

# Undergraduate Course Catalog

2019-2020



**Manchester**  
University

At Manchester, we do some things differently than other colleges and universities. First, we welcome you to be yourself. Then, we encourage you to discover your best self.

The process is a journey of self-discovery on which you'll learn about yourself and make friends from many walks of life. You'll learn from differences and why it's important to listen respectfully to other views. You'll explore new ideas and new places.

And while the journey is yours to make, you'll find as much support as you need along the way.

By the time you graduate, you'll be equipped for productive careers and leadership in your communities. And you'll be ready to make the world a better place – because that's what Manchester graduates do.

In this University Catalog you'll find:

- Our mission and values
- Majors, minors, certificates and courses
- Graduation requirements
- Faculty
- Campus facilities
- Lots of “nuts and bolts” information about MU

For other questions not answered in this catalog, don't hesitate to ask. Asking questions is how we all learn and our faculty and staff are eager to help you. At Manchester, we'll know your name. And we'll help you discover your great potential.

Dave McFadden  
President



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## **2019 - 2020 Calendar**

### **FALL SEMESTER 2019**

Aug	21	New Faculty Workshop
	22 -23	Faculty Workshop
	24-27	New Student Welcome Week
	28	Classes Begin
Oct	7-8	Fall Break (classes resume 8 a.m. Oct 9)
	12	Homecoming
	16	End of first half of the semester
	17	Beginning of second half of the semester
Nov	27-Dec 1	Thanksgiving Recess (classes dismiss 6 p.m. Nov. 26; classes resume 8 am Dec 2)
Dec	6	Classes End
	9	Reading Day – No exams or classes
	10-13	Final Examinations
	13	End of Semester

### **JANUARY SESSION 2020**

Jan	2	Classes begin
	22	Session ends

### **SPRING SEMESTER 2020**

Jan	28	Classes Begin
March	13	End of first half of the semester
	14-22	Spring Break (classes dismiss 6 p.m. March 13; classes resume 8 a.m. March 23)
	23	Beginning of second half of the semester
April	10	Good Friday Holiday (classes dismiss 6 p.m. April 9, classes resume 8 a.m. April 13)
May	8	Classes End
	11	Reading Day – No exams or classes
	12-15	Final examinations
	15	End of Semester
	16	Commencement ceremonies
June	2-4	Alumni Days

### **SUMMER SESSIONS 2020**

Session 1: May 20-June 30

Session 2: July 1-Aug 11

## THE INSTITUTION

### Mission and Values Statements

#### **Mission Statement**

Manchester University respects the infinite worth of every individual and graduates persons of ability and conviction who draw upon their education and faith to lead principled, productive and compassionate lives that improve the human condition.

#### **Values Statement**

As a primarily undergraduate, residential, liberal arts community rooted in the tradition of the Church of the Brethren, Manchester University values:

**Learning**, because high academic expectations in an environment combining liberal arts and professional preparation equip graduates to live healthy, productive and principled lives;

**Faith**, because our diverse faiths call us to make the world a kinder and better place, establish justice, build peace amid strife, and model lives of agape (selfless love), tikkun olam (repairing a broken world), and salam (peace);

**Service**, because committing self in service to others connects faith with action and abilities with convictions;

**Integrity**, because honesty and trust are the foundations of teaching and learning, enriching, enduring relationships, and strong communities;

**Diversity**, because understanding differences develops respect for ethnic, cultural and religious pluralism; an international consciousness; and an appreciation for the infinite worth of every person; and

**Community**, because a positive community sharpens self-identity, promotes acceptance of the demands of responsible citizenship, and transforms conflict into mutual respect.

### Origins and Traditions

Manchester University traces its origin to the Roanoke Classical Seminary founded by the United Brethren Church in Roanoke, Ind., in 1860. The Seminary became Manchester College in 1889, when it was moved to North Manchester, Ind. In 1895, the campus was purchased by representatives of the Church of the Brethren, who deeded it to four state districts of the Church in 1902. The number of supporting districts increased until, by 1932, Manchester served the five-state area of Indiana, Ohio, Michigan, Illinois and Wisconsin.

Rapid growth of the public high school and increasing interest in higher education resulted in a gradual shift of emphasis from an academy and Bible school to a college of liberal arts. The academy was discontinued in 1923.

Mount Morris College in Mount Morris, Ill., merged with Manchester College in 1932. Founded as a Methodist seminary in 1839, Mount Morris had been purchased by representatives of the Church of the Brethren in 1879 and operated as the Rock River Seminary and College Institute until 1884, when the name was changed to Mount Morris College. The merger of Mount Morris College and Manchester College came about when the

Church of the Brethren decided its educational program would be strengthened by pooling its resources in fewer colleges. Manchester College changed to Manchester University on July 1, 2012.

The relationship of Manchester University with the Church of the Brethren continues. The University accents this relationship and welcomes students of all faiths.

### **Accreditation**

Manchester University is accredited by The Higher Learning Commission and has been a member of the North Central Association of Colleges and Schools (230 South LaSalle Street, Suite 7-500, Chicago, IL 60604; 800-621-7440; [www.hlcommission.org](http://www.hlcommission.org)) since 1932.

### **State of Indiana**

Manchester University is authorized by name in statute as an approved institution of higher education in the state of Indiana. In full compliance with federal rules, please contact the Indiana Commission for Higher Education following the steps outlined here for Indiana's higher education complaint resolution process.

### **Pharmacy Program Accreditation**

Manchester University's Doctor of Pharmacy Program is accredited with the Accreditation Council for Pharmacy Education, 2135 South LaSalle Street, Suite 4100, Chicago, IL 60503; 312/644-3575; FAX 312/664-4652; [www.acpe-accredit.org](http://www.acpe-accredit.org)),

### **Teacher Education Accreditation**

The baccalaureate level teacher education program is accredited by the Indiana Professional Standards Board and by the National Council for Accreditation of Teacher Education.

### **Social Work Accreditation**

The baccalaureate level social work program is accredited by the Council on Social Work Education.

### **Athletic Training Accreditation**

The undergraduate and graduate level Athletic Training programs are accredited by the Commission on Accreditation of Athletic Training Education (CAATE). The undergraduate program has been placed on Probation as of February 24, 2017, by the CAATE (6850 Austin Center Blvd., Suite 100, Austin, TX 78731-3101)

### **Non-discrimination Statement**

Manchester University is committed to non-discrimination in campus life. The University does not discriminate on the basis of national origin, ancestry, race, color, age, sex, gender identity or expression, sexual orientation, familial status, religion, disability or veteran status in admissions or any area of campus life, including its educational programs, scholarships and loan awards, residence life programs, athletic programs, extracurricular programs, promotion and tenure policies and practice, and alumni affairs.

Manchester University is committed to carry out the provisions of Section 504 of the Rehabilitation Act of 1973 and the Americans With Disabilities Act, which provide for accessibility of University programs to the physically disabled.

## **ACADEMIC PROGRAMS**

Manchester University seeks to develop in each student an appreciation for learning through an academic foundation grounded in the disciplines and in-depth study in specific majors. This combination prepares students for graduate school, the professions and positions of leadership in all areas of society. A broad-based, flexible general education curriculum in the liberal arts provides the most appropriate formal preparation to:

- meet contemporary challenges,
- fulfill career goals,
- lead a purposeful, healthy and rewarding life and
- serve society as a responsible citizen.

### **Degrees Offered**

Manchester University offers programs leading to the Associate of Arts, the Bachelor of Arts, the Bachelor of Science, the Master of Athletic Training, the Master of Science in Pharmacogenomics and the Doctor of Pharmacy degrees. Each program combines a core of liberal arts courses, a concentration in a specific major and elective courses.

The University does not guarantee graduation to any student who does not complete requirements for a degree or a major.

The graduate degree requirements are outlined in the [Graduate Studies Bulletin](#). The Doctor of Pharmacy requirements are outlined in the [Pharmacy Bulletin](#).

### **The Baccalaureate Degree**

The baccalaureate degree requires the satisfactory completion of:

1. A minimum of 120 semester hours of credit to include:
  - a. Core Program requirements for the degree sought.
  - b. A major field of study with a minimum average grade point of C (2.00) in those courses counted toward the major, excluding any courses taken Pass/ Not Pass.
  - c. A minimum average grade point of C (2.00) in those courses counted toward a minor if a minor is completed.
2. A minimum cumulative grade point of C (2.00), excluding any courses taken Pass/ Not Pass.
3. The residence requirement consists of either a minimum of 90 semester hours or 30 of the last 36 semester hours of credit toward the degree earned through Manchester University. Credits earned in approved study abroad programs are considered Manchester University credits.

### **Academic Major and Minor**

A student's program must include a major. A minor is optional.

#### **The Major**

The major is a grouping of courses in one subject area, sometimes with the addition of related courses from other disciplines to provide depth in one academic area. All degree candidates must complete at least one major. Students may complete more than one major if all requirements for each major are met. The concentration is an area of emphasis within a major. Each major must include at least 9 semester hours of courses that are not included in any other major or minor.



Students must elect a major by the end of the sophomore year. Instructions for electing a major are available from the department chair of the intended major.

### **The Minor**

The minor field of study is an option provided to complement study in a major field or to develop a special area of interest. Each minor must include at least 9 semester hours of courses that are not included in any other major or minor.

### **Senior Comprehensive Evaluation (SCE)**

Each academic major includes a senior comprehensive evaluation (SCE), which every student must complete to graduate. The comprehensive evaluation is a learning/assessment experience, consistent with the learning goals of the major. Each department will provide students with information about the structure of the SCE, how it will be evaluated and procedures for remediation.

### **Second Degree**

Requirements for a second baccalaureate degree are:

1. A minimum of 32 additional semester hours of credit earned at Manchester University.
2. A minimum cumulative grade point average of 2.00, excluding any courses taken Pass/Not Pass.
3. Completion of Core Program requirements for the degree sought.
4. Completion of a major field of study, distinct from the major field in the first degree, with a minimum average grade point of 2.00 in those courses counted toward the major.
5. Conferral of the second degree at a commencement other than the one in which the first degree is conferred.

### **Fields of Study**

For details of majors, minors, concentrations and course descriptions, consult departmental listings.

### **Program Areas**

The following is for listing purposes only. All areas of study can be found in the Major/Minor Fields of Study section.

Accounting	International Studies (minor only)
Adapted Physical Activity (minor only)	Journalism (minor only)
Art	Libraries and Literacies (ASA only)
Athletic Training	Marketing
	Mathematics
Biology	Mediation and Conflict Resolution (ASA only)
Biology-Chemistry	Medical Technology
Business Management	Modern Languages
Chemistry	Music
Communication Studies	Peace Studies
Criminology	Philosophy
Data Science (minor only)	
Economics	Physics
Education	Political Science
Engineering Science	Pre-pharmacy
English	Professional Sales



Environmental Studies	Psychology
Entrepreneurship (minor only)	Queer Advocacy (ASA only)
Exercise Science and Fitness	Religious Studies
Finance	Scientific Computing (ASA only)
French (minor only)	Social Work
Gender Studies (minor only)	Sociology
Gerontology (minor only)	Software Engineering
German (minor only)	
	Spanish
Global Health	
Health Communications	
	Sport Management
History	
Individualized Interdisciplinary Major	Teaching English to Speakers of Other Languages (minor only)
Interfaith Literacy (ASA only)	

### **Pre-Professional Study**

Manchester University students may plan a combined liberal arts/professional curriculum in preparation for graduate programs. Also, students may complete a degree in selected majors by combining three years of course work at Manchester with credit earned at a regionally-accredited professional school.

Careers commonly approached through pre-professional curriculum include:

Athletic Training	Ministry
Dentistry	Pharmacy
Engineering	Physical Therapy
Law	Veterinary Medicine
Medicine	

All areas of study can be found in the Major/Minor Fields of Study section.

### **The Associate of Arts Degree**

#### **Graduation Requirements**

The Associate of Arts degree requires the satisfactory completion of:

1. A minimum of 60 semester hours of credit to include:
  - a. Core Program requirements.
  - b. An approved major with a minimum average grade point of C (2.00) in those courses counted toward a major, excluding any courses taken Pass/Not Pass.
2. A minimum cumulative grade point average of C (2.00), excluding any courses taken Pass/Not Pass.
3. A minimum of 30 semester hours earned through Manchester University.

An associate degree cannot be received in the same commencement as a baccalaureate degree if the major of the associate program is available as a minor in the baccalaureate program. For a student to receive both an associate degree and a baccalaureate degree in similar majors, the associate degree must be received prior to the baccalaureate degree.

The Associate of Arts degree is available in the following areas:

Criminology  
Gerontology

All course work in the Associate of Arts program is of baccalaureate degree level and has a liberal arts orientation rather than a purely vocational base. All credits earned are applicable to a baccalaureate degree at Manchester University.

## **Special Learning Opportunities**

### **January Session**

January session is designed so students concentrate on one course. This allows participation in one of the many classes offered on and off campus in the United States and internationally. On-campus options include regular classes as well as specially-designed classes. The maximum January session student load is one academic and one physical education activity, applied communication studies, or music ensemble course, not to exceed 4.5 semester hours.

Manchester University does not transfer tuition for students who enroll at another institution during January session, although information about colleges with which Manchester has formal tuition exchange programs is available in the Office of the Registrar.

### **Values, Ideas and the Arts (VIA)**

The Values, Ideas and the Arts (VIA) program is integrated into the Core curriculum and provides an array of events that embody Manchester's values statement. The program is coordinated with the following goals in mind: broadening students' cultural experiences, enriching students intellectually and aesthetically, providing opportunities to experience the arts and promoting dialogue about ideas and values.

Events include presentations, debates, and musical and dramatic performances by guests and on-campus organizations.

### **Honors Program**

The Honors Program at Manchester University engages students with a high level of interest, initiative, and ability to challenge themselves intellectually, to understand the interdependence of knowledge, and to lead and serve on campus and in the community in order that they may lead principled, productive, and compassionate lives. Honors recognition may be earned by students who have a cumulative grade point average of 3.50 or better and who convert the appropriate number of course hours. Students may receive 1 of 3 different levels of Honors recognition, depending on the number of honors courses they have completed.

#### Eligibility:

First-year students who are awarded a Presidential Scholarship or top-level Ability and Interest Scholarship are invited to submit an essay application for admission into the Honors Program. The essays will be reviewed by the members of the Undergraduate Honors Committee for acceptance into the Honors Program. Two of these students will be awarded the Honors Scholarship and as a result are required to be active members in the Honors Program in order to maintain their award.

Upper-class and transfer students with grade point averages of 3.50 or higher and with at least 14+ credit hours can apply to the Honors Program by contacting the Director of the Honors Program. These students must complete an essay application and must obtain a recommendation from a current or former faculty member to be considered for acceptance into the Honors Program. Transfer students are allowed to ask faculty members from another institution to complete the recommendation form.

In order to maintain membership in the Honors Program it is required that students keep a cumulative GPA of 3.5 or higher and convert at least one honors course a year (including IDIV 395/IDIV 495). Students whose cumulative grade point average falls in the threshold of 3.30-3.49 will be in a probationary period for 1 semester in order to raise the GPA to 3.5. If they do

not, their honors designation will be removed from their record. If students meet the requirement during another term, they can re-apply and continue to progress in the Honors Program.

#### Honors courses:

First year honors students are highly encouraged to take the Honors First Year Seminar (FYS) and to convert courses to Honors. A conversion should provide a student with an alternative, preferably more challenging, way of accomplishing the goals of the course. The Honors assignment can build upon a current assignment or could add to the student's learning and discovery in the course. The goal of the conversion is to challenge the student by exploring complex perspectives and interdisciplinary ideas through classroom opportunities. All course work completed in the Honors Program will be identified on the student's record.

#### Graduation from the Honors Program:

Students may receive 1 of 3 different levels of Honors recognition, depending on the number of honors courses they have completed. Honors courses cannot be taken on a Pass/No Pass basis.

- 1) *Honors and Achievement*: This recognition is given to the student who has maintained a cumulative 3.5 GPA and who has completed a minimum of 18 hours of honors coursework (9 hours outside of major, 6 hours in major, and 3 honors thesis). The student will be recognized at the undergraduate commencement ceremony with an Honors Program medallion.
- 2) *Honors*: This is given to students who have maintained a cumulative 3.5 GPA and who have completed a minimum of 12 hours of honors coursework (can include FYS-H). At least 6 hours of coursework must be at the 300-400 level. The student will be recognized at the commencement ceremony with honors cords.
- 3) *Achievement*: This is for a student who has maintained a cumulative 3.5 GPA and completes the 3 hours of Honors Thesis but does not complete the required number of honors courses to qualify for Honors. To qualify for this recognition, students must apply no later than the beginning of their senior year and must have a strong recommendation from an instructor and department chair. Students will be recognized at commencement with an Honors Program lapel pin.

#### **Peace Studies Institute**

The Peace Studies Institute offers public programs, visiting speakers and performers, conferences and workshops on peace and justice issues. A joint student-faculty-staff committee directs the Institute's program, which is supported primarily by the Sam and Marla Ropchan Endowment for Peace Studies.

#### **Practica, Field Experiences and Internships**

Because actual experience is an excellent teacher, Manchester University provides a number of field experiences for its students. A practicum/field experience is a unit of work that permits a student to observe a profession or provides practical application of previously studied theory. It allows a student to participate in activities typical of a profession but does not demand a high level of professional responsibility or professional judgment. An internship is a unit of work performed in actual service for a public/private organization. This experience links classroom instruction to a career. Because an internship serves as a trial period in a career, it is available only to junior and senior students who demonstrate academic and personal maturity appropriate to the position.

## **Language Study**

Faculty members from all departments encourage students to learn a language while they are in college. Three languages – Spanish, French and German – are offered at Manchester, at various levels. Regardless of major, students benefit from knowing a language in addition to English. Students can, if they choose, enhance their language study with enrollment in off-campus January session courses as well as in study abroad programs.

## **Study Abroad Programs**

Manchester University offers three types of study abroad: short-term, semester and year programs. Students of all majors may study abroad, and courses are for academic credit.

Short-term programs include January Session courses and occasional summer session classes. Short-term programs are led by Manchester University faculty and vary each year. Students may participate in off-campus international courses multiple years. Courses offered in recent years included travel to: Australia, Bahamas, England, France, Germany, Ireland, Italy, Nicaragua and Spain. Since the cost of January Session is included in the regular fees for semester-long study, the cost of an off-campus January Session course is limited to the expenses for that specific travel program. Students planning to study on a specific January Session program should contact the faculty leader. Students with general questions or individuals interested in advanced planning should contact the Director of Study Abroad and Off-Campus Academic Programs.

Semester and year programs are residency programs and are available through our partner programs, including BCA Study Abroad and Hokusei Gakuen University (HGU). Study abroad locations include: Barcelona, Spain; Brussels, Belgium; Cheltenham, England; Dublin, Ireland; Dunedin, New Zealand; London, England; Marburg, Germany; Quito, Ecuador; Sapporo, Japan; St. Augustine, Trinidad and Tobago; Strasbourg, France; Valladolid, Spain.

Students planning to study abroad for a semester or year should meet with the Director of Study Abroad and Off-Campus Academic Programs and begin planning early. The application process may take more than one year. Students must be familiar with major, minor and Core graduation requirements. If the courses taken abroad do not meet these requirements, additional work may be necessary for graduation. Therefore, study abroad students must work closely with their academic major advisor and the director of study abroad to develop an integrated academic plan.

## **Chicago Center**

The Chicago Center for Urban Life and Culture provides Manchester students with the opportunity to earn credit and work and learn in Chicago as part of their academic program. The Chicago Center is open to students in all majors seeking an urban internship. The Chicago Center offers special practicum experiences for Social Work majors and student teaching placements for Education majors. Chicago Center summer programs are also available. Representatives from the Chicago Center also visit campus each semester and appointments can be arranged. Students interested in the Chicago Center should meet with the Director of Study Abroad and Off-Campus Academic Programs and begin planning early.

## **Individualized Study**

### **Tutorial**

Instructors may consent to tutor a catalog course for a student who is unable to take the course in the usual manner. In such cases, an additional fee is charged to the student. When courses are taught as tutorials because of University-caused scheduling conflicts, no fee is charged.

### **Special Problems Courses**

A student who has demonstrated ability to work independently may propose a course with a qualified professor and second evaluator. The department chair and college dean also must approve the course. An additional fee is charged to the student.

### **Summer Sessions**

Summer session classes are offered in two formats: a fifteen day on-campus format or a six week online format. The on-campus format can also include travel courses. The maximum student load for the fifteen day on-campus format is one academic and one physical education course, not to exceed 4.5 semester hours. The maximum student load for the six week on-line format is two academic courses, not to exceed 8 semester hours.

### **Graduation Pledge Alliance**

The Graduation Pledge of Social and Environmental Responsibility, which a significant number of graduating seniors adopt each year, is officially recognized at commencement ceremonies. The pledge is sponsored by the Peace Studies Institute.

“I pledge to explore and take into account the social and environmental consequences of any job I consider and will try to improve these aspects of any organizations for which I work.”

