 3 s.h.)

A specialized course dealing with a particular aspect of the journal-ism/public relations field. Topics vary by semester. The course examines contemporary topics and explores how media professionals respond to these issues. *Journalism/Public Relations majors are required to take JRN 4750 once and may take the course two additional times, provided the content is distinct.*

JRN 4910, 4920 Journalism/Public Relations Practicum/ **Cooperative Education** 1-4 s.h. each

On-campus or on-the-job experience in publications, publicity, or promotion work. One or more cooperative education experiences may substitute for the practicum. Prerequisite: JRN 1320, JRN 2860, and JRN 3570; or departmental approval.

Legal Assistant

See listings under Paralegal Studies (LAW).

Management (MGT)

MGT 2160 Human Behavior and Attitudes

Holistic approach to understanding oneself; discussion of various approaches to personal growth and development; overview of

communication skills and practices; analysis of personal values and attitudes. General elective or general education only. No credit within busi- ness majors.

MGT 2360 Principles of Management

An introduction to the nature and principles of management; history, theories, practices, problems, and techniques; characteristics and qualities of managers; contemporary trends in management thought and practice.

MGT 3020 Organizational Behavior

Analysis of group and individual behavior in the organization; analysis of social structures which affect management policies and procedures. Prerequisite: MGT 2360.

MGT 3100 Strategic Human Resources Planning

3 s.h.

Analysis of personnel functions, job and manpower requirements, techniques for recruitment and hiring, job analysis techniques; compensation process; collective bargaining process. Prerequisite: MGT 2360.

MGT 3160 Human Behavior and Leadership

Leadership and its relationship to theory, style, time management, problem solving, personal power, team building, and selfassessment. Self-assessment instruments, discussion, films, case studies, in-basket exercise, leaderless group problem-solving exercises, peer interview, assessments, and team development are integrated to provide a better understanding of leadership and of human behavior as it relates to leadership.

MGT 3210 Operations Management

A study of the organizational operations responsible for products, services, tasks and processes. Manufacturing and service operations are studied as linked, cross-functional, integrated, aimed at customer requirements, and designed to minimize waste. Prerequisites: CIS 2380, MGT 2360, MTH 2350, and QS 3550.

MGT 3270 Human Resources Training and **Development**

Processes involved in retaining and developing the human resources of any organization; includes learning theory and its pathing and consulting techniques. Prerequisite: MGT 3020.

MGT 3360 Lodging Management I (HMG*/NFS)

MGT 3690 Entrepreneurship

3 s.h.

3 s.h.

A study of the entrepreneur and the entrepreneurial spirit in business and the financial, organizational, and personal influences which combine to create a flow of new ideas, new markets, new products, and new technology. Applications of business research techniques for assisting local business owners and operators in analyzing their operations and practices. Prerequisites: ACC 2010, MGT 2360, and MKT 2440.

MGT 4260 Club Management (HMG*/SM) 3 s.h. MGT 4300 Strategic Planning in an e-Commerce

Environment

Capstone in the e-Commerce Certificate: applying research of strategic management and the management of information technologies to develop an integrated framework for analyzing how the Internet can be used to measure organizational performance in the various functional areas of business. Case studies apply the principles of e-Commerce. Prerequisites: one course each in accounting, management, management information systems, marketing, and economics; and BUS 3530.

MGT 4350 Compensation

The development, validation, and implementation issues associated with a wage-and-salary program. Topics include: market position, pay range development and validation, market surveying, and implementation techniques and issues. The technical, legal, and moral issues involved in fringe benefit planning, implementation, and administration. Prerequisites: FIN 3150.

MGT 4360 Lodging Management II (HMG*/NFS)

3 s.h.

MGT 4710-4750 Seminars

1-3 s.h. (max. 4 s.h.)

Prerequisites for all seminars: Junior level or full-time work experience. Students are limited to a total of 4 s.h. of seminars.

MGT 4710	Brunch with an Expert Seminar	1 s.h.
MGT 4720	Literature Review Seminar	3 s.h.
MGT 4730	Research Seminar	3 s.h.
MGT 4740	General Topic Seminar	1-3 s.h.
MGT 4750	Leadership Seminar	1 s.h.

MGT 4910 Internship

3 s.h.

Supervised professional work experience in the area of specialization. Completed in the last two semesters of the program.

Management Information Systems (MIS)

Technology Entrepreneurship

An introduction to entrepreneurship, with a focus on technology-facilitated entrepreneurial activities and integration of the ideas of opportunity recognition, resource allocation, and value creation. Through experiential learning, students develop a business outline for a project that focuses on the local community or Internet marketplace as the primary market.

MIS 2010 Social Media for Marketing

3 s.h.

Examines usage of social media for marketing and relationship building purposes. A study of the benefits and challenges associated with emerging and established social media platforms in the marketing process.

MIS 2030 Mobile Computing

3 s.h.

An overview of various mobile computing applications, technologies, and wireless communication. Students examine common paradigms in mobile computing, such as user interface design, user experience, mobile operating systems, wearable computing, mobile marketing and computing in an environment with limited resources.

MIS 2110 3D Printing and Design

Students have hands-on experience in 3D modeling and printing, using design software to create and prepare simple 3D objects for printing.

MIS 2400 Introduction to Management Information Systems

3 s.h.

The value of information technology to business and the contribution technology can make to the strategic goals of an organization. Technical foundation concepts such as networks, hardware, and software. Case studies are used to illustrate concepts. Hands-on exercises using industry-standard software are included. Prerequisite: CIS 2380.

MIS 2410 Business Presentations 3

Study of the principles of creating effective business presentations. Emphasizing the need for preparation and practice, the course offers strategies to plan, develop, and deliver effective presentations. Hands-on practice with presentation software is required. Prerequisite: CIS 2250 or CIS 2380.

MIS 2500 Database Design and Management 3 s.h

Examination of database design and management concepts within the framework of business applications. Focus is on the relational database model with supplemental information on developing technologies. Provides a strong theoretical foundation covering both logical and physical database design strategies. Develops an awareness of database management issues such as data security and transaction management. Students implement project solution using industry standard relational database management system software. Prerequisites: MIS 2400.

MIS 2690 Project Seminar

Students synthesize concepts from programming, marketing, entrepreneurship, web, and mobile design. Students implement a technology-focused solution to address a real world problem or entrepreneurial opportunity.

MIS 2700 Systems Analysis and Design 3 s.h.

An overview of the concepts, skills, methodologies, and tools necessary for systems analysts to successfully develop information systems. The systems development life cycle is examined within the context of business applications. Students learn to translate business requirements into information systems that support business objectives. Hands-on experience with industry standard software. Prerequisite: MIS 2400.

MIS 2800 Introduction to Visual Basic Programming 4 s.h.

Introductory instruction in computer programming. Topics include fundamental programming concepts such as algorithm development, programming structures, and methods to determine program correctness. Emphasis on creating business-oriented applications using Microsoft Visual Basic software. Fourth-credit laboratory comprised of extensive exercises in implementing business problem solutions. Prerequisite: MIS 2400.

MIS 2850 Web Design for Business Applications 3 s.h.

Study of the evolution, design, and development of Internet web sites. An introduction to HTML coding and the use of GUI software for the development and maintenance of web sites and web pages. Investigation and determination of what constitutes an acceptable web site. Prerequisite: CIS 2380 or permission of the department.

MIS 2910 MIS Internship I 1 s.h

Supervised work performed in a professional setting that provides experience with current technologies. Final grade based on student performance as measured by a learning agreement negotiated between the student, MIS advisor, and employment supervisor at the beginning of work. Prerequisites: must have completed 9 semester hours of MIS classes.

MIS 2950 Network Essentials and Data Communications 3 s h

Analysis of data communications systems for business. Considers distributed processing, network terminology, protocols, standards, topologies, and management issues. Students are required to demonstrate network concepts with practical applications. Prerequisite: MIS 2400.

MIS 3300 Information Systems for Decision Making 3 s.h

Present the fundamental concepts of information systems. Emphasis on the process by which computer systems are developed from the end users' perspective. Problem solving using computer based information systems. Analyzing existing information systems by way of case study methodology. Prerequisite: CIS 2250 or CIS 2380. No credit for majors in Management Information Systems.

MIS 3350 Health Care Informatics 2-3 s.h.

Introducing applications of informatics systems to health care practitioners. Health care informatics issues covering hardware, software, databases, communications applications, computer developments, and associated legal and ethical issues are explored. How health care providers can assess, develop, and use information systems to work more efficiently, allocate resources more effectively, and improve client care. Hands-on experiences with industry standard software are required of those registered for 3 s.h. Prerequisites: for pre-nursing and nursing majors; CIS 2250 or 2380 or equivalent; for health care management majors, CIS 2380 or equivalent. *No credit for majors in Management Information Systems*.

MIS 3420 Computer Ethics

3 s.h.

An introduction to the major issues surrounding the use of computers in our society, with a special focus on social behavior in online communities and the electronic workplace. Exploration of why computers and information technology raise ethical questions and the ways in which individuals perceive, experience, and behave in a computer environment. Case studies are used to understand each ethical situation, discuss the different perspectives, and decide how each of us would handle different ethical decisions, providing guidelines to becoming a safe, responsible professional and social computer user. Prerequisite: CIS 2380. May be used in partial fulfillment of general education Goal GE-5B.

MIS 3440 Information Security

The requirement of organization managers to safeguard both electronic and non-electronic information and data; an understanding of the threats to information security to which organizations are exposed; and effective strategies for minimizing their effects. Topics such as risk assessment and management, human factors, compliance with regulations, and ethical considerations are discussed. Case studies are emphasized. Prerequisites: CIS 2380.

MIS 3460 e-Commerce Information Technology 3 s.h.

An introduction and investigation of establishing, developing, and managing Web strategy in the e-commerce area, studying the critical elements essential to successful website implementation and management. Application of the systems approach to examine some of the new business models emerging from web-based business. Prerequisite: CIS 2380.

MIS 3470 Health Care Data Analytics 3 s.h.

The intersection of clinical informatics, data analytics, and population health informatics. Data mining and visualization tools used to discover meaning from datasets to guide the improvement of health outcomes and current clinical practice standards. Prerequisite: MIS 2400; prerequisite or corequisite: MIS 2700.

MIS 3500 Database Programming – SQL 3 s.h.

Database programming and administration using the Structured Query Language (SQL). Students learn to create relational database applications and to access and manipulate information stored within those databases. The student also becomes familiar with database administration and security issues. Query and reporting functions are emphasized. A business-oriented application is developed. Prerequisite: MIS 2500.

MIS 3700 Information Systems Project Management 3 s.h.

3 s.h.

Study of the strategies and tools useful in the management of information systems projects. The processes and issues involved in formulating a project, including development of scope, design options, integration with other projects, and development of project plans. The effects of staffing, budget, schedule, and risk management on the project's outcomes. Examples highlight the handson skills and solutions required. Industry standard software is used to implement case study solutions. Prerequisites: MGT 2360 and MIS 2700.

MIS 3740 Software Development and Testing 3 s.h.

Fundamental principles of software engineering, emphasizing a rigorous approach to software development. Examination of the application of those principles to organization case studies. Topics include software process models, requirements analysis, software quality assurance, operations and testing, addressing both procedural and object-oriented development. Prerequisites: MIS 2700, MIS 2800.

MIS 3800 Intermediate Visual Basic Programming 3 s.h

Problem-solving with the computer using the computer language Microsoft Visual Basic for Windows. Advanced programming techniques and applications in a business environment; emphasis on creating complex business-oriented applications in the Microsoft Windows operating system environment, using an Object Oriented Programming (OOP) approach. Prerequisite: MIS 2800 or equivalent.

MIS 3850 XML Programming for Business Applications 3 s.h.

The key features of the most common XML standard languages and tools for electronic publishing and document exchange on the Internet. Emphasis is on the definition and structure of the Extensible Markup Language (XML) and encoding, tools and standards related to XML, for example SGML, DTD, XML Schema, CSS and XSL style sheets, and transformations. Methods and tools for producing and managing electronic documents are learned and used in assignments. Business applications are emphasized. Prerequisites: MIS 2850.

MIS 3910 MIS Internship II

A continuation of MIS 2910, where student may gain additional practical experience with technology. Supervised work performed in a professional setting that provides experience with current technologies. Final grade based on student performance as measured by a learning agreement negotiated between the student, MIS advisor, and employment supervisor at the beginning of work. Prerequisites: MIS 2910; must have completed 12 semester hours of MIS classes.

MIS 3950 Advanced Networking

Network analysis and configuration using state of the art networking concepts and devices. Analysis of the OSI model, data encapsulation, network segmentation, addressing, subnetting and network design. Investigation of basic configuration of business and home networking routers, including hardware manufacturers such as MISCO, LINKSYS, and DLINK, through hands-on and simulator practice labs. Prerequisites: MIS 2950.

MIS 4320 Audit and Control of Accounting and Information Systems 2 s.h.

Principles of auditing of information systems with emphasis on controls, audit types, security, and audit techniques and their effects on accounting and computer system development. Prerequisites: MIS 2700 or MIS 3300, and ACC 2020.

MIS 4500 Advanced Database Concepts 3 s.h.

Exploration of advanced topics in database design and examination of the implications of new technologies for 21st century business. The business applications of data warehousing and data mining technologies and their effect on business information systems and decision making. Developing a theoretical foundation for understanding the emerging methodologies, such as object-oriented database systems and object-relational database systems, and their implications for

business development. Prerequisite: MIS 3500.

MIS 4570 Human Resources Information Systems 3

The application of computer-based information systems to human resources (HR) management. Investigation of technologies appropriate for organizations of various sizes, effective strategies for obtaining and using technology, and the major trends in Internet technologies suitable for HR processes. Hands-on experience with industry standard software required. Prerequisite: CIS 2380. No credit for majors in Management Information Systems.

MIS 4710-4750 Seminars

1-3 s.h. (max. 4 s.h.)

Prerequisites for all seminars: Junior level or full-time work experience. Students are limited to a total of 4 s.h. of seminars.

MIS 4710	Brunch with an Expert Seminar	1 s.h.
MIS 4720	Literature Review Seminar	1-3 s.h.
MIS 4730	Research Seminar	1-3 s.h.
MIS 4740	General Topic Seminar	1-3 s.h.
MIS 4750	Leadership Seminar	1 s.h.

MIS 4800 Advanced Applications Programming 3 s.h.

Advanced topics in Microsoft Visual Basic .NET Programming. Topics may include advanced techniques of file access, database applications, ActiveX Data Objects (ADO.NET) and Active Server Pages (ASP.NET). Students are required to complete hands-on demonstrations of skill. Prerequisite: MIS 3800.

MIS 4950 Information Systems Senior Seminar 3 s.h.

A capstone course covering advanced strategies and techniques of systems development and project management. Each student demonstrates competency in the core disciplines of information management, business analysis, programming, database technology, and networking. Students are required to use industry standard software to complete project assignments. Prerequisites: must be taken within final 6 hours of major.

Marketing (MKT)

1-2 s.h.

MKT 2440 Principles of Marketing

3 s.h.

Study of marketing concepts, terminology, and applications, with special emphasis on the marketing mix relationships: e.g., product, price, promotion, and distribution. Introduction to the role and operation of marketing functions and their respective influence on the organization, both internally and externally. Prerequisites: WRT 1010 and WRT 1020. Recommended prerequisite: ACC 2010 or equivalent.

MKT 2550 Consumer Behavior (HMG/NFS) 3 s.ł

The study of the impact of consumer behavior (based on psychological and social forces) on the market. Analysis of the buying decision process and how it is affected by advertising, public relations, and the mass media. Emphasis on consumer-oriented legislation. Prerequisite: MKT 2440.

MKT 2620 Fashion Promotion and Coordination

(MRM*) 3 s.h.

MKT 3100 Professional Selling

3 s.h.

The study and application of professional selling theory and technique as they relate to marketing communication. Other topics include types of selling situations, customer relationship management, teleselling, customer service, ethical issues of selling, and sales management. Prerequisite: MKT 2440.

	MKT 3300	Sport Marketing (SM*)	3 s.h.
]	MKT 3500	Electronic Retailing (MRM*)	2 s.h.

MKT 3730 Principles of Advertising 3 s.h.

Intended for students with career plans in advertising and related fields. Emphasis on application of theory and strategies. Students develop and apply marketing and creative skills in analyzing advertising problems and preparing advertisement concepts for consumer and business marketing. Examination of the strategic, practical, and ethical dimensions of advertising through applications.

MKT 3870 Sales Management

3 s.h.

Introduction to organization and direction of sales programs, involving personal selling activities and integration of sales efforts with other marketing elements of the firm, implementation of sales programs, selection of appropriate sales personnel, designing and implementing sales policies and procedures, evaluation and control of sales force performance. Prerequisites: MKT 2440 and MGT 2360.

MKT 4370 Marketing Hospitality Services (HMG*)

3 s.h.

MKT 4560 Marketing Management

3 s.h.

A study of the overall marketing strategy pertaining to problems experienced in today's economy, utilizing a case study method. Emphasis on physical distribution, cost analysis, and effective pricing. Prerequisites: QS 4230, minimum of 12 s.h. in marketing, and senior standing.

MKT 4710-4750 Seminars

1-3 s.h. (max. 4 s.h.)

Prerequisites for all seminars: Junior level or full-time work experience. Students are limited to a total of 4 s.h. of seminars.

MKT 4710	Brunch with an Expert Seminar	1 s.h.
MKT 4720	Literature Review Seminar	3 s.h.
MKT 4730	Research Seminar	3 s.h.
MKT 4740	General Topic Seminar	1-3 s.h.
MKT 4750	Leadership Seminar	1 s.h.

MKT 4910 Internship

3 s.h.

Supervised professional work experience in the area of specialization. Completed in the last two semesters of the program.

Mathematics (MTH)

MTH 1040 Introduction to Algebra

4 s.l

An introduction to algebraic thinking with a focus on concepts and processes. Problem solving is emphasized and the use of the graphing calculator is integrated throughout the course. A key issue of the course is the development of appropriate skills for later courses including operations with subsets of the real numbers and familiarity with linear functions and equations. This course does not satisfy general education requirement and does not apply toward mathematics major or minor.

MTH 1050 College Algebra

4 s.h.

Second course in algebra, designed to help students develop appropriate skills with algebraic concepts and processes needed for later courses. Emphasizes problem solving, multiple representations of functions, and the use of a graphing calculator. Topics include linear, quadratic, rational, and logarithmic functions. Prerequisite: two years of high school algebra, MTH 1040, or placement test. *Does not apply toward mathematics major or minor.*

MTH 1060 Trigonometry

3 s.h.

Study of trigonometric functions, their properties, inverses and graphs; trigonometric ratios, the solutions of triangles; basic identities; the sum and difference formulas; trigonometric equations. Geometric vectors and operations with complex numbers are introduced. Prerequisite: MTH 1050 or equivalent. *Does not apply toward mathematics major or minor.*

MTH 1150 Contemporary Mathematics

3 s.h.

Designed to develop an understanding of and apprecia-

tion for the history, techniques, and applications of mathematics. Focus on a variety of real-world problems that can be solved by quantitative methods. Topics are selected from different branches of mathematics in order to bring the excitement of contemporary mathematical thinking to the non-specialist. Prerequisite: 1 year of high school algebra, or equivalent. Satisfies the general education requirement.

MTH 1210 Precalculus

5 s.h.

Focus on a study of functions, their inverses, graphs, and properties. Specifically, polynomial, rational, exponential, logarithmic, and trigonometric functions are explored. Students solve equations and real-world problems involving these functions. Graphing calculators are an integral part of the course. Prerequisites: two years of high school algebra within the last two years or MTH 1050.

MTH 2330 Learning and Teaching Number Concepts (EDI)

3 s.h.

Designed specifically for prospective elementary school teachers. Understanding and use of the underlying principles of key mathematical concepts in a problem solving environment. Focus on number sense and numeration, whole number operations, fractions and decimals, computational algorithms, patterns, relations, functions, and informal algebra. A variety of materials, activities, and strategies appropriate to teaching elementary school mathematics are used. Prerequisite: two years of high school algebra within the last two years, or placement test, or MTH 1040. A requirement in the program for elementary teacher certification; it satisfies the general education requirement for students in the Elementary Teacher Education Program.

MTH 2340 Learning and Teaching Geometric and Statistical Concepts (EDU) 3 s.h.

Second course designed specifically for prospective elementary school teachers. Understanding and use of key mathematical concepts in a problem solving environment. Focus on mathematical logic; properties of two- and three-dimensional geometric figures; similarity and congruence; motion geometry; common and metric measurement; statistical methods to describe, analyze, and use data; and probability applied in everyday life. A variety of materials, activities, and strategies appropriate to teaching elementary school mathematics are used. Prerequisite: MTH 2330. A requirement in the program for elementary teacher certification.

MTH 2350 Probability and Statistics

4 s.h.

Topics include data collection and graphic presentation; measures of central tendency; measures of dispersion; normal distribution; regression and correlation; sampling methods; design of experiments; probability and simulation; sampling distributions; statistical inference including confidence intervals and hypothesis testing for one-sample and two-sample problems. Prerequisite: two years of high school algebra within the last three years, or placement test, or MTH 1040.

MTH 2510 Calculus with Analytic Geometry I 5 s.h.

Topics include a study of limits, continuity, derivatives of algebraic and transcendental functions, applications of derivatives, integrals, and the Fundamental Theorem of Calculus. Prerequisite: MTH 1210 or departmental approval. *Computer Science majors must complete this course with a grade of C* (2.0) or better within the first 20 semester hours of their major.

MTH 2520 Calculus with Analytic Geometry II

Topics include a study of methods of integration, applications of integrals, sequences, series and power series, parametric curves, and polar coordinates. Prerequisite: MTH 2510. Computer Science majors must complete this course with a grade of C (2.0) or better within the first 20 semester hours of their major.

MTH 3250 Introduction to Statistical Research

3 s.h.

4 s.h.

An extension of statistical techniques to include analysis of variance and correlation. Develops the ability to understand and

evaluate research papers. Consideration is given to legitimacy of design, appropriateness of analysis, and validity of conclusions. Prerequisite: MTH 2350.

MTH 3300 Modern Algebra

3 s.h.

4 s.h.

Topics include groups, subgroups, isomorphism, cosets and Lagrange's Theorem, group homomorphisms, rings, and integral domains. Prerequisite: MTH 2520.

MTH 3330 Algebraic Thinking and Proportional Reasoning

Designed specifically for elementary school teachers. Focus on building algebraic thinking through examination of patterns and relationships, logic, and functions, as well as developing appropriate symbolic forms to represent and analyze mathematical situations and structures. Multiple representations of situations are used and the interrelationships of these representations are stressed. Attention given to developing proportional reasoning by investigating number theory, ratio and proportion, and decimals and percents as extensions of the whole number system. Prerequisite: MTH 2330 and MTH 1210.

MTH 3340 Geometry for Elementary Teachers 4 s.h

Designed specifically for elementary school teachers. Students are introduced to a variety of materials, activities, and physical models and manipulatives, and dynamic software as learning tools. Focus on analyzing characteristics and properties of two- and three-dimensional geometric objects and their measurement using different representational systems, recognizing the usefulness of transformations and symmetry in analyzing mathematical situations, and using visualization and spatial reasoning to solve problems both within and outside mathematics. Prerequisite: MTH 2330.

MTH 3410 Linear Algebra

3 ch

Use of multiple representations of linearity, solution of systems of linear equations, organizing data using matrices, performing matrix operations, using determinants, study of algebraic and geometric structures of vector spaces, recognizing subspaces and spanning sets, finding eigenvectors and eigenvalues, using technology to explore ideas, developing logical proofs, and applying concepts to real-life situations. Prerequisite: MTH 2520.

MTH 3510 Calculus with Analytic Geometry III 4 s.h.

A study of vectors, vector-valued functions, differential calculus of functions of several variables and applications, multiple integrals, vector fields, and line and surface integrals. Prerequisite: MTH 2520.

MTH 4330 Reasoning and Proof in the Elementary Mathematics Classroom 2 s.h

Exposes K-8 preservice and inservice teachers to mathematical reasoning and proof. Emphasis on making and investigating mathematical conjectures, developing and evaluating mathematical arguments and proofs, selecting and using various types of reasoning and methods of proof. Age-appropriate ways to foster systematic thinking, conjecturing, and marshaling of evidence are also explored. Prerequisite: MTH 1210, MTH 3330.

MTH 4340 Technology in the Elementary Mathematics Classroom

Focus on the appropriate use of electronic technologies to help in teaching elementary school children to understand mathematics. Calculators, graphers and computers are used in a laboratory setting to investigate patterns; test conjectures; explore and analyze data, connect numerical, symbolic, and graphical representations; visualize geometric concepts; and investigate and solve real-world problems. Hands-on experience using and evaluating Internet resources appropriate for use in an elementary school mathematics classroom. Prerequisite: MTH 2330 or permission of instructor.

MTH 4510 Introduction to Real Analysis

s.h.

Logic, set theory, methods of mathematical proof, relations and functions, cardinality, and study of the properties of the real number system. Emphasis is on rigorous proofs of mathematical statements. Prerequisite: MTH 2520.

MTH 4530 Differential Equations

3 s.h.

Solution techniques and applications of first-order differential equations, higher-order linear differential equations, Laplace transforms, and linear systems. Prerequisite: MTH 2520.

MTH 4650 Foundations of College Geometry

3 c h

To broaden the understanding of Euclidean geometry; study finite geometries, geometric transformations and non-Euclidean geometries; write geometric proofs; apply geometric concepts to real-world situations; and explore geometric concepts and relationships using interactive software. Prerequisite: MTH 2520.

MTH 4950 Senior Seminar

2 s.h.

Designed to help students develop oral and written communication within the context of the mathematics major. An essential component of the course is the preparation and presentation of a research paper. Taken by mathematics students with senior status as a requirement for graduation; to be taken in the final six hours of the program.

$MTH\ 4960\ Senior\ Seminar\ in\ Elementary\ Mathematics\ Education$

2 s.h.

Students with a major to teach mathematics in the elementary school research and discuss issues and evolving practice related to the teaching and learning of mathematics. Introduction to the professional community of mathematics educators and curriculum and evaluation standards. Opportunity to explore the historical development of mathematics that includes the contributions of various cultures. Oral presentations and a research paper are required. Prerequisite: senior status in the Elementary certification program.

Medical Laboratory Science (MLS)

MLS 4900 Introduction to Research Methods

1 s.h.

Quantitative and qualitative research methods used in medical, scientific, and social sciences. Areas of discussion include: formulation of research hypothesis, literature review, statistical methods used, components of the IRB (intuitional review board), and interpretation of published research findings in recognized peer reviewed journals.

Medical Technology (MTE)

MTE 1010 Medical Terminology

2 s.h.

3 s.h.

Development of medical vocabulary with emphasis on anatomical terms, diseases, symptoms, treatments, and acceptable medical abbreviations

MTE 2010 Introduction to Health Care Professions 2 s.h.

An investigation of the range of health care professions, including careers involving direct patient care, support services, and community-based services. The course is designed to familiarize students with what it means to work as part of an interdisciplinary team, the ethical responsibilities of health care professionals, and types of communication in health care settings.

MTE 3050 Clinical Hematology and Hemostasis

Introduction to clinical hematology and hemostasis (coagulation) with emphasis on identification and classification of red blood cells, white blood cells, and platelets in human disease. Focus on

normal conditions, leukemic conditions, general hematopoiesis, and conditions of normal and abnormal bleeding. Examination of the cellular elements found in bodily fluids as they pertain to the pathology of disease. Lecture 2 hours, laboratory 3 hours. Prerequisite: BIO 3010 and CHM 2210.

MTE 3070 Clinical Immunohematology

3 s.ł

Human blood group antibodies and antigens from the discoveries in 1900's to the present day. Current blood banking procedures in collection, analysis, storage, and transfusion of blood components. The laboratory covers the basic immunohematology procedures, including ABO grouping, Rh typing, compatibility testing, antibody identification, and special antibody studies. Prerequisite: BIO 3010, BIO 3280, and program director approval. Lecture 2 hours, laboratory 3 hours.

MTE 3090 Urinalysis and Body Fluids

2 s.h.

A lecture/laboratory course that introduces the analysis of bodily fluids with focus on the theory and current practice of clinical procedures. Core content topics include the analysis and clinical inter- pretation of urine, cerebral spinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, feces, semen, and the differentiation of transudates and exudates fluids findings. Lecture 2 hours, laboratory 3 hours. Prerequisite: MTE 3050, MTE 3640, and program director approval.

MTE 3170 Parasitology (BIO*)

4 s.h.

MTE 3280 Clinical Immunology and Serology (BIO*)

4 s.h.

MTE 3500 Medical Mycology and Virology (BIO*)

4 s.h.

MTE 3640 Clinical Chemistry (CHM)

2 a h

Introduction to clinical chemistry topics, focusing on areas that include acid-base balance, carbohydrates, enzymes, proteins, and non-nitrogen compounds. Laboratory calculations and automation are covered. Students are expected to apply concepts learned in general chemistry, organic chemistry, and biochemistry to laboratory exercises. Lecture 2 hours, laboratory 3 hours. Prerequisite: CHM 2210.

MTE 3700 Clinical Laboratory Operations

2 s.h.

Concepts of laboratory management and supervision, including human resources, fiscal considerations, and quality measures. Regulatory issues facing health care organizations. Educational outcomes as they pertain to laboratory continuing education are discussed and practiced. Prerequisite: admission to 3000-level MTE courses.

MTE 4950 Senior Seminar

1 s.h.

Comprehensive review of all major didactic content: hematology, hemostasis, body fluids, clinical chemistry, immunology, immunohematology, and microbiology. At the conclusion of the course, students take a comprehensive computerized examination modeled after the national board examination. Successful passing of all sections of the comprehensive examination is required for completion of the course and for graduation. Prerequisites: senior standing, program director approval; to be taken in the final six hours of the program.

Merchandising and Retail Management (MRM)

MRM 2400 Principles of Retailing (HMG)

3 s.h

Overview of the basic principles of the retailing industry for all types of retail firms and retail supply chains, including such businesses as banking, health care services, information technology, and manufacturing companies that sell their products through retail firms. Topics include customer relationship management, industry consolidation, and supplier relations, together with finance, operations, information technology, and real estate as they relate to retail.

MRM 2620 Fashion Promotion and Coordination (MKT)

Study of the principles, procedures, and special techniques of fashion promotion and coordination. Analysis of sources of information and responsibilities of fashion promotion personnel in various organizations.

MRM 3010 Specialty Merchandising

3 s.h.

Study of the merchandising of specialty goods and services. Specific techniques of merchandising specialty goods are analyzed from the retailer's point of view. Characteristics of specialty goods and consumer buying habits are studied. Prerequisite: MRM 2400.

MRM 3080 Visual Merchandising

s.h.

Study of the various facets of visual merchandising, encompassing retail merchandise presentation, displays, store planning, signage, lighting, and fixtures. Discussion of the merchandising and design criteria for point-of-purchase, exhibits, and special promotions. The merchandising and design aspects emphasized.

MRM 3480 Retail Buying

3 s.h.

Merchandising functions of retail buying with emphasis on the varied techniques used for planning, executing, and evaluating merchandise. Prerequisites: CIS 2250 or CIS 2380, MGT 2360, MKT 2440.

MRM 3500 Electronic Retailing (MKT)

2 s.h

Investigates the growing world of the cyber store and the scope of on-line retailing. Examination of the different types of e-tailers: traditional "bricks and mortar" store web sites, shopping service "malls" accessed through Internet service providers, and large-scale on-line auction and off-price retail sites. Goods and service e-tailors, both profit and non-profit, are analyzed. E-tail web consumers and their buying patterns are examined.

MRM 3630 Architectural Style and Interior Design (FCS/HMG)

4 s.h

Basic principles of design and color related to lodging interiors and exteriors; emphasis on planning, selecting, and furnishing environments for both commercial and consumer needs.

MRM 3650 Market Field Study

2 s.h.

An in-depth study of a wholesale market district emphasizing history, creation, production, and distribution of consumer goods. On-site visit for a three-to-five day period. Prerequisite: MRM 2400.

MRM 3750 Human Shelter and Environment (FCS*)

4 s.h.

MRM 4470 Retail Merchandising

3 s.h.

The role of the retail merchandiser, with examination of selected current topical issues. Review of budgetary standards and techniques used for strategic planning. Application of merchandising planning concepts utilizing computer systems. Emphasis placed on critical analysis and decision making. Prerequisites: MGT 2360; MRM 2400.

MRM 4910 Internship

3 s.h.

Supervised professional work experience in the area of specialization. Completed in the last two semesters of the program.

Music (MUS)

See also Music/Applied (MUAP)

MUS 1130 Theory I

3 s.h

Fundamental harmonic, rhythmic, and melodic practices of the 18th and 19th centuries, including major and minor keys, intervals, cadences, primary triads in root and inverted positions, through an integrated visual/aural/compositional approach. Must be taken concurrently with MUS 1140, Sight-singing and Ear Training I.

MUS 1140 Sight-singing and Ear Training I

1 s.h.

Basic aural, visual, and vocal experiences in dictation and singing at sight: includes major and minor scalar and diatonic chordal outlines, rhythms in simple meter, and major and minor triads. Must be taken concurrently with MUS 1130, Theory I.

MUS 1330 Theory II

3 s.h.

1 s.h.

Continuation of Theory I, including secondary, diminished, and augmented triads, non-chord tones, melodic composition, and secondary dominants, through an integrated visual/aural/compositional approach. Must be taken concurrently with MUS 1340, Sightsinging and Ear Training II.

MUS 1340 Sight-singing and Ear Training II

Continuation of basic aural, visual, and vocal experiences in dictation and singing at sight; includes melodies constructed of primary triads, rhythms in compound meter, and major, minor, and diminished triads in inversion. Must be taken concurrently with MUS 1330, Theory II.

MUS 1800 Introduction to Music Technology

s.h.

Includes basic computer operations, study of hardware (including MIDI) and software for aural skill study, music notation and scoring, and music instruction. Basic knowledge of music fundamentals, piano keyboard, and personal computers is recommended.

MUS 2020 Music Through the Ages

3 s.l

Introduction to music designed especially for the non-musician to increase understanding and enjoyment of music through intelligent listening habits. Includes music literature together with life and thought during major historical eras; contemporary composers and new trends. *General education course for non-majors; credits do not apply to music majors.*

MUS 2030 Musical Encounters

3 s.h

An introductory course in music based on the study of compositional principles, such as melody, harmony, rhythm, texture, and form, as applied to major works of art music and twentieth century American music. *General education course for non-majors; credits do not apply to music majors.*

MUS 2130 Theory III

3 s.h.

Continuation of Theory II, including fundamental harmonic, rhythmic, and melodic practices of the 18th and 19th centuries, including secondary chords, modulation, mode mixture, through an aural/visual/compositional approach. Must be taken concurrently with MUS 2140, Sight-singing and Ear Training III.

MUS 2140 Sight-singing and Ear Training III

1 s.h.

A continuation of aural, visual, and vocal experiences in sight singing and dictation; includes modulations to closely related keys, compound intervals, rhythmic subdivisions, chromatic chords. Must be taken concurrently with MUS 2130, Theory III.

MUS 2330 Theory IV

3 s.h.

Continuation of Theory III, including fundamental harmonic and melodic practices of the 18th, 19th, 20th, and 21st centuries through an integrated visual/aural/compositional approach. Must be taken concurrently with MUS 2340, Sight-singing and Ear Training IV.

MUS 2340 Sight-singing and Ear Training IV 1

A continuation of Sight-Singing and Ear Training III; includes the study of unusual and mixed meters, syncopation, chromatic inflection, remote modulation, and modal scales. Must be taken concurrently with MUS 2330, Theory IV.

MUS 3090 Music for the Classroom Teacher (EDU) 2 s.h.

Development of the basic knowledge of the melodic, rhythmic, and harmonic elements of music; introductory experiences in reading and playing music using the autoharp, guitar, piano, and recorder. The course is particularly designed for but not limited to, the

elementary school teacher. Prerequisite: EDU 2000.

MUS 3110 Diction 1: English and Italian

1 s.h.

The basics of English and Italian lyric diction, designed for singers and teachers of singing, including the use of the International Phonetic Alphabet.

MUS 3120 Diction 2: German and French

1 ch

The basics of German and French lyric diction, designed for singers and teachers of singing, including the use of the International Phonetic Alphabet. Prerequisite: MUS 3110 or department approval.

MUS 3330 History of Music Literature I

 $3 \, \text{s.h.}$

Development of music from pre-Christian beginnings through the Baroque period with emphasis on music form, style, literature, and composers.

MUS 3340 History of Music Literature II

3 s.h.

Development of music from the Classical period to the present with emphasis on musical form, style, literature, and composers.

MUS 3540 Piano Pedagogy I

2 s.h.

Intensive study of methods and materials in piano teaching as applied to beginning and intermediate students.

MUS 3550 Piano Pedagogy II

2 s.h.

Continuation of MUS 3540 as applied to the advanced student.

MUS 3630 Strings Pedagogy

s.h.

Group study of strings; technical differences, capabilities, peculiarities, ranges, bowings, etc., sufficient to teach beginning students effectively in groups. Designed for the middle and secondary school teacher.

MUS 3650 Woodwinds Pedagogy

2 s.h.

Group study of winds: technical differences, capabilities, ranges, etc., sufficient to teach beginning students effectively in groups. Designed for the middle and secondary school teacher.