### **Manchester University Employment Guarantee**

The Employment Guarantee is part of the [Triple Guarantee](#) program. If at six months following graduation with a baccalaureate degree, a graduate of Manchester University has not secured employment after an appropriate effort to obtain it (or has not enrolled in a graduate program), he or she may return to the University for additional undergraduate courses and career preparation for one year without a charge for tuition.

To qualify for this guarantee, students will need to follow a prescribed program of preparation before graduation that supplements their course of study. Details about the program are available from the Office of Career and Professional Development.

## **Interdisciplinary Programs**

### **Environmental Studies**

The mission of the Environmental Studies Program is to provide students experiential learning opportunities and rigorous academics rooted in natural sciences, political sciences, economics and philosophy to better understand the human endeavor in the context of responsible environmental stewardship. Through the program students learn about local, regional and global environmental issues that are integrated across disciplines. Global climate change, loss of biodiversity, clean water, resource depletion and the lack of a “land ethic” all suggest there are tremendous fundamental opportunities for positive change. Humans as well as all other organisms depend upon the quality and integrity of natural systems. The future of the world depends on the wisdom with which science and technology are used and how humans engage in responsible decision making that leads toward an environmentally sustainable world. The Environmental Studies Program provides a fundamental understanding of the biophysical world and how it intersects with human endeavors through formal academics, laboratory and field experiences, internships and undergraduate research opportunities. This interdisciplinary program includes three tracks: Technical, Natural History and Policy Track. Courses are taught by faculty across the disciplines.

### **Gender Studies**

The gender studies program analyzes gender as a social and cultural phenomenon. The program relies upon the insights of feminist scholars, both men and women, who have revised concepts of gender that once were thought universal but now are seen as culturally determined. Students study women and femininity, as well as men and masculinity, from a gendered perspective that critiques traditional points of view.

The interdivisional minor in gender studies complements a variety of majors. It prepares graduates to do the critical thinking required in business and professions as well as to apply principles of gender analysis to graduate study in the humanities and the social sciences.

### **Gerontology**

By 2030, older people will make up 25 percent of the U.S. population. Specialists in gerontology will be needed to meet multiple needs of older adults.

Students who elect a minor or associate degree in gerontology work closely with a program advisor to tailor their studies to complement career aspirations in health care and social work, politics, law, research, product design or program development, business, marketing, media, transportation and housing, education, arts and leisure, retirement planning and many other occupations.

Students explore physical, psychosocial, financial, environmental and spiritual aspects of aging, using classroom experiences, individualized research, field trips, service learning and practicums in various settings.

### **Global Health**

The global-health major takes an interdisciplinary and multidisciplinary approach to health issues affecting populations and individuals in Indiana and around the world, spanning both political and socioeconomic boundaries.



### **Individualized Interdisciplinary Major**

A student may wish to design a major suited more to that individual than the major(s) offered by departments. Provisions have been made for this through the establishment of an individualized interdisciplinary major. A student presents a program proposal to the vice president and dean for academic and student affairs. Individualized interdisciplinary majors must be approved by the Undergraduate Curriculum Committee. A student electing to complete an individualized interdisciplinary major cannot have another major. Procedures for planning this type of program can be obtained in the Office of Academic Affairs.

### **International Studies**

This program is an interdisciplinary examination of the cultural, political, economic and social patterns that have defined our modern world. Students who minor in international studies enhance their majors and expand their educational and employment opportunities upon graduation.

The minor in international studies is filled with rich and exciting experiences. It provides students with a wide range of opportunities to:

- gain skills in diplomacy, communication, negotiation and conflict resolution
- participate in the Harvard National Model United Nations Conferences
- acquire social skills and cultural sensitivity through interaction with other people and cultures
- pursue individual, interdisciplinary tracks or areas of interest, within the parameters outlined in the program curriculum

### **Mark E. Johnston Entrepreneurship Program**

The Mark E. Johnston Entrepreneurship Program exposes students to the academic background needed to start an organization. Whether students are interested in starting a traditional for-profit business or a nonprofit organization with a social purpose, they need a solid foundation in basic business principles, and this program provides that foundation. It is designed to achieve the following goals:

- Students will experience the nature of an entrepreneurial venture and assess their personalities and abilities in the context of the common traits and challenges facing entrepreneurs.
- Students will demonstrate an understanding of basic accounting, marketing, management and finance in the context of start-up and growth scenarios.
- Students will demonstrate an understanding of business topics unique to entrepreneurial ventures.
- Students will develop a business plan either for a start-up idea of their own or for a community member seeking assistance.

The primary take-away for the student will be a business plan, comparable to what a business professional would develop and suitable for presenting to potential lenders and investors.

### **Peace Studies**

Manchester University's groundbreaking Peace Studies program is an interdisciplinary program exploring nonviolent responses to conflict and injustice, whether in our personal lives or international relations. Students consider questions of values and personal lifestyle, as well as historical perspectives, conflict resolution, mediation, political theory and social change. MU's

peace studies program provides a distinctive emphasis on theoretical and applied nonviolence, equipping students to work for justice in a variety of areas.

The Peace Studies program prepares students to:

- Understand dynamics of conflict, be it interpersonal, intragroup or between nations or global parties
- Develop strong critical thinking, writing and communication skills that are transferable to any field
- Graduate with mediation and conflict resolution skills that are valuable in both personal and professional life
- Join a tradition of graduates committed to peace and social justice

Formal concentrations within the major are interpersonal and intergroup conflict studies, religious and philosophical bases, international and global studies and social inequality studies. Students also may choose to design individualized concentrations within the peace studies major, such as communication, gender studies, social change or environmental studies.

Most peace studies students engage in study abroad opportunities, and many complement their major in peace studies with a second major. Internship and practicum opportunities are available with national or international peace and justice organizations. The student's program of study is under the supervision of the director of the peace studies program and the Peace Studies Council. A number of scholarships are designated for peace studies majors.

## **Academic Policies and Procedures**

The University makes every effort to assist students through the academic advising program, yet the final responsibility for meeting all academic and graduation requirements rests with each student. Assistance in interpreting the requirements is available from academic advisors and the registrar.

### **Registration**

Students must complete the required steps in enrollment during the official registration period for each semester. Instructions and time schedules are announced on the Office of the Registrar's website. A late charge is assessed for failure to meet announced deadlines. When conditions beyond the control of the student cause an unavoidable delay, notice should be given to the registrar immediately. Registration must be completed by 5 p.m. the day before classes begin. Only under exceptional circumstances will students be allowed to enroll after the first day classes are scheduled to meet. No students will be enrolled after the last Change of Course Day. The University accepts no responsibility for holding room reservations or classroom space if registration has not been completed according to schedule.

### **First Year Seminar (FYS) and First Year Experience (FYE) Enrollment and Completion**

New first-year students matriculating in the fall semester must enroll in FYS and FYE courses to fulfill the C-1FS requirement. Students are not permitted to switch sections once they arrive on campus. Students who fail the FYS course (F, UW, W, or WF) must complete ENG-111 College Writing at Manchester to fulfill the requirement. A failing grade in an FYS class is not replaced by a passing grade in ENG-111. Students who fail the FYE course (F, UW, W, or WF) must repeat the course at Manchester in the following semester to fulfill the requirement. No transfer or dual credit courses will fulfill the C-1FS requirement for new first-year students.

Transfer students or new first-year students matriculating in January Session or spring semester fulfill the C-1FS requirement by completing ENG-111 and FYE-1FS at Manchester. A composition course equivalent to ENG-111 taken at another institution will fulfill the C-1FS FYS requirement for transfer students.

### **Change of Registration**

Students can make adjustments to their schedules without completing specific paperwork during the first three days of the fall or spring semester or on the first day of January or summer sessions designated as Change of Course days. Changes made after the official Change of Course days require submission of the Change of Course form to the Office of the Registrar. Students are responsible for ensuring they are properly enrolled in courses.

### **Withdrawal from Courses**

During the first two-thirds of a semester, a student may withdraw from a course and receive a grade of W. After that date, a student who withdraws will receive a grade of WF. A student who does not withdraw but stops attending class will receive a grade of UW. Both the WF and UW count as an F (0) in the student's grade point average. Forms for withdrawing from individual courses are available in the Office of the Registrar.

### **Withdrawal from University**

The University regards the registration of a student as a contractual agreement. For this reason, special procedures must be followed in the event a student withdraws from the University. Any student considering withdrawal after the beginning of classes initiates the process by having an interview with a member of the Student Success staff. A form obtained from that office must be

completed with signatures from the student financial services, residence life and registrar's offices before withdrawal is official.

### **Enrollment Status**

Students enrolled for 12 or more semester hours of credit in the fall or spring semesters are classified as full-time students. Full-time students are billed for one-half of the academic year costs prior to each of these semesters. January session tuition, general fees, and room and board costs are included in these one-half year costs.

Enrollment in either fall or spring semester for less than 12 semester hours of credit classifies a student as part time with part-time rates assessed for tuition costs. January session tuition and room and board costs are not included in charges for part-time enrollment.

### **Audit/No-Credit Enrollment**

Students may choose to enroll in classes on an audit or no-credit basis with the consent of the instructor. While no official grade or academic credit is awarded for either experience, no-credit students must meet all class requirements. Auditors may, but are not required to, submit assigned papers, take tests, and complete papers and projects for evaluation. The no-credit option applies only to music ensembles or private music instruction.

Students may change their registration from credit to audit or no-credit during the first two-thirds of a course. Students may not change their registration from audit or no-credit to credit.

### **Academic Load and Overload**

Enrollment in 14-16 semester hours of credit is considered a normal academic load. A student may enroll for more than 16 semester hours (overload) during a regular semester if that student has a cumulative grade point average of 3.0 or higher. No student will be permitted to enroll for more than 18 semester hours of credit in any semester without a special petition to the Academic Standards Committee.

### **Class Standing of Students**

Students are classified on the basis of the number of semester hours they have completed.

- first year 0 - 27.75 semester hours
- sophomore 28 - 59.75 semester hours
- junior 60 - 91.75 semester hours
- senior 92 or more semester hours

### **Class Attendance**

Specific attendance policies and sanctions for excessive absences from class are the prerogative of the individual instructor. Students are expected to attend all officially scheduled lectures, discussions, laboratory exercises and examinations. Instructors may excuse students for reasonable causes. Students are responsible for all work missed regardless of the reason.

The following are examples of reasonable causes for excused absences: sickness of student, death or serious illness in the student's immediate family, university activities (such as field trips, intercollegiate sports or artistic performances), religious observances, circumstances beyond the student's control, such as jury duty or bad weather.

Sanctions for unexcused absences may include a failing grade on any work due on the date of an absence, a reduction of the final grade for the course or a failure in the course.

**Examinations**

Final examinations are scheduled on the last four days of each regular semester, and other tests are given during the semester at the discretion of the instructor.

**Academic Advising**

New students are assigned to an advisor in their major area of interest. Change of Advisor forms are available in the Office of the Registrar.

Students should consult with the academic advisor regarding questions about career choices, course selections, graduation requirements and related matters. Each registration period the student's advisor must sign enrollment forms or approve on-line registration before the student can enroll for classes.

These procedures provide each student contact with a faculty member who can assist in assuring that all requirements are completed in sequence and on schedule. Each student, however, has the final responsibility for monitoring his or her own graduation requirements.

**Time Limitations for Completing Degree Requirements**

A student may earn a degree by fulfilling requirements of any Manchester University Catalog in force while enrolled, provided these requirements are dated no more than seven years prior to the year the degree is to be awarded.

**Preparation for Graduation and Participation in Commencement**

Degrees are conferred at the end of the fall and spring semesters. Diplomas are awarded at the May commencement.

The graduation year runs from Sept. 2 to Sept. 1 of a given year. Students expecting to complete all requirements by Sept. 1 of the year of graduation must submit the Graduation Application to the Office of the Registrar by Dec. 1 of the final year of attendance. Students who participate in the May commencement with requirements to be completed during the following summer must have the official record of their credits submitted to the Office of the Registrar by Sept. 1 to be included in the graduating class of that year. Those who complete graduation requirements or submit official documentation of completion after Sept. 1 will be included in the following year's graduating class. A Letter of Completion indicating fulfillment of requirements for a degree to be conferred later will be supplied when needed for employment, graduate study or other purposes when all requirements are completed.

**Advanced Placement and Credit by Examination**

Students may earn college credit through the Advanced Placement Program (AP) of The College Board, the International Baccalaureate (IB) Program or the University Level Examination Program (CLEP). Additional information is available at the Office of the Registrar.

Proficiency credit may be awarded for a grade of B or above on departmental proficiency examinations. No proficiency credit will be awarded for beginning modern language, basic mathematics, basic algebra, precalculus or applied music. Proficiency credit is not given to meet the Values, Ideas and the Arts requirement. No more than one semester hour credit may be earned through proficiency examination in physical activity courses.

### Dean's List

At the end of each semester, the Office of Academic Affairs publishes the Dean's List. Students earning a semester grade point average of 3.5 or higher who have completed at least 12 semester hours with no more than three hours of Pass/Not Pass grades are included on the Dean's List. Students with more than one hour of Incomplete (I) or Not Recorded (NR) grades at the end of the semester are not eligible for the Dean's List.

### Graduation with Honors

To graduate with honors, students must complete a minimum of 60 graded credit hours through Manchester University. Credits earned through Pass/No Pass grades do not count toward the 60-hour requirement.

Summa cum laude 3.950 - 4.000

Magna cum laude 3.850 - 3.949

Cum laude 3.650 - 3.849

Graduation with honors is determined using the final cumulative grade point average.

### Credits, Grades and Grade Points

#### Unit of Credit

The semester hour is the basic unit of credit at Manchester University. The number of semester hours generally corresponds to the number of class hours a course meets each week during the semester.

#### Grading System

Manchester University reports and records grades through the conventional letter system. The following point values are used to calculate the grade point:

Letter	Point Value	Quality
A	4.00	Excellent
A-	3.70	
B+	3.30	Good
B	3.00	
B-	2.70	
C+	2.30	Fair
C	2.00	
C-	1.70	
D+	1.30	
D	1.00	Poor
D-	0.70	
F	0.00	Failing (no credit)

Letter symbols used for other purposes on grade reports and records are listed below:

**AU** Course audited

**I** Incomplete\* (Temporary grade) Student unable to complete work for reasons beyond his/ her control.

**NC** Course taken for no credit

**NP** Not Pass\*\* – Equal to C- through F. Does not affect grade point average.

**NR** Grade not reported\* (Temporary grade) Course extends beyond end of semester.

**P** Pass\*\* – Equal to A through C. Does not affect grade point average.

**R** Registered – Course overlaps two semesters.

**UW** Unauthorized Withdrawal (Failure, 0)

**W** Withdrawn Passing

**WF** Withdrawn Failing (0)

\* Work must be completed by the midsemester date of the next regular semester, otherwise a failure (0) is recorded.

\*\* The instructor and registrar will only verify the P or NP grade to outside agencies, not the actual grade given in the course.

### **Grade Point Average (GPA)**

The cumulative grade point average determines a student's rank in class, academic honors and academic good standing. The first step in ascertaining the GPA is to determine grade points. Grade points earned in any course are determined by multiplying the number of semester hours assigned to that course by the point value of the grade earned. The cumulative GPA is determined by dividing the total grade points earned by the sum of the semester hours attempted.

### **Intra-semester Academic Performance Reporting**

Early feedback about academic performance is critical to students' success. At Week 3 faculty report to the registrar the names of students who would benefit from additional support from academic advisors and the Success Center. Grades are reported at Week 7 for any student earning a C- or below. These grades are not a part of the student's official record and do not affect the cumulative GPA.

### **Transcript of Record**

Official Transcripts may be requested on the Office of the Registrar webpage at <https://www.manchester.edu/academics/registrar>. A fee of \$10 is charged for each official copy. No official transcript is released if a student has outstanding financial obligations to the University.

### **Pass/Not Pass Option**

#### **Student converted Pass/Not Pass courses**

In order to foster the spirit of intellectual inquiry and breadth, undergraduate students may convert a maximum of four courses to Pass/Not Pass. This option applies only to students who have completed one semester at Manchester and are not on academic probation. Students in the Honors Program may take one honors course P/NP. Courses in the Core program, those prerequisite to or included in a major or minor, and all courses required for teacher certification may not be converted to P/NP. Students may not request exceptions.

Eligible students may elect the P/NP option during the first two-thirds of a course. This option is not reversible after the request has been approved. Those enrolled for P/NP who earn grades of C or higher receive P. Full credit is given only for the P grade, but the credit is not included in determining students' grade point averages. The NP grade does not affect students' grade point averages.

#### **Departmental and Program Pass/Not Pass courses**

Academic departments and program councils may offer courses that are offered solely on a



Pass/Not Pass basis, and all student enrolled in these courses are graded on a P/NP scale. These departmental offerings may be included in a major or minor and do not count towards the four courses students may convert to P/NP. These courses may be primarily experiential in nature or determined by faculty to be incompatible with the level of evaluation required by letter grades Courses that utilize the Pass/Not Pass grading scale must be approved by the Academic Policies Committee. A brief rationale for the P/NP grading scheme should be included in the course proposal document.

### **Repeating Courses**

Students may retake any course subject to the following conditions: (1) Students will receive credit for the course only once, except for courses which by catalog description may be repeated for credit; (2) Final grades for each enrollment in the course will be recorded on the permanent record. Only the repeated course grade will be counted toward the cumulative and major GPAs for meeting graduation requirements. In the rare circumstance when students earn a passing grade the first but not the second enrollment, both grades will be included in the GPA.

### **Credit for Prerequisites and Lower-Level Courses**

A student who has completed a course for which a prerequisite(s) exists may not repeat or take the prerequisite(s) for credit.

Students may not earn credit in a lower-level course whose main substance overlaps one or more higher-level courses for which they have received credit.

### **Academic Dishonesty and Grievance**

Membership in the Manchester University community requires a devotion to the highest principles of academic and personal integrity, a commitment to maintain honor and a continuous regard for the rights of others. There can be no rights without individual responsibility.

Manchester University faculty are committed to teaching and learning as a career and a profession. Each instructor is presumed to develop and use methods and techniques which enhance learning and which best fit his or her personality and subject matter area. At the same time, the instructor is expected to abide by the general principles of responsible teaching which are commonly accepted by the academic profession. These principles suggest that faculty keep complete records of student performance and that they develop, apply and express uniform criteria for evaluating student performance.

Students are free to take reasoned exception to the data or views offered in any course of study. While they may reserve judgment about matters of opinion, they are responsible for learning the content of any course in which they are enrolled. At the same time, students are expected to abide by the general principles of academic honesty which are commonly accepted in educational settings.

When a student chooses not to follow the general principles of academic honesty, the following policies and procedures will apply.

### **Academic Dishonesty Policy**

The Academic Dishonesty Policy applies in cases of plagiarism or cheating as defined below.

## **Plagiarism**

Plagiarism is the presentation of information (either written or oral) as one's own when some or all of the information was derived from some other source. Specific types of plagiarism encountered in written and oral assignments include the following:

- Sources have been properly identified, but excerpts have been quoted without proper use of quotation marks; or the material has been slightly modified or rephrased rather than restated in the student's own words.
- Key ideas or items of information derived from specific sources that present material that is not common knowledge have been presented without proper identification of the source or sources.
- Unidentified excerpts from other sources have been woven into the student's own presentation.
- A paper or speech may be a mosaic of excerpts from several sources and presented as the student's own.
- An entire paper or speech has been obtained from some other source and presented as the student's own.
- Texts in another language are translated into English and presented as the student's own.

## **Cheating**

Cheating consists of any unpermitted use of notes, texts or other sources so as to give an unfair advantage to a student in completing a class assignment or an examination. Intentionally aiding another student engaged in academic dishonesty is also considered cheating.

Submission of the same work (essay, speech, art piece, etc.) to fulfill assignments in separate classes requires the permission of both instructors (if both courses are being taken in the same semester), or the permission of the second instructor (if they are taken during different semesters).

## **Academic Dishonesty Procedures**

1. In a case of academic dishonesty, the instructor shall send a letter documenting the deception to the student, with copies emailed to the associate dean of academic affairs, the dean of student experience, and the student's academic advisor. The instructor shall complete an Academic Dishonesty Tracking form and submit documentation of the academic dishonesty to the Office of Academic Affairs.
2. In cases of a first offense, the associate dean will send a letter outlining the seriousness of academic dishonesty and the consequences of a second offense to first offenders not going through the Academic Integrity Panel (AIP) process.
3. A formal appeal of the professor-imposed sanction may be sent to the vice president for academic affairs within a week of the date of the letter documenting the dishonesty.
4. An AIP will be convened by the associate dean for all second offenses and for any first offenses if requested by the instructor. The AIP will consist of the associate dean, two faculty selected from an appointed group, and two students selected from a pool of students appointed by the Office of Academic Affairs. The composition of each AIP will be determined based on scheduling availability and avoidance of conflict of interest. The associate dean will vote only in cases of a tie. The associate dean will schedule a hearing with the student and the AIP upon receipt of the tracking form. A registration "hold" will be placed in effect until the hearing has occurred.

5. Following the hearing, the associate dean will inform the student and the instructor who filed the report of dishonesty of the AIP's decision in writing. The associate dean will inform the registrar of any action which affects enrollment (i.e. suspension or expulsion).

### **Penalties**

1. The instructor has the sole discretion to impose specific grade sanctions such as failure of the assignment or failure of the course for any incident of academic dishonesty. When a failing grade for the course is imposed, the student will not be allowed to withdraw from the course with a grade of W.
2. For a first referred offense, the AIP has the discretion to impose disciplinary sanctions such as a letter of apology, monetary fine or community service requirement in addition to any grade sanction imposed by the instructor.
3. For a second or subsequent offense, an AIP hearing will occur, whereby additional sanctions up to and including suspension or expulsion from the University could be applied.

### **Due Process**

Students shall have a right to due process. This shall include the right

1. To be informed of the nature of the violation
2. To a fair hearing of the evidence leading to a decision in the case
3. To be accompanied to any hearing by a faculty or administrative staff member from the University campus community.
4. To request an appeal based only on due process or new, exculpatory evidence.

### **Appeal**

An appeal for an academic dishonesty decision may be made only with the vice president for academic affairs and only on the basis of due process violations or the discovery of new, exculpatory evidence. The vice president's decision is final and no further appeal procedure shall exist in the University. A request for appeal must be made within five days of receipt of the AIP's decision.

### **Academic Grievance Policy**

The Academic Grievance Policy pertains only to cases in which a student believes the final course grade has been assigned in a capricious or unfair manner. Grievances unrelated to academic performance may be brought directly to the Office of Academic Affairs.

### **Academic Grievance Procedures**

1. The student and the instructor should discuss the student's grievance and make every effort to reach a satisfactory solution. A mutually agreed upon third party may be invited to observe the meeting.
2. If an agreement cannot be reached, the student will bring the issue to the department chair and, if no resolution, then to the college dean of the involved instructor. Final course grade grievance must be brought before the chair and dean no later than March 1 for fall semester and January session grades, and October 1 for spring semester and summer session grades.
3. If an agreement cannot be reached through the department chair or college dean, the student may initiate the formal grievance procedure.
  - a. The student will obtain an Academic Grievance form from the Office of Academic Affairs.

- b. The completed form will be forwarded by the student to the Office of Academic Affairs.
- c. The Academic Standards Committee will review the grievance only if procedures 1 & 2 have been completed. The written summaries initially provided to the department chair can be used by the Academic Standards Committee and/or the committee may wish to interview both parties individually.
- d. The Academic Standards Committee will render a final decision.
- e. Exception: If the involved instructor is a member of the Academic Standards Committee, the vice president for academic and student affairs will appoint a full-time faculty member from the same college to replace the involved instructor while the grievance is being reviewed or discussed and a decision is being made.

### **Academic Good Standing**

Academic good standing at Manchester University is determined by a student's success in achieving a minimum cumulative grade point average for a particular enrollment period. Students are not regarded to be in academic good standing if they are placed on academic probation as defined in the Catalog under Academic Probation and Disqualification.

A student who is not in academic good standing will be declared ineligible for participation in intercollegiate athletics. Grade point average also is used to determine eligibility for serving as an officer in student government, resident hall assistant, editor of campus publications, or station manager for the campus radio station. In some cases the minimum grade point average for participation in extracurricular activities may be higher than those listed in the Catalog.

Probationary status will be determined for all students at the end of fall and spring semesters. A student may petition for a reevaluation of their probationary status at the end of any grading period.

### **Academic Probation and Disqualification**

The University has established minimum standards of academic performance and reserves the right to evaluate a student's academic eligibility for continued enrollment. At the end of each semester, failure to meet the standards will result in academic probation or disqualification from continued enrollment. Standards are based upon the student's cumulative grade point average (CGPA) and the total semester hours attempted by the student at Manchester University. A cumulative grade point average of 2.00 is required for graduation.

Students will be placed on academic probation or disqualified from further attendance if they do not meet the minimum standards outlined below.

#### **Probation**

Semester hours attempted*	Minimum CGPA required
0-27.5	CGPA < 1.8
28 or more	CGPA < 2.0

Students on academic probation are required to successfully complete a formal program administered through the Success Center and earn a term GPA of 2.0 or higher in the subsequent semester to continue at Manchester University. Students who do not successfully complete the formal program or earn a term GPA below 2.0 in the subsequent semester will be disqualified.

## **Disqualification**

Semester hours attempted\*

1-59.5

60 and up

Minimum CPGA required

CGPA < 1.4

CGPA < 1.8

\*Transfer credits are never counted in total semester hours attempted; however, to determine where transfer students are in relationship to these charts, the semester hours of transfer credit is added to the semester hours attempted at Manchester University.

The name of any student whose CGPA is above the minimum standards but has a semester GPA less than 1.8 shall be forwarded to the academic advisor and the Spartan Success team for academic counseling or intervention.

### **January or Summer Session for Disqualified Students**

Disqualified students may apply to enroll in January or summer courses in the session immediately following the semester of disqualification. Enrollment in either January or summer session courses does not guarantee reinstatement for the following semester.

### **Right to Appeal Academic Disqualification and Reinstatement**

Any student who has been disqualified has the right to submit an appeal for reinstatement to the Academic Standards Committee. Disqualified students who are not enrolled at the University for one semester or more must submit the Readmission Application – available from the Office of Admissions – along with the letter of appeal. Students who are reinstated will be placed on academic probation and must meet the requirements outlined in the probation category above. Information about the appeal process is available in the Office of the Registrar.

### **Graduation and Transfer-Out Rates**

Most students are able to complete their studies and graduate from Manchester University in four years without difficulty. Classes are readily available and advisors work closely with students to plan ahead. Some students take more than four years to graduate when they change majors, pursue multiple majors, study abroad, encounter academic difficulties or simply stop out for a January session, semester or more.

Approximately 34 percent of first-time full-time students leave Manchester after one year (based on five-year average). As reported to the U.S. Department of Education, the average four-year graduation rate for first-time full-time students entering in Fall 2005 through Fall 2014 was 45 percent.

## ACADEMIC PROGRAM: CORE PROGRAM REQUIREMENTS

### Manchester Core: A Program in the Liberal Arts

Core Program requirements may be met by any of the following, subject to appropriate policies and limitations:

1. Completion of appropriate courses from the Core Program list with a passing grade
2. Proficiency credit by examination for courses on the following Core Program list
3. Proficiency credit via General Examinations of the Advanced Placement Program (AP), International Baccalaureate Program (IB) or College Level Examination Program (CLEP)
4. Transfer credit for courses evaluated as equivalent to courses on the Core Program list or approved alternate courses
5. Completion of courses specified as approved substitutes for Core Program courses with a passing grade

<b>Semester hours required</b>		<b>Baccalaureate AA</b>	
<b>Foundational Skills (C-1FOQ)</b>		10-11	10-11
First Year Seminar in Critical Thinking (C-1F)		4	4
	FYS First Year Seminar	3	3
	FYE First Year Experience	1	1
Oral Communication (C-1O)		3	3
	COMM 110 Foundations of Human Communication		
Quantitative Reasoning (C-1Q)		3	3
	MATH 113 Quantitative Reasoning (BA only)		
	MATH 115 Elementary Probability and Statistics		
	MATH 121 Calculus I		
	MATH 210 Statistical Analysis		
	PSYC 241 Statistics and Research Design I		
<b>Physical Activity and Wellness (C-2)</b>		2	1
PE 101 (C-2LA) / PE 105 (C-2FA)		1	
	Choice of any two (for BA/BS) of the courses offered. A maximum of 1.0 credits count toward the baccalaureate degree. A maximum of .5 credits count toward the associate degree. Student-athletes who compete at the intercollegiate level are not allowed to enroll in an activity course in the same sport in which they compete.		
	PE 106 - Fitness Decisions for a Healthy Lifestyle.	1	1
<b>Integration Into the World (C-3)</b>		9	6
	Three courses (two courses for AA), at least one in each category.		
Responsible Citizenship (C-3RC)			
	COMM 212 Small Group Communication		
	COMM 314 Language and Thought		

	COMM 415 Rhetoric of War		
	EDUC 216 Building Communities in Schools		
	ENG 361 Women in Literature		
	FIN 204 Financial Responsibility		
	GNST 125 Intro to Gender Studies		
	GNST 201 Intro to Queer Studies		
	HIST 227 Race & Ethn in Amer Hist		
	HIST 236 Aspects of American Social History		
	HIST 250 Hist of Holocaust		
	IDIV 221 Race, Power, and Marginalization in Schools		
	PEAC 110 Intro to Peace Studies		
	PEAC 112 Concerning Poverty		
	POSC 131 Introduction to International Studies		
	POSC 201 Political Concepts		
	PSYC 201 Social Psychology		
	SOC/SOWK 220 Social Gerontology		
	SOSC 102 Human Conflict		
	SOWK 110 Intro to Social Work		
	SOC/SOWK 228 Race, Ethnic, and Gender Inequality		
Global Connections (C-3GC)			
	ART 348 History of World Art		
	BUS 202 Exploring International Business		
	BUS 371 International Sport Governance		
	ENG 250 Literary Passport		
	ESAT 313 International Sports Medicine		
	FREN 110 Inside France		
	FREN 111 Food Cultures		
	FREN 112 Memory and Culture		
	FREN 201 Communication and Culture		
	FREN 202 Culture and Controversies		
	FREN 301 Oral Communication		
	FREN 301 Ideas and Culture		
	GER 111 Identity and Culture		
	GER 112 Community and Culture		
	GER 201 Cultures in Contact		
	GER 202 Crises and Controversies		
	HIST 210 Modern China and East Asia: 1750 to the Present		
	HIST 226 Imperialism and the Modern World		
	HIST 242 South and Southeast Asia: Ancient to 1500		
	HIST 244 Topics in Chinese History		
	HIST 246 South and Southeast Asia: 1500 to Present		
	HIST 252 Comparative Civilization		
	HIST 263 The Making of India and Pakistan		



	IDIV 240 Making of the Modern Mind		
	IDIV 350 The India Story		
	MODL 231 Pre-Hispanic Mesoamer/Andean Cultures		
	MUS 119 World Musics		
	PEAC 250 Peacemaking in Practice Abroad		
	POSC 236 Comparative Foreign Policy		
	POSC 237 African Politics		
	PSYC 352 Culture & Psychology		
	REL 131 Jewish Faith, Culture and People		
	REL 222 Religions of East Asia		
	REL 223 Religions of India		
	SOC 311 Cultural Anthropology		
	SPAN 111 Food Cultures		
	SPAN 112 Memory and Culture		
	SPAN 201 Communication and Culture		
	SPAN 202 Cultures and Controversies		
	SPAN 203 Media and Culture		
	SPAN 230 Living the Spanish Lang		
	SPAN 301 Oral Communication		
	SPAN 302 Ideas and Culture		
<b>Ways of Knowing (C-4)</b>		27	9
Philosophical, Religious and Creative Inquiry*		12	3
	Once course from each category.		
	One course from each category.		
Religion (C-4RL)			
	REL 101 The Hebrew Bible		
	REL 102 Introduction to New Testament		
	REL 111 Christian Traditions		
	REL 120 Intro to Religious Studies		
	REL 210 Judaism, Christianity, and Islam		
	REL 228 The Brethren Heritage		
	REL 241 Jesus and the Gospels		
Philosophy (C-4PH)			
	ECON 234 Welfare, Freedom and Justice		
	PHIL 201 Intro to Philosophy PHIL 215 Ethical Decision Making PHIL 219 Business Ethics		
	PHIL 235 Bioethics		
	PHIL 330 Philosophy of Religion		

Visual and Performing Arts (C-4AR)			
	ART 201 Art and Life		
	ART 230 Introduction to Visual Art ART 251 Art in Context		
	ART 253 Women in the Visual Arts		
	ART 342 Hist of Anc & Med Art		
	ART 344 Hist of Renaiss & Baroque Art		
	ART 346 Hist of Mod & Contemp Art		
	HUM 130 Experiencing the Arts MUS 123 American Music		
	MUS 120 Introduction to Music		
	MUS 122 Jazz History		
	MUS 220 Music for Stage and Film MUS 232 Music Hist & Analysis II THTR 201 Theatre and Society		
Literature (C-4LT)			
	ENG 214 Classical & Medieval Lit		
	ENG 238 World Literature ENG 242 African Amer Lit ENG 309 Contemporary Literature		
	ENG 338 Culture Through Literature		
	FREN 315 Intro to French Literature		
	LIB 210 Banned Children's Literature		
	MODL 201 European Literature MODL 225 Legends Revisited MODL 241 US Latino Literature and Culture		

	REL 266 Religious Classics		
	SPAN 315 Intro to Literary Analysis		
Human Behavior and Institutions		9	3
	Three courses, each in a different discipline*		
Economics (C-4HE)			
	ECON 115 Economic Concepts		
	ECON 221 Princ of Microecon		
	ECON 222 Princ of Macroecon		
Education (C-4HD)			
	EDUC 230 Educational Psychology		
History (C-4HH)			
	HIST 104 Intro European Hist Anc to 1500 HIST 105 Intro European Hist 1500 to Present HIST 113 North American History to 1865		
	HIST 114 United States History Since 1865		
	HIST 121 World History to 1500		
	HIST 123 World History from 1500		
	HIST 201 Medieval Europe		
	HIST 202 Renaissance and Reformation Europe		
	HIST 203 Early Modern Europe		
	HIST 204 Modern Europe		
	HIST 205 Ancient Europe		
Political Science (C-4HP)			
	POSC 121 Amer Natl Politics		
	POSC 122 State & Local Politics		
	POSC 140 International Politics POSC 233 Comparative Politics		

Psychology (C-4HY)			
	PSYC 110 Intro to Psychology		
Sociology (C-4HS)			
	SOC 101 Intro to Sociology		
Natural World*		6	3
	Two courses, each in a different discipline*		
Biology (C-4NB)			
	BIOL 101 General Biology BIOL 102 Human Biology: Stages of Life BIOL 106 Princ of Biology I BIOL 108 Princ of Biology II		
	BIOL 204 Fundamentals of Human Physiology		
	BIOL 214 Field Ecology		
Chemistry (C-4NC)			
	CHEM 101 Chemical Science		
	CHEM 105 Intro to Inorganic Chem		
	CHEM 111 General Chemistry I		
Earth/Space (C-4NE)			
	NASC 203 Descriptive Astronomy		
	NASC 209 Physical Geology		
	NASC 211 Weather, Climate, and Civilization		
Environmental Science (C-4NN)			
	ENVS 130 Intro to Environmental Studies		
Physics (C-4NP)			
	NASC 103 Physical Science		

	PHYS 111 College Physics I		
	PHYS 210 General Physics I		
	PHYS 220 General Physics II		
	*one course only required for the AA degree		
<b>Synthesis &amp; Critical Connections (C-5)</b>			
Critical Connections (C-5CC)		3	0
	INTD 320 Narrative Eye: Film & Story		
	INTD 324 Feminist Theory		
	INTD 330 Ethnobotany		
	INTD 341 Rethinking God: The Reality of the Virtual		
	INTD 345 Religion and Ideological Power		
	INTD 401 Arts and Ideas		
	INTD 403 Requiem: The Mass and its Music		
	INTD 405 Life and Death		
	INTD 407 Media and Religion		
	INTD 410 Cinema for Social Change		
	INTD 413 The Fashion Police		
	INTD 417 Dispelling the Myths of the Wild West		
	INTD 421 Queen Elizabeth I		
	INTD 423 Law and Philosophy		
	INTD 425 Environmental Philosophy		
	INTD 427 International Women's Rights		
	INTD 430 Evolution: Hist & Ctr Significance		
	INTD 435 Biology and Society		
	INTD 437 Science & Archaeology of Ancient Greece		
	INTD 441 Globalization		
	INTD 443 History of American Medicine		
	INTD 445 Development of Scientific Thought in Great Britain		
	INTD 447 Medieval Fntn of Western Society		
	INTD 450 Adv Studies in Gerontology		
Values, Ideas and the Arts (C-5VIA)		1	0.5
	Students are required to attend five VIA events for each semester of full-time enrollment. Credit accumulates at 0.25 semester hours for every ten VIA events attended. A maximum of 2.0 hours may be used toward graduation for BA/BS degrees; a maximum of 1.0 hours may be used toward graduation for the AA degree. Attendance requirements will be waived for any semester in which the student is enrolled full time but studying off campus (i.e. student teaching, internships, field instruction or study abroad).		

Bachelor of Arts	
	Students who seek the BA degree will demonstrate language proficiency, other than in their native language, at the intermediate level. Students can demonstrate intermediate language level by
	a. Completing the intermediate (201/202) sequence at Manchester University,
	b. Placing into the advanced level (300) of a language and receiving a grade of C or higher in one course at this level,
	c. Passing a proficiency examination with a grade of B or higher, in addition to completing the language placement test,
	d. Completing the courses at another accredited institution with grades of C or higher, or
	e. Earning a score of four or five on the Advanced Placement examination.
Bachelor of Science	
	Students who seek the BS degree will demonstrate mastery of quantitative thinking skills at the level of introductory statistics or applied calculus or higher. Courses listed in the Core Quantitative Reasoning section (C-1Q) fulfill this requirement.
Writing	
	Each academic major in the baccalaureate degree programs will designate (W) courses within the major requirements. Each student must successfully complete one (W) course in her/his major in addition to the writing requirement in foundations. These courses will be designated in the <i>Catalog</i> with a (W) in the course title.

## ACADEMIC PROGRAM: MAJOR AND MINOR FIELDS OF STUDY

### Courses of Instruction

The detailed requirements for major and minor fields of study, as well as the descriptions of each course, are listed on the following pages. Divisional and departmental courses are arranged alphabetically by division or department.

Courses that are required, or can be used to fulfill part of the Core Program requirements are identified in the course descriptions by the following coding:

C-1F	First Year Seminar and First Year Experience
C-1O	Oral Communication
C-1Q	Quantitative Reasoning
C-2	Physical Activity and Wellness
	C-2FA                      Fitness and Wellness Activity
	C-2LA                      Lifetime Activity
C-3	Integration Into the World
	C-3RC                      Responsible Citizenship
	C-3GC                      Global Connections
C-4	Ways of Knowing
	C-4RL                      Religion
	C-4PH                      Philosophy
	C-4AR                      Visual and Performing Arts
	C-4LT                      Literature
C-4H	Human Behavior Institutions
	C-4HD                      Education
	C-4HE                      Economics
	C-4HH                      History
	C-4HP                      Political Science
	C-4HS                      Sociology
	C-4HY                      Psychology
C-4N	Natural World
	C-4NB                      Biology
	C-4NC                      Chemistry
	C-4NE                      Earth/Space
	C-4NN                      Environmental Science
	C-4NP                      Physics
C-5	Synthesis and Critical Connections
	C-5CC                      Critical Connections
	C-5VI                      Values, Ideas and the Arts

The level of courses is indicated by the course number as follows:

Beginning Level Courses 100  
Intermediate Level Courses 200  
Advanced Level Courses 300  
Advanced Level Courses 400

Only students with junior standing or above, or the instructor's permission, may take 400-level courses.



The semester and the year for the regular offering of the course are given with most course descriptions. The University reserves the right not to schedule or offer a course if suitable faculty are not available, or to cancel a course if enrollment is insufficient.

### Course Descriptions and Major/Minor Requirements

- Accounting (See College of Business)
- Art
- Athletic Training (See Exercise Science and Athletic Training)
- Audio Production and Marketing (certificate only)
- Biology
- Biology-Chemistry (Pre-Health Care)
- Business Management (See College of Business)
- Chemistry
- Communication Studies
- Computer Science (See Mathematics and Computer Science)
- Criminology (See Sociology, Social Work, and Criminology)
- Economics
- Education
- Engineering Science
- English
- Entrepreneurship (See College of Business)
- Environmental Studies
- Exercise Science
- Finance (See College of Business)
- French (See Modern Languages)
- Gender Studies
- German (See Modern Languages)
- Gerontology
- Global Health
- History and Political Science
- Humanities courses
- Interdisciplinary courses
- Interdivisional Studies
- Interfaith Literacy (ASA only)
- International Studies
- Journalism (See English)
- Libraries and Literacies (ASA only)
- Library courses
- Marketing (See College of Business)
- Mathematics and Computer Science
- Mediation and Conflict Resolution (ASA only)
- Media Studies (See Communication Studies)
- Medical Technology
- Modern Languages
- Music
- Natural Science courses
- Peace Studies
- Philosophy
- Physical Education (See Exercise Science and Athletic Training)
- Physics
- Political Science (See History and Political Science)
- Pre-Health Care(See Biology-Chemistry)
- Pre-Law (Consult with History and Political Science Department)
- Pre-Pharmacy
- Professional Sales (See College of Business)
- Psychology
- Queer Advocacy (ASA only)
- Recreation (See Exercise Science and Athletic Training)
- Religious Studies
- Scientific Computing (ASA only)
- Social Science courses
- Sociology, Social Work, and Criminology
- Software Engineering(See Mathematics and Computer Science)
- Spanish (See Modern Languages)
- Sport Management (See College of Business)
- Teaching English to Speakers of Other Languages: TESOL(See Modern Languages)
- Theatre (See Music)

## **Art**

*Chair, E. Oke, J. Diesburg, T. Rohrer*

The Department of Art offerings provide studio and lecture courses designed to develop an understanding of the fundamentals of aesthetics and the development of the artistic skills. The art major and minor are designed as a combination of foundation courses and flexible electives, providing an opportunity for students to specialize according to their interests. Students may follow different tracks, including areas of studio art (2-D and 3-D), graphics and photography, art history and educational and community arts. Courses are provided for both students with professional interests, as well as for others seeking cultural enrichment. Students contemplating an art major may submit a portfolio for purposes of placement, although a portfolio is not required. Non-majors may have prerequisites waived.