MUS 3660 Brass Pedagogy

1 s.h.

Group study of brass: technical differences, capabilities, peculiarities, ranges, etc., sufficient to teach beginning students effectively in groups. Designed for the middle and secondary school teacher.

MUS 3670 Percussion Pedagogy

1 s.h.

Group study of percussion: technical differences, capabilities, peculiarities, ranges, etc., sufficient to teach beginning students effectively in groups. Designed for the middle and secondary school teacher.

MUS 3910, 4910 Music Management Cooperative

Education I, II

2-4 s.h.

Specialized learning experiences related to music management, under supervision of authorized personnel. Prerequisite: approval of advisor.

MUS 4020 Contrapuntal Techniques

2 s.n

Aural and visual acquaintance with contrapuntal music of the 17th and 18th centuries; writing of music involving techniques characteristic of the period.

MUS 4030 Form and Analysis

2 s.h.

Structural elements of musical composition as applied to form, from the simple song forms to the sonata-allegro form; melodic, harmonic, and structural analysis of representative works.

MUS 4040 Conducting and Performing Techniques

Integrated course with emphasis on baton technique, score reading, and arranging. Lecture 1 hour, laboratory 2 hours.

MUS 4070 Choral Techniques

2 s.h.

Integrated course in development of choral tone, blend, balance, articulation and appropriate baton techniques, score preparation, style, and rehearsal procedures.

MUS 4170 Church Music (RST)

2 s.h.

The practice of church music in Catholic and Protestant traditions; a survey of music literature for liturgical purposes; principles of church music administration and program organization.

MUS 4750 Special Topics in Music

2 s.h. (max. 8 s.h.)

Special topics in music involving material of timely, special, or unusual interest not contained in the regular course offerings.

MUS 4800 Teaching of Music at the Elementary Level

Methods and materials for teaching general music in the classroom, as well as the study of standards, methods, materials, and rehearsal techniques for the elementary vocal and instrumental programs

MUS 4850 Teaching of Music at the Secondary Level 2 s.h.

Study of standards, repertoire, techniques, and materials of choral and instrumental music for the middle and high school music programs.

MUS 4950 Music Management Seminar

2 s.h

Through class discussion, presentations, and directed projects, students acquire information and skills pertinent to their particular interests and goals, as well as an overview of the entire music management field.

MUS 4960 Senior Seminar in Music

1 s.h.

Capstone course for all music concentrations. In-depth consideration of issues related to the senior music major's concentration. *To be taken in the student's senior year*.

Music / Applied (MUAP)

MUAP 1010, 1020, 1030, 1040 Applied Music for the Adult Beginner 2 s.h. each (max. 14 s.h. each)

Basic course with emphasis on fundamental technique and musicianship. Includes theory, technique, reading, and repertoire designed to meet the needs of the individual student. *Credit not applicable toward* performance major nor toward major applied music electives.

MUAP 10x0.05 - Piano for the Adult Beginner

MUAP 10x0.15 – Voice for the Adult Beginner

MUAP 10x0.24 - Organ for the Adult Beginner

MUAP 10x0.26 – Violin for the Adult Beginner

MUAP 10x0.28 - Guitar for the Adult Beginner

MUAP 10x0.31 – Flute for the Adult Beginner

MUAP 10x0.41 - Clarinet for the Adult Beginner

MUAP 10x0.45 – Cello for the Adult Beginner

MUAP 10x0.51 – Trumpet for the Adult Beginner

MUAP 1080 Chorale 1 s.h. (max. 14 s.h.)

Study and performance of sacred and secular choral literature; development of a discriminatory taste in music through experience in actual participation.

MUAP 1090 Voice Class I 2 s.h. (max. 14 s.h.)

Practical approach to fundamentals of good singing techniques: support, vowel formation, concepts of resonance. Emphasis is on establishment of good vocal habits and exercises for development of the singing and speaking voice.

MUAP 1100 Voice Class II

2 s.h. (max. 14 s.h.)

Continuation of Voice Class I.

MUAP 1150, 1160, 2150, 2160, 3150, 3160, 4150, 4160

Voice 2 s.h. each (max. 14 s.h. each)

Voice placement; vocalization for tone production, intonation, breath control, relaxation, resonance, vowel formation, and study of the consonants; simple songs with English diction suitable to acquired technique; introduction to the Art Song: Italian Art Song, selected arias.

MUAP 1210, 1220, 2210, 2220, 3210, 3220, 4210, 4220

Piano

2 s.h. each (max. 14 s.h. each)

Study of keyboard theory, techniques and repertoire designed to meet needs of individual students.

MUAP 1240, 1250, 2240, 2250, 3240, 3250, 4240, 4250

Organ

2 s.h. each (max. 14 s.h. each)

Organ technique; application to basic materials; congregational accompaniment; repertoire designed to meet needs of individual students.

MUAP 1260, 1270, 2260, 2270, 3260, 3270, 4260, 4270

olin 2 s.h. ea

2 s.h. each (max. 14 s.h. each)

 $MUAP\ 1280,\ 1290,\ 2280,\ 2290,\ 3280,\ 3290,\ 4280,\ 4290$

Guitar 2 s.h. each (max. 14 s.h. each)

MUAP 1310, 1320, 2310, 2320, 3310, 3320, 4310, 4320

Flute 2 s.h. each (max. 14 s.h. each)

MUAP 1360, 1370, 2360, 2370, 3360, 3370, 4360, 4370

Saxophone 2 s.h. each (max. 14 s.h. each)

MUAP 1410, 1420, 2410, 2420, 3410, 3420, 4410, 4420

Clarinet 2 s.h. each (max. 14 s.h. each)

MUAP 1430, 1440, 2430, 2440, 3430, 3440, 4430, 4440

Viola 2 s.h. each (max. 14 s.h. each)

MUAP 1450, 1460, 2450, 2460, 3450, 3460, 4450, 4460

Cello 2 s.h. each (max. 14 s.h. each)

MUAP 1470, 1480, 2470, 2480, 3470, 3480, 4470, 4480

Harp 2 s.h. each (max. 14 s.h. each)

MUAP 1510, 1520, 2510, 2520, 3510, 3520, 4510, 4520

Trumpet 2 s.h. each (max. 14 s.h. each)

MUAP 1560, 1570, 2560, 2570, 3560, 3570, 4560, 4570

Low Brass

2 s.h. each (max. 14 s.h. each)

MUAP 1580, 1590, 2580, 2590, 3580, 3590, 4580, 4590

French Horn

2 s.h. each (max. 14 s.h. each)

MUAP 1650, 1660, 2650, 2660, 3650, 3660, 4650, 4660

Jazz Piano 2 s.h. each (max. 14 s.h. each)

The study of jazz keyboard skills, theory, and repertoire designed to meet the needs of the individual student. Prerequisite: 2 semesters of applied piano or permission of instructor. Does not replace the applied instrument/voice requirement of any concentration.

MUAP 2150, 2160, 3150, 3160, 4150, 4160

Voice

2 s.h. each (max. 14 s.h. each)

Continuation of MUAP 1150, MUAP 1160; more advanced repertoire.

MUAP 2610 Lyric Theater

1 s.h. (max. 14 s.h.)

The study and public performance of staged productions from the operatic, light opera, and Broadway genres. Open to all students and community members.

MUAP 3620 Ensemble: Instrumental Chamber Music

1 s.h. (max. 14 s.h.)

Study and performance of duos, trios, quartets, and other combinations; open to all students by audition.

MUAP 3720 Ensemble: Orchestra/Band 1 s.h. (max. 14 s.h.)

Rehearsal, membership, and performance in an orchestra,

band, or jazz ensemble; open to all students by audition.

MUAP 4010 Orchestration

Fundamentals of orchestration and arranging for instruments and voices, with an emphasis on the application of 18th to 21st century techniques. Prerequisite: four semesters of theory or departmental approval.

MUAP 4100 Applied Composition 2 s.h. (max. 14 s.h.)

Study of music composition for acoustic and electronic media: methods; forms; orchestration; and performance techniques. Private lesson format. Prerequisites: MUS 2130, MUS 2140, MUS 2330, MUS 2340, and MUAP 4010; or permission of instructor. Does not replace the applied instrument/voice requirement of any concentration.

MUAP 4770 Film Scoring I

2 s.h

First semester of a three-term sequence, beginning with study and utilization of computer software and hardware for composition for film and video. Prerequisites: MUS 1800, MUS 1130, MUS 1140, MUS 1330, MUS 1340, and basic keyboard skills demonstrated by proficiency examination. Some experience in musical composition is recommended.

MUAP 4780 Film Scoring II

2 s.h

Continued study of methods of composing, arranging, and orchestrating music for film and video, using music technology. Prerequisite: MUAP 4770 or permission of instructor.

MUAP 4790 Film Scoring III

2 s.h

Studies leading to composition of a feature-length film score, in collaboration with Broadcast and Cinema Arts senior seminar students. Prerequisite: MUAP 4770 and MUAP 4780, or permission of instructor.

Natural Science (NSC)

NSC 1250 Health Problems (FCS/NFS)

4 s.h.

4 s.h.

Biological approach to health and disease in man. Study of drugs, smoking, alcohol, venereal disease, sex education, nutrition, heredity, and topics of current interest. (For non-science majors.)

NSC 3080 The Nature and Scope of Inquiry 3-4 s.h.

Theme-based, highly interactive interdisciplinary course designed to enable students to explore the different approaches and ways of knowing that contribute to understanding and resolving complex issues, problems or dilemmas of contemporary life. Utilizing the different modes of inquiry which characterize the various disciplines, the course involves students in readings, discussions, works of art, lectures by experts, team collaboration, and independent research. The course focuses on a compelling theme and is designed to develop the commitment to intellectual inquiry, humanistic values, and service to others as embodied in the mission of Madonna University.

NSC 3250 The Ascent of Man

Presentation of interrelationships of science and humanities throughout history. Discussion of the role of science and technology on the course of human events; course based on TV series. (For non-science majors.)

NSC 3730 Science Foundations I: Chemistry and Life Science (EDU) 4 s.h.

An introduction, for preservice elementary teachers, to the basic concepts of matter: atoms, molecules, its changes, properties, and reactions. Plant and animal life, genetics, food cycle, changes in digestion, and ecosystems. Lecture 3 hours, laboratory 3 hours. Prerequisite: MTH 1040 or equivalent. (For non-science majors.)

NSC 3740 Science Foundations II: Astronomy, Earth Science, and Physics (EDU) 4 s.h.

A continuation of basic science concepts for preservice elementary teachers; study of the solar system, the earth's structure, and the laws

and forces which govern our planet and the universe as a whole. Lecture 3 hours, laboratory 3 hours. Prerequisite: MTH 1040 or equivalent. (For non-science majors.)

NSC 4050 Science and Social Responsibility

2 s.h.

Introduces students to interdisciplinary thinking, analysis, and research in the natural sciences. Examines the role of science in a rapidly changing society. Theories and methodologies of the natural sciences are explored, as well as the ethical dimensions of science in the 21st century. Students integrate knowledge of significant social and scientific developments that determine public policies and which in turn affect society at large. *Enrollment limited to international students in specific programs*.

NSC 4950 Senior Seminar

2 s.h.

Preparation and presentation of a scientific paper. Taken by Natural Science and Integrated Science students with senior status as a requirement for graduation; to be taken in the final six hours of the program.

Nursing (NUR)

NUR 2810 Introduction to Professional Nursing

s.h

Provides an overview of the role of the professional nurse and addresses the nature of the nursing profession. Foundational concepts of dynamics of systems, holistic caring, and professional practice are explored. Includes an academic service-learning experience. Prerequisite: admission to the nursing major. Corequisite: NUR 2830.

NUR 2830 Health Assessment and Promotion 3 s.h.

Focuses on the role and activities of a professional nurse in collecting a health history and performing a physical assessment of an adult. The process of health assessment utilizes previous knowledge from anatomy and physiology and pathophysiology. The relationship of health assessment to evidence based health promotion is explained. A supervised laboratory practicum focuses on cognitive, affective, and psychomotor skill development. Prerequisite or corequisite: NUR 2810, WL 2100.

NUR 3010 Transitions in Professional Nursing 3 s.h.

Designed to introduce the registered nurse (RN) to the foundations of baccalaureate nursing education. RNs focus on professional nursing roles within the context of complex practice settings across the care continuum. Exploration of concepts relevant to the contemporary health care system and skills necessary for academic and professional success. Prerequisite: admission to the RN degree-completion program.

NUR 3040 Health Assessment for RN's

2 s.h.

The comprehensive assessment of adult patients and the development of focused assessments as related to specific pathology, based on a holistic appraisal of the adult patient. Includes a supervised practicum.

NUR 3420 Pharmacology

3 s.h.

Focuses on the principles of pharmacology while incorporating the nursing process with an emphasis on providing safe and quality care to the adult patient receiving medications.

Prerequisites: NUR 2810 and NUR 2830.

NUR 3460 Holistic Mental Health Nursing Care 4 s.h.

This course introduces the student to a holistic perspective of psychiatric-mental health nursing. The student identifies evidence to support clinical decision making and application to the nursing process. This course includes a supervised practicum. Prequisites: NUR 2810, NUR 2830. Prerequisite or corequisite: NUR 3420.

NUR 3480 Holistic Nursing Care Adults and Families I 5 s.h.

This course focuses on the professional nursing role in the care of adult patients experiencing acute and chronic health problems addressing the physiological and psychosocial needs within the framework of the nursing process. This course includes a supervised practicum in an adult health care setting and supervised laboratory practicum. Prerequisites: NUR 2810, NUR 2830. Prerequisites or corequisites: NUR 3420, NUR 3460, MIS 3350.

NUR 3800 Health Promotion, Risk Reduction, and Disease Prevention 3 s.h.

Focuses on the application of nursing strategies to enhance optimum wellness across the lifespan. Integrates health promotion, risk reduction, and disease prevention principles into the care of individuals and families across the care continuum. Prerequisite: admission to the RN degree-completion program.

NUR 3950 Evidence-Based Nursing Practice 2 s.h.

Provides the RN the opportunity to analyze the components of the research process and methodologies relative to nursing practice with an emphasis on the bridge between theory, nursing research, and clinical decision making. Prerequisite: MTH 2350; admission to the RN-BSN program.

NUR 3960 Evidence-Based Scholarship and Practice 2 s.h.

Evidence based scholarship serves as the basis for making clinical judgments and fulfilling professional nursing responsibilities. This course examines the implications of an evidenced based practice approach in nursing. Prerequisite: NUR 3420. Prerequisites or co-requisites: NUR 3460, NUR 3480.

NUR 3970 Population Focused Care of The Older Adult and Family

5 s.h.

Addresses theories related to physical, psychological, legal, and social aspects of aging for individuals and families. Issues including chronicity, palliative, and end of life care are analyzed. This course includes a supervised practicum and service learning component. Prerequisites: NUR 3420, NUR 3460, NUR 3480 Pre-or Corequisites: NUR 3960, NUR 3980, RST 3500.

NUR 3980 Holistic Nursing Care of Adults and Families II 4 s.h.

Focuses on the care of adult patients with acute and/or chronic health problems with an emphasis on evidence—based clinical practice guide-lines. Patients and their families are cared for in a holistic manner utilizing the nursing process. This course includes a supervised acute care practicum. Prerequisites: NUR 3420, NUR 3480. Prerequisites or corequisites: NUR 3960, NUR 3970, RST 3500.

NUR 4120 Issues in Gerontological Nursing and Palliative Care

Focuses on the care of older adults across the care continuum. Current theories are examined with an emphasis on the physical, psychological, legal, and social aspects of aging. Normal aging changes, common acute, chronic, and complex health problems, community resources, interdisciplinary team management, and quality of end of life care for older adults and their families are explored. Prerequisite: admission to the RN-BSN program.

NUR 4300 Population Based Care

4 s.h.

3 s.h.

Focuses on the synthesis of community, public health, and nursing principles and concepts as applied to the promotion and preserving of the health of populations. Attention is given to the complexity of systems of care across the continuum through frames of increasingly culturally, ethnically, and socially diverse populations. Envi-ronmental, epidemiological, social, economic, political, ethical/legal, disaster, and global factors examined as influences on the health ofaggregates. Utilizing the nursing process, population-based interventions are introduced. Prerequisites: NUR 3010, NUR 3800; admissionto the RN-BSN or RN-MSN program.

NUR 4410 Holistic Nursing Care of Children and Families

4 s.h.

Focuses on wellness/illness management, clinical decision making, and holistic care of children and their families. The clinical component emphasizes evidence-based practice in structured pediatric settings. Prerequisite: all 3000-level NUR courses.

NUR 4430 Population-Focused Professional Nursing 5 s.h.

Addresses population-focused nursing involving the identification of the determinants of health. Contemporary issues impacting population health are analyzed. Concentration on health beliefs and evidence-based practice to guide health promotion and disease prevention functioning in collaborative relationships with families and within communities. Prerequisites: all 3000-level NUR courses.

NUR 4450 Holistic Nursing Care of Women and Families

4 s.h.

Focuses on the creation of a holistic culture of caring and safety for women and families across the lifespan through an understanding of evidence-based health promotion, and disease prevention concepts related to professional nursing practice in diverse settings. This course includes a supervised practicum. Prerequisite: all 3000-level NUR courses.

NUR 4740 Nursing Leadership for Promoting Quality and Safety

3 s.h.

Provides the RN the opportunity to examine the various leadership roles, responsibilities, and opportunities for nurses within health care settings. Principles of leadership, management, health policy, change, finance, interdisciplinary collaboration, and environments within which nurses work are studied through the context of quality and safety. Prerequisite: admission to the RN-BSN program.

NUR 4820 Holistic Care Immersion

5 s.h.

Focuses on the integration and application of evidence-based practice, wellness/illness management, clinical decision making, and holistic caring in professional nursing practice. Includes an acute care clinical component. Prerequisites: NUR 4410, NUR 4430, NUR 4450; prerequisite or corequisite: NUR 4840; corequisite: NUR 4950.

NUR 4840 Dynamic Nursing Leadership 3 s

An understanding of the dynamics of the ever-changing health care environment is foundational to professional nursing practice. Knowledge of leadership principles and dynamics of systems coupled with professional roles and responsibilities in promoting quality and safety will be examined. Prerequisites: NUR 4410, NUR 4430. NUR 4450.

NUR 4950 Transitions to Professional Nursing Praxis 3 s.h.

Facilitates the integration of a liberal arts education and nursing science. Emerging nursing issues are analyzed within the context of nursing praxis. Prerequisites: NUR 4410, NUR 4430, NUR 4450; prerequisite or corequisite: NUR 4820, NUR 4840.