### **Baccalaureate Degree**

#### **Bachelor of Arts only**

Major in art; 39 hours; ART 131, 201, 210, 213, 315, 346, 499; two courses selected from: ART 342, 344, 348; twelve hours of electives in art.

CONCENTRATIONS: Graphic Design; History; Community Arts Organization; Studio

Majors are expected to participate in a senior exhibition and to successfully complete the senior comprehensive evaluation prior to graduation.

Minor in art; 27 hours: ART 131, 201, 210, 213, 315; one course selected from: ART 342, 344, 346, 348; nine hours of electives in art.

Teaching major in Visual Arts Education: Requirements available in the Office of Teacher Education.

### **Courses ART**

#### **131 BASIC DESIGN - 3 hours**

Introductory experiments and practice in various media with emphasis on understanding the principles of composition, color theory and mechanical perspective. Lab fee required.

#### **201 ART AND LIFE - 3 hours**

A course emphasizing the role of the artist in society through an introductory study of materials, processes and the history of art in its broadest sense. Progression from those areas with which the contemporary student is already acquainted (advertising, design and architecture) to a survey of the fine arts up to the present day. C-4AR.

#### **205 ELEMENTARY ART EDUCATION TECHNIQUES - 2 hours**

A course to develop skills in handling various media for use in the elementary and junior high/middle schools. It combines a study of the art curriculum at these levels with a study of the general elementary curriculum and how the two are interrelated. Lab fee required.

#### **210 PAINTING I - 3 hours**

An introduction to painting. Students learn techniques for rendering objects, starting with still life, followed by a range of subject matter. Final projects focus on subjects developed through a structured, creative process. Prerequisite: ART 131.

**213 FIGURE DRAWING - 3 hours**

This course introduces students to drawing portraits and the human body. Class time is primarily devoted to observational drawing of live models with emphasis on accurate form and proportions, using a variety of media and techniques. Prerequisite: ART 131.

**216 ELEMENTARY ARTS AND CRAFTS - 3 hours**

A companion course to ART 205 with emphasis placed on the construction and application of various craft media to the elementary and junior high/middle schools. There is further study of the art curriculum and its relationship to the total curriculum of the elementary and junior high/middle schools. Lab fee required.

**221 DIGITAL PHOTOGRAPHY - 3 hours**

An introduction to the principles, vocabulary and techniques of photography. Students will learn to use the functions of their cameras and explore a range of digital editing, from subtle improvements to major alterations. Open to all majors, no photography experience needed. A personal digital camera is required.

**225 FABRIC DECORATION - 3 hours**

A study of surface design on fabrics, using dyes and inks. The student will explore discharge, tie dye, batik and silk screen methods of application of design principles to the fabric surface. Various finishing techniques will also be explored. Generally offered in January. Lab fee required.

**230 INTRODUCTION TO VISUAL ART - 3 hours**

An overview of artistic media, genres, and stylistic periods of western art, beginning with pre-renaissance icons through contemporary art. Students will identify definitive characteristics of examples from each period and use those characteristics to guide classification and analysis of other art. C-4AR. Lab fee required.

**241 CERAMICS - 3 hours**

Practice in wheel throwing, sculpture, various methods of hand building and glaze formation. Lab fee required. Prerequisite: consent of instructor.

**251 ART IN CONTEXT - 3 hours**

This intensive course introduces students to the art of a specific region within its geographic, historical and social context. This course is designed as an off-campus travel offering. May be repeated to different locations. C-4AR. January

**253 WOMEN IN THE VISUAL ARTS - 3 hours**

This course offers an introduction to women's important and exciting participation and representation in the visual arts from a range of cultures and periods and in various media and forms. In addition to studying the works of art created by women, our investigations will also address the ways gender identity is constructed in the arts, the conditions under which women artists have worked and the ideologies and institutions that have shaped women's relationships to the arts. C-4AR.

**261 GRAPHIC DESIGN - 3 hours**

An introduction to the broad field of graphic design. This course will include visual problem-solving, typography and layout using industry-standard software, such as Adobe products, and will culminate in client-based projects. Lab fee required.

**271 THREE-DIMENSIONAL CONSTRUCTION - 3 hours**

Problems in three-dimensional design, using paper, metal, wood, plaster and clay. Lab fee required. Prerequisite: ART 131.

**303 SCULPTURE - 3 hours**

A basic course in sculpture in various media. Lab fee required. Prerequisites: ART 131, 271.

**310 PAINTING II - 3 hours**

Students design a series of painting in various media. Emphasis is placed on organized process, implementation of the student-designed projects, and quality of the final pieces. Prerequisites: ART 131, 210.

**313 FIGURE DRAWING II - 3 hours**

Further exploration of art based on drawing from live models. Emphasis placed on organized process, implementation of the student-designed projects, and quality of the final pieces. Prerequisite: ART 131, 213.

**315 CRAFTS - 3 hours**

Designing for and working with various craft media and processes. Specifically, proficiency is developed in areas of printmaking, fibers (surface design and textile construction), and ceramics. Lab fee required. Prerequisite: ART 131.

**336 OUTDOOR SKETCHING AND PAINTING - 3 hours**

Drawing and painting of outdoor subjects with major emphasis on watercolor technique. Prerequisites: ART 131, 210.

**342 HISTORY OF ANCIENT AND MEDIEVAL ART - 3 hours**

The study of art from pre-history and ancient times through the 1200s. C-4AR. Spring, alternate years.

**344 HISTORY OF RENAISSANCE AND BAROQUE ART- 3 hours**

History of art from the 1300s through the 1700s, including the proto-Renaissance through Rococo. C-4AR. Fall, alternate years.

**346 HISTORY OF MODERN AND CONTEMPORARY ART - 3 hours**

History of art from the 1800s to the present, including both European and American movements and the impact of photography. C-4AR. Spring, alternate years.

**348 HISTORY OF WORLD ART - 3 hours**

The study of art from specific regions of the world, with emphasis on art from non-Western origins, including the art of China, Japan, India and areas of Africa. This course is both history and project based. Course requirements include a practical component, whereby students are responsible for making art related to a specific region of study. C-3GC. Fall, alternate years.

**361 GRAPHIC DESIGN II - 3 hours**

This course builds on the foundation of graphic design skills learned in ART 261. Assignments focus on visual problem solving, typography and layouts. Students improve their proficiency with the most recent Adobe Creative Suite software by working with clients on real-life graphic design projects. Prerequisite: ART 261.

**475 INTERNSHIP - 1-12 hours**

Students will work with professionals in institutions or occupations related to their educational goals. They might act as research assistants, helpers in photo labs, catalogers, text-panel writers or packers/unpackers for art exhibits. This experience links classroom instruction to actual career responsibilities. The student is supervised by a professional employed by the specific agency. May be repeated for a maximum of twelve hours of credit. Prerequisite: approval of the department chair.

**499 SENIOR PROJECT PREPARATION - 3 hours**

This course is designed to be an elective, preparatory course to aid in successful (remedial) completion of the Senior Comprehensive Experience (SCE) requirement for the major. Arranged as a tutorial, the curriculum focuses on integrating professional practices and synthesis within the major, explicitly developing and honing professional skills, competencies, and broadening perspectives. The course is aimed at students who struggle to meet the requirements for the SCE. Prerequisite: Junior/Senior standing and permission of department chair. Tutorial fees apply.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

## **Niswander Biology Department**

*Chair A. Costello-Harris, S. Beyeler, C. Gohn, J. Robison, M. Rotter, K. Short*

The mission of the Department of Biology is to provide a nurturing academic environment where students and faculty can explore and move toward an appropriate mastery of the major conceptual areas of Biology which include: cellular organismal and population levels of life.

### **Baccalaureate Degree**

Major in biology; 50-52 hours: BIOL 106, 106L, 108, 108L, 229, 229L, 331, 331L, 360, 395; 364/364L or 422/422L; 315/315L or 413/413L; one course selected from: BIOL 241/241L, 243/243L, 322/322L; one course selected from: BIOL 313, 313L, 332, 365; four hours of electives in biology; three hours of internship (BIOL 475) or research (BIOL 496); two semesters of chemistry with lab selected from: CHEM 105/105L and 106/106L or 111/111L and 113/113L.

No more than four hours of combined internship and practicum credit can count toward the major.

Majors must successfully complete a senior comprehensive evaluation before graduating. Details are available from the department chair.

Minor in biology; 24 hours: BIOL 106, 106L, 108, 108L, 16 hours of departmental electives.

Biology Teaching Major: Requirements available in the Office of Teacher Education.

### **Courses BIOL**

#### **101 GENERAL BIOLOGY - 3 hours**

An introduction to the principles of biology for the non-major. Topics may include cell biology, evolution, anatomy and physiology of major organ systems, human biology, heredity and ecology. May not be used for credit in the biology major. C-4NB.

#### **102 HUMAN BIOLOGY – STAGES OF LIFE - 3 hours**

An introduction to the basic principles related to human life history, from fertilization through death. These will serve as the vehicle for considering how scientific methodology illuminates issues in both the personal and public arenas. Both personal decisions and public policy issues are impacted by our understanding of underlying biological/scientific principles. Topics such as the mechanisms of fertilization, development, homeostatic system integration, systemic physiology of selected systems (e.g. cardiovascular, nervous, endocrine, reproductive) and the continued changes associated with aging will be addressed. May not be used for credit in the biology major. C-4NB.

#### **106 PRINCIPLES OF BIOLOGY I - 3 hours**

An examination of the nature of science and scientific thinking through an introduction to living organisms and their relationship to the environment. Biostatistics, biodiversity and ecological processes will be covered. C-4NB. Fall.

#### **106L PRINCIPLES OF BIOLOGY I LAB - 1 hour**

An examination of the nature of science and scientific thinking through an introduction to living organisms and their relationship to the environment. Biostatistics, biodiversity and ecological processes will be covered. Completion of or concurrent enrollment in BIOL 106. Fall.

**108 PRINCIPLES OF BIOLOGY II - 3 hours**

Integrating principles of biology, stressing the common responses of life to the problems of existence. Major topics include cellular organization of organisms, genetics, evolution and organismic processes that maintain life. Examples drawn primarily from vertebrates and vascular plants. The associated laboratory (BIOL 108L) involves animal dissection. C-4NB. Spring.

**108L PRINCIPLES OF BIOLOGY II LAB - 1 hour**

Laboratory experience in microscopy, Mendelian genetics, population genetics and anatomy and physiology of selected animals and plants. Data interpretation and scientific writing (laboratory reports and laboratory notebooks) will be emphasized. Completion of or concurrent enrollment in BIOL 108. Spring.

**202 FUNDAMENTALS OF HUMAN ANATOMY - 3 hours**

A regional approach to the study of human structure. Emphasis is on the basic structural organization of the human body, underlying anatomical principles and the anatomical details appropriate for allied health students. Cannot be taken for credit within the biology major. Spring.

**202L FUNDAMENTALS OF HUMAN ANATOMY LAB - 1 hour**

Laboratory course to complement BIOL 202. Laboratory work in identifying anatomical structures in humans. Emphasis on musculoskeletal, circulatory and nervous systems. Prerequisite: Completion of or concurrent enrollment in BIOL 202. Spring.

**204 FUNDAMENTALS OF HUMAN PHYSIOLOGY - 3 hours**

An introduction to the basic principles of human physiology. Emphasis is on the basic functional mechanisms operating at the cellular, organ and system levels as well as the integrative control process that regulate each system. Cannot be taken for credit within the major following BIOL 422. C-4NB. Fall.

**204L FUNDAMENTALS OF HUMAN PHYSIOLOGY LAB - 1 hour**

Laboratory work supplements the investigation of the systems covered in BIOL 204. Prerequisite: Completion of or concurrent enrollment in BIOL 204. Fall.

**214 FIELD ECOLOGY - 3 hours**

A field and laboratory-oriented introduction to ecological principles and environmental issues, including an extended off-campus field trip. C-4NB.

**225 CONSERVATION BIOLOGY - 2 hours**

Definitions and origin of biodiversity, threats to its maintenance, value of preserving variety, ecological and genetic principles relating to preservation and practical strategies for preservation. Spring, alternate years.

**225L CONSERVATION BIOLOGY LAB - 1 hour**

Data collection and hypothesis testing in conservation biology. Completion of or concurrent enrollment in BIOL 225. Spring.

**227 ORNITHOLOGY - 3 hours**

This course offers an overview and introduction to the evolution, morphology, physiology and identification of birds (Class Aves). Class will include fieldwork.

**229 INTRODUCTION TO MOLECULAR BIOLOGY - 3 hours**

Introduction to the major classes of biological molecules. Structures and functions of carbohydrates, lipids, proteins and nucleic acids will be covered in addition to examples of cell structures, enzymes and metabolic pathways. Prerequisites: One year of biology and one year of chemistry. Fall and Spring.

**229L INTRODUCTION TO MOLECULAR BIOLOGY LAB - 1 hour**

Focus is on the isolation and measurement of carbohydrates, lipids, proteins and nucleic acids. Experience in thin layer chromatography, spectrophotometry, electrophoresis and light microscopy. Completion of or concurrent enrollment in BIOL 229. Fall and Spring.

**234 INTRODUCTION TO HISTOLOGY - 3 hours**

Cellular components of tissues from vertebrate animals. Emphasis is placed on the appearance of primary tissues and the major organ systems. Tissue microanatomy will be examined stressing function as well as structure. Prerequisites: BIOL 106, 106L, 108, 108L. January.

**234L INTRODUCTION TO HISTOLOGY LAB - 1 hour**

Laboratory experience in the identification and description of the microanatomy of the primary tissues and major organ systems of vertebrates. Completion of or concurrent enrollment in BIOL 234. Prerequisites: BIOL 106, 106L, 108, 108L.

**241 VASCULAR PLANT SYSTEMATICS - 3 hours**

Evolution and classification of ferns, fern allies and seed plants; characteristics of major plant families; plant geography. Prerequisites: BIOL 106, 106L, 108, 108L. Fall, alternate years.

**241L VASCULAR PLANT SYSTEMATICS LAB - 1 hour**

Floristic study of a local natural area, plant identification techniques and characteristics of important plant families. Completion of or concurrent enrollment in BIOL 241. Fall, alternate years.

**243 INTRODUCTION TO ALGAE, PLANTS AND FUNGI - 2 hours**

Biology of algae, fungi, bryophytes and vascular plants. Life cycles, ecology and interactions with humans and the evolution of major groups. Prerequisites: BIOL 106, 106L, 108, 108L. Spring, alternate years.

**243L INTRODUCTION TO ALGAE, PLANTS AND FUNGI LAB - 1 hour**

Analysis of classification, morphology, life cycles and ecology of selected algal, plant and fungal taxa. Completion of or concurrent enrollment in BIOL 243. Spring, alternate years.

**252 EVOLUTION - 3 hours**

Mechanisms and consequences of natural selection, genetic drift, mutation, adaptation and speciation. Computation of heritability, relative fitness and Hardy-Weinberg equilibrium. Macroevolution and interpretation of phylogenies and DNA sequence evolution. Discussion and analysis of classical and contemporary primary literature relating to evolutionary theory. Prerequisites: BIOL 106/L, BIOL 108/L. Spring, alternate years.



**275 PRACTICUM IN BIOLOGY - 1-4 hours**

Observation of and participation in the activities of a professional in biology or an applied field that makes significant use of biological principles. Examples of appropriate mentors include, but are not limited to, genetic counselors, research scientists and industrial scientists. May be repeated once for credit. Prerequisite: Appropriate course work in biology and related fields.

**312 MARINE BIOLOGY - 3 hours**

The ocean as an environment, a survey of marine communities and adaptive strategies of organisms that live there. Emphasis on the biology, ecology and life histories of marine organisms. Prerequisites: BIOL 106 and 108. Spring, alternate years.

**313 MICROBIOLOGY - 3 hours**

Taxonomy, morphology, physiology and ecology of bacteria and viruses. Relationships between microorganisms and their natural environments and with animal hosts are introduced. Prerequisite: BIOL 229, 229L. Fall and Spring.

**313L MICROBIOLOGY LAB - 1 hour**

Laboratory experiences in isolating, growing, and identifying, bacteria, molds and viruses. Mastery of aseptic techniques is expected. Completion of or concurrent enrollment in BIOL 313. Prerequisite: BIOL 229, 229L. Fall and Spring.

**315 ECOLOGY - 3 hours**

Relationships of individual organisms to the environment; structure and dynamics of single-species populations; interactions between and among populations; and the structure, dynamics and function of biotic communities. Prerequisites: BIOL 106, 106L, 108, 108L. Fall, alternate years.

**315L ECOLOGY LAB - 1 hour**

Collection, analysis and presentation of ecological data. Completion of or concurrent enrollment in BIOL 315. Fall, alternate years.

**322 PLANT PHYSIOLOGY - 3 hours**

Fundamental principles of physiology as related to higher plants. Includes vascular plant structure, water relations, soil and mineral nutrition, metabolism with emphasis on photosynthesis, growth, regulation and development. Prerequisites: BIOL 229, 229L.

**322L PLANT PHYSIOLOGY LAB - 1 hour**

Laboratory and field study of water relations, photosynthesis, growth and other plant processes. Completion of or concurrent enrollment in BIOL 322.

**331 INVERTEBRATE ZOOLOGY - 3 hours**

An introduction to major invertebrate phyla of the animal kingdom. Morphological and taxonomic characteristics, functional and evolutionary relationships, natural history, and ecological relationships and life cycles of representative types will be discussed. Prerequisites: BIOL 106, 106L, 108, 108L. Fall, alternate years.

**331L INVERTEBRATE ZOOLOGY LAB - 1 hour**

A survey of major invertebrate phyla with dissections. Some outside collections will be made. A detailed laboratory notebook is required. Completion of or concurrent enrollment in BIOL 331. Fall, alternate years.

**332 DNA SCIENCE - 3 hours**

A laboratory course that will introduce the student to DNA and how it can be analyzed and manipulated in order to obtain a novel gene sequence from an organism. Topics will include DNA extraction, polymerase chain reaction, restriction digestion, bacterial transformation, plasmid purification and analysis, gene sequencing and bioinformatics. Laboratories will emphasize the use of appropriate controls, troubleshooting and how the nature of science is reflected during the execution of a novel experiment. A mandatory lab fee will be charged. Prerequisite: BIOL 229 and 229L. Fall.

**350 ANIMAL BEHAVIOR - 3 hours**

Mechanisms, development, ecology and adaptive significance of animal communication, social behavior, mate selection, reproduction and parental investment. Students will develop, perform and present a research project. Prerequisite: BIOL 106, 106L, 108, 108L. January.

**360 GENETICS - 4 hours**

Development of the theory of the gene from Mendel to modern times. Inheritance patterns, chromosomal genetics, and storage and readout of genetic information at the molecular level. Prerequisite: BIOL 229 and 229L. Fall.

**364 COMPARATIVE VERTEBRATE ANATOMY - 3 hours**

An evolutionary and comparative morphological study of the organ systems in the phylum Chordata. Emphasis of the course is on the functional significance of specific vertebrate structural adaptations and their inclusion in the basic vertebrate body plan. The associated laboratory BIOL 364L requires animal dissection. Prerequisites: BIOL 106, 106L, 108, 108L. Fall.

**364L COMPARATIVE VERTEBRATE ANATOMY LAB - 1 hour**

Laboratory experience in the dissection and identification of the various vertebrate anatomical systems including the integumentary, skeletal, muscular, circulatory, digestive, renal, reproductive and nervous systems. Emphasis will be on the cat as a representative mammal with frequent references to other vertebrates and chordates. The laboratory requires animal dissection. Completion of or concurrent enrollment in BIOL 364. Prerequisites: BIOL 106, 106L, 108, 108L. Fall.

**365 CELL BIOLOGY - 3 hours**

Structural and physiological aspects of the cell; its molecular subcellular and cellular organizations with emphasis on various microscopic and cytological techniques; its function as related to its organization including permeability, metabolism, reproduction, differentiation and certain other specialized functions. Prerequisite: BIOL 229 and 229L. Spring, alternate years.

**395 ORIENTATION TO RESEARCH (W) - 1 hour**

An introduction to searching and interpreting scientific literature and to posing and developing research questions in the field of biology. Students develop a viable research proposal under the direction of a faculty mentor. Prerequisites: BIOL 106, 106L, 108, 108L; FYS or ENG 111. Fall.

**413 LIMNOLOGY - 3 hours**

An in-depth examination of the ecological relationships across the biological, chemical and physical parameters of inland lakes and streams. A watershed approach will be emphasized. Prerequisites: BIOL 106, 106L, 108, 108L, one college-level chemistry class with laboratory. Fall, alternate years.