NUR 4960 Emerging Issues Seminar for Professional Nursing 2

Focuses on issues and trends affecting nursing practice, health care systems, and the nursing profession. Reflects on contemporary issues, such as genetics, genomics, technology, emerging infections, client self-management, care coordination, health literacy, and scientific advances. The influence of these issues on the role of the baccalaureate-prepared nurse is analyzed. To be taken in the student's final semester in the BSN segment of the RN degree-completion program.

Nutrition and Food Science (NFS)

Prerequisites: BIO 2240 and NFS 2250.

3 s.h.

3 s.h.

NFS 2000

Professional Issues in Dietetics

Introduction to the profession of dietetics and professional associations. Evaluation of nutrition-related legal, ethical and research-related issues. Discussions of health care policy, delivery and reimbursement issues. Discussions of the impact of public policy on the dietetics profession.

NFS 2220 General Nutrition for the Health Professional

A study of nutrients in foods and their involvement in the function of human body systems. Health and nutrition throughout the lifespan is discussed. May not be used toward the Dietetics major or the majors or minor in Nutrition and Food Science.

NFS 2230 Therapeutic Nutrition for the Health **Professional** 2 s.h.

The application of basic nutrition knowledge to diet modification as a preventative or therapeutic aid in specific disease states is discussed. Prerequisites: NFS 2220 or equivalent, and approval of advisor.

NFS 2250 **Human Nutrition (FCS/HMG)** 4 s.h.

Study of nutrients in foods and their involvement in the function of human body systems. Problems in and programs for meeting personal, family, national, and world nutritional needs.

NFS 2260 Introductory Food Science (FCS/HMG) 3 s.h.

Examination of the basic composition, structure and properties of foods and the chemistry of changes occurring during preparation and storage. Laboratory experience in basic culinary techniques and methods of food preparation. Lecture 2 hours, laboratory 3 hours.

NFS 2290 **Topics in Food and Nutrition** 1 s.h. (max. 3 s.h.)

An overview of current scientific information about contemporary topics in food and nutrition. Students explore how issues related to the topic affect the consumer. Topics vary by semester. Students may take the course up to three times, provided the content is distinct.

NFS 2380 **Child Nutrition**

Exploration of factors that influence nutrition and food intake from infancy through childhood: healthy attitudes toward food, healthy food environments, and nutritional concerns related to childhood. Includes creation of healthy snacks and planning educational activities for children. No credit toward majors or minors in Dietetics or Nutrition and Food Science.

Nutrition for the Aging (AGE) 2 s.h. NFS 2420

Practical problems of meeting nutritional needs of older adults considering economic, physical, and psychological changes that occur with age. Study of agencies and programs concerned with meal delivery systems for the elderly.

NFS 2550 Consumer Behavior (HMG/MKT*) 3 s.h.

Food Service Sanitation (HMG) **NFS 2760**

Control of foodborne illness in the food service industry. Specifics of Food Service Sanitation Law and the inspection report form. Most common violations and means for training and motivating employees.

NFS 2910 **Cooperative Education** 1-4 s.h. (max. 4 s.h.)

Supervised work experience in a professional situation related to the student's area of specialization. Prerequisite: approval of advisor.

NFS 2930

Supervised work experience in a professional situation related to the student's area of specialization. Prerequisite: approval of advisor.

years includes key nutrition concepts, physiological principles, and nutritional recommendations. Prerequisite: NFS 2250.

cycle. Study of each phase from pre-conception through the elderly

The study of changing nutrient needs throughout the life

NFS 3220 Nutrition Assessment 2 s.h. An examination of the process of obtaining and interpreting nutritional data. Students gain experience with medical documentation and explore appropriate uses for nutrition support.

NFS 3250 Medical Nutrition Therapy I

Physiological basis for modification of the normal diet as a preventive measure or therapeutic aid in certain diseases and disor- ders of the body. Prerequisites: BIO 2240 and NFS 3220.

NFS 3290 Topics in Food and Nutrition 1 s.h. (max. 3 s.h.)

Specialized study of contemporary topics in food and nutrition. Students explore concepts related to food intake and nutrition, enabling them to better serve the consumer. Topics vary by semester. Students may take the course up to three times, provided the content is distinct.

Environmental Foods and Nutrition (ENV) NFS 3310 2 s.h.

Study of issues related to sustainable agriculture, local food supply, organic farming, and other issues related to nutritional health and the environment. Hands-on experience working with organic farming.

NFS 3360 Lodging Management I (HMG*) 3 s.h.

NFS 3380 Nutrition Education and Counseling

Designing instructional units and materials for teaching nutrition and health principles to children and adults. Counseling theories, motivational interviewing, and behavior modification are covered. Prerequisite: NFS 2220 or NFS 2250.

NFS 3460 Food Service Management I (HMG) 3 s.h.

Purchasing standards, buying procedures, storage principles, and factors affecting quality, efficiency, and economy in quantity food production and service. Laboratory experience related to quantity food preparation and service. Safety and efficiency in the use and care of specialized equipment. Lecture 2 hours, laboratory 3 hours. Prerequisites: MGT 2360, NFS 2260.

Market Field Study (HMG*) **NFS 3660** 2 s.h.

NFS 3910 **Cooperative Education** 1-4 s.h. (max. 4 s.h.)

Supervised work experience in a professional situation related to the student's area of specialization. Prerequisite: approval of advisor.

NFS 3930 1-4 s.h. **Practicum**

Supervised work experience in a professional situation related to the student's area of specialization. Prerequisite: approval of advisor

NFS 4250 **Advanced Human Nutrition** 4 s.h.

Biochemical principles involved in the metabolism of specific nutrients. Problems in applying this knowledge to particular topics in nutrition. Prerequisites: CHM 1610 or CHM 3610; BIO 2240; NFS 2250.

NFS 4360 Lodging Management II (HMG*) 2 s.h.

NFS 4380 Community Nutrition

Social, economic, and political aspects of public health in relation to food and nutrition; problems and programs affecting vulnerable groups such as the poor, the aged, the handicapped, pregnant teenagers, infants. Lecture and supervised practice in community setting. Includes an academic service-learning experience. Prerequisite: NFS 2250.

NFS 4420 Medical Nutrition Therapy II

Examination of the interrelationships of physiology, biochemistry, and nutrition as related to medical nutritional therapy (MNT), including the scientific evidence supporting MNT. Emphasis on the role of MNT in preventing and treating disease/disorders. Coverage of the Nutrition Care Process and MNT of multiple disease states. Prerequisites: BIO 2240, NFS 3220.

NFS 4460 Food Service Management II (HMG) 3 s.h

Principles of management applied to food service systems; physical facilities planning; sanitation and safety standards; organization and leadership; personnel management and cost control. Prerequisites: NFS 2260, MGT 2360.

NFS 4910 Cooperative Education

l-4 s.h.

3 s.h.

Supervised work experience in a professional situation related to the student's specialization area. Prerequisite: approval of advisor.

NFS 4950 Senior Seminar

2 s.h.

Senior research and presentation of research thesis. Discussions of professionalism and career preparation.

Discussions of professionalism and career preparation

NFS 4960 Experimental Foods and Research

3 s.h.

Principles involved in food quality, spoilage and preservation, control of foodborne illnesses. Managerial and manipulative techniques involved in formal demonstrations for teaching or promotional work. The experimental method applied in development and evaluation of selected food items. Lecture 2 hours, laboratory 3 hours. Prerequisites: BIO 2260 or BIO 2270; CHM 1610 or CHM 2210, NFS 2260.

Occupational Safety and Health (OSH)

OSH 1020 Standards and Regulations

3 s.h.

OSHA/MIOSHA/NFPA standards, codes, and regulations. Rationale for the Williams-Steiger Occupational Safety and Health Act of 1970. Evolution of standards, record-keeping, compliance, and enforcement.

OSH 2150 Building Construction (FS)

3 s.h.

Study of fundamental concepts of building design and construction; site selection, code compliance, architectural plans, incorporation of mechanical and power devices; terminology.

OSH 2910 Cooperative Education I

1-3 s.h

Field placement in either municipal, industrial, hospital, or similar settings that provide experience in the area of occupational safety. Preservice students only.

OSH 2930 Internship I

1-3 s.h

Field placement in either municipal, industrial, hospital, or similar settings that provide experience in the area of occupational safety. Preservice students only.

OSH 3020 Field Experiences

1-3 s.h.

Credit awarded individuals for evidence of full-time employment of two or more years in the field of occupational safety. Documentation of competencies required.

OSH 3110 Industrial Safety and Health (FS) 3 s.l

A study of numerous job-related safety and health hazards associated with a wide range of occupations in industrial work environments.

OSH 3210 Construction Safety

s.h.

Study of factors in building structures and in use of tools and materials that cause accidents. Application of regulations and standards of Michigan Department of Labor—Construction Division. Development of safety awareness to prevent or reduce accidents on construction sites.

OSH 3220 Inspection and Survey of Facilities (FS) 3 s.h.

Safety and health hazards, both common and unique to various kinds of occupancies, including residential, industrial, and com- mercial. Includes surveying procedures, hazard recognition and evaluation, and the application of appropriate measures to assure maximum life and property safety. Prerequisite: OSH 2150 or consent of advisor.

OSH 3310 Safety Program Management

3 s.h.

Examination of the organizational concepts of a safety program, with emphasis on organizational safety programs, objectives, responsibilities, and implementation; accident control and reports; motivation and incentives.

OSH 3500 Hydraulics and Water Supply (FS*)

3 s.h.

OSH 3520 Industrial Hygiene I

3 s.h.

Familiarization with irritating or toxic substances and various occupational stress factors causing employee discomfort or illness; emphasis on sources and the control of environmental pollution, concepts of industrial hygiene; hazard evaluation, and elimination of related problems. Prerequisites: CHM 1110; BIO 2240, *or* BIO 2430 and 2440, *or* NSC 1250.

OSH 3680 Fire Protection Systems I (FS*)

3 s.h.

OSH 3690 Fire Protection Systems II (FS*)

3 s.h.

OSH 3910 Cooperative Education II

1-3 s.h.

Advanced semi-professional level assignments in on-thejob application of occupational health and safety principles in an industrial, commercial, institutional setting. Preservice students only.

OSH 3930 Internship II

1-3 s.h.

Advanced semi-professional level assignments in on-thejob application of occupational health and safety principles in an industrial, commercial, institutional setting. Preservice students only.

OSH 3980 Industrial Hygiene II

3 s.h.

Techniques of instrumentation and sampling. Hands-on training in use of instruments to measure and evaluate occupational health hazards by taking samples or surveying noise level, heat exposure, oxygen deficiency, combustible vapors, ventilation, as well as toxicology and radiation sources, along with protective measures to cope with hazards for their prevention and control. Prerequisites: OSH 3520, CHM 1110; BIO 2240, *or* BIO 2430 and 2440, *or* NSC 1250.

OSH 4250 Fire and Arson Investigation (FS*/EM)

4 s.h.

OSH 4300 Employee Occupational Health Maintenance and Medical Care Program

3 s.h.

Study of drugs, smoking, alcohol, nutritional, and substance abuse in relationship to lost time, morale, accident frequency, and security. Medical care aspects deal with pre-employment, return to work, and work limitations as well as periodic physical re-examination; providing administrative and operational guidelines for designing and implementing a health maintenance program as well as emergency and pre-hospital medical care.

OSH 4400 Tactics and Strategy (FS*)

3 s.h.

OSH 4510 Hazardous Materials I (EM/FS)

3 s.h.

Detailed knowledge for the emergency service professional: (a) identification, storage, handling, disposal, and identifying products of combustion of hazardous materials, including flammables, explosives, oxidizing, and corrosive materials; (b) methods

of contingency planning for hazardous materials incidents, culminating with the use of current software to conduct table top exercises to assist in planning, mitigating, and responding to hazardous materials emergencies. Pre- requisite: CHM 1110 or equivalent.

OSH 4520 Hazardous Materials II (EM/FS)

Preparation and certification at the technician level (40 hour) for emergency service professionals responding to hazardous materials incidents. Emphasis on the development of hazardous materials regulations, transportation placards, labels and markings, and hazard communication requirements. Prerequisite: EM 4510.

OSH 4900 Fire Service Management (FS*)

3 s.h.

3 s.h.

OSH 4950 Senior Seminar

2 ch

Preparation and presentation of a library research paper that integrates knowledge gained in the major discipline. *Taken by students with senior status as a requirement for graduation; to be taken in the final six hours of the program.*

Paralegal Studies (LAW)

LAW 1000 Introduction to Paralegal Studies

3 s.h.

Introduction to the various roles of the paralegal, with an emphasis upon job functions, ethics, and skills, legal terminology, the court system.

LAW 1010 Legal Research and Writing I

An introduction to the law library and the use of legal references; the techniques of legal research as used in writing letters, instruments, pleadings, briefs, and memoranda. Emphasis on State law. Prerequisite: WRT 1020 and completion of the Writing Assessment with a score of 4T or completion of required WRT 1150 component.

LAW 2220 Domestic Relations

3 c l

Divorce law, including interviewing, determination of jurisdiction, counseling, investigation; drafting, serving and filing of legal papers; Friend of the Court Act and property settlements.

LAW 2350 Real Estate 3 s.h.

Interviewing and data collection, title work, mortgage work, taxation, drafting of purchase and sale agreements, closing, liability, insurance.

LAW 2410 Contractual and Commercial Relations 3 s.h.

Fundamentals and theory of the law of contracts. Sales transactions, the Uniform Commercial Code, banking transactions, consumer law, analysis of standard commercial contracts.

LAW 2550 Computer Assisted Legal Research 3 s.h

Proprietary legal research technology using Westlaw and Lexis. Introduction of new litigation databases for investigating civil and criminal cases. Prerequisites: LAW 1010 and CIS 2250 or CIS 2380 or equivalent. Student must be prepared for online course work.

LAW 2560 Legal Research on the Internet

3 s.h.

Introduction to concepts for performing legal and factual research on the Internet (except Westlaw and Lexis) for use in legal applications. Students analyze information retrieved using information literacy principles. Federal legal research as well as factual research is undertaken. Prerequisites: LAW 1010 and CIS 2250 or CIS 2380 or equivalent. Student must be prepared for online course work.

LAW 2570 Litigation 3 s.h.

Pre-trial, trial, appeal, and enforcement/compliance procedures for civil cases. Data collection and analysis; calendar control and scheduling; organization and coordination of exhibits; drafting of interrogatories, complaint, answer, and other pleadings.

LAW 3210 Legal Research and Writing II

3 s.h.

Further development of research and writing skills, including analyzing a fact situation and following the evolution of a typical lawsuit. Emphasis on Federal law. Prerequisite: LAW 1010, LAW 2570.

LAW 3450 Business Associations

3 s.h.

Pre-incorporation and incorporation procedures, directors' meetings, stockholders' meetings, public sales of securities, foreign jurisdictions, amending Articles of Incorporation and By-laws, partnership agreements, and dissolution.

LAW 3560 Intellectual Property

3 s.h.

An overview of the law of patents, trademarks, and copyrights. Focus is on the unique intellectual property problems facing inventors, writers, musicians, and artists. Prerequisite: LAW 1010.

LAW 3670 Law Office Economics and Technology 3 s.

Law firm utilization of computers and specialized legal software to achieve the economic practice of law. Prerequisite: CIS 2250 or 2380 or equivalent.

LAW 3860 Probate Estates

3 s.h.

Probate administration; Michigan Probate Code; gift taxes; decedents' estates, including determination of assets, federal and state death returns; fiduciary income tax returns; transfer of securities; closing documents.

LAW 3870 Will and Trust Drafting

2 s.h.

3 s.h.

An introduction to the items to be considered in drafting wills and trusts. Inter vivos and testamentary trusts are introduced. Role playing for the initial client interview. Students draft a sample will and participate in a will contest mock trial. Prerequisite: LAW 1010.

LAW 4100 Special Problems in Law 1-3 s.h. (max. 10 s.h.)

Study of selected areas of paralegal practice on a seminar basis.

LAW 4220 Torts: An Overview of Negligence

The fundamentals of tort law with emphasis on application to fact situations encountered in legal practice. Areas covered are intentional interferences and defenses, negligence and defenses, strict liability, product liability, misrepresentation, defamation, wrongful death, medical malpractice, and auto negligence.

LAW 4230 Medical-Legal Concepts and Medical Records 3 s.h.

Practical applications of legal concepts to medical-legal records. Medical terminology and review of medical records are covered.

LAW 4270 Evidence 3 s.h.

Practical use of evidentiary rules in terms of case development and the trial process, including pre-trial discovery plans, trial preparation, and trial assistance.

LAW 4560 Case Preparation and Trial 3 s.

An advanced course in the litigation process. An actual case is developed for trial presentation. Drafting of opening statements, closing statements, and jury instructions are covered. Prerequisite: LAW 1010.

LAW 4580 Alternative Dispute Resolution

An advanced course in the pre-trial litigation process which involves pretrial settlement of lawsuits through facilitated settlement, including such methods as: self-help, agency intervention, arbitration, mediation, negotiation, mini-trials, summary jury trials, and court-ordered ADR. Investigation into a career as a mediator is addressed. Prerequisite: LAW 1010; prerequisite or corequisite: LAW 2570.

LAW 4930/4940 Internship

1-3 s.h.

Demonstration of professional paralegal skills in an employment situation (arranged by the student). Permission of depart ment required. 1 s.h.= 180 hours of work experience; 2 s.h. = 225 hours of work experience; 3 s.h. = 270 hours of work experience. Prerequisite: completion of 24 s.h. of Paralegal classes. (Note: registration for an unpaid situation is LAW 4930; and for a paid situation is LAW 4940.) Corequisite: LAW 4950.

LAW 4950 Legal Seminar

3 s.h.

Capstone course for students with a paralegal or nurse paralegal program. Typically taken the last semester of a student's course of study. Students conduct a legal research and writing assignment, take a pre- and post- ethics quiz, self-assess their current paralegal skills, provide an evaluation of personal and program curriculum, and develop a strategy for continuing legal education. Prerequisite: completion of 24 s.h. of Paralegal classes. Corequisite: LAW 4910 or LAW 4930.

Philosophy (PHL)

PHL 1010 Introduction to Philosophy

3 s.h.

A study of the meaning of philosophy, basic philosophical concepts, terminology, methods, problems, systems, and schools. Core requirement for Pastoral Ministry majors and minors. *Requirement for Religious Studies majors and minors*.

PHL 1050 Philosophy of Person

3 s.h.

An analysis of human experience and nature found through examination of the questions about the nature of reality, knowledge, values, freedom, and destiny. (Recommended for students interested in the human sciences and psychology.)

PHL 1550 Introduction to Ethics (RST)

3 s.h.

Examination of the field of ethics and tools for ethical decision-making. Overview and analysis of significant philosophical approaches to ethical questions, as a basis for study of contemporary ethical issues.

PHL 2010 Logic

3 s.h.

A study of the three acts of the mind: understanding, judgment, and reasoning. Both inductive and deductive reasoning are studied and practiced. The traditional syllogism and the basics of symbolic logic are covered. Course includes a study of informal fallacies.

PHL 2850 Philosophy of Law (RST)

3 s.h

A critical survey of the three basic questions of the philosophy of law, via ontology (What is law?), epistemology (How do we know about law?), and ethics (Why should we obey the law?). Entails a study of what makes a legal system legitimate, the difference between (religious) morality and the law, legal theory, penology, and police ethics.

PHL 2990 Principles of Catholic Social Doctrine (RST*) 3 s.h.

PHL 3150 Existentialism

3 s.h.

A study of the major themes of the philosophical approach of existential phenomenology which forms the intellectual foundation of much of modern thought and literature. (*Recommended for students interested in art, music, and literary criticism.*)

PHL 3310 Philosophy of Science

3 s.h

A study of the philosophy of science, reflecting on the philosophical presuppositions of modern scientific inquiry and a philosophical consideration of the nature of the world in which we live. (Recommended for students interested in science and math.)

PHL 3650 Philosophy of Knowledge

An examination of the philosophical problems connected with the questions of how human beings know what they know, and how they know whether that knowledge is true or not. (*Recommended for students interested in psychology.*)

PHL 3750 Special Topics in Philosophy

1-4 s.h. (max. 9 s.h.)

Focus on specialized topics of philosophical inquiry. Topics vary; may be repeated for credit with a new topic. PHL 1010 may be a prerequisite in some cases.

PHL 4080 Moral Issues in Business (RST*) (Recommended for students interested in business.)

3 s.h.

PHL 4090 Environmental Ethics (RST*)

3 s.h.

(Recommended for students interested in science.)

PHL 4110 Medical Ethics (RST*)

3 s.h.

 $(Recommended\ for\ students\ interested\ in\ health\ care\ and\ aging\ studies.)$

PHL 4150 Philosophy of Religion (RST)

3 s.h.

Study of the relationship between philosophy and religion by highlighting philosophy's role in the inquiry into the validity, value, and meaning of man's concern with the existence and nature of the Ultimate Reality: God. (Recommended for students interested in the liberal arts.)

PHL 4230 Metaphysics (RST)

3 s.h.

The study, from a philosophical perspective, of the core issues of reality: the fundamental constituents of existence; the nature of God, truth, goodness, and the beautiful; with discussion of some of the solutions to metaphysical problems that have been proposed throughout the course of human history. Prerequisite: any other philosophy course or permission of the instructor.

Physical Education (PED)

Physical education activity courses may be repeated, with instructor permis-

sion, up to 4 s.h. for a single course. A maximum of 6 s.h. for all such courses may be counted toward the 120 s.h. of a baccalaureate degree.

PED 1710 Introduction to Hatha Yoga 2 s.h. (max. 4 s.h.)

Introduction to the general philosophy and principles of Hatha Yoga. Students learn the value of yoga postures, relaxation techniques and breathing. Students learn how health and mental function can be positively influenced by regular yoga practice. Particular attention is given to health needs of individual students.

PED 2000 History and Principles of Physical Education 2 s.h.

Survey of the history and principles of Physical Education and how they relate to individuals with diverse needs and cultural val- ues. Emphasis is placed on the promotion of life-long health and happi- ness through physical activity. Students learn strategies for planning instruction and organizing physical activities within the context of the K-12 schools. Prerequisite: WRT 1010 and WRT 1020 or equivalent.

PED 2150 Health and Wellness

3 s.h.

Study of health and wellness and the tools to take responsibility for one's own level of fitness. Emphasis is placed on exer- cise, proper nutrition, and dealing with stress in a positive way. Students learn strategies for planning and organizing proper fitness and nutrition programs. Prerequisites: PED 2000 and BIO 2240.

PED 2280 First Aid and Safety

2 s.h.

The cognitive and practical skills required for basic first aid, artificial respiration, and CPR; including accident and safety awareness and understanding the liability aspects of administering these skills. Extensive "hands-on" laboratory skills are emphasized to prepare for CPR (adult, infant, and child) and First Aid certification through the American Red Cross.

PED 2350 Kinesiology

2 s.h.

Lecture course covering the principles of human motion based on the anatomical and mechanical analysis of the skeletal and

muscular systems, including functional joint classification and muscle actions as prime movers, assistors, and stabilizers. Prerequisite: BIO 2240.

PED 2500 Fitness Principles

1 s.h.

Basic study of health fitness and physical fitness, with attention to nutrition, the major health problems of the United States, behaviors that promote personal health, and the obstacles to changing health behaviors.

PED 3030 Physical Education for the Elementary Classroom Teacher (EDU)

2 s.h.

Designed to prepare elementary classroom teachers to teach physical education. Topics include the physical education curriculum, assessment, motor development, skills, and fitness development. Prerequisites: EDU 2000 and EDU 3460.

PED 3250 Motor Development

2 s h

Survey of motor development issues as they relate to self expression, development, and learning. Emphasis is placed on basic principles of physical, cognitive, social, and emotional development with attention to individual differences. Students learn strategies assessing motor skill development and planning and implementing motor skill development activities. Issues of safety are also addressed. Prerequisites: PED 2000 and BIO 2240.

PED 3350 Adapted Physical Education

2 s.h.

Basic survey of the philosophy and goals of adapted phys- ical education, emphasizing the needs and characteristics of students with disabilities. Students learn strategies for planning and instructing activities for the disabled student. Prerequisites: PED 2000 and BIO 2240.

PED 3400 Physiology of Exercise

3 s.h.

Muscular, metabolic, and cardio-respiratory adaptations of the human body to acute and chronic exercise. Includes laboratory exercises designed for examining physiological response to exercise. Prerequisite: BIO 2240.

PED 3500 Curriculum and Instruction in Physical Education

3 s.h.

An in depth study of curriculum development with emphasis on K-12 Physical Education. Students learn to develop, implement, assess, and modify the curriculum in a manner consistent with best practices. Students explore their roles as advocates for health and wellness as it relates to the community and diverse learners. Prerequisite PED 2000, admission to Teacher Education Program or permission of instructor.

PED 3810 Assessment: Team Sports

2 s.h

The teaching, performance, analysis, and evaluation of selected traditional and non-traditional team activities. For those seeking K-12 Physical Education endorsement. Prerequisite: PED 2000.

PED 3820 Assessment: Individual Sports

The teaching, performance, analysis, and evaluation of

selected fundamental individual and team activities. For those seeking K-12 Physical Education endorsement. Prerequisite: PED 2000.

PED 3830 Movement for Elementary Physical Education

1 s.h.

Designed for physical education majors preparing to teach K-6 physical education. Emphasis on fundamental movement activities. Prerequisite: PED 2000.

PED 4610 Instructional Methods of Teaching Elementary PE

3 s.h

The theory of instruction, methods, and materials for providing physical education for elementary school children. The application of effective instructional theory, planning and practice of physical education, as well as sound decision making and multicultural approaches are

emphasized in the field-based context. Observation of classroom procedures, participation in simulation, and teaching. Students participate in both lecture and laboratory experiences. Prerequisite: PED 3500 and Admission to the Teacher Education Program.

PED 4620 Instructional Methods of Teaching Secondary PE

3 s.h.

The theory of instruction, methods, and materials for providing physical education for secondary students. The application of effective instructional theory, planning and practice of physical education, as well as sound decision making and multicultural approaches are emphasized in the field-based context. Observation of classroom procedures, participation in simulation, and teaching. Students participate in both lecture and laboratory experiences. PED 3500 and Admission to the Teacher Education Program.

PED 4650 Measurement and Evaluation in Physical Education 3 s.h.

The application of tests and measurements in the evaluation process in physical education: evaluations of cognitive and affective learning, motor ability, health-related fitness, physical performance, and different sports skills. Prerequisites: PED 3500 and Admission to the Teacher Education Program.

Physics (PHY)

PHY 2530 General Physics I

4 s.h.

Fundamental methods of mechanics, molecular physics, heat, and sound. Opportunity for experiments at Argonne National Laboratory near Chicago. Lecture 3 hours, laboratory 3 hours. Prerequisites: MTH 1050 and MTH 1060, or MTH 1210, or the equivalent; or departmental approval. (Offered Fall Semester.)

PHY 2540 General Physics II

4 s.h.

Fundamental methods and principles of magnetism, electricity, optics, light, and atomic physics. Opportunity for experiments at Argonne National Laboratory near Chicago. Lecture 3 hours, laboratory 3 hours. Prerequisites: MTH 1050 and MTH 1060, or MTH 1210, or the equivalent; or departmental approval. (Offered Winter Semester.)

PHY 2630 Physics for Scientists and Engineers I 4 s.h.

For students planning to major in engineering, pre-medicine, chemistry, mathematics, and computer science. Motion and Newton's laws, energy, momentum, rigid-body mechanics, gravitation, simple harmonic motion, waves and sound, and thermal physics. Lecture 3 hours, laboratory 3 hours. Prerequisite or corequisite: MTH 2510.

PHY 2640 Physics for Scientists and Engineers II 4 s.h.

For students planning to major in engineering, pre-medicine, chemistry, mathematics, and computer science. Electricity, magnetism, electromagnetic waves, geometrical and wave optics, and the essence of modern physics. Lecture 3 hours, laboratory three hours weekly. Prerequisites: MTH 2510 and PHY 2630.

PHY 2710 Fundamental Electronics

4 s.h.

Study of power and energy of A.C. and D.C. circuits; introduction to diodes, transistors, transducers, and their applications in circuits and modern instruments. Lecture 3 hours, laboratory 3 hours. Prerequisite: PHY 2540 or PHY 2640 or departmental approval.

PHY 3510 Modern Physics: Atomic and Nuclear

Investigation of properties of atoms and the nucleus, the changes under the influence of relativity, and the impact of the quantum theory. Applications of instruments in studying nuclear reactions. Lecture 3 hours, laboratory 3 hours. Prerequisite: PHY 2540 or PHY 2640 or departmental approval.

PHY 4510 Electronics: Digital Techniques

Number systems, digital codes, and Boolean algebra used in analysis of digital logic circuits; logic gates, encoding and decoding; Flip-flops, counters, registers and integrated circuits. Introduction to interfacing. Lecture 3 hours, laboratory 3 hours. Prerequisite: PHY 2540 or PHY 2640 or equivalent; PHY 2710 recommended.

Political Science (PSC)

PSC 1010	World Problems (HIS*)	3 s.h.

PSC 2350 American Judicial Process (CJ*) 3 s.h.

PSC 2510 American Government 4 s.h.

Study of American political structure to include the organization, power, functions and services of national, state and local government and their interdependence in seeking solutions to contemporary social, economic, and political issues.

PSC 3010 International Relations 4 s.h.

Analysis of world politics, sources of foreign policy, dynamics of the existing international system, systematic theorizing about future developments.

PSC 3210 Comparative Politics 4 s.h.

Comparative analysis of political phenomena, emphasizing the interplay of governmental institutions, social-economic-cultural configurations, and patterns of values and ideologies.

PSC 4050	Constitutional Law (CJ*)	3 s.h.

PSC 4510 State and Local Government 4 s.h

Analysis of state and local governments, local political forces, trends in metropolitan and suburban politics, problems in planning in an age of urbanization and governmental relations.

PSC 4631	Global Studies	Modern Africa	(HIS*)	3 s.h.
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PSC 4633 Global Studies: Modern Latin America (HIS*)3 s.h.

PSC 4634 Global Studies: Modern Middle East (HIS*) 3 s.h.

Psychology (PSY)

PSY 1010 General Psychology 3 s.h.

The science of behavior and mental processes: sensation and perception, learning and cognition, motivation, emotion, personality development, adjustment, and maladjustment.

PSY 1020 Controversies in Psychology: A Critical Thinking Approach 4 s.h

Developing a critical thinking approach to reading, discussing, and writing about psychological literature. Recognition and evaluation of assertions, arguments, and evidence, and development in the expression of ideas verbally and in writing. Reading and discussion material on major controversies in the field, such as the role of nature vs. nurture, intelligence testing, repressed memory, continuity vs. change in personality, and the effectiveness of psychotherapy. Prerequisite: PSY 1010.

PSY 1030 Tools for Success in Psychology 1 s.h.

For psychology majors and individuals considering a psychology major. Introduction to the American Psychological Association writing style, library research skills, portfolio requirements in the psychology major, career options in the field of psychology, and ethical principles in psychology. Prerequisite or corequisite: PSY 1010 or PSY 1020.

PSY 2010 Introduction to Alzheimer's Disease and Other Dementias (AGE*)

4 s.h.

PSY 2450 Life-Span Developmental Psychology 4 s.h.

1 s.h.

4 s.h.

Study of the maturational and experiential influences on physical, emotional, intellectual, social, and personality development of the individual, from the prenatal period through late adulthood. Developmental tasks and theories of developmental change related to life stages. Prerequisite: PSY 1010.

PSY 2700 Child Psychology (FCS)

Principles of growth, maturation, and learning relating to child development. Interaction of hereditary and environmental factors influencing the social, cognitive, and personality development of the child. Theories and research relative to the psychology of the child from the prenatal period through late childhood. Prerequisite: PSY

PSY 2760 Psychological Testing and Measurement 3 s.h.

Focus on the key concepts of psychological testing and measurement, including standardization, normative samples, types of reliability and validity, and item analysis. Coverage of psychometric considerations in test construction, different types of tests and their applications, the meaning and limitations of test scores, historical background for the uses and misuses of testing. Ethical, professional, and social considerations in testing are also considered. Prerequisite: PSY 1010.

PSY 2830 Research and Quantitative Methods I 4 s.h.

Developing basic knowledge and skills in conducting sci- entific research in psychology. Emphasis on the scientific method, research ethics, research design. Development of a research proposal. Prerequisite: PSY 1010, PSY 1020, and PSY 1030; prerequisite or corequisite: MTH 2350 or equivalent.

PSY 2840 Research and Quantitative Methods II 4 s.h.

Developing basic knowledge and skills in conducting scientific research in psychology. Emphasis on measurement, descriptive and inferential statistics, and hypothesis testing. Development of an original research paper. Prerequisite: PSY 2830 or permission of instructor.

PSY 3010 Current Topics in Psychology 1 s.h. (max. 2 s.h.)

Reading and discussion of current research articles, focusing on topics in a different area of psychology each week. Topics change each time the course is offered, so it may be re-elected. Prerequisite: PSY 1010.

PSY 3020 Motivational Interviewing 1 s.h.

Training in a person-centered, goal-oriented method of therapeutic intervention developed to uncover and strengthen motivation for positive change. Examination of research supporting the method and experience in the technique and application of the model. Areas of application include behavioral change for health and wellness, improving work relationships, and ambivalence about change. Useful for students in psychology, social work, addiction studies, and in all health care disciplines. Prerequisite: PSY 1010.

PSY 3070 Psychology of Midlife and Aging (AGE*) 3 s.h.

PSY 3100 Health Psychology 3 s.h.

Study of the theory and research on the intersection between mind and body: stress, depression, and physical illness; the psychological impact of illness; empirically supported ways to change habits, such as smoking, overeating, or reluctance to exercise; effective coping mechanisms; placebo effects; mindfulness and relaxation techniques; the impact of class and culture on health, and psychological interventions for pain. Useful for students in health care disciplines and in psychology. Prerequisite: PSY 1010.

PSY 3130 Adolescent Psychology (FCS)

Prerequisite: PSY 1010.

Nature of pre-adolescent and adolescent behavior and its underlying dynamics; systematic study of modern concepts for understanding and dealing with the adolescent and pre-adolescent in our society. Emphasis on normal behavior development as it relates to the physical, emotional, social, and intellectual growth of adolescents.

PSY 3330 Psychological Issues in Child Abuse and Neglect 1 s.h.

From a psychological perspective, examination of why child maltreatment occurs and who commits such acts, the short- and long-term effects of child abuse/neglect, the various treatment strategies employed with abused children and their abusers, and the broad legal and societal issues raised by this phenomenon.

PSY 3340 Self-Destructive Behavior in Adolescent Girls 1 s.h.

The psychological bases for self-destructive behaviors in adolescent girls, including deliberate cutting of the skin, eating disorders, suicide and para-suicide, sexual promiscuity, gang membership, and substance abuse. Avenues for treatment and prevention also discussed.

PSY 3390 Addiction Studies: Dual Diagnosis (AS*) 1 s.h.

PSY 3420 Abnormal Psychology 4 s.h.

Nature of abnormal and deviant behavior and its underlying dynamics; systematic study of modern concepts of diagnosis, understanding, treatment and prevention of abnormal behavior patterns. Emphasis on normal behavior development as delineated by psychopathology. Prerequisite: PSY 1010.

PSY 3460 Addressing Behavior Changes in Dementia 2 s.h.

PSY 3480 Psychosocial Domains of Palliative/End-of-Life Care (HSP*) 3 s.h.

PSY 3490 Psychology of Traumatic Experiences (EM) 1 s.h.

The immediate and long term psychological effects of such traumatic events as abuse, accident, assault, crime, disaster, homicide, and suicide. The reactions of victims, witnesses, and survivors. Issues relevant to helping and healing in the aftermath of trauma are discussed. Prerequisite: PSY 1010.

PSY 3520 Industrial/Organizational Psychology (BUS)

Application of concepts, theories, and methods from psychology to issues in the workplace. Topics include research methods, employee selection and assessment, performance appraisal, training and development, leadership, motivation, job satisfaction, job involvement, organizational structure, and organizational change and development. Prerequisite: PSY 1010.

PSY 3660 Social Psychology 4 s.h.

Focus on the complex ways in which human beings comprehend themselves and their social environment from the psychological and sociological perspectives. Emphasis on social cognition, personality behavior, interpersonal attraction, aggression, attitude formation; the influence of culture and society on prosocial behavior, prejudice, conformity, power, and dynamics of the group. Examines the various re- search methodologies used in both disciplines. Prerequisite: PSY 1010.

PSY 3720 Introduction to Clinical Psychology 3 s.h.

An overview of current issues in the mental health field and an introduction to important skills needed by professionals in their day to day work. Students become familiar with diagnostic approaches, interviewing and clinical data gathering, types of psychological intervention, legal and ethical considerations, and how to recognize, understand and minimize psychologically inevitable gender and cultural biases often encountered in mental health settings. Prerequisite: PSY 3420.

PSY 3750 Mental Health Treatment Theories

3 s.h.

An intensive introduction to the most influential and prevalent treatment methods in the mental health field. Treatment approaches as discreet theoretical systems containing their own philosophical views of the person, conceptualizations of disorder, definitions of cure, and technical prescriptions. Problems in determining the efficacy of treatment approaches also addressed. Prerequisite: PSY 1010.

PSY 3820 Forensic Psychology (CJ)

3 s.h.