**413L LIMNOLOGY LAB - 1 hour**

Laboratories will provide the necessary skills to plan and execute research and interpret data from on-site lake and stream studies. Writing laboratory reports in scientific format and keeping an appropriate laboratory notebook is required. Completion of or concurrent enrollment in Biol 413. Fall, alternate years.

**422 ADVANCED HUMAN PHYSIOLOGY - 3 hours**

A survey of human organ systems, their specific processes and the nervous and hormonal processes integrating the activity of the various systems. Topics include cellular metabolism, blood, nerve and muscle function, circulation, respiration, digestion, water and electrolyte balance and the nervous and endocrine systems. Prerequisites: BIOL 106, 106L, 108, 108L; one year of chemistry. (Exercise Science majors may substitute BIOL 204, 204L and ESS 325 for BIOL 106 and BIOL 106L). Spring.

**422L ADVANCED HUMAN PHYSIOLOGY LAB - 1 hour**

Laboratory experience in the collection and analysis of physiological variables of vertebrates. Investigations focus on the responses of most major physiological systems (including integumentary, muscular, circulatory, digestive, renal, respiratory, nervous and sensory systems). Investigations will utilize various vertebrates including humans. Completion of or concurrent enrollment in Biol 422. Prerequisites: BIOL 106, 106L, 108, 108L. Spring.

**431 IMMUNOLOGY - 3 hours**

Cells and tissues of the immune system and the nature and function of antigens and antibodies. Survey of immune capabilities of humans and animals, immune diseases, immunodeficiency states, transplantation of organs and the influence of nutrition on the immune system. Prerequisite: BIOL 365 or BIOL 313. Spring, alternate years.

**475 INTERNSHIP IN BIOLOGY - 3 hours**

Student interns will function as applied professionals in biology or related field in order to understand the real world application of biological concepts, and to develop critical-thinking and technical skills, as well as professionalism. May not be repeated for credit. Prerequisite: junior standing or above, appropriate course work in biology or related discipline, and instructor permission.

**496 RESEARCH IN BIOLOGY - 1 hour**

Students will work under the direction of a faculty mentor in order to develop a research question, collect and analyze data, and communicate results in both written and oral formats. This course may be repeated for a total of three hours. Prerequisite: instructor permission.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

## **Biology-Chemistry (Pre-Health Care)**

*Director J. Osborne*

The biology-chemistry major is a joint major involving the Biology and Chemistry Departments at Manchester University. It provides a strong, broad-based, interdisciplinary background in science that prepares students for a variety of career paths, including the professional areas of medicine, optometry, pharmacy, dentistry and veterinary science, as well as graduate programs leading to master's or doctorate degrees in chemistry, biochemistry, molecular and cell biology and organismic biology. Additional options include entry level employment in the fields of biology, chemistry or biochemistry.

### **Baccalaureate Degree**

Major in biology-chemistry, 55-58 hours: BIOL 106, 106L, 108, 108L, 229, 229L, 364, 364L, 365 or 313 and 313L, 422, 422L; CHEM 111, 111L, 113, 113L, 235, 235L, 311, 311L, 312, 312L, 405, 405L or 406; one year of physics selected from PHYS 111 and 112, or PHYS 210 and 220.

Course descriptions can be found on the biology, chemistry and physics major fields of study sections.

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the program director.

## **Chemistry**

*Chair K. Davis, S. Klein, M. Bryant, J. Osborne, T. Salupo-Bryant, K. Watson*

The courses are designed for students who desire (a) a knowledge of chemistry to understand the technological society in which they live and to supplement other sciences; (b) to prepare for graduate work in the chemical sciences; (c) to secure training toward professions in medicine, medical technology, nursing, dentistry, engineering, etc.; (d) to teach chemistry in the secondary schools.

### **Baccalaureate Degrees**

Courses listed in parentheses are prerequisites.

Major in chemistry, 50 hours: CHEM 111, 111L, 113, 113L, 235, 235L, 311, 311L, 312, 312L, CHEM 341, 341L, 342, 342L; (MATH 121) PHYS 210, 220; two hours of laboratory work selected from: CHEM 405L, 441, 443; six hours of electives selected from: CHEM 405, 406, 425, 435.

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the department chair.

Minor in chemistry, 23 hours: CHEM 111, 111L, 113, 113L, 235, 235L, 311, 311L, and seven hours of electives selected from CHEM 200-400 level courses with no more than four hours from CHEM 380, 385, 475, 480, 485.

Requirements for the teaching major are available in the Office of Teacher Education.

### **Courses CHEM**

#### **101 CHEMICAL SCIENCE - 3 hours**

Applications of chemistry in society. Topics covered include an introduction to chemical bonding, chemical energy and organic chemistry. These concepts are applied to fossil fuels, the food system, nutrition, drugs, plastics and current topics of pollution. Fall. Spring. C-4NC.

#### **105 INTRODUCTION TO INORGANIC CHEMISTRY - 3 hours**

A broad overview of the basic theory and principles of general and inorganic chemistry. Topics include bonding theories, stoichiometry, thermodynamics, kinetics, acids and bases, and nuclear chemistry. The CHEM 105 and 106 sequence is recommended for students needing one year of chemistry. Prerequisite: MATH 105 or placement into a higher-level mathematics course. Fall. C-4NC.

#### **105L INTRODUCTION TO INORGANIC CHEMISTRY LAB - 1 hour**

Focuses on investigation of the topics covered in CHEM 105, including stoichiometry, thermodynamics, kinetics and acid-base chemistry. Prerequisite: Concurrent enrollment or successful completion of CHEM 105.

#### **106 INTRODUCTION TO ORGANIC CHEMISTRY - 3 hours**

Emphasizes organic and biological aspects of chemistry. Lectures cover bonding, structure, reactions, and naming of organic and biologically important molecules. Applications of organic chemistry to life sciences, industry and the home are stressed. The CHEM 105 and 106 sequence is recommended for students needing one year of chemistry. Prerequisite: CHEM 105. Spring.

**106L INTRODUCTION TO ORGANIC CHEMISTRY LAB - 1 hour**

Focuses on investigation of the topics covered in CHEM 106, including properties of organic compounds, reactivity, synthesis. Lab fee. Prerequisites: CHEM 105L and concurrent enrollment or successful completion of CHEM 106.

**111 GENERAL CHEMISTRY I - 3 hours**

Basis for all higher level chemistry courses. Topics covered include atomic and molecular structure; stoichiometry; energy relationships; bonding; and solid, liquid and gaseous states. Fall. C-4NC.

**111L GENERAL CHEMISTRY I LAB - 1 hour**

Laboratory experience in stoichiometry and introductory quantitative analysis supplement the classroom material. Lab fee. Prerequisite: Successful completion of or concurrent enrollment in CHEM 111. Fall.

**113 GENERAL CHEMISTRY II - 3 hours**

Thermodynamics as it relates to chemical equilibrium, acid-base systems and slightly soluble salts. The theory and application of kinetics to chemical systems is covered. Appropriate descriptive chemistry is included at all phases of the course. Prerequisite: CHEM 111. Spring.

**113L GENERAL CHEMISTRY II LAB - 1 hour**

Includes work in kinetics, colligative properties and ionic equilibria. Prerequisites: CHEM 111L or CHEM 112LH, successful completion of or concurrent enrollment in CHEM 113. Spring.

**136 FORENSIC SCIENCE - 3 hours**

Various aspects of analysis in the crime laboratory. Fingerprinting, drug analysis, arson investigation, blood analysis, DNA analysis, ballistics, and a variety of other topics will be studied. Laboratory work will be emphasized. A field trip will be included. Prerequisite: one CHEM course.

**235 ANALYTICAL CHEMISTRY - 3 hours**

An introduction to volumetric, photometric, chromatographic, potentiometric and gravimetric analytical techniques. Prerequisites: CHEM 113. Fall.

**235L ANALYTICAL CHEMISTRY LAB - 1 hour**

Laboratory work requires the use of spreadsheets for data analysis and computer searching of the Chemical Abstracts database. Students will also investigate acid-base equilibria, redox equilibria, spectroscopic techniques and separations. Lab fee. Prerequisite: CHEM 113L and concurrent enrollment or successful completion of CHEM 235.

**260 ENVIRONMENTAL CHEMISTRY - 3 hours**

An introduction to chemical processes in key areas of the Earth's environment, including the stratosphere, the ground-level atmosphere, ground water, sand soils and sediments. Emphasis on the impact of human activity and remediation strategies. Prerequisite: Six hours of college-level chemistry.

**311 ORGANIC CHEMISTRY I - 3 hours**

Fundamental concepts of organic chemistry including bonding, nomenclature, isomerism, stereochemistry, and the relation of structure to chemical and physical properties are covered. Descriptive chemistry and reaction mechanisms related to hydrocarbons, alkyl halides and alcohols are included. Prerequisite: A grade of C- or higher in CHEM 113. Fall.

**311L ORGANIC CHEMISTRY I LAB - 1 hour**

Experience in techniques of purification, separation and identification. Reactions illustrative of topics covered in lecture are included. Lab fee. Prerequisites: CHEM 113L; successful completion of or concurrent enrollment in CHEM 311. Fall.

**312 ORGANIC CHEMISTRY II - 3 hours**

Concepts covered in CHEM 311 as applied to the chemistry of aromatics, carbonyl compounds, amines, carbohydrates, etc. Continues to use reaction mechanisms and reactive intermediates in understanding the reactions of these compounds. Applications to related fields are made. Prerequisite: CHEM 311. Spring.

**312L ORGANIC CHEMISTRY II LAB - 1 hour**

Experience in functional group transformation, synthetic sequences and laboratory techniques. Lab fee. Prerequisite: CHEM 311L; successful completion of or concurrent enrollment in CHEM 312. Spring.

**341 PHYSICAL CHEMISTRY I - 3 hours**

Principles of quantum mechanics, chemical thermodynamics and statistical thermodynamics with application to pure substances including phase equilibria will be explored. Prerequisites: CHEM 113, MATH 122, PHYS 210 and 220. Fall.

**341L PHYSICAL CHEMISTRY I LAB (W) - 1 hour**

Laboratory to accompany CHEM 341. Prerequisite: CHEM 113L, CHEM 341 concurrent enrollment. Fall.

**342 PHYSICAL CHEMISTRY II - 3 hours**

Principles of chemical kinetics and dynamic equilibrium as well as application of equilibrium and non-equilibrium theory to a variety of chemical applications including electrochemistry and spectroscopy will be explored. Prerequisites: CHEM 341 or PHYS 340. Spring.

**342L PHYSICAL CHEMISTRY II LAB - 1 hour**

Laboratory to accompany CHEM 342. Prerequisites: CHEM 113L, CHEM 342 concurrent enrollment. Spring.

**405 BIOCHEMISTRY I (W) - 3 hours**

The chemical aspects of living organisms with an emphasis on structure-function relationships. Topics include biomonomers, protein structure and function, and degradative and synthetic biochemical cycles. Prerequisite: CHEM 312; FYS or ENG 111. Fall.

**405L BIOCHEMISTRY I LAB - 1 hour**

Experience in the isolation, purification and characterization of proteins. Lab fee. Prerequisites: CHEM 312L, 405 concurrent. Fall.

**406 BIOCHEMISTRY II - 3 hours**

Advanced topics on the chemical aspects of living organism with an emphasis on biopolymer interactions. Topics include protein-nucleic acid interactions, genetic information processing and molecular physiology. Prerequisite: CHEM 405. Spring.

**425 ADVANCED ORGANIC CHEMISTRY - 3 hours**

A physical organic approach to structure and reactions. The use of chemical literature and electronic searching with STN are practiced. Prerequisite: CHEM 312 and 342.

**427 INSTRUMENTAL ANALYSIS LAB - 2 hours**

Experience in the use of chemical instrumentation. Various methods will include spectroscopy, chromatography, electrochemistry, mass spectrometry and others. Experiments include characterization and synthesis of organic and inorganic compounds. Includes six hours of laboratory work per week. Prerequisite: CHEM 233.

**435 ADVANCED INORGANIC CHEMISTRY - 3 hours**

Electronic structures and periodicity of elements. Includes bonding theories for covalent, ionic and metallic compounds; molecular symmetry; acid-base theories; and redox, transition metal and organometallic chemistry. Prerequisite: CHEM 342.

**441 ADVANCED ANALYTICAL LAB I - 1 hour**

Experience in the use of chemical instrumentation. Various methods will include spectroscopy, chromatography, mass spectrometry, electrochemistry and others. Includes three hours of laboratory work per week. Prerequisite: CHEM 235, 235L.

**443 ADVANCED ANALYTICAL LAB II - 1 hour**

Experience in the use of chemical instrumentation. Multi-week projects of chemical, environmental and biochemical analysis involving multiple methods will be employed. Various methods will include spectroscopy, chromatography, mass spectrometry, electrochemistry and others. Includes three hours of laboratory work per week. Prerequisite: CHEM 235, 235L.

**451 TOXICOLOGY & HUMAN HEALTH - 4 hours**

The purpose of this course is to provide students with a fundamental understanding of general principles, mechanisms, current trends and recent developments in the prevention, detection, diagnosis and treatment of acute and chronic toxicities from drug and chemical exposures from a variety of sources (medications, environment, food, water, etc.). Topics will discuss distribution, cellular penetration, metabolic conversion, and elimination of toxic agents, as well as the fundamental laws governing the interaction of foreign chemicals with biological systems. Emphasis will be placed upon application of these concepts to the understanding and prevention of mortality and morbidity resulting from exposure to toxic substances. Overall rationale is to learn strategies to prevent toxicity after intentional or accidental poisonings, and various forms of natural and man-made disasters. Prerequisites: CHEM 312 and two semesters of BIOL courses.

**475 INTERNSHIP (W) - 2-4 hours**

Students with junior or senior status work in a professional setting related to chemistry: industrial, governmental or private research facilities. The students are supervised and evaluated by professionals who submit reports to the students and the chemistry faculty supervisor. May be repeated once with consent of the department. Prerequisite: FYS or ENG 111; consent of department chair.

**496 RESEARCH - 1-4 hours**

Independent research under the supervision of a faculty member or other designee. May be used toward completion of the major Senior Comprehensive Evaluation. May be repeated for a maximum of four hours. Prerequisite: CHEM 311L.



**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and the vice president and dean for academic affairs also must approve. A set of guidelines is available at the Office of the Registrar. Prerequisite: FYS or ENG 111.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

## **Arthur L. Gilbert College of Business**

*Dean T. Ogden, B. Driscoll, R. Hedstrom, W. Hoffman, S. Kang, J. Lutz, D. McGrady, J. Messer, B. Pyrah, J. Simmers, H. Twomey*

The College of Business builds upon the University's liberal arts program, combining traditional academic course work with experiential learning to prepare students for professional careers in for-profit businesses and nonprofit organizations. Students will have the opportunity to explore accounting, business management, entrepreneurship, finance, marketing, professional sales and sport management. Internships may be arranged across the curriculum.

### **Baccalaureate Degrees**

Core, 30 hours: ACCT 211, 212; BUS 108, 111, 313, 474; ECON 221, 222; FIN 333; MATH 210.

Major in accounting, 53 total hours: core courses plus ACCT 311, 312, 321, 331, 409, 475; BUS 310.

Major in business management, 52 total hours: core courses plus BUS 231, 310, 340, 350, 435, 447, 448, 485.

Major in finance, 49 total hours: core courses plus ACCT 331; ECON 310; FIN 335, 340, 455, 475, 485.

Major in marketing, 52 total hours: core courses plus ART 261; BUS 234, 301, 337, 420, 435, 445, 485.

Major in professional sales, 52 total hours: core courses plus BUS 234, 309, 317, 322, 435, 451, 453; COMM 344.

Major in sport management, 51 hours: core courses plus BUS 117, 241, 245, 363, 367, 369, 425, 435.

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the dean of the College of Business.

Minor in business, 20-21 hours: ACCT 211, 212; BUS 108, 111, 313; FIN 333; three or four hours of electives selected from departmental courses.

Minor in entrepreneurship, 25 hours: ACCT 211; BUS 111, 234, 448, 451; IDIV 201; six hours of electives approved by the Johnston Chair.

Minor in professional sales, 18-19 hours: ACCT 211; BUS 111, 234, 309; two courses selected from BUS 317, 322, 451, 453, COMM 344.

### **Courses ACCT**

#### **211 PRINCIPLES OF ACCOUNTING I - 3 hours**

Students examine the principles of an integrated accounting system including both financial and managerial accounting. Emphasis is placed on introducing the financial statements and using accounting information. Topics include cost-volume-profit analysis, budgeting, accounting cycle, cash and working capital. Fall. January. Spring.

**212 PRINCIPLES OF ACCOUNTING II - 3 hours**

Students continue the examination of the principles of an integrated accounting system including both financial and managerial accounting. Emphasis is placed on interpreting financial statements and using accounting information for decision making. Topics include receivables, inventory, long-term assets, liabilities and product costing. Prerequisite: ACCT 211. Fall. January. Spring.

**231 ACCOUNTING SOFTWARE APPLICATIONS - 1 hour**

Students examine computer software applications (QuickBooks) commonly used for accounting purposes. Prerequisite: ACCT 211.

**311 INTERMEDIATE ACCOUNTING I - 4 hours**

Students examine the theoretical framework and underlying concepts that govern the field of accounting. Topics include the accounting cycle, measurement and valuation of balance sheet accounts and presentation of financial statements. Prerequisite: ACCT 212. Fall.

**312 INTERMEDIATE ACCOUNTING II - 4 hours**

Students continue the examination of the theoretical framework of financial reporting. Topics include accounting for investments, income taxes, pensions and leases, as well as current issues in accounting. Prerequisite: ACCT 311. Spring.

**321 MANAGERIAL & COST ACCOUNTING - 4 hours**

Students examine accounting methods that assist an organization with planning and control. Emphasis is placed on decision making. Topics include costing systems, cost allocations, budgeting and variance analysis. Prerequisite: ACCT 212.

**331 INTRODUCTION TO TAXATION - 4 hours**

Students examine the concepts underlying federal taxation. Emphasis is placed on topics that affect both individuals and businesses, including tax accounting, revenue recognition, deduction allowance and depreciation.

**405 ADVANCED ACCOUNTING - 4 hours**

Students explore the problems of accounting for partnerships, consolidations, foreign currency transactions and international accounting. Prerequisite: ACCT 312.

**409 AUDITING - 4 hours**

Students examine the audit process, including its components: planning, fieldwork, and reporting. Topics include professional responsibilities, audit risk and materiality, internal control and evidence accumulation. Prerequisite: BUS 310.

**413 ADVANCED AUDITING - 3 hours**

Students examine auditing and attestation professional standards and practices, including planning and accepting engagements, evaluating internal controls, obtaining evidence to form a basis for conclusion and preparing communications to satisfy engagement objectives. Prerequisites: ACCT 409.

**422 ADVANCED MANAGERIAL ACCOUNTING - 3 hours**

Students examine advanced accounting methods that assist an organization with planning and control. Emphasis is placed on the managerial accountant as business partner in an organization. Topics include quality costs, transfer pricing, performance measurement and current topics in managerial accounting. Prerequisite: ACCT 321.

**433 ADVANCED TAXATION - 4 hours**

Students examine income tax rules for corporations, partnerships, estates and trusts. Prerequisite: ACCT 331.

**435 GOVERNMENT AND NONPROFIT ACCOUNTING - 3 hours**

Students learn the basic principles and procedures of financial accounting for state and local governments and nonprofit organizations. Prerequisite: ACCT 311.

**450 FINANCIAL ANALYSIS - 3 hours**

Students examine external and internal financial analysis. Topics include financial statement analysis, comparison of the financial statements with prior year statements, budgets and statements of other companies in the industry. Prerequisite: FYS or ENG 111; FIN 333.

**475 INTERNSHIP - 0-12 hours**

This course option grants academic credit for a supervised professional experience designed to give students experience in their fields of study. Evaluation of the experience is provided by the student, the student's supervisor in the internship and a Manchester University supervising instructor. This course may be repeated for a maximum of 12 hours of credit. Prerequisite: Approval of department's Internship Committee. Grading is P/NP.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussion.

**Courses BUS****106 COMPUTER APPLICATIONS: VARIABLE TOPICS - 1 hour**

This course introduces students to computer software applications commonly used in business. Variable topics may include word processing, spreadsheets, database applications, presentation graphics, accounting applications or web design. This course may be repeated with different topics.

**108 SPREADSHEET & DATABASE APPLICATIONS - 2 hours**

Students examine computer software applications commonly used in business. The focus of the course is on spreadsheet and database applications with an introduction to other basic applications.

**111 FOUNDATIONS OF BUSINESS - 3 hours**

Students examine the basic elements of business enterprises with emphasis on marketing and management. Topics include the marketing mix and the functions of management as well as introductions to finance and accounting. No previous exposure to studying business is required or expected.

**117 PRINCIPLES AND PRACTICES IN SPORT MANAGEMENT - 3 hours**

Students examine the relationships, goals and missions that are relevant in gaining a general understanding of the sport industry. Topics include the history and evolution of sport management, current trends in the profession, career options and professional development and an introduction into the major areas of the field.

**202 EXPLORING INTERNATIONAL BUSINESS - 3 hours**

Students explore international business in one or more countries outside the United States. Topics include international marketing, advertising, manufacturing, distribution, tourism and promotion. No previous exposure to studying business is required or expected. C-3GC.

**231 PRINCIPLES OF MANAGEMENT - 3 hours**

Students build upon the basic elements of the management process examined in BUS 111, exploring management in greater depth in the modern organization. Topics include planning, organizing, leading, and controlling, as well as management's impact on organizational effectiveness, employee productivity and employee satisfaction. Prerequisite: BUS 111.

**234 PRINCIPLES OF MARKETING - 3 hours**

Students build upon the basic elements of the marketing mix examined in BUS 111, exploring marketing in greater depth in the modern organization. Topics include the development of the marketing plan (products and services, pricing, promotion and distribution), as well as introductions to consumer behavior, market research, market segmentation, business-to-business marketing and the social responsibilities of marketers. Prerequisite: BUS 111.

**241 SOCIAL AND ETHICAL ISSUES IN SPORT MANAGEMENT – 3 hours**

Students examine the psychosocial and ethical factors involved in effective sport management. Topics include leadership, team dynamics, ethical dilemmas and decision making, international sport governance and the intersection between sport management and various social institutions.

**243 SPORT INFORMATION PRACTICES - 3 hours**

Students investigate the fundamentals of communicating in a sports environment. Topics include sports information utilizing various media, effective public relations and statistical methods and record keeping.

**245 GOVERNANCE AND POLICY IN SPORT MANAGEMENT - 3 hours**

Students examine the organizational structure of a variety of athletic governing bodies. Topics include league structure and decision-making, conferencing of scholastic/intercollegiate athletics and professional sport, Olympic structure, and governing policy development and management. Prerequisite: BUS-117

**301 PROMOTION AND ADVERTISING - 3 hours**

Students examine the role of advertising in the marketing mix. Topics include all promotional mix elements with an emphasis on advertising; promotion strategies; market segmentation; brand positioning; creativity models; and regulatory, public policy and ethical issues.

**309 INTRODUCTION TO SALES – 3 hours**

Students explore the role of the selling function in the marketing mix. Topics include personal selling theory and practice, business-to-business theory and practice, and an introduction to managing the sales force and designing sales territories. Prerequisite: BUS 234.

**310 BUSINESS INFORMATION SYSTEMS - 3 hours**

Students examine information systems as well as system development through systems analysis, design and implementation. Topics include business processes, information flows, systems documentation, internal controls and relational database concepts. Prerequisite: ACCT 211; BUS 108; BUS 111.

**313 BUSINESS LAW I - 3 hours**

Students examine the legal environment in which businesses operate. Topics include contracts, sales and introductions to business organizations, employment law and commercial paper. Fall. January. Spring.

**317 TECHNOLOGY IN PROFESSIONAL SALES - 3 hours**

Students explore sales technology and decision making systems that support achievement of sales representatives' and managers' responsibilities. Topics include customer relationship management systems (CRM), time and territory management systems, lead generation and qualification systems, reporting and analytics, and sales force optimization systems. Prerequisite: BUS-309.

**322 SALES FORECASTING - 3 hours**

Students examine the role of formal statistical techniques in the forecasting of product sales and market demand. Topics include forecasting methods and model selection, forecasting with regression models, forecasting with time-series models and the evaluation of forecast accuracy. Prerequisites: BUS 234; MATH 210.

**325 PRINCIPLED LEADERSHIP - 3 hours**

Students explore leadership in multiple contexts including business, community, and other organizations. Topics include styles and traits of both effective and ineffective leaders along with the role of organizational culture in leadership effectiveness. No previous exposure to studying business is required or expected. C-3RC.

**337 RETAIL MANAGEMENT - 3 hours**

Students examine the role of retailing, focusing on all channels of omniretailing. Topics include retailing management, inventory management and control, purchasing, promotion, location, and human resource management.

**340 HUMAN RESOURCE MANAGEMENT - 3 hours**

Students examine the process of managing the people associated with an organization. Topics include employee recruitment, retention and separation; diversity; employee safety and health; salary and benefits administration; and unionization. Prerequisite: BUS 111.

**350 ORGANIZATIONAL BEHAVIOR - 3 hours**

Students explore the complex and dynamic organizational society in which the professional manager operates. Topics include the role of the individual in an organizational culture, job and organizational design and organizational change. Prerequisite: BUS 111.

**361 SPORT FINANCE - 3 hours**

Students examine financial and managerial accounting concepts necessary to be financially literate in the business of sport. Topics include corporate annual reports, budget planning, common ratios and financing of sport organizations. Prerequisite: BUS-111

**363 MARKETING AND SPONSORSHIP IN SPORT - 3 hours**

Students examine principles of marketing and sponsorship related to the sport and fitness industry including professional sports, corporate fitness, college/high school athletics, clubs and resorts. Topics include sport consumer behavior, market segmentation, applying marketing mix concepts, creating marketing plans and creating sponsorship packages. Prerequisite: BUS-111

**365 SPORT LAW - 3 hours**

Students examine the legal concepts related to sport and physical activity. Topics include participation and eligibility issues, constitutional due process, Title IX and related administrative law, facility and employment contracts, and tort law applications to participants and spectators. Prerequisite: BUS-111

**367 SPORT FOR DEVELOPMENT - 3 hours**

Students examine how sport can be used as a catalyst for development and social change. Topics include the sociocultural impact of sport, sport as an intervention tool, grassroots and global programs using sport as a social change agent, ethical and environmental practices in sport management and effective program development.

**369 EVENT AND FACILITY MANAGEMENT - 3 hours**

Students examine the multi-faceted nature of event and facility planning, organizing and management. Topics include strategic planning in event and facility development, financing and revenue generation, event and facility operations and evaluation. Prior completion of BUS 363 preferred. Prerequisite: BUS-117

**371 INTERNATIONAL SPORT GOVERNANCE - 3 hours**

Students examine international issues in sport governance and business. Topics include the interaction between sport and culture, various practices in event and facility management and an international understanding of the sports industry. This is a travel course that will be taught outside the United States. C-3GC.

**414 BUSINESS LAW II - 3 hours**

Students continue the examination of the legal environment in which businesses operate. Topics include business organizations, agency, debtor/creditor relations, secured transactions, and securities law. Prerequisite: BUS 313.

**420 MARKETING RESEARCH - 4 hours**

Students examine the use of research as a basis for marketing decision making. Topics include sources of marketing information; sampling; design of surveys and experiments; forecasting; and methods of analyzing, interpreting and using data. Prerequisites: BUS 234; MATH 210.

**425 STRATEGIC MANAGEMENT IN SPORT - 3 hours**

Students examine strategic management issues in the sport business industry. Topics include management functions within sport, policy development, effective organizational leadership and decision making, corporate social responsibility and organizational change. Prerequisite: BUS-117, 363.

**435 INTERNSHIP - 0-12 hours**

This course option grants academic credit for a supervised professional experience designed to give students experience in their fields of study. Evaluation of the experience is provided by the student, the student's supervisor in the internship and a Manchester University supervising instructor. This course may be repeated for a maximum of 12 hours of credit. Prerequisite: Approval of the department's Internship Committee. Grading is P/NP.

**445 MARKETING MANAGEMENT- 3 hours**

Students examine all elements of the marketing mix and develop a marketing plan for a product or service. Topics include new product and service development, pricing, promotion, segmentation, customer relationship management and Internet marketing. Prerequisite: BUS 234

**447 OPERATIONS MANAGEMENT - 4 hours**

Students examine the processes by which land, labor and capital are transformed into goods and services. Topics include forecasting, inventory management, quality management, design of work systems, location planning, facilities layout and waiting lines. Prerequisites: BUS 111; MATH 210.

**448 ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT - 3 hours**

Students examine issues unique to establishing and operating small businesses. Topics include entrepreneurial behavior, starting or acquiring a small business, financing a new business, developing a business plan and using strategic planning tools in a small business. Prerequisite: BUS 111.

**451 SALES AND ENTREPRENEURSHIP - 4 hours**

Students explore the intersection between the sales function and the small business start-up and the differences between selling an established product or service and selling in the start-up context. Topics include selling to multiple audiences (e.g., investors, customers, government) and moving others to believe in the entrepreneur and in her or his vision for the future. Prerequisite: BUS 309.

**453 SALES MANAGEMENT - 3 hours**

Students explore sales technology along with the responsibilities of sales executives and field sales managers. Topics include CRM; time and territory management; sales presentations; and sales force design, recruiting, training, motivation, compensation and evaluation. Prerequisite: BUS 309.

**474 CASE STUDIES IN BUSINESS (W) - 3 hours**

Using the case method, students in this capstone course synthesize the materials examined in the other courses required in their majors. Students hone critical thinking as well as oral and written presentation skills in the context of analyzing unstructured business problems. Prerequisites: senior status; BUS 111, 313; FIN 333. Spring.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.



**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussion.

**Courses FIN****204 FINANCIAL RESPONSIBILITY - 3 hours**

Students examine their roles in contributing to a financially responsible society and how various parties can impact the financial health of society at large. Topics include establishing and improving credit, using debt wisely, banking, personal budgeting, asset protection, tax management, long-term financial planning for retirement and education and institutional approaches to financial management. C-3RC.

**333 PRINCIPLES OF FINANCE - 3 hours**

Students examine the principles of corporate financial management. Topics include financial management overview, cash flows, taxes, financial statement analysis and forecasting, financial markets and institutions, interest rates, risk and rates of return and bond and stock valuation. Prerequisite: ACCT 212. Fall. Spring.

**335 CORPORATE FINANCE - 3 hours**

Students continue the examination of the principles of corporate financial management. Topics include cost of capital, capital budgeting, capital structure, dividend policy, hybrid financing and risk management. Prerequisite: FIN 333.

**340 INVESTMENT MANAGEMENT - 3 hours**

Students examine long- and short-term objectives of investment strategies, focusing on wealth accumulation. Topics include investment in stocks, bonds, mutual funds options and futures. Prerequisite: FIN 333.

**455 EQUITY ANALYSIS AND VALUATION - 3 hours**

Students use contemporary methods to analyze specific industries and securities. Topics include fundamental and technical approaches to security analysis, concepts of risk evaluation and portfolio theory and management. Prerequisite: FIN 335.

**475 INTERNSHIP - 0-12 hours**

This course option grants academic credit for a supervised professional experience designed to give students experience in their fields of study. Evaluation of the experience is provided by the student, the student's supervisor in the internship and a Manchester University supervising instructor. This course may be repeated for a maximum of 12 hours credit. Prerequisite: approval of the department's Internship Committee. Grading is P/NP/

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussion.

## **Courses NPM**

### **201 PRINCIPLES OF NONPROFIT MANAGEMENT - 3 hours**

Students examine the historical and cultural traditions in the United States which foster the growth of the third sector, the unique perspectives of management as they relate to nonprofit organizations and the focus of nonprofit activities. Topics include the scope, impact, methods and diversity of mission-based organizations, the management of volunteers and donors and the social values associated with the nonprofit sector.

## **Communication Studies**

*Chair J. Case, M. Calka, M. Lahman, T. McKenna-Buchanan, G. Morales*

The Department of Communication Studies combines traditional academic work with hands-on, experiential, and problem-based learning to prepare students to succeed professionally and personally. Students are immersed in the classic modes of communication—interpersonal, small group, public and mediated—and have the opportunity to specialize in digital media, public relations and health communication.

### **Baccalaureate Degrees**

Major in communication studies; 39 hours: COMM 130, 230, 256, 324, 360, 370, 477 or 499; 18 hours of electives chosen in consultation with advisor and approved by department chair.

Major in digital media: 39 hours: COMM 130, 230, 232, 240, 256, 324, 360, 370, 477 or 499; 12 hours of electives from ART 221, ART 261, CPTR 117, COMM 234, 235, 314, 336, and 432.

Major in public relations; 39 hours: COMM 130, 230, 256, 260, 314, 324, 335, 360, 370, 477 or 499; 9 hours of electives from BUS 234\*, COMM 221, 234, 240, 334, 341.

Major in health communication; 42 hours: COMM 130, 220, 230, 233, 241, 256, 324, 327, 360, 370, 477 or 499; three of the following: COMM 210, 335, 344; ECON 240; ESAT 343; SOWK 350.

Minor in communication studies; 21 hours: COMM 130, 256, 324, 360; nine hours of electives selected in consultation with advisor and with approval of the department.

Minor in digital media; 24 hours: COMM 130, 230, 232, 240, 360; 9 hours of electives from ART 221, ART 261, CPTR 117, COMM 234, 235, 336, and 432.

Minor in health communication; 21 hours: COMM 220, 233, 256, 327, 360; one of the following: COMM 241, 344, 370; ECON 240, SOWK 360.

Minor in public relations; 21 hours: COMM 256, 260, 324, 335, 360; 6 hours of electives from BUS 234\*, COMM 130, 221, 234, 314, 338, 341.

Communication studies, digital media, health communication and public relations majors must successfully complete COMM 477 Senior Internship or COMM 499 Senior Research Project to meet the senior comprehensive evaluation requirement prior to graduation. Details are available from the department chair.

Beginning in 2018-19 academic year, students will also be able to major or minor in health communication.

\*Students majoring or minoring in public relations are not required to take the prerequisite for BUS 234.

## **Courses COMM**

### **110 FOUNDATIONS OF HUMAN COMMUNICATION - 3 hours**

Examines a broad variety of communication contexts focusing both on the theoretical foundations and the development of communication skills. The course covers the definition and models of communication, including basic concepts such as the speaker, the listener and the message. The course also addresses mediating variables that affect communication across contexts, such as gender and culture. Finally, the course demonstrates how to communicate effectively in various settings, including interpersonal, group, public and mediated communication. C-1O. Fall. Spring.

### **130 MEDIA LITERACY - 3 hours**

Media analysis, interpretation and creation. Topics include media literacy, effects, audiences, economics, history, narrative structures and forms. Projects are designed to increase students' media literacy and introduce media production tools. Fall.

### **210 INTERPERSONAL COMMUNICATION - 3 hours**

A study of the factors involved in sending and receiving messages in interpersonal relationships. The student is encouraged to develop increased awareness of the effect one's communicating has on others and on the self. Both theoretical and applied aspects are stressed.

### **212 SMALL GROUP COMMUNICATION - 3 hours**

An introduction to small group communication theory and practice. Lectures and assignments will provide the opportunity to examine the impact of the following on communication in a small group setting: group roles, leadership, group interaction patterns and group formation and development. C-3RC.

### **220 INTRODUCTION TO HEALTH COMMUNICATION - 3 hours**

Examines the ways communication shapes health and health practices. Topics may include: provider-patient communication, organizational communication in health contexts, communication in community health education, information technologies in health communication and communication training for health care professionals. Students come away with a broad understanding of the implications of health communication on self and society.

### **221 DISCOURSE IN POLITICAL CAMPAIGNS AND SOCIAL MOVEMENTS - 3 hours**

An examination of campaign and social movement discourse and development theory. Students analyze persuasive message strategies utilized in historical and current political campaigns and social movements.

### **230 APPLIED THEORIES OF COMMUNICATION - 3 hours**

Students apply communication theory to examine human interaction, both interpersonally and in the larger social world. Emphasis on theories that can be applied in COMM 370. Fall.

### **232 NEW MEDIA - 3 hours**

Introduces the forms, narrative structures and cultural implications of digital media. Students learn of fundamental phenomena, such as interactivity, convergence, transmedia and fan cultures, and they apply what they learn to a transmedia storytelling project.

**233 HEALTH LITERACY - 3 hours**

In the U.S., close to 30 million adults have below basic health literacy and only 12% have the health literacy skills needed to understand most of the health instructions provided by healthcare professionals (U.S. Department of Health and Human Services, n.d.). Even those with higher education often struggle to comprehend and navigate the U.S. health care system. In this course, we will examine and analyze the definition of health literacy. Health literacy means that a person is able to read, understand, and act on health information. This course will also look at national and international literacy levels. We will examine at risk populations for low literacy, health literacy research and measurement tools. We will also learn about plain language and will apply it to current health information as well as examine health communication techniques being used to address low literacy and other issues

**234 INTRODUCTION TO SOCIAL MEDIA - 3 hours**

This course encourages hands-on familiarity with current social media platforms, explores the history of social media and discusses ethical considerations for social media use. Prerequisite: COMM 110.

**235 COMMUNITY PODCASTING - 3 hours**

Students use microphones, digital audio files, audio production software and the Spartan Stream production facilities to tell stories that are relevant to the North Manchester community. Students record and edit stories and then create Spartan Stream channels for them. Lectures include formal instruction on equipment usage, audio composition and the role of podcasting in communities.

**240 PROFESSIONAL COMMUNICATION - 3 hours**

A study of, and hands-on experience with, professional presentations, interviews and negotiations. Course content will emphasize strategies, technology issues, verbal and nonverbal communication, roles and ethics.

**241 COMMUNITY HEALTH WORK - 3 hours**

In this course, we examine and analyze the broad context of public health, health inequality, public policy, and community health. We then learn core competencies and skills relevant to community health work at the interpersonal, group, and community levels. We explore application of these core competencies and skills to specific health topics within given situations. The course material comes recommended by the Indiana Community Health Workers Association which will provide an optional opportunity for students to earn certification as a community health worker through the association after the completion of this course.

**256 INTERCULTURAL COMMUNICATION - 3 hours**

An examination of how communication is influenced by culture and how culture is created and maintained through communication. Students explore the complex relationship between culture and communication and how these issues interact with context and power in intercultural interactions. Fall.

**260 INTRODUCTION TO PUBLIC RELATIONS - 3 hours**

An introduction to the ethical management of relationships between organizations and the publics that can affect their success. Students learn the public relations process of research, planning, communication and evaluation.

**314 LANGUAGE AND THOUGHT (W) - 3 hours**

Examination of some of the connections between the structure of language and the structure of thinking. Types of misevaluation are analyzed in terms of the language habits from which they spring. Effort is made to help students be more aware of the interpersonal and organizational problems created by unexamined attitudes toward language. C-3RC.

**324 PERSUASION - 3 hours**

A study of the messages that move humans to act. Emphasis on the persuasive, argumentative and propagandistic appeals used to secure or resist social change. Students employ a number of analytical tools to build critical inquiry skills and develop advocacy skills by creating and presenting ethical arguments. Spring.

**327 CULTURAL AND HEALTH DISPARITIES - 3 hours**

In the U.S. healthcare system, there are a number of health disparities that are caused by race, ethnicity, class, gender, religion, sexual orientation, age, and socioeconomic status, and that influence medical decision-making and/or outcomes. This course will analyze and examine how health communication contributes to the understanding of culture and the reduction of health disparities by focusing on elements of cultural sensitivity and cultural competence.

**335 ADVANCED PUBLIC RELATIONS - 3 hours**

Students refine skills learned in the introductory course by designing their own PR campaigns and by working in teams on crisis response simulations. Particular emphasis is placed on developing appropriate and individual approaches to community relations. Prerequisite: COMM 260.

**336 VIDEO GAMES AND VIRTUAL IDENTITIES - 3 hours**

A study of the convergence of media and rhetoric in video games. Students learn how to analyze video games as cultural artifacts, as configurations of distinct but interlocking units of meaning. Lectures emphasize the interactivity, rhetoric and cultural implications of this emergent medium. Assignments include theoretical analyses and a presentation on contemporary issues.

**338 COMMUNICATION, TRAINING, AND DEVELOPMENT - 3 hours**

An in-depth exploration of the art and methods of training and development as applied to communication problems in organizational settings. Provides students the opportunity to develop and/or refine training and facilitation skills and to link communication theory and research to organizational practice. Students come away equipped to apply insights in organizational settings.

**341 COMMUNICATION IN ORGANIZATIONS (W) - 3 hours**

An examination of approaches to the study of communication channels in complex organizations. Units cover organizational theories, communication climate, message flow, communication audit and communication with the public. Prerequisite: FYS or ENG 111. Spring.

**344 LISTENING: A RELATIONAL APPROACH TO SALES - 3 hours**

Explores the appropriate attitudes and relevant listening principles needed to develop effective sales relationships. Because effective listening skills and empathy have a positive effect on sales performance and buyer satisfaction, students develop proficiency in the interrelated listening processes of hearing, understanding, remembering, interpreting, evaluating and responding. As students develop an ethics of listening they consider important choices that must be made each time they communicate with others. Students learn in theory and practice that effective and appropriate communication begins with listening: competent communicators work harder to understand than to be understood.

**360 COMMUNICATION ETHICS AND FREE SPEECH (W) - 3 hours**

Examination of the tensions between free and responsible communication in society. Using selected case studies of communication (taken from a variety of contexts and forums: interpersonal, organizational and public), students examine the moral implications of human communication. Spring.

**362 TELECOMMUNICATIONS - 3 hours**

A study of the economic, cultural and technological implications of cell phones, PDAs, iPods, laptops, cameras and surveillance technologies. Students learn the implications of these everyday media for larger issues, such as citizenship, consumerism and civic activism. Course content emphasizes the challenges and possibilities of adapting telecommunication technologies to civic purposes, and of the power of distance-collapsing and space-transforming media. Prerequisites: COMM 232.

**367 TV CRITICISM - 3 hours**

An application of critical theory to the television industry and television programs. Students learn how TV meaningfully combines images, sounds and words and how audiences can negotiate and subvert these combinations. Particular attention is paid to aesthetics, issues of representation, and audience behaviors. Other topics include reality TV, television as a culture industry, interactive TV and the global television market.

**370 RESEARCH METHODS - 3 hours**

This course provides an introduction to communication research. It includes framing appropriate questions for research, choosing a suitable qualitative or quantitative method and sample, crafting the research design and data collection. Data analysis and interpretation, as well as research ethics, are also addressed. Spring.

**375 INTERNSHIP IN COMMUNICATION STUDIES - 3 hours**

Students function as applied professionals in communication fields appropriate to their interests and training, including radio and television stations, theatres, public relations firms, etc. May not be repeated for credit. Application forms are available from faculty advisors. Prerequisite: Juniors or seniors majoring or minoring in communication studies, digital media or public relations.

**415 RHETORIC OF WAR - 3 hours**

An exploration of war rhetoric found in current and historical artifacts. Students utilize classical and contemporary methods of rhetorical criticism and reflect upon the ethical nature of persuasive appeals. Course content includes a survey of historical, political, philosophical and religious documents. Course activities include investigations of site specific commemorative rhetoric such as the Vietnam Veterans Memorial and the Korean War Veterans Memorial. C-3RC.

**432 GUERRILLA JOURNALISM - 3 hours**

At the intersection of professional media production and political activism, guerrilla journalists use cameras, microphones and post-production editing to craft media processes. Students form production teams, produce audio and video projects and upload these projects to Spartan Stream. Activities include formal instruction on equipment usage, video composition, distribution strategies and the role of guerrilla journalism in civic activism. Prerequisites: COMM 232.

**477 SENIOR INTERNSHIP IN COMMUNICATION STUDIES - 3 hours**

Students work in a professional environment as a part of their senior comprehensive evaluation. Students design the internship with the help of the communication studies faculty member in charge of internships. Senior internships may not be repeated for credit. Application forms are available from faculty advisors. Prerequisite: COMM 370.

**499 SENIOR RESEARCH PROJECT - 3 hours**

Students conduct original research as part of their senior comprehensive evaluation. Students will design a research study with the help of a communication studies faculty member. Senior research projects cannot be repeated for credit. Students must complete an application form available from faculty advisors. Prerequisite: COMM 370.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean must also approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.



## **Economics**

*Chair S. Majumder*

Economics is the study of how people make choices. The Department of Economics provides the theoretical tools that can be used to analyze such issues as discrimination, poverty, pollution and international relations. The department offers a wide range of courses that allow the student to obtain the foundation for careers in business, teaching, government and law. Our program places an emphasis on the development of analytical/critical thinking skills, quantitative and communication skills, and an ethical and global perspective on economic issues.

### **Baccalaureate Degree**

Major in economics, 32 hours: ECON 221, 222, 331, 332, 352, MATH 210; 12 hours of electives chosen from ECON 303, 310, 324, 328, 336, 342, 344, 348, 499, MATH 240, MATH 251.

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the department chair.

Minor in economics, 20 hours: ECON 221, 222, 331, 332, 352; MATH 210.

### **Courses ECON**

#### **115 ECONOMIC CONCEPTS - 3 hours**

An introduction to basic economic concepts and their role in the analysis of public and private economic decisions. An emphasis will be placed on the application of those concepts to public policy issues, such as those related to the environment, health care, economic development, money and banking and government taxes and expenditures. C-4HE.

#### **221 PRINCIPLES OF MICROECONOMICS - 3 hours**

The principles of economics with emphasis on methodology of economic analysis, supply and demand theory, market theory, resource allocation, public provision of goods and the economic discussion of environmental quality and resource use. C-4HE.

#### **222 PRINCIPLES OF MACROECONOMICS - 3 hours**

The principles of economics with emphasis on national income analysis, national problems of unemployment and inflation, banking, fiscal and monetary policies and international economics. This course will discuss the choices society must make within the economic framework. C-4HE.

#### **234 WELFARE, FREEDOM AND JUSTICE - 3 hours**

Economists over the last 250 years have probed the range and attributes of human behavior. In light of these investigations they have often asked philosophical questions about what constitutes an ideal society with a particular emphasis on fairness and well-being. This course looks at the writings of notable economists who tackle issues such as fairness, equality, distribution and social well-being. Their works will be analyzed and compared to trace these questions and the answers proposed. C-4PH

**303 ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS - 3 hours**

A study of the economics of environmental and natural resource issues. The natural resource issues will include energy, renewable and nonrenewable resources and sustainability. The environmental issues will include the analysis of optimal pollution levels, environmental regulations and alternative policies to reduce pollution and global warming. Prerequisites: ECON 115 or ECON 221.

**310 MONEY AND BANKING - 3 hours**

Analyzes money and financial institutions and their roles in the economic system. Discusses the Federal Reserve System and the commercial banking system, the historical role of money in a society, and the vital relationship between money, interest rates, price and output. Prerequisite: ECON 222.

**324 INTERNATIONAL ECONOMICS - 3 hours**

The study of the patterns of international trade in goods, services, and financial instruments. Topics will include trade models, trade policies, international factor movements, balance of payments, exchange rate determination and international macroeconomics. Prerequisite: ECON 221 and 222 or consent of instructor.

**328 ECONOMIC DEVELOPMENT - 3 hours**

An introduction to the economic experiences of the developing countries of Asia, Africa and Latin America. Topics include theories of development and the issues of population growth, poverty, income inequality, external dependence and debt, governmental inefficiencies, environmental erosion, the agricultural sector and trade policy. Prerequisite: ECON 115 or ECON 221.

**331 INTERMEDIATE MICROECONOMIC THEORY - 3 hours**

An in-depth study of the price-output allocations in the market economy. Topics include consumer theory, market structures and pricing theory, allocation models and related topics. Prerequisites: ECON 221.

**332 INTERMEDIATE MACROECONOMIC THEORY - 3 hours**

A study of theory of income determination for an economy. National income analysis, consumption, investment theory and related topics are included. Prerequisites: ECON 221 and ECON 222.

**336 GAME THEORY - 3 hours**

The study of individual, governmental and firm behavior that attempts to explain strategic interactions between individuals or groups of individuals in which the outcome of a decision depends on the choices of others. Prerequisite: ECON 221.

**342 AGRICULTURAL ECONOMICS - 3 hours**

This course is designed to introduce the student to the basic concepts in Agricultural Economics. This course will explore the role of agriculture in development, the determinants of a farmer's production and marketing decisions, food policy and its impact on health and poverty, the evolution and importance of agricultural policy, the role of risk and risk management options and the relationship between agriculture, trade and the environment. Prerequisite: ECON 221.

**344 HEALTH ECONOMICS – 3 hours**

An application of economic principles to examine the allocation of resources, price determination, and public policy in the health care sector. Emphasis on the role of economic theory to identify current problems and evaluate proposed solutions in the context of health policy and politics. Topics covered may include markets for health care and insurance, economic determinants of health, inequalities in health care provision, organ donor markets, governmental health provision and regulation, and comparative analyses of health care systems across developed and developing nations. Prerequisite: ECON-221. **C-3RC**

**348 BEHAVIORAL ECONOMICS - 3 hours**

The study of human behavior that attempts to incorporate the insights of psychology and other social sciences into the development of economic models in an attempt to explain behavior that cannot be explained by standard economic analysis. Prerequisites: ECON 221 or consent of instructor.

**352 ECONOMETRICS (W) - 4 hours**

Research project design in economics using regression techniques to analyze data in light of economic theory. Concepts covered include simple and multiple linear regression, problems in regression, including heteroskedasticity, multicollinearity and autocorrelation, as well as more advanced regression techniques such as simultaneous equation estimation. Prerequisites: ECON 221; MATH 210 or 240.

**375 INTERNSHIP IN ECONOMICS - 1-3 hours**

Provides academic credit for a supervised professional experience in a field related to economics. The student, faculty advisor and professional supervisor provide evaluation. See the department chair for information and an application. Prerequisite: junior or senior standing in the department and written approval from the department chair.

**499 SENIOR RESEARCH SEMINAR - 3 hours**

Conduct an extensive research project grounded in economic theory and utilizing econometric methodologies. The student will work under the close supervision of a faculty member. Prerequisites: ECON 350, senior standing in the department.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

## **Henney Department of Education**

*Chair H. Schilling, K. Kurtzhals, M. Potts, S. Stetzel*

The Education Department prepares students for a variety of careers that involve working with children and young adults. The department prepares teachers of ability and conviction at the early and middle childhood, middle school, high school and all-grade levels. Each of the licensure-seeking majors is aligned with regulations determined by the Indiana Department of Education's Office of Educator Licensure and Development.

In addition, the Education Department offers a major in Educational Studies. Intended for students who are interested in a career working with people of all ages but not as a licensed teacher, this major offers a variety of focus areas including business, counseling, education and library services.

Manchester University is accredited by the Department of Education, Division of Professional Standards, the National Council for Accreditation of Teacher Education (NCATE) and the North Central Association of Colleges and Secondary Schools.

### **Baccalaureate Degree**

Courses listed in parentheses are prerequisites.

Major in educational studies; 35 hours: EDUC 111, 212, 230; EDUC 223 or PSYC 224 (PSYC 110); PEAC 218 or 320; SOWK 110; four hours of EDUC 465; 12 hours from one of the four foci:

- Business: ACCT 211; BUS 111, 231, 234; COMM 260; ECON 221 or 222; NPM 201
- Counseling: PSYC 201, 225, 366; SOC 340 or 335; SOWK 274
- Education: EDUC 203, 205, 216, 340, 342
- Library Services: EDUC 342; ENG 254; LIB 200, 202, 210

**Elementary Education Major:** early and middle childhood generalist with an emphasis in mild intervention, English learners or high ability.

Required courses for all Elementary Education Majors: EDUC 111, 212, 230, 246, 301, 351, 362, 405, 410, 474; HIST 111 or 112, HIST 121 or 123; MATH 107, 303.

English Language Learners Concentration: EDUC ENG/MODL 350, 354, 471; ENG 310 or 311; one French, German, or Spanish course at 300 or 400 level.

High Ability Concentration: EDUC 240, 346, 472.

Mild Intervention Concentration: EDUC 263, 315, 478.

**All Grade Teaching Majors:** music (choral or instrumental), physical education, visual arts.

**Secondary Teaching Majors:** biology, chemistry, English/language arts, history, mathematics, physics, Spanish. An option of mild intervention, English learners or high ability may be added to any secondary teaching major.

Detailed information regarding course requirements for all teaching certifications is available in the Office of Teacher Education or in the department of the major area.

### **Elementary Education Methods Block**

The elementary education methods block includes EDUC 301, 325, 327, 351 and MATH 303. Prerequisites: EDUC 237, 340.

### **Professional Semester in Elementary Education**

The following courses are included in the professional semester; EDUC 410 and 474 and EDUC 471 or 472 or 478. The student teaching experience will be a full semester and students will return to campus once a week for evaluation, analysis and problem solving in EDUC 410.

### **Professional Semester in All Grade and Secondary Education**

The courses EDUC 410 and 475, and possibly 477 or 479 are included in the professional semester. The student teaching experience will be a full semester and students will return to campus once a week for evaluation, analysis and problem solving in EDUC 410.

### **Senior Comprehensive Evaluation**

The senior comprehensive evaluation for all students seeking licensing through Manchester University consists of the following components: successful completion of the Impact on Student Learning project which consists of the development and teaching of a unit plan in a student teaching placement, the written representation of the research and data analysis and the oral defense of the project. Additional information regarding the SCE can be found in the Student Teaching Handbook.

### **Admission to Teacher Education and Approval to Student Teach**

Information can be found in the Teacher Education Student Handbook on the Department of Education web site.

### **Teacher Licensing and Graduation Requirements**

Candidates for an Indiana teaching license can find information on the Indiana Department of Education website ([www.doe.in.gov](http://www.doe.in.gov)). The application will be processed when the candidate has met the following criteria, which are subject to change by action of the Teacher Education Committee of Manchester University:

1. Satisfaction of all requirements for admission to the Teacher Education program and student teaching, including the Celebrating Diversity Workshop requirement.
2. A cumulative grade point average of 2.50, including a C+ or better in student teaching.
3. A 2.50 grade point average in each teaching field in which the candidate wishes to be licensed.
4. Conduct approval from the Student Experience Office.
5. Completion of the baccalaureate degree and an approved Manchester University teacher licensing program.
6. Satisfactory completion of the CASA exams (math, reading and writing) or the SAT or ACT equivalent passing scores.
7. Successful completion of the Indiana Developmental/Pedagogy exam as well as the appropriate Indiana Content Area Assessments in areas of licensure.
8. Minimum of proficient rating on each professional disposition from faculty members of the unit and/or clinical faculty.
9. A current CPR/Heimlich certification (no older than one year) must be on file with Education Department.

Application deadlines may vary for the Fast Forward program. Contact the Education Department for further information.

## **Transition to Teaching**

The Transition to Teaching (T2T) program prepares a qualified person who holds at least a baccalaureate degree to enter the teaching profession. Having passed the appropriate licensure tests to be admitted, participants enroll in a set of education courses focused on pedagogy, enabling the professional to enter the field of teaching. This non-degree track provides coursework required for a teaching license in the state of Indiana.

T2T Secondary Education required courses (18 credit hour maximum): EDUC 212, 230, 343, 353, 385 and 485.

## **Courses EDUC**

### **111 EXPLORING TEACHING AND LEARNING - 3 hours**

The first course taken by all education students seeking the baccalaureate degree. Introduces prospective education majors to the education programs at Manchester University, current issues in P-12 education, educational philosophy and challenges facing the teaching profession. Content includes professional development, decision-making, effective teaching, family involvement, culture of and in schools, professional standards, collaboration and teachers as lifelong learners. 25 hours of field experience required. Fall. Spring.

### **203 LEARNING THROUGH MOVEMENT - 3 hours**

Course addresses the implementation of interdisciplinary instruction that includes fundamental concepts and processes of dance, theatre and physical education. It will include methods, resources and assessment strategies for integrating dance, theatre and physical education throughout the elementary curriculum to meet the needs of all learners. Fall, odd years.

### **205 CREATIVITY IN THE CLASSROOM - 3 hours**

Course addresses the implementation of interdisciplinary instruction that includes fundamental concepts and basic processes of the fine arts. It will include methods, resources and assessment strategies for integrating the fine arts throughout the elementary curriculum to meet the needs of all learners. Fall, even years.

### **212 THE EXCEPTIONAL LEARNER - 3 hours**

This course provides a comprehensive overview of the field of special education with a major emphasis on the understanding of individual differences. The historical developments that have affected special education along with current issues and trends and the impact of legislation upon special educational practices, including inclusion, will be reviewed. The course will survey strategies for adapting education programs to educationally different children and youth. The characteristics of disabling conditions and relevant terminology will be defined and the issues of assessment and placement will be discussed. 25 hours of field experience required.

### **216 BUILDING COMMUNITIES IN SCHOOLS - 3 hours**

An exploration of the relationships between communities and schools in diverse settings. The course will examine the influence the community has on the school systems in that environment, paying close attention to poverty, culture and family dynamics. C-3RC

### **223 CHILD DEVELOPMENT (W) - 3 hours**

A study of the physiological, intellectual, sociological and psychological factors influencing the child from the time of conception to puberty. Field experience is required. Spring.

**230 EDUCATIONAL PSYCHOLOGY – 3 hours**

Application of theories of learning. Content develops an awareness of the growth and development of learners from early childhood through adolescence. A systematic examination of best practices through action research will be included. 25 hours of field experience required. Required for sophomores seeking entry into the Teacher Education Program. Prerequisites: EDUC 111.

**240 LEARNERS WITH HIGH ABILITY - 3 hours**

Students will explore the social and emotional predispositions, characteristics and needs of high ability youth. Best practices for identifying the inherent leadership and entrepreneurial capacities of high ability students and helping them develop those personal traits and capacities to their fullest potential will be studied and applied. Field experience required. Prerequisite: EDUC 212. Fall.

**246 EDUCATIONAL ASSESSMENT - 3 hours**

This course will help preservice teachers to better understand their own implicit theories behind testing, while helping them to identify effective testing practices. This course also acquaints students with current controversies, research methods and applied issues in instruction and assessment. 25 hours of field experience required. Prerequisite: EDUC 230.

**263 LEARNERS WITH MILD DISABILITIES - 3 hours**

An in-depth study of the characteristics and causes of mild disabilities, including psychological, environmental and cultural factors. Prerequisite: EDUC 212. Spring.

**301 CORRECTIVE READING - 3 hours**

Study of the informal and formal assessment of children's reading disabilities, uses and interpretation of standardized and teacher constructed tests and an emphasis on remedial techniques. Includes tutoring experience in diagnosis and correction. Taken as part of the Elementary Methods Block. Prerequisite: EDUC 230 and 340. Fall.

**310 PRACTICUM IN ELEMENTARY EDUCATION - 3 hours**

Practical experience in the public school classroom under the direction of a classroom teacher and University representative. The student will assume approximately one-half of the responsibilities of the classroom teacher. Outside readings related to the level of instruction will complement the daily experience in the classroom. Prerequisite: approval of the department chair.

**315 MILD INTERVENTIONS: STRATEGIES FOR INSTRUCTION - 3 hours**

Examination of curriculum, effective teaching methods and materials appropriate to teach learners with mild disabilities. Prerequisites: EDUC 212, 263. Fall.

**340 LITERACY BLOCK (W) - 8 hours**

Integrated study of the language arts. Emergence and development of listening, speech, writing and reading, including word recognition and comprehension strategies. Includes the evaluation and use of instructional and recreational reading materials, methods, curriculum, assessment and computer applications. Requires participation in school classrooms and wide reading in children's literature. Prerequisite: EDUC 230. Spring.

**343 LITERACY IN THE CONTENT AREAS (W) - 3 hours**

An overview of literacy skills and reading strategies. This course is intended for secondary education and P-12 education majors with an emphasis on engaging readers in textbook reading using research-based reading strategies. Students enrolled in the course will demonstrate performance of literacy standards through planning developmentally appropriate reading instruction. Prerequisite: EDUC 230.

**344 ASSESSING AND IDENTIFYING HIGH ABILITY LEARNERS - 3 hours**

An in-depth study of the identification of high ability students and the basis for educating high ability students. Field experience required. Prerequisite: EDUC 212. Spring

**346 INSTRUCTIONAL METHODOLOGIES FOR TEACHING HIGH ABILITY LEARNERS - 3 hours**

Differentiation and other instructional methodologies to serve the learning needs and styles of high ability learners will be addressed. Models of best practices based on research may include various models of teaching such as information-processing models of teaching/learning, social dynamics of teaching, personal and behavioral models, individual differences, learning styles and underlying research literature. Field experience required. Prerequisite: EDUC 212 and 240. Fall.

**350 ASSESSMENT AND IMPLEMENTATION OF MILD INTERVENTIONS - 3 hours**

Informal and formal testing, individual educational programs, classroom management and organization to meet the educational needs of learners. Prerequisites: EDUC 212, 263. Spring.

**351 CLASSROOM MGMT/CONFLICT RESOLUTION: ELEMENTARY SCHOOLS - 3 hours**

The study of current models of classroom discipline and conflict resolution and mediation in schools. Students will learn strategies to manage individual and group behavior and practice skills and processes for effectively resolving and/or mediating conflicts. Taken as part of the Elementary Methods Block. 25 hours field experience required. Prerequisites: EDUC 230, 340.

**353 CLASSROOM MGMT/CONFLICT RESOLUTION: SECONDARY SCHOOLS - 3 hours**

The study of current models of classroom discipline and conflict resolution and mediation in schools. Students will learn strategies to manage individual and group behavior and practice skills and processes for effectively resolving and/or mediating conflicts. Taken semester prior to student teaching. 25 hours field experience required. Prerequisite: EDUC 230 and 343.

**362 LITERACY AND ENGLISH LEARNERS - 2 hours**

Course addresses the study and application of methods of teaching English Learners (EL). It will include principles of language learning and their impact on content learning, how to teach specific language skills and how to design EL courses and language assessment tools. Future elementary teachers will develop multicultural awareness as they develop linguistic and cultural sensitivities required to adapt to EL at all stages of cultural integration. Field experience may be required. Prerequisites: EDUC 237. Concurrent enrollment in EDUC 340.

**405 INTEGRATED METHODS OF ELEMENTARY EDUCATION - 4 hours**

This course is designed to provide the elementary education major with planning and instructional strategies necessary for exemplary language arts, social studies and science instruction in the classroom. Attention will be made to those strategies that might be used for integrated instruction as well as instruction of each area as separate and distinct disciplines. Prerequisite: EDUC 340.



**410 THE TEACHER IN TODAY'S SCHOOL - 2 hours**

An examination of critical issues facing teachers in today's schools. Topics are variable but will include classroom management, legal rights and responsibilities of teachers and career service assistance. Taken concurrently with student teaching. Spring.