How the science of psychology is used by our legal system to better understand situations where an individual's state of mind or psychological functioning may have an impact on the legal process, the distinction between forensic and clinical work, conceptual underpinnings of forensic psychology, and the role of psychology in the legal system and controversies surrounding its use. Career paths and training issues also discussed. Prerequisite: PSY 1010.

PSY 3870 Neurobiology of Drug Addiction (AS*) 1 s.h.

PSY 4220 Theories of Personality 4 s.h.

An overview of the major theories of personality, the role of personality theories in development, how various personality theories can be distinguished from one another, and an evaluation of these theories. Prerequisites: PSY 1010, junior or senior standing.

PSY 4300 Cognitive Psychology 4 s.h.

All aspects of human thinking, including attention, perception, memory, knowledge, language, problem solving, creativity, decision making, and intelligence. Attention given to current research in areas such as mood-dependent memory, the power of suggestion in creating false memories, speed reading, and learning vocabulary, as well as the application of cognitive principles in everyday life. Course includes an on-line laboratory component in which students participate in a variety of experimental studies in various areas of cognitive psychology. Prerequisite: PSY 1010.

PSY 4500 Behavioral Neuroscience (BIO) 4 s.h.

Scientific explanations of the neurobiological basis of behavior and evolution of the brain. Examination of nervous system structure and function; neuron biochemistry and neurotransmission; psychopharmacology; sensory and motor systems, physiological mechanisms influencing circadian rhythms, emotion, learning and memory, neurological disorders, psychological disorders, stress, and drug abuse. Prerequisite: PSY 1010.

PSY 4700, 4710 Mental Health Field Placement and Seminar I. II 5, 5 s.h.

An 8-hour-per-week intensive field placement experience in a clinical setting, to develop students' clinical interaction skills and prepare them for jobs in the mental health field. Includes a weekly, three-hour seminar which augments supervision provided at the placement sites and provides additional support for students: developing the ability to understand clinical material, documenting interactions, presenting clinical observations, and preparing case reports and assessments. Prerequisites: PSY 4700 requires PSY 3720 pre- or co-requisite and permission of the instructor. PSY 4710 requires PSY 4700.

PSY 4840 Ethical Professional Practices (AS*/SW) 1 s.h.

PSY 4850, 4860 Advanced Research and Quantitative Methods I, II

In preparation for graduate studies, students develop advanced knowledge and skills in conducting scientific research in psychology. Emphasis placed on critical review and analysis of the scientific method, research ethics, research design, and measurement. Descriptive and inferential statistics are reviewed, and multivariate statistical techniques are introduced. Application and synthesis for each student involving the development of a research proposal that qualifies as original research. Prerequisite: PSY 2840.

PSY 4950 Seminar in Psychology

2 s.h. The capstone of the Psychology Major. A review and consolidation of material covered throughout the major. Preparation of a portfolio, including refining work completed for courses in the major and reflective writing on the departmental goals for the major. Includes focus on graduate school preparation and continued professional development. Prerequisite: senior standing.

Quality and Operations Management (QOM)

QOM 3560 Teaming

To study the concepts and practice the skills for functioning and leading as family teams, cross-functional teams, task forces, and ad hoc teams for continuous improvement. Focus on goals, roles, communication, problem solving, decision making, planning, conflict management, innovation, and facilitating meetings.

QOM 3630 Materials and Purchasing Management 3 s.h.

Relationship and coordination of purchasing to other business functions. Includes qualitative and quantitative procedures for determining need, selection of sources, storage of materials. Prerequisites: MGT 2360; MTH 2350 or QS 3550.

QOM 4230 Quality and Process Improvement Techniques

Study of continuous process improvement, process management, and quality management systems. Includes case studies and group work which explore data analysis tools and methods, including SPC, flowcharting, and root-causes analysis. Students define, analyze, and evaluate a process in a workplace setting, preparing a final report outlining the process and recommending process improvement. Prerequisite: QS 3550.

Quantitative Systems (QS)

Applied Business Statistics

Applied study of computerized statistical analyses as they relate to general business operations. Statistical procedures include descriptive statistics, t-test, ANOVA, two-way ANOVA, chi-square, simple correlation. Case study methodology is heavily employed. A computerized data analysis project which uses a minimum of two statistical tests is required. Prerequisites: CIS 2380, MTH 2350, and junior standing.

QS 4220 Human Resources Selection, Tests, and Measurements 3 s.h.

Study of occupational/attitudinal surveying, testing, and evaluation: studies of validity, reliability, internal/external designs, item analysis, factor analysis, quantitative and qualitative analytical approaches. Course work includes measurement and development of instrumentation as applied to business-related issues. Students design and implement an original instrument applicable to either the private or public sector. Prerequisites: MGT 2360 and QS 3550.

OS 4230 Marketing Research 3 s.h.

Study of both consumer and industrial marketing research, covering areas of problem definition, survey design, sampling questionnaires, data collection, quantitative and qualitative analysis, graphics design, and report writing/presenting. A high level of analytical expertise is required: students complete an original market research study and offer a formal presentation. Prerequisites: MKT 2440 and QS 3550.

Radiography (RT)

8 s.h.

Clinical practice in JRCERT radiographic technology/ nuclear medicine program. Prerequisite: departmental approval.

RT 1150 Radiography II

8 s.h.

Clinical practice in JRCERT radiographic technology/ nuclear medicine program. Prerequisite: departmental approval.

RT 1500 Radiography III

8 s.h.

Clinical practice in JRCERT radiographic technology/ nuclear medicine program. Prerequisite: departmental approval.

RT 2000 Radiography IV

8 s.h.

Clinical practice in JRCRT radiographic technology/ nuclear medicine program. Prerequisite: departmental approval.

Religious Studies (RST)

RST 1330 Survey of Christianity

3 s.h.

A survey of Christianity, its origins, teachings, customs, and rituals, as well as its historical highlights and impact on world beliefs.

RST 1450 Survey of Western Religions

3 s.h.

A survey of religions of the Western hemisphere, with particular focus on Judaism, Christianity, and Islam, their historical backgrounds, religious beliefs, liturgies, customs, and values.

RST 1460 Survey of Eastern Religions

3 s.h.

A survey of the major religious traditions of Asia, including Hinduism, Sikhism, Jainism, Buddhism, Inner Asian Shamanism, Confucianism, Taoism, and Shinto; their historical backgrounds, cultural contexts, beliefs, meanings, values, and customs.

3 s.h.

Study of the doctrines, practices, and persons formed by and reflective of the Catholic tradition in history and the Vatican II ecumenical experience.

RST 1550 Introduction to Ethics (PHL*)

3 s.h.

RST 2150 History of the Church

3 s.h.

An examination of the history of the Church from its earliest beginnings in Palestine through the Second Vatican Council. All major and significant episodes of the history of the Church are covered, with more in-depth study of the Crusades and the Protestant Reformation. Students are also provided some familiarity with Christian thinkers who have made significant contributions to Church doctrine and theology.

RST 2240 Theology of Ministry

3 s.h.

A study of the biblical foundations, theology, history, and development of the Christian concept of "ministry" or service with focus on the apostolate and contributions of the laity in the life of the Church, the priestly ministry, and lay ecclesial ministry.

RST 2560 Old Testament: Torah and Historical

3 s.h.

An in-depth study of the Hebrew Scriptures, from the Pentateuch to the historical writings, with special focus on major historical events that form the foundation of Judaism, and on Old Testament theological themes of creation, election, exodus, covenant, exile, monotheism, and fidelity.

RST 2570 Old Testament: Prophets and Wisdom Literature

3 s.h.

A study of the Books of the Prophets and the Wisdom and Deuterocanonical Literature, with an emphasis on their historical background, role in the development of Judaism, and theological significance. Particular focus on Old Testament themes of election, covenant, exile, monotheism, faithfulness, and justice.

RST 2580 New Testament: The Four Gospels

3 s.h.

A study of the historical development and foundations of the four Gospels, with special focus on themes and theological perspectives unique to each and on the distinctive approaches of the four evangelists to the life, message, death, and resurrection of Jesus Christ.

RST 2590 New Testament: Acts, Epistles, and Revelation

3 s.h.

A study of the development of the Christian Church in the first century A.D., of the epistles that reflect its unique concerns, and of the historical background, symbolism, and theology of the Book of Revelation.

RST 2850 Philosophy of Law (PHL*)

3 s.h.

RST 2990 Principles of Catholic Social Doctrine (PHL) 3 s.h.

An examination of the major principles of Catholic social doctrine through a study of papal and episcopal documents. Focus on the ways in which Catholic social justice teachings are applied and shape law, culture, politics, and social policy.

RST 3030 Spirituality of Aging (AGE*)

1 s.h.

RST 3100 Franciscan Values, Social Justice, and Service 3 s.h.

Study of the life and legacy of Francis of Assisi as a prism for exploring social justice issues, the Catholic way of looking at the world and human existence, and key Franciscan values. Reflection upon the meaning and implications of this legacy for addressing contemporary issues, such as ecological responsibility, and the call to peace, justice, and respect for all persons. May include an academic service-learning experience.

RST 3150 Christian Spirituality

3 s.h.

Study of the Christian experience of the relationship between God and God's people as reflected in the history of the Christian religion. Examination of the major schools and figures that have contributed to Christian approaches to union with God through the practice of the Christian life, prayer, mysticism, and contemplation.

RST 3220 Catholic Moral Theology

Focus on Catholic moral decision making and the Catholic moral tradition. Examination of the scriptural and natural law foundation for morality, the freedom of the will, and the objective good, with an in-depth comparison of modern moral theories such as proportionate good, situation ethics, etc., with the school of moral absolutes. Consideration of such topics as sexual morality, contraception, abortion, the ethics of war and self-defense, truth-telling, and conscience and the formation of conscience.

RST 3310 Mary, the Madonna, Woman of Faith

3 s.h.

A study of Mary's role and significance in the covenant of redemption, with an examination of Mary in Scripture, Church teaching and tradition, prayer, liturgy, art, and music.

RST 3400 Jesus Across the Millennia

3 s.h.

A scriptural, historical, and theological investigation of Jesus of Nazareth and of his impact on history, including in relation to both historical and contemporary social and cultural developments.

RST 3410 Sustainability: Vision and Values (IDS*)

3 s.h. 3 s.h.

RST 3490 Worship and Sacraments Overview of the historical, theological, spiritual, and cultural aspects of the Christian worship of God with a focus on the meaning of Christian prayer, symbols, and ritual. Includes an examination of the biblical roots and development of the seven sacraments of the Church.

RST 3500 Spiritual and Ethical Considerations in Palliative/Endof-Life Care (HSP*)

RST 3530 Marriage and the Family (FCS/SOC)

4 s.h.

Marriage and family studied from the Biblical, theological, economic, technological, and sociological aspects. (Interdisciplinary.) Prerequisite: junior or senior status.

RST 3610 Pastoral Counseling

3 s.h.

Introduction to the field of pastoral care and counseling. A presentation of theological, pastoral, and psychological foundations of pastoral care and counseling; investigation of skills and techniques for this special type of caregiving; and analysis of various areas of need typically encountered by those involved in pastoral ministry.

RST 3750 Special Topics in Religious Studies

1-4 s.h. (max. 6 s.h.)

Focus on specialized topics in the areas of religious studies, theology, or pastoral ministry. Prerequisites vary. Topics vary; may be repeated for credit with a new topic.

RST 3802 Palliative/End-of-Life Issues: A Lourdes Experience (HSP*)

3 s.h.

RST 4080 Moral Issues in Business (PHL)

3 s.h.

Review traditional philosophical theories of ethics; examine principles of Christian morality, particularly those dealing with ethics from a Catholic perspective; investigate areas in the American marketplace that raise ethical concerns (e.g., injustices in the American economic system).

RST 4090 Environmental Ethics (PHL)

3 s.h.

A study of moral/ethical dilemmas of equitable and responsible stewardship over creation. Judeo-Christian/Franciscan, non-western perspectives of contemporary issues of war and peace, abundance and want, stewardship and domination, excess and poverty, etc., are explored.

RST 4110 Medical Ethics (PHL)

3 s.h.

An academic study of contemporary moral issues relative to modern health care, life science, and future issues in the light of Judeo-Christian convictions. Prerequisite: junior or senior status.

RST 4140 Life/Death Issues

4 s.h.

Intensive study of death, bereavement, grief, and mourning. In addition to physical death, topics include alienation, aging, separation, personal violation, and social and phenomenological death. Prerequisite: junior or senior status.

RST 4150 Philosophy of Religion (PHL*)

3 s.h. 3 s.h.

RST 4160 Ecclesiology

Examination of the theology of Church: its nature, founding, authority, scriptural foundations and background, its communal structure, sacramental nature, salvific purpose, relation to the Incarnation, Mary, and the Eucharist, and the role of the laity.

RST 4170 Church Music (MUS*)

2 s.h.

RST 4220 Christian Awareness

3 s.h.

A study of the New Testament challenge to wholeness based on the command to love God, self, and others. Contemporary helps and hindrances to that quest examined in the light of ecumenical developments.

RST 4230 Metaphysics (PHL*)

3 s.h.

RST 4240 Christology

An exploration of the person of Christ and his salvific mission, tracing the development of christological thought over the centuries, through the biblical materials, the work of theologians.

ciliar decisions, modern and contemporary discussions, and ecumenical dialogue.

RST 4930, 4940 Internship

1-3 s.h. each

Participation in a service-oriented capacity in an apostolate, ministry, or parish, usually lasting a semester. Written reflection on the experience. Prerequisite: permission from the department chair.

RST 4950 Senior Seminar: Sharing Your Faith 3 s.h.

The capstone course for Pastoral Ministry majors, focusing on the student's preparation for practical involvement in church-related service or other relevant forms of ministry. Students complete a field experience and document, evaluate, and reflect on actual involvement in pastoral ministry.

RST 4960 Senior Thesis

1 c h

A 20-25-page thesis on a topic of theology, written during senior year and required for graduation in the Religious Studies major. Prerequisite: prior approval of topic by the department chair.

Sign Language Studies (SLS)

SLS 1000 Sign Language in Society

3 c h

A survey of American Sign Language and Deaf culture. Emphasis on Sign language structure, history, and usage. Discussion of a sociocultural perspective of Deaf people, including readings from anthropology, sociology, linguistics, and education. Includes an examination of American attitudes toward Sign language and Deaf culture. *May be used in partial fulfillment of general education Goal GE-5B*.

SLS 1010, SLS 1020 Beginning American Sign Language I, II

4, 4 s.h.

Development of basic ASL communication skills with appropriate vocabulary and grammatical structures. Emphasis on communicative and linguistic functions. Prerequisite or corequisite to SLS 1010: SLS 1000. Prerequisite to SLS 1020: SLS 1010. Thirty hours of laboratory practicum required for SLS 1010, 1020. *Note: 3 s.h. of SLS language courses may be used in fulfillment of general education Goal GE-6.*

SLS 2010 Intermediate American Sign Language I 4 s.h.

First level of immediate instruction and review of ASL grammatical features with further development of communication functions at the intermediate level. Prerequisite: SLS 1020 or placement. *Thirty hours of laboratory practicum required for SLS 2010*.

SLS 2020 Intermediate American Sign Language II 4 s.h.

Second level of immediate instruction and review of ASL grammatical features with further development of communication functions at the intermediate level. Prerequisite: SLS 2010 or placement. Thirty hours of laboratory practicum required for SLS 2020.

SLS 2110 Orientation to Deafness 3 s.h.

A survey of clinical and developmental aspects of hearing and deafness. Includes discussion of basic audiology, deaf education, and communicative implications of hearing loss. Prerequisite: SLS 1000.

SLS 2310 Deaf Culture 3 s.l

A survey of sociocultural factors that define Deaf persons as members of a cultural minority. Examination of Deaf history, exploration of cultural characteristics of Deaf persons, and an examination of contributions of Deaf persons to American society. Corequisite: SLS 2020. May be used in partial fulfillment of general education Goal GE-5B.

SLS 2450 Deafness and Community Resources 3 s.h.

History and evolution of community resource development as a contributing force behind social change within the Deaf Community. Covers topics such as education, vocational rehabilitation services, community mental health programs for Deaf persons, and community service agencies (national, state, and local). Prerequisite:

SLS 1000.

SLS 3010 Advanced American Sign Language I

Advanced American Sign Language development with a focus on English and ASL content and text analysis to increase student vocabulary and understanding of ASL syntactical patterns. Communicative dialogues will emphasize sociocultural aspects of deafness. Prerequisite: SLS 2020 or departmental approval.

SLS 3020 Advanced American Sign Language II 3 s.h.

Continued advanced ASL development with further emphasis on sociocultural and historical considerations of deaf heritage. Prerequisite: SLS 3010 or departmental approval.

SLS 3290 Fingerspelling and Numbers in ASL

Concentrated instruction in practice of fingerspelling, numbering, and loan signs at increasing levels of complexity. Corequisite: SLS 2020 or placement.

SLS 3410 Fundamentals of Interpretation and Transliteration

3 s.h.

2 s.h.

Introduction to the theory, practice, and criticism of interpretation and transliteration: simultaneous and consecutive. Study of various models of the interpreting and transliterating processes, problems of linguistic and communicative equivalence, historical foundations, and professional issues. Prerequisite: cumulative GPA of 3.0 in SLS courses; departmental approval.

SLS 3470 Deaf People and the Law

2 s.h.

Presents the history and evolution of civil rights laws affecting individuals in the Deaf Community and the impact on integration into society. Details federal laws, such as the Americans with Disabilities Act, as well as state special education laws, laws governing interpreters, housing, employment and other related laws and regulations that affect the daily lives of Deaf citizens.

SLS 3810 American Sign Language: Registers 3 s.h.

An examination of the impact of register (frozen, informal, formal, consultative, and intimate) on language. Emphasis on identification and practice of vocabulary and grammatical constructs specific to a variety of situations and registers in ASL, with exploration of parallels in English. Prerequisite: SLS 3010.

SLS 4010 American Sign Language: Discourse 3

Ongoing interaction in Sign Language. Students are required to prepare lectures, presentations (informative, descriptive, etc.), and conduct interviews in American Sign Language. Prerequisite: SLS 3020 or departmental approval.

SLS 4040 ASL Literature and Drama 3 s.h.

The use of American Sign Language as a form of story-telling, poetry, and drama. ASL literature is analyzed and incorporated as part of receptive/expressive language development and advanced skills enhancement. Includes exploration of the canons of Deaf literature and drama. Prerequisites: SLS 3020 and/or departmental approval.

SLS 4220 Sign Language Structure 4 s.h.

Analysis of the symbolic and linguistic structure of American Sign Language and other Sign systems. Includes aspects of phonology, morphology, syntax, semantics, grammar, and discourse. Examination of bilingual and bicultural practices, sociolinguistics, and related research. Prerequisites: SLS 3010 and/or departmental approval.

SLS 4250 Contrastive Text Analysis: ASL and English for Interpreters

Analysis of various texts in ASL and English to identify structures unique to one language or the other. Problems of translation and/or interpretation. Includes discussion of cross-cultural communication between deaf and hearing cultures. Prerequisite: SLS 3020.

3 s.h.

SLS 4450 Simultaneous Interpretation for Interpreters 3 s.h

A practical course in the process of interpreting from ASL to English and from English to ASL. Emphasis is on a sociolinguistic model of interpretation. Related linguistic processes are examined. Prerequisites: SLS 3410.

SLS 4610 Voice to Sign: Interpreting Laboratory

Development of skills in voice to Sign interpreting. Audio- and videotaped discourse is interpreted into ASL, and recorded and analyzed with the instructor. Prerequisites: SLS 3410; cumulative 3.0 average within SLS department, and/or departmental approval.

SLS 4710 Selected Seminar Topics 1 s.h. (max. 4 s.h.)

Workshops or seminars include topics related to the Deaf community, Deaf culture, Sign Language, education, and related issues. (May be repeated for credit, as topics vary.)

SLS 4750 Interpreting in Specialized Settings

1-3 s.h. (max. 6 s.h.)

3 s.h.

2 s.h.

Emphasis on specialized settings in which interpreters are expected to function. A range of interpreting settings and situations is examined, such as: deaf/blind, hospital/medical, religious, and community-based situations. Prerequisite: SLS 3410.

SLS 4810 Sign to Voice: Interpreting Laboratory 3 s.h.

Focus on Sign to voice interpreting. Videotapes and inclass speakers provide interpreting exercises for the student. Sign to voice techniques discussed and put into practice. Prerequisites: SLS 3410; cumulative 3.0 average within SLS department, and/or departmental approval.

SLS 4850 Advanced Interpreting Laboratory

A targeted, in-depth synthesis of voice-to-sign/sign-to-voice skills for both interpreting and transliterating. Includes individual and peer assessment through analysis of weekly laboratory assignments. Discussion and practice of specialized techniques and settings, such as team interpreting, video relay interpreting, and sight interpreting. Prerequisites: SLS 4610 and SLS 4810, or departmental approval.

SLS 4900 Interpreter Assessment and Credentialing 2 s.h.

Preparation for state and national certification examinations for professional interpreters. Exposure to the written and performance testing experience. Requires successful completion of state written examination and completion of national written qualifying examination. (Examination fees include membership in the Michigan Registry of Interpreters for the Deaf and the Registry of Interpreters for the Deaf.) Includes opportunities for students to experience simulated examinations. Corequisite: SLS 4610 and SLS 4810, or departmental approval.

SLS 4930 Field Observation 2 s

Observation of sign language interpretation within the community in a variety of settings including educational, religious, medical, legal, corporate, and others. Corequisite: SLS 4450 and departmental approval.

SLS 4940 Field Practicum: ASL Interpreting 2 s.h.

Practicum conducted in settings equipped to provide application of interpreting/transliterating principles. Includes in-depth experiences in delivering interpreting services within the confines of state and national law. Provides experiences with various age groups, language preferences, and interpreting models reflective of current practices in the profession. Requires guided reflection with instructor on regular basis. Prerequisite: SLS 4930.

SLS 4941 Field Placement: Deaf Community Studies 3 s.h.

Observation and practicum in community-based service organizations and agencies, educational programs, vocational rehabilitation, or related areas. Documentation of placement-related experi-

ences with on-site personnel. Requires guided reflection with instructor on regular basis. Prerequisite: SLS 2450 and SLS 3470, and departmental approval.

SLS 4950 Senior Seminar

2 s.h.

Capstone course for senior-level students in the Department of Sign Language Studies. Students construct electronic/video portfolios of their academic and professional work in the respective areas of concentration (either Deaf Studies or Interpreting). After passing a written comprehensive examination, the culminating demonstration of students' program accomplishments is made through a presentation to peers and faculty. To be taken in the student's final academic year of the program.

Social Science (SSC)

SSC 3070 Social Studies Foundations (EDU)

3 s.h.

Interdisciplinary course comprising selected topics in Economics, Geography, History, Political Science, and Sociology integrated into an overview of the structure of the respective disciplines and designed to provide solid content background and resources for elementary school teachers. Prerequisites: SOC 1010, and PSC 2510 or GEO 3010.

SSC 3080 The Nature and Scope of Inquiry

3-4 s.h.

Theme-based, highly interactive interdisciplinary course designed to enable students to explore the different approaches and ways of knowing that contribute to understanding and resolving complex issues, problems, or dilemmas of contemporary life. Utilizing the different modes of inquiry which characterize the various disciplines, the course involves students in readings, discussions, works of art, lectures by experts, team collaboration, and independent research. The course focuses on a compelling theme and is designed to develop the commitment to intellectual inquiry, humanistic values, and service to others as embodied in the mission of Madonna University.

SSC 3110	Do Animals Matter? (HUM*)	4 s.h.
330 3110	Do Allinais Matter: (HUM')	4 5.11.

SSC 4300 Humane Studies (HUM*) 3 s.h.

SSC 4950 History and Social Science Seminar (HIS*) 4 s.l

Theoretical and philosophical foundations of history and the social sciences, including a paper or project reflecting methodological skills. Prerequisite: senior status in the major.

Social Work (SW)

SW 2140 Conflict Resolution (SOC*/EDU) 1 s.h.

SW 2160 Empathy Listening Skills (SOC)

1 s.h.

Instruction and practice in the establishment of rapport with individuals through the use of empathic listening skills. The material is presented in the context of developing a helping relationship.

SW 2290 Tools for Success in Social Work and Sociology (SOC)

1 s.h.

For social work and sociology majors or individuals considering either major. Introduces American Psychological Association (APA) writing style, forms of professional writing required in social work generalist practice, elements of effective oral communication, library research and technology skills, resources available for success in the Social Work or Sociology Programs. Includes University - required Writing Assessment for students needing to complete this requirement. Prerequisite or corequisite (for social work majors only): SW 2300. Prerequisite or corequisite (for sociology majors only): SOC 2210. Course is graded as a S/F.

SW 2300 Introduction to Social Work

Introduces the profession of Social Work, the roles of the generalist social work practitioner, and the profession's Code of Ethics. Emphasizes client systems from a strengths perspective and the positive value of diversity and difference. Explores the profession's historical development, commitment to human rights and social and economic justice, current trends, and acquaints students with fields of practice. Stresses self-assessment and critical thinking skills to determine suitability for a career in social work. Includes a 30-hour academic service-learning experience. Prerequisite or corequisite (for social work majors only): SW 2290.

SW 3010 Special Topics in Social

Vork 1-3 s.h. (max. 10 s.h.)

Specialized topics of interest related to social work practice. Open to majors and non-majors.

SW 3400 Human Behavior and the Social Environment I

3 s.h.

First of two courses examining biological, social, cultural, psychological, spiritual perspectives of human behavior, emphasizing interaction of these dimensions as they impact social functioning within the ecological systems framework. Introduces concepts of context and environment, diversity and difference, oppression, poverty, marginalization and alienation, privilege and power, as they shape human experience and identity. Includes reflection on developmental influences affecting student's own values, world view, and professional development. Prerequisites: BIO 1010 or BIO 2240; PSY 1010; SOC 1010; prerequisite or corequisite: SW 2300.

SW 3410 Human Behavior and the Social Environment II

3 s.h.

Second of two courses examining dimensions of human behavior and the social environment. Builds upon theories and approaches presented in SW 3400: HBSE I, with a focus on human behavior development across the life course and the social system's role in promoting or deterring health and well-being. Further explores intersection of diversity and difference, social justice and oppression as relates to a person's life experiences. Stresses positive value of human diversity in social work practice. Prerequisite: SW 3400 with a grade of C (2.0) or better.

SW 3450 Practice Methods I: Individuals 3 s.

First in a sequence of four methods courses grounded in the generalist model of social work practice. Orients to the application of engagement, assessment, evidence-based intervention, and evaluation with individuals. Focuses on diversity, difference, and the utilization of knowledge, skills, and values in social work with individuals. Prerequisites: BIO 1010 or BIO 2240; PSY 1010, and SOC 1010; prerequisites or corequisites: SW 2300 and SW 3400.

SW 3700 Practice Methods II: Groups and Families 4 s.h

Second in a sequence of four methods courses grounded in the generalist model of social work practice. Applies knowledge, skills, and values in working with families and groups. Interprets human behavior within the context of a family's or group's culture, ethnicity, worldview, strengths, developmental stages, and challenges within a systems theory framework. Develops practice skills and methods for engaging, assessing, intervening, and evaluating with families and groups. Includes a 30-hour academic service-learning experience. Prerequisite: SW 3400 with a grade of C (2.0) or better.

SW 3960 Social Research Methods (SOC) 4 s.h.

Prepares students to become educated consumers of evidence-based social work and social science research to inform and improve practice, policy, and social service delivery. Orients to scientific and ethical approaches to building knowledge through the use of quantitative and qualitative research processes. Emphasizes importance of understanding ethical considerations when conducting research with human subjects. Prerequisites: CIS 2380; SW 2300 (for social work majors only), SOC 2210 (for sociology majors only).

SW 4260 Social Welfare History and Policy

4 s.h.

3 s.h.

Explores the profession's social welfare system from a philosophical and historical basis and examines the characteristics of contemporary social welfare policy in the United States. Critically analyzes major social policies and identifies how international, federal, state, local, and agency-based policy influences social work practice and delivery. Examines strategies for changing policy with particular emphasis on social justice, human rights, and vulnerable populations. The course includes a mandatory policy-focused field day. Prerequisites: PSC 2510 and admission to the Social Work Program.

SW 4350 Practice Methods III: Organizations

Third in a sequence of four methods courses grounded in the generalist model of social work practice. Analyzes organizational characteristics and behaviors in preparation for advancing effective service delivery. Develops practice skills and methods for engaging, assessing, and intervening in organizations and agencies, including resource development and program evaluation. Focuses on effective, ethical, and professional practice within human service agencies and organizations. Prerequisites: SW 3410, SW 3700, and admission to the Social Work Program.

SW 4700 Practice Methods IV: Communities (SOC) 3 s.h.

Fourth in a sequence of four methods courses grounded in the generalist model of social work practice. Examines perspectives and structures of community, focusing on oppression, discrimination, poverty, marginalization, alienation, factors of diversity and difference as well as sources of privilege and power as they impact social wellbeing. Emphasizes the application of planned change processes at the community level in response to changing contexts and needs to promote social and economic justice, and to advance the equitable distribution of basic human rights and resources. Prerequisite: SW 4350 for Social Work Students or SOC 1010 for all other students.

SW 4750 Senior Integrative Capstone

3 s.h.

Using critical thinking to integrate social work knowledge, skills, theory, evidence, and values relating to person-in-environment. The course builds upon all previous courses and field internships in the curriculum, using a multi-level analysis and reflection process on professional self and population of engagement. Taken concurrently with the second semester of field placement. Corequisites: SW 4900 and SW 4950.

SW 4800, 4900 Field Practicum I, II 4, 4 s.h.

Field education component involving 200 clock hours per term of direct service taken concurrently with Field Seminar (SW 4850 and SW 4950). This is the "signature pedagogy" of social work education. Working under social work supervision, students apply the knowledge, skills, and values of generalist social work practice with client systems of all sizes. Refining of skills to engage, assess, intervene, and evaluate within the profession's values and ethics. Provision of a structured learning opportunity to integrate theory and practice in the role of social work practitioner. Prerequisites: all junior-level social work courses. Prerequisites or corequisites for SW 4800: SW 4260, SW 4350; corequisite for SW 4800: SW 4850. Prerequisites or corequisites for SW 4900: SW 4950. Formal admission to Field Practicum is required.

SW 4840 Ethical Professional Practices (AS*/PSY) 1 s.h.

SW 4850, 4950 Field Practicum Seminar I, II 2, 2 s.h.

Integrative seminar taken concurrently with Field Practicum I and II (SW 4800 and SW 4900). Students reflect upon experiences and challenges of field practicum. Focus is on evaluating and supporting the integration and application of knowledge, skills, and values of generalist social work practice from course work to field. Students demonstrate the professional use of self, self-awareness, and

appreciation for diversity and difference. Agency data, reports, and forms are reviewed to further develop skills in research and in program and practice evaluation strategies. Prerequisites: all junior-level social work courses. Prerequisites or corequisites for SW 4850: SW 4260, SW 4350; corequisite for SW 4850: SW 4800. Prerequisites or corequisites for SW 4950: SW 4700, SW 4750; corequisite for SW 4950: SW 4900.

Sociology (SOC)

SOC 1010 Introduction to Sociology

Foundations and principles of social order, social control, social institutions, and social life in America and other cultures. Focus on how people's conditions, character, and life chances are influenced by organizations and institutions. Emphasis on critical thinking about practices and beliefs in a variety of social contexts.

SOC 1300 Introduction to Community Leadership

Examination of various avenues to civic involvement and their importance in maintaining civil society, with an introduction to the communitarian philosophy and to principles and best practices in service-learning. Designed to prepare students to get the most out of their community service experiences. This course includes a 15-hour academic service-learning experience.

SOC 2140 Conflict Resolution (EDU/SW) 1 s.h.

Introduces students to 21st century non-violent conflict resolution skills and knowledge. The class addresses non-violence, attitudes towards conflict, conflict styles, macro and micro levels of conflict processes, diversity, and methods of conflict resolution. The focus is interpersonal conflict resolution in the home and work.

SOC 2160 Empathy Listening Skills (SW*)

1 s.h.

SOC 2210 Social Problems

4 s.h.

Analysis of major social issues/problems in the US and globally from a sociological perspective. Consideration of national and international implications. Focus on issues of stratification (social class, race, gender), deviance, industrial conflict, warfare, environmental pollution, and consumption. Analyses of specific social movements that respond to political and economic contradictions. Focus areas may include: media and public opinion; social inequality and justice; social control and deviance; and belief, religion, and science. May include an academic service-learning component.

SOC 2290 Tools for Success in Social Work and Sociology (SW*)

1 s.h.

SOC 3120 Diversity, Discrimination, and Social Justice 3 s.h.

Issues of diversity, discrimination, and social justice with particular attention given to institutions that provide human services (sociology, criminal justice, nursing, gerontology, social work, psychology, education): how marginalized populations (e.g. race/ethnicity, religion, age, gender, sexual orientation, social class, medical/mental disability) are socially constructed; how these groups have been affected in the contexts of social stratification; institutional and structural discrimination; how economic, political, and cultural systems pose challenges to these marginalized groups; exploration of possible solutions.

SOC 3130 Sociology of the Family

3 s.h.

Analysis of the family as a major social institution, with consideration of the way forms of the family vary cross-culturally. Examination of how political and economic developments affect the family. Topics include: ethnic and social class variations in structure, patterns of mate selection, parenthood, parent-child interactions, divorce, and changing gender roles.

SOC 3210 Principles of Criminology (CJ*/FOR)

SOC 3230 Juvenile Justice (CJ*)

SOC 3250 Women and Violence

3 s.h. 2 s.h.

An examination of selected types of violence in women's lives. Analysis of the social factors influencing women's deviance, victimization, and criminality. Focus on the relationship between gender roles and violence, as well as the most common forms of violent behav- ior women encounter, such as rape, domestic battery, and prostitution.

SOC 3530 Marriage and the Family (RST*/FCS)

4 s.h. 3 s.h.

SOC 3620 Society and Health: Sociological Perspectives

Individual and group responses to the meaning of the sick role and well-being, provider-patient relationships, structure of health care organizations, and issues of inequality within health care institutions. Topics include the effects of age, race, gender and socioeconomic status on health and wellness; the interrelationships between healers, patients and social institutions. Topics are examined through the sociological perspectives of conflict theory, functionalism, and symbolic interactionism.

SOC 3710 Special Topics in Sociology 1-3 s.h. (max. 3 s.h.)

Analyses of current issues and topics from a sociological perspective. Normally offered in a weekend format.

SOC 3800 Sex and Gender Roles

3 s.h.

An examination of the idea of socially constructed gender roles and how these roles changed historically in response to internal contradictions, as well as political and economic forces such as the women's movement. Perspectives included from disciplines such as history, biology, anthropology, psychology, political science, and economics. Discussion of the interaction of race, ethnicity, social class, and sexual orientation with gender roles with an emphasis on multiculturalism and globalism.

SOC 3950 Social Theory

3 s.h.

An examination of classical and contemporary sociological theory as related to understanding social changes and research methodology. Focus on how theory provides the basis for interpreting the human condition, addressing social problems, and conducting empirical research regarding human behavior. Students examine and evaluate strategies for the improvement of society. Prerequisite: SOC 1010, SOC 2210.

SOC 3960 Social Research Methods (SW*)

4 s.h.

SOC 4000 Proposal Writing and Grant Administration (AGE*/EM)

2 s.h. 3 s.h.

SOC 4700 Practice Methods IV: Communities (SW*)

SOC 4890 Seminar in Community Leadership 3 s.h.

To prepare student for active civic engagement and eventual leadership. Purposeful civic learning through the student's servicelearning leadership placement and the creation of a Community Leadership Portfolio. Analysis of the role of civic engagement and community involvement in the maintenance of civil society. This course includes a 30-hour academic service-learning experience. Prerequisites: SOC 1300, SOC 3120, SOC 3420.

SOC 4900 Applied Social Research Methods

2 s.h.

Application of qualitative and quantitative research methods in sociology and related social science disciplines utilizing the scientific method. Students have an opportunity to participate in the completion of a community-based research project and gain the practical experience needed in applied sociology. Major areas of sociological concern include the nature, scope, and logic of social changes. The course includes an exploration of specific strategies to improve society. Prerequisite: SW 3960.

SOC 4930 Sociology Internship

2 s.h.

Professionally supervised practical experience (75 hours) in an approved setting, focusing on behavior of the individual, small groups, and community. Extends the student's sociological knowledge and skill base and provides an opportunity for students to synthesize theory with practice while gaining practical work experience. To be taken in the final academic year of the program.

SOC 4950 Sociology Seminar

2 s.h.

Capstone course for the sociology major. A review and consolidation of material covered throughout the major. Preparation of electronic portfolios of academic and professional work, including refining work completed for courses in the major. Includes focus on graduate school preparation and continued professional development. To be taken in the final academic year of the program.

Spanish (SPA)

SPA 1010, 1020 Elementary Spanish I, II

4. 4 s.h.

Basic skills for mastery of the Spanish language: listening, speaking, reading, and writing, with a focus on grammatical structures and syntax. To be taken in sequence. Prerequisite for SPA 1020: SPA 1010.

SPA 1110 Spanish for Criminal Justice (CJ)

3 s.h.

A combination of language and cross-cultural training to prepare students to communicate effectively with Hispanic populations in the U.S. Students develop a beginning level of fluency in Spanish and explore cross-cultural and socio-economic factors that influence the behavior of Hispanic communities across the United States. *No credit toward a major or minor in Spanish. May be used toward partial fulfillment of general education Goal GE-5B.*

SPA 2230, 2240 Intermediate Spanish I, II

, 3 s.