**440 GENERAL METHODS FOR ADOLESCENT LEARNERS - 3 hours**

The study of curriculum, methods and materials, computer applications and teacher assessment of student learning for grades 5-12. Must be taken in January prior to student teaching. Three week placement in diverse classroom is expected. Prerequisites: EDUC 230, 353. January.

**465 INTERNSHIP - 3-6 hours**

Students with junior or senior status will be placed with professionals in work environments related to their educational goals. This experience will extend knowledge to application in the actual career. The student will be supervised by a professional employed in the respective environment. May be repeated once in a different work environment for a maximum of six hours of credit. Prerequisite: consent of the department chair.

**471 ENGLISH LEARNERS STUDENT TEACHING - 6 hours**

Full-time teaching experience in the public school setting under the direct supervision of a teacher or coordinator responsible for differentiating instruction to English learners. Involvement is increased until the candidate assumes the responsibilities of the high ability educator. Must be complemented with a similar experience in EDUC 474 or 475. Prerequisites: EDUC 212, 340, 362.

**472 HIGH ABILITY STUDENT TEACHING - 6 hours**

Full-time teaching experiences in the public school setting under the direct supervision of a teacher or coordinator responsible for differentiating instruction to high ability learners. Involvement is increased until the candidate assumes the responsibilities of the high ability educator. Concurrent enrollment in one of the following courses: EDUC 473, 474, 475, 477 or 479. Prerequisites: EDUC 212, 305, 344, 346.

**473 EARLY CHILDHOOD STUDENT TEACHING - 3-6 hours**

Supervised teaching experience in nursery schools, day care centers, Head Start, kindergarten, first, second or third grade under college faculty and early childhood personnel supervision. Fee required. Prerequisites: EDUC 130, EDUC 327. Spring.

**474 ELEMENTARY STUDENT TEACHING - 7 or 13 hours**

Full-time teaching experiences in the public schools. Initial experiences include observing the classroom teacher and working with small groups. These experiences are gradually expanded until the student is in complete charge of the learning experiences of an elementary education. Prerequisites: Methods Block. Fee required. Spring.

**475 HIGH SCHOOL STUDENT TEACHING - 7 or 13 hours**

Full-time teaching experiences in the public schools. Following a brief observation experience, the student assumes the responsibilities of the regular classroom teacher under that teacher's direction. Students are expected to observe classes other than those of the cooperating teacher. Taken as a part of the professional term in secondary education. Prerequisites: one of the following EDUC 440; MUS 310, 360; MODL 354. Fee required. Spring.

**477 JR HIGH/MIDDLE SCHOOL STUDENT TEACHING - 3 or 6 hours**

Full-time teaching experiences in the public schools. Experiences are expanded until the student assumes the responsibilities of the regular classroom teacher. Must be complemented with a similar experience in EDUC 474 or 475. Prerequisites: EDUC 348; one of the following EDUC 440; MUS 310, 360; MODL 354. Fee required.

**478 MILD INTERVENTION STUDENT TEACHING - 6 hours**

Full-time teaching experiences in the public school special education classroom. Involvement is increased until the student assumes the responsibilities of the special education teacher. Must be complemented with a similar experience in EDUC 474. Prerequisites: Methods Block. Fee required. Spring.

**479 ALL GRADE STUDENT TEACHING - 13 hours**

Full-time teaching experience in the public schools. Following a brief observation experience, the student assumes the responsibilities of the regular classroom teacher under the teacher's direction. All students will have experiences at two different grade levels. Taken as part of the professional semester. Prerequisites: one of the following: EDUC 440; MUS 310; MUS 360. Fee required.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and the vice president and dean for academic affairs must also approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

## **Engineering Science**

*Coordinator G. Clark*

The engineering science degree is a dual-degree program that unites the advantages of a liberal arts background with those of an engineering degree from one of the nation's leading engineering schools. The program combines three years of course work completed at Manchester University with course work at an engineering institution such as Columbia University, Purdue University, The Ohio State University or Washington University in St. Louis, MO. Manchester University has an articulation agreement with Columbia University; students completing the Manchester program with a GPA of 3.3 will be admitted to Columbia upon recommendation by the program coordinator. Transfers to other engineering schools will be explored on an individual basis. Transfer credits from the engineering institution are used to complete the Manchester University degree in Engineering Science. A degree from the engineering institution is awarded after the completion of all requirements at that institution.

Typically, three years of coursework are completed at Manchester University and two years at the student's chosen engineering school. In order to complete the Manchester portion of the degree in three years, entering first year students must be prepared to take calculus during their first semester (students must take a Mathematics Placement exam to determine their level of preparedness; students not prepared to take calculus straightaway should discuss options with a member of the Department of Physics). Coursework for the engineering science major includes two semesters of calculus-based physics and two semesters of chemistry fundamentals. Upper-level course work depends on the route of engineering specialization: chemical or physical.

### **Baccalaureate Degree**

Courses listed in parentheses are prerequisites.

Major in engineering science, 54 hours: MATH 121, 122, 231, 245, (MATH 130) 251; CPTR 105; CHEM 111, 111L, 113, 113L; PHYS 210, 220.\*

Choose one of the following sequences: CHEM 235, 235L, 311, 311L, 341, 341L; or PHYS 301, 301L, 310, 310L, 320, 320L.

\*ECON 222 Macroeconomics is required for admission to Columbia University.

Course descriptions can be found on the [mathematics and computer science](#), [chemistry](#), and [physics](#) major fields of study pages.

## **English**

*Chair K. Ings, S. Erickson-Pesetski, B. Gilliar, S. Thomson, J. Watson*

The English major is offered with a concentration in literature, writing or language. Each concentration prepares students for continued study in graduate or professional school as well as for professional employment. Literature, because it is the recorded history of cultural and linguistic change, is an essential component of all concentrations. Students who concentrate in literature acquire understanding and appreciation of various literary forms, of specific literary works and of the development of literature. Students who choose to concentrate in writing take, in addition to courses in literature, journalism and professional and creative writing, an internship that gives them experience working in a professional setting. Students who concentrate in language take courses in literature and linguistics, as well as an introductory course and a practicum in teaching English to speakers of other languages.

Some first-year students will be assigned to ENG 103 based on standardized test scores and high school preparation. Some students may be assigned to working with a consultant in the Writing Center based on a diagnostic essay.

### **Baccalaureate Degree Bachelor of Arts only**

Major in English, language concentration, 39 hours: ENG 115, 321, 350, 352, 485; 310 or 311; 332 or 333; two courses selected from 340, 342, 344; 12 hours of electives selected from English courses (200 level and above); electives may also include MODL 201, modern language courses at the 300 level and above.

Major in English, literature concentration, 39 hours: ENG 115, 311, 321, 332, 333, 335, 340, 342, 344, 366, 485; six hours of electives selected from English courses (200 level and above); electives may also include MODL 201.

### **Bachelor of Arts or Bachelor of Science**

Major in English, writing concentration, 39 hours: ENG 115, 201, 317, 321, 366, 477, 485; 310 or 311; 332 or 333; 363 or 365; one course selected from 340, 342, 344; six hours of electives selected from English courses (200 level and above); elective may also include MODL 201.

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the department chair.

Minor in English, 24 hours: 24 hours of electives selected from English courses (200 level and above); electives may also include MODL 201.

Minor in journalism, 24 hours: ENG 201, 317, 363, 365, 377; COMM 130 or 232; one course selected from ART 131, ART 221, ART 261; one course selected from COMM 350, COMM 362, COMM 432.

Minor in teaching English to speakers of other languages (TESOL), 24 hours: ENG/MODL 350, 352, 354; ENG 310 or 311; six hours intermediate French, German or Spanish; one 300 or 400-level course in French, German or Spanish\*; one course chosen from COMM 256; ECON 320; ENG 238, 310, 311 (not used to meet above requirements); HIST 227; SOC 228.

\*International students will be exempt from the language courses if their native language is not English. Students who have completed one semester of study abroad may substitute (upon

approval of the program coordinator) an appropriate course from their study abroad if their non-English academic experience is substantial.

Applied Study Area in Libraries and Literacies; Stacy L. Erickson-Pesetski, coordinator: ENG 254, ENG 476; LIB 200; one course selected from ENG 311, LIB 202, COMM 232 or COMM 234.

Teaching Major in English/Language Arts: requirements available from the English department chair and the Department of Education.

## **Courses ENG**

### **103 FIRST YEAR SEMINAR WRITING LAB - 2 hours**

Complements the First Year Seminar writing instruction with concentrated work on the conventions of academic writing; focus on close reading, attention to grammar and mechanical skills, analysis and critical thinking, proper research methods and citation and revision. Admission by placement; taken in conjunction with the First Year Seminar during the fall semester. Students receiving a grade below C- will be required to enroll in ENG 111 the following spring.

### **111 COLLEGE WRITING - 3 hours**

Prepares students for the rigor and practice of college writing and critical thinking. Emphasis is on the essay form, on the reciprocal processes of clear writing and analytical reading. Students will both analyze model essays and write a sequence of essays that build toward a rhetorical repertoire; an ability to use language with nuance, clarity, and appropriateness of expression; and a foundation in research skills. Students will be taught to incorporate and respect other voices through integration of quotes, standard principles of documentation and avoidance of plagiarism. C-1W.

### **115 INTRODUCTION TO LITERARY STUDIES - 3 hours**

A variety of literary and critical texts are used to introduce central concepts of analytical and interpretive reading. The course examines ideas of literature and the formation of literary canons along with the relationship of literature to criticism and of critical analysis to evaluation. Fall.

### **201 JOURNALISM I: REPORTING - 3 hours**

Fundamentals of gathering, interpreting and writing news, along with an introduction to feature writing and news analysis. Emphasis is placed upon learning to organize a news story and to write clearly and concisely. Attention is given to the conventions of newspaper style, the organization of newspapers and the use of computers in writing and editing. Fall.

### **214 CLASSICAL AND MEDIEVAL LITERATURE - 3 hours**

Major works of ancient and medieval Europe in translation. Works likely to be studied, in whole or in part, are Homer's Iliad and Odyssey, Aeschylus' Agamemnon, Plato's Apology, Ovid's Metamorphoses, the anonymous Song of Roland and Dante's Divine Comedy. C-4LT. Spring.

### **238 WORLD LITERATURE - 3 hours**

Literature in English and in translation representing both a variety of genres and of cultural traditions. C-4LT. Fall, January, Spring.

**242 AFRICAN AMERICAN LITERATURE - 3 hours**

Explores African American literature from the folk tale through contemporary literature. Readings will include selections from early oral black vernacular traditions, slave narratives, the Harlem Renaissance, the Black Arts Movement, the Civil Rights Movement and contemporary writings. Prospective authors include Wheatley, Douglass, Du Bois, Hurston, Hughes, Baldwin, Ellison, Wright, Hansberry, Morrison, Dove and Wideman. C-4LT. Fall, January, Spring.

**250 LITERARY PASSPORT - 3 hours**

An introduction to the literature and culture of a particular non-US country or region. Students will read, discuss and write about literary texts from a variety of genres and investigate how writers use literature to preserve and respond to historical, social, political and/or artistic circumstances. Topics will vary according to instructor and student interest and will be indicated by different subtitles, such as South Asian Literature, Canadian Literature, Irish Literature and German Literature. May be taken twice, under different subtitles. C-3GC. Fall, January, Spring.

**254 CULTURE OF THE BOOK - 3 hours**

Introduction to the increasingly significant theoretical field of Book Studies. Provides students with an overview of the history and future of the book, including social, economic and political influence. Students will examine the role of the author, printer, and publisher and consider the importance of other external forces, such as marketing strategies and advertising techniques, on interpretation and circulation.

**309 CONTEMPORARY LITERATURE - 3 hours**

A study of literatures since 1965 representing various cultural traditions and critical perspectives. Selections from the literatures of Canada, the United States, the United Kingdom, Ireland, Africa, Australia and New Zealand. Prose, poetry and dramatic literature will be considered. C-4LT. Spring, odd years.

**310 STRUCTURE OF THE ENGLISH LANGUAGE - 3 hours**

Principles of phonology, grammar and usage by which the English language functions. Traditional, structural and generative-transformational models are examined and applied. Fall, odd years.

**311 HISTORY OF THE ENGLISH LANGUAGE - 3 hours**

Developments in English phonology, grammar and vocabulary from Indo-European and Germanic beginnings through Old, Middle and Early Modern English to Contemporary English. Emphasis is placed upon changing pronunciations, development of periphrases and dropping of inflections, growth of vocabulary, emerging standards for written and spoken dialects and recent patterns of variation. Fall, even years.

**317 JOURNALISM II: EDITING - 3 hours**

A study of news writing, news analysis, feature writing and opinion writing from the editor's perspective, along with attention to basic principles of newspaper and magazine design, the role of the press in society and fundamentals of media law. Students use computers in writing and red pencil in copy editing. Prerequisite: ENG 201. Spring.

**321 SHAKESPEARE (W) - 3 hours**

The plays of Shakespeare as literary text and theatrical production. Examination of the historical, cultural and formalistic issues that have created Shakespeare's unparalleled reputation in world literature. Within a context of contemporary literary theory, the plays will be studied from socio-political and theatrical perspectives. Includes opportunities to perform and to experience professional productions. Prerequisite: FYS or ENG 111. Fall.

**332 AMERICAN LITERATURE I: COLONIAL AND ANTEBELLUM AUTHORS - 3 hours**

Surveys American literature from its beginnings through the Antebellum era. Readings will include the writings of early explorers, Puritans and agrarian idealists, as well as the oral traditions of Native Americans, and will move through the American Renaissance, with attention to slave narratives, sentimental fiction, and transcendental philosophy. Prospective authors include Columbus, Crèvecoeur, Wheatley, Cooper, Emerson, Fuller, Poe, Stowe, Hawthorne and Thoreau. Fall, even years.

**333 AMERICAN LITERATURE II: POSTBELLUM AUTHORS - 3 hours**

Surveys American literature from the Civil War to the World War I era. Readings will include selections from the picaresque, naturalist and realist traditions as well as early feminist writings. Prospective authors include Alcott, Melville, Twain, Whitman, Dickinson, Crane, James, Chopin, Gilman and Wharton. Spring, even years.

**335 MODERN LITERATURE - 3 hours**

The study of English-speaking writers from 1900 through 1965. The course follows the development of modernism as an international movement through the exploration of such authors as Waugh, Forster, Woolf, Fitzgerald, Conrad, Cather, Hemingway, H.D. and Kerouac. Fall, odd years.

**338 CULTURE THROUGH LITERATURE - 3 hours**

Offers concentrated study of selected authors and issues. Students explore a specialized field of literacy and cultural studies in an effort to learn more fully the social, historical and artistic dimensions of literature. Students learn both how culture shapes literature and how literature shapes culture. Topics will vary according to instructor and student interest and will be indicated by different subtitles, such as Jane Austen in Literature and Popular Culture, The Harlem Renaissance and Midwestern Authors. May be taken twice, under different subtitles. C-4LT. Fall, January, Spring.

**340 BRITISH LITERATURE I: THE MIDDLE AGES AND RENAISSANCE - 3 hours**

British literature of the eighth through the sixteenth centuries. Selections from such works as Beowulf, The Canterbury Tales, Everyman and The Faerie Queen introduce literary themes and techniques characteristic of the Middle Ages and the Renaissance. Other works likely to be included are those of Langland, Kempe, Malory, More, Marlowe and Sidney. Fall, odd years.

**342 BRITISH LITERATURE II: THE SEVENTEENTH AND EIGHTEENTH CENTURIES - 3 hours**

British literature from the last quarter of the sixteenth century to the end of the 18th century. Poetry, prose and drama selected to represent the varied perspectives of gender, race and class and to illustrate evolving social, religious and intellectual contexts. Spring, even years.

**344 BRITISH LITERATURE III: THE ROMANTICS AND VICTORIANS - 3 hours**

British literature from the late eighteenth century to the end of the 19th century, from responses to the French Revolution to the death of Victoria. Surveys major Romantic and Victorian authors, with attention to the poetry of Wordsworth, Coleridge, Keats and Tennyson; the fiction of Austen, Mary Shelley, the Brontës, Eliot, Dickens and Hardy; and the essays of Mill, Arnold and Ruskin. Fall, odd years. Spring, odd years.

**350 TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES - 3 hours**

Instruction and practice in the theory, techniques and skills of teaching English to speakers of other languages, observing ESL and foreign language classes, tutoring international students, diagnosing language acquisition problems, planning lessons and curricula, evaluating ESL texts and conducting related research. Prerequisite: ENG 310 or 311, or a modern language course at the 300 level. Fall.

**352 PRACTICUM IN TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES - 3 hours**

Supervised experience in teaching English to speakers of other languages. Students will apply the theories and techniques of second-language acquisition which were covered in the prerequisite course. Practicum may be done anywhere in the world. Prerequisite: ENG 350.

**354 SECOND LANGUAGE ACQUISITION - 3 hours**

Course explores how people learn language and what methodologies respond to different linguistic needs and learning styles. Topics include: theories of language learning, diagnosis of language learning problems, assessment techniques, pedagogies appropriate to second language acquisition, relationship of culture to language development. Prerequisite: intermediate proficiency in a second language. Spring.

**361 WOMEN IN LITERATURE - 3 hours**

A chronological and thematic study of poetry, fiction, drama, essays and journals by women who represent a variety of cultural traditions. Emphasis will be upon works written in English, but translations may be used. C-3RC. Spring, even years.

**363 CREATIVE WRITING - 3 hours**

The writing of poems, plays and short stories. All students experiment with various genres, then concentrate, if they choose, on only one. Professional writing, as well as student writing, is analyzed and discussed in class. Success in the course may be achieved both through the student's own writing and through intelligent application of critical principles to the writing of others. Fall, odd years.

**365 PROFESSIONAL WRITING - 3 hours**

Introduces students to the types and discourse conventions expected of professional writing, including application dossiers, correspondence (both letters and emails), reports, proposals, memos, press releases and presentations. Students will engage in both independent and collaborative writing assignments. This course is designed to help prepare students for the kinds of writing typically encountered in the professional workplace. Fall, January, Spring.

**366 LITERARY CRITICISM - 3 hours**

Critical writing from the fifth century B.C. to the present. Focuses on the perennial questions of literary interpretations formulated by ancient, modern and contemporary critics and theorists. Prerequisite: one course in literature. Spring.



**377 INTERNSHIP IN JOURNALISM - 3 hours**

On-the-job-experience for qualified students in gathering, interpreting, reporting and editing news and feature material. The student works in a professional environment under the supervision of a newspaper or magazine staff. May not be repeated for credit. Prerequisite: B or above in ENG 201 or practical experience in journalism, and consent of instructor.

**476 INTERNSHIP IN BOOK CULTURE - 2-3 hours**

On-the-job experience for qualified students in libraries, book arts and/or book culture. The student works in a professional environment (such as a library, archive, publishing house or bindery) under the supervision of a staff member. May not be repeated for credit. Prerequisite: ENG 254 or LIB 200.

**477 INTERNSHIP IN WRITING - 3 hours**

On-the-job-experience for qualified students in researching, composing and editing written material. The student works in a professional environment, such as a newspaper, magazine or advertising agency, under the supervision of a staff member. May not be repeated for credit. Prerequisite: B or above in ENG 201; 317; 363 or 364; and consent of instructor.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and the college dean. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions. Academic majors are required to take this course for at least three hours. Fall.

## **Environmental Studies**

*Director S. Beyeler*

### **Baccalaureate Degree**

Courses listed in parentheses are prerequisites.

Major in environmental studies, 51-56 hours.

Core, required for all majors; 26 hours: BIOL 106, 106L, 108, 108L, 225, 225L; ECON 115; ENVS 130, 401, 475 or 380/480; INTD 425; POSC 121 or 122.

Natural history concentration, 54-56 hours: core courses plus the following: BIOL 331, 331L, 241, 241L or 243, 243L, 315/315L or 413/413L; ENVS 201; NASC 207/207L or 209; one sequence selected from: CHEM 105, 105L and 106, 106L, or 111, 111L and 113, 113L.

Policy concentration, 56 hours: core courses plus the following: one sequence selected from: CHEM 105, 105L and 106, 106L, or 111, 111L and 113, 113L; ECON 303; ENVS 403; MATH 210; POSC 225; one course selected from: POSC 222, (ECON 221; MATH 120 and 210 or 240) ECON 350; (SOC 101) SOC 222. Students in policy concentration are advised to take ECON 303 prior to ENVS 403.

Technical concentration, 53 hours: core courses plus the following: BIOL 315/315L or 413/413L; CHEM 111, 111L, 113, 113L, 235, 235L, 260, 106/106L or 311/311L; MATH 210.

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the director of environmental studies.

Minor in environmental studies, 26 hours: BIOL 106, 106L; ENVS 130; one course selected from: CHEM 105/105L, 106/106L, 111/111L; ECON 115; ENVS 401; INTD 425; POSC 121 or 122; three hours of elective credit to be approved by the director of environmental studies.

Course descriptions can be found on the major fields of study pages.

### **Specialized Environmental Courses**

#### **BIOL 225 CONSERVATION BIOLOGY - 2 hours**

Definitions and origin of biodiversity, threats to its maintenance, value