Development of the ability to communicate in Spanish with a focus on vocabulary building, grammar, reading, writing, and conversation. To be taken in sequence. Prerequisite for SPA 2230: SPA 1020. Prerequisite for SPA 2240: SPA 2230.

SPA 2700 Project: Written/Oral Spanish 2

Spanish project allowing a student to strengthen written and oral skills for language proficiency. The project is designed to fit individual needs. In Spanish. Prerequisite or corequisite: SPA 2240.

SPA 3010 Business Spanish

3 s.h

Prepares students with an intermediate level of Spanish to use Spanish in professional situations. Special attention to technical and commercial practices that require an advanced command of Spanish (e.g., business communications, public presentations, and cultural etiquette). Opportunity for shadowing in a Spanish-speaking business. In Spanish. Prerequisite: SPA 2240.

SPA 3250 Cultures of Spain and Spanish America

Study of the language and cultures of the people of Spain, Latin America, and the Spanish-speaking Caribbean. Emphasis on their diversity, artistic manifestations (including. art, literature, music), immigration, politics, and their shared cultural history. In Spanish. Prerequisite: SPA 2240.

SPA 3260 Cultures of Latinos in the U.S. 3 s.

Study of the language and cultures of Latinos living in the United States. Emphasis on their diversity, artistic manifestations (including art, literature, music), immigration, and politics. Students conduct interviews with members of Latino communities in the U.S. In Spanish. Prerequisite: SPA 2240.

SPA 3310 Oral and Written Composition

4 s.h.

Applied advanced grammar, giving practice in original composition with emphasis on developing skill in employing natural, everyday expressions in speaking and writing through the use of correct idiomatic Spanish. In Spanish. Prerequisite: SPA 2240.

SPA 3620 Special Topics

1 s.h. (max. 2 s.h.)

Directed study by an advanced student pursuing an area of interest within the Spanish program (e.g., literary analysis, cultural analysis). Designed to fit the individual interests of the advanced student. In Spanish. Prerequisite: SPA 2240 and permission of instructor.

SPA 4100 Survey of Literature in Spanish

4 s.h.

A survey course of Peninsular and Latin American literature readings in Spanish: selected literary masterpieces from the Middle Ages to the present. Emphasis on the continued development of linguistic skills. In Spanish. Prerequisite: SPA 3310.

SPA 4300 Spanish Linguistics

3 s.h.

Study of aspects of the Spanish language: the structure of sounds, meanings of words, how words and sentences are organized, and how it is used in society. In Spanish. Prerequisite: SPA 3310.

SPA 4400 Spanish Language and Culture in the U.S. 3 s.h.

The sociolinguistics of the Spanish spoken in the United States: study of the Spanish language and the Latino culture within the social contexts of the Latino communities in the United States. The course includes a research component. May include an academic service-learning experience. In Spanish. Prerequisite: SPA 3310.

SPA 4620 Independent Research

2 s.h.

Undergraduate research under faculty supervision. The student initiates and pursues a research project of an aspect of the Spanish language within the context of education and prepares a proposal to submit for presentation at the Michigan World Languages Association (MIWLA) annual conference or at another professional organization. Prerequisite: SPA 4300 and approval of the Spanish advisor.

SPA 4802 Study Abroad: Topics in the Community 2 s.h.

Focus on a selected topic from contemporary issues and constructs facing the people of Spain and Spanish America, such as family system, gender construct, indigenous resistance, immigration, religion, social class, and education, and on how these issues are influenced by cultural, political, historical, and economic contexts. Students participate in a short-term study abroad experience where they will have the opportunity to interact with Spanish speakers, conduct observations, and complete interviews. In Spanish. Prerequisites: SPA 3310 and approval of Spanish advisor.

Speech Communication

See listings under Communication Studies (COM).

Sport Management (SM)

SM 1100 Introduction to Sport Management (BUS) 3 s.h.

Exploration and analysis of sport and recreation from philosophical, historical, and organizational perspectives. Introduction to the field of sport management, examining professional opportunities available, résumé writing, and professional networking in the field.

SM 2100 Media Relations in Sport (JRN)

3 s.h.

The practical application of various techniques and strategies used in developing good public relations in and through sport. Communications and public relations theories and methods are presented and common public relations issues are analyzed in the professional, intercollegiate, and commercial sport industries.

SM 2300 Social Issues in Sport Management

Analysis of critical issues and controversies in sport including the influences that social attitudes, media, politics, and the economy have on various sports institutions from childhood play to professional athletes. Includes perspectives on religion, deviance, violence, race, gender, and social class in sport.

SM 2930 Practicum in Sport/Recreation 1-3 s.h.

Hands-on work experience in the sport or leisure industry. Application of practical knowledge of introductory sport management principles in an approved, supervised sport- or recreation-specific assignment. Prerequisite: SM 1100 and 24 semester hours in major completed.

SM 3100 Facility Design and Event Management

The processes for managing sport and event enterprises. Specific attention given to the design and management of a sport facility as well as the skills and processes associated with administration of a sport event, whether it be participant-centered or spectator-centered. Prerequisite: SM 1100.

SM 3300 Sport Marketing (MKT)

An in-depth analysis of the various techniques and strategies of marketing in the sport environment. Basic marketing concepts examined, with applications to the uniqueness of the sport and leisure industry: event marketing, sponsorship, licensing, sport information, and public relations. Prerequisite: SM 1100.

SM 4100 Legal and Ethical Aspects of Sport (BUS) 3 s.h.

An analysis of the legal and ethical aspects of the sport environment. Topics include negligence; liability; control of amateur, professional, and school sport; violence/crowd control; product liability; risk management; and selected current issues. Prerequisites: SM 1100 and BL 3300.

SM 4260 Club Management (HMG*/MGT)

SM 4300 Budgeting and Financing of Sport (FIN) 3 s.h.

An analysis of financial concepts and theories and their application in the professional, intercollegiate, recreational, and commercial sport environments. Topics include revenues and expenses of professional, intercollegiate, and private sport industries; issues impacting these revenues and expenses; budgeting methods; economic impact; fundraising at the intercollegiate level; ownership in sport; and public and private funding for non-profit sport programs. Prerequisites: SM 1100 and ACC 2000.

Gender and Race in Sport SM 4500

3 s.h. Socially constructed categories of class, race, and gender, and their influence on perceptions of the body. The impact these categories have on institutionalization, practice, and representation of sport and leisure is discussed, with an emphasis on promoting unbiased and non-prejudicial sport and leisure environments. Prerequisites: SM 1100 and SM 2300.

SM 4930 **Sport Management Internship** 3 s.h.

On-the-job experiences with the application of principles and techniques that have been presented in course work in the sport management program. Approximately 400 clock hours, including periodic consultation with a university supervisor. Prerequisite: senior standing and at least 24 credits in the Sport Management major. Corequisite: SM 4950.

SM 4950 **Seminar in Sport Management** 2 s.h.

In this capstone seminar, students integrate their internship experiences in sport management with the relevant theoretical knowledge. Classroom discussion focuses on the practical application ofthese theories and their relevance to the "real world." Prerequisite:

Senior standing and at least 24 credits in the Sport Management major. Corequisite: SM 4930.

Study Abroad

3 s.h.

3 s.h.

3 s.h.

Study Abroad

1-4 s.h. (max. 14 s.h.)

Study topics designed as the focus of international experiences shorter than three weeks. May be repeated for credit. Course numbers may be used with any course rubric.

X803 Study Abroad

1-4 s.h. (max. 14 s.h.)

Study topics designed as the focus of international experiences of more than three weeks, including but not limited to the offering of Madonna University courses at an international location. May be repeated for credit. Course numbers may be used with any course rubric.

Television and Video Communications

See listings under Broadcast and Cinema Arts (BCA).

University (UNV)

UNV 1010 Transition to Higher Education

1 s.h.

Interactive course designed to address transition issues first-year students face when entering the University: introduction to thought-provoking, challenging, and interesting ideas to enhance critical thinking, research, writing, and presentation skills; engagement in a community of learners; and reflection on a service-learning experience that fulfills the University's mission of service. The culminating assignment is a structured debate, which students prepare for throughout the course. Includes an academic service-learning experience. Required of all students under age 24 transferring in fewer than 13 s.h. of college credit (excluding Advanced Placement, dual enrollment, International Baccalaureate, and early college credits). Students who complete a semester of Intensive English as a Second Language are excused from this requirement.

World Languages (WL)

WL 2100 **Communication and Culture for Health Care Professionals**

Culturally based concepts of health and illness among diverse populations are studied to facilitate understanding of differences in global human health conditions for the purpose of providing culturally competent health care. Basic foreign language for health care is included.

WL 2710 Language Acquisition

3 s.h.

A survey course on the fundamentals of second language acquisition. Issues pertaining to syntax, semantics, and phonology; contrasts of first- and second-language acquisition as well as social and infrastructural factors that affect the learning process (monolingual vs. bilingual societies, monoglossia vs. diglossia, cultural capital).

WL 4900 **Language Immersion Service-Learning**

Immersion experience (minimum 30 clock hours) in a community-based organization where use of the target language and cultural knowledge is required. Development of oral and written language skills in actual use. Reflective exploration of community service and civic responsibility in lifetime perspective. Prerequisite: high-intermediate proficiency in the target language and permission of the department.

World Language Study

Madonna University offers majors and minors in American Sign Language and Spanish (see under these listings), a Certificate of Completion in Chinese, and an introductory course in Japanese. Students who wish to study a language not being taught at Madonna University should see their major advisor or the Office of Academic Advising to arrange Consortium registration at the University of Detroit Mercy or Marygrove College, or see the Center for Study Abroad to discuss opportunities for international study.

Writing (WRT)

WRT 1000 Writing Workshop

1-3 s.h. (max. 3 s.h.)

Individualized instruction for students developing college-level writing skills. Working with tutors in the Writing Center for a prescribed number of hours per week is a requirement for this course. May be repeated for a maximum of three semester hours. (Does not apply to any major or minor in the Language, Literature, Communication, and Writing department.)

WRT 1010 College Composition I

3 s.h.

Study and practice of strategies for academic writing, with a focus on writing and reading descriptive, narrative, and expository essays. Emphasis on writing as a process. Introduction to information literacy. Prerequisite: placement by Madonna University Writing Assessment Program. (Does not apply to any major or minor in the Language, Literature, Communication, and Writing department.)

WRT 1020 College Composition II

3 s.h.

Study and practice of strategies for academic writing, with a focus on writing and reading persuasive and argumentative essays. Continued emphasis on writing as a process. Development of information literacy skills, as applied to writing a substantial research paper. An exit portfolio, to be scored by at least two Composition instructors, is required for successful completion of the course. Prerequisite: WRT 1010 or placement by Madonna University Writing Assessment Program. (Does not apply to any major or minor in the Language, Literature, Communication, and Writing department.)

WRT 1150 Writing Review

1-3 s.h. (max. 3 s.h.)

Individualized instruction for transfer students who would benefit from a review of college-level writing and research skills. Working with tutors in the Writing Center for a prescribed number of hours per week is a requirement for this course. May be repeated for a maximum of three semester hours. (Does not apply to any major or minor in the Language, Literature, Communication, and Writing department.)

WRT 1320 News Reporting (JRN*)

3 s.h.

WRT 2050 Creative Writing

3 s.h.

Writing and study of poetry, fiction, and plays at an introductory level. Includes discussion, writers' workshops, and regular conferences with the instructor. Students contribute to the production of a class electronic publication. Prerequisite: WRT 1020.

WRT 2440 Technical Writing

3 s.l

Theory and application of technical writing principles. Topics include an introduction to the technical communication environment, ethical and legal considerations, the basics of writing and analyzing technical documents, collaborative writing, and design principles for documents and Web sites. Students create a variety of technical documents for inclusion in their final e-portfolios. Prerequisite: WRT 1020 or equivalent.

WRT 3100 Advanced Composition

3 s.h.

Advanced study and application of the rhetorical elements of invention, form, and style in nonfiction writing. Emphasis on strategy and style in appealing to a variety of audiences. Class meetings include writers' workshop format. Prerequisite: WRT 1020.

WRT 3250 Writing Creative Nonfiction

ls.h.

Exploration of the craft of creative nonfiction, concentrating on rhetorical features and borrowings from other literary genres. Writing memoir, poetic essays, literary journalism, essays of place, or literary approaches to narrative in scientific writing. Students share work in progress and render feedback on the work in progress of others. Pre-requisite: WRT 2050.

WRT 3260 Business and Professional Writing (BUS) 3 s.h.

A study of the strategies and stylistic devices which lead to clear, concise, and complete business writing. Various types of business letters, memoranda, proposals, and reports are examined and developed. Prerequisite: WRT 1020.

WRT 3440 Advanced Technical Writing

3 s.h.

Continued study and application of technical writing principles. Topics include communicating persuasively, designing documents and Web sites, using graphics, evaluating and testing documents and Web sites, and learning key applications for creating a variety of technical documents. Introduction to technical communication software. Students create a variety of technical documents for inclusion in their final e-portfolios. Prerequisite: WRT 2440 or equivalent.

WRT 3490 Publication Software for Technical Writers 3 s.h.

In-depth learning in the use of technical communication software with multi-channel, multi-device publishing capabilities: developing standards-compliant content, publishing this content in various formats, working collaboratively on writing projects, incorporating images, and adding demos and simulations. Students create a variety of technical documents, using principles and strategies learned in the technical writing course sequence, for inclusion in their final e-portfolios. Prerequisite: WRT 3440.

WRT 4000 Rhetorical Theory and Criticism (COM) 4 s.h.

Survey of Western rhetorical theory from Classical times to the present; analysis and criticism of major theoretical and philosophical concepts concerning persuasion in speaking and writing. The influence of rhetoric on political, social, and individual thought and action.

WRT 4750 Topics in Writing 1-4 s.h. (max. 8 s.h.)

Advanced writing experience focusing on a single genre. Includes writing experience, the study of professional texts, participation in small-group writing workshops, and individual conferences with instructor. May be repeated in new topic for credit. Prerequisite: WRT 2050 or departmental approval.

WRT 4910 Cooperative Education in Writing 3 s.h.

On-campus or on-the-job experience (paid) with professional writing assignments. Includes bi-monthly discussion of co-op experiences with peers and regularly scheduled consultations with the instructor. Prerequisite: WRT 3440.

WRT 4930 Writing Practicum

3 s.h.

On-campus or on-the-job experience (unpaid) with professional writing assignments. Includes bi-monthly discussion of coop experiences with peers and regularly scheduled consultations with the instructor. Prerequisite: WRT 3440.

WRT 4950 Senior Seminar: Writing for Publication 3 s.h.

Advanced course in freelance and literary writing for authors working on all types of manuscripts: fiction, nonfiction, and poetry. A guided but individualized study of the student's chosen literary form. Includes advanced study of effective writing techniques, marketing information, and strategies for publication. *Must be taken in final twenty hours of the degree program*.

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- Ronald Urso, Accounting; B.B.A., Davenport University; M.S. Fin., Walsh College.
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- **Peter Wilson**, Criminal Justice; B.S., Michigan State University; M.A., University of Michigan.
- Richard Witkowski, Educational Leadership; B.S., Michigan State University; M.S., Walsh College; M.A., Ph.D., University of Michigan.
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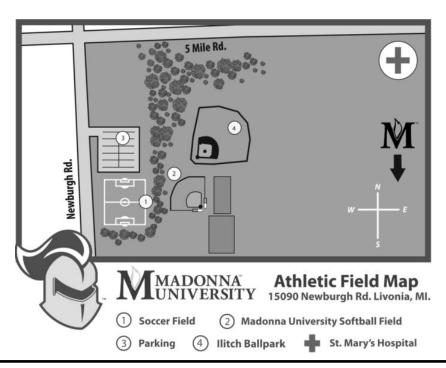
Telephone Directory

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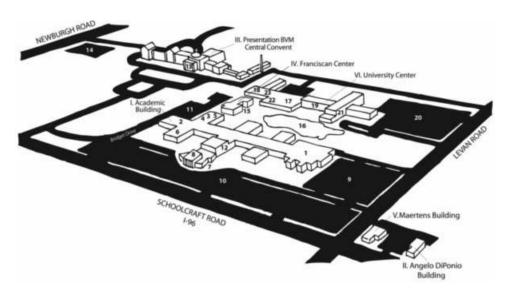
SAFETY and EMERGENCY (734) 432-5442

Academic Advising and Prior Learning (734) 432-5417
College of Arts and Humanities
School of Business
College of Education(734) 432-5655
College of Nursing and Health
Nursing Simulation Practice Laboratory(734) 432-5596
College of Science and Mathematics(734) 432-5523
College of Social Sciences
Graduate School(734) 432-5667
Admissions Office(734) 432-5339
Nursing Admissions
Macomb University Center
44575 Garfield Road, Clinton Township 48038
SWEEP, Livonia
SWEEP, Southwest Detroit(313) 965-5334
5716 Michigan Avenue (at 35th Street), Detroit 48210
Financial Aid(734) 432-5663
Office of the Registrar(734) 432-5400
Student Accounts
Office of the Vice-President for Student Affairs
and Mission Integration(734) 432-5881
Alumni Office
Addin Office(/34) 432-3011

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LIVONIA CAMPUS



I. Academic Building

- 1. Activities Center
- 2. Administration
- 3. Alumni Office
- 4. Bookstore
- 5. Psychology Clinic
- 6. Ford Motor Company Technology Wing
- 7. Kresge Hall
- 8. Library
- 9. Parking Lot East

- 10. Parking Lot South
- 11. Parking Lot West
- 12. Science Lecture Hall
- II. Angelo DiPonio Building

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III. Felician Sisters Presentation BVM Central Convent

- 13. Presentation BVM Chapel
- 14. Parking Lot Central Convent

V. Franciscan Center for Science and Media

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- 15. Cardinals Square
- 16. St. Francis Pond

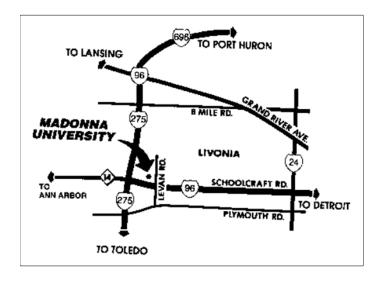
V. Maertens Building

School of Business; Outreach and Distance Learning Office; Livonia SWEEP Office; Classrooms M101-M132

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- 21. Residence Hall
- 22. University Center Classrooms (ground floor)
- 23. University Chapel (ground floor)

DRIVING MAPS



LIVONIA CAMPUS

Madonna University is located east of the I-96 and I-275 intersection

36600 Schoolcraft Road Livonia, Michigan 48150 (734) 432-5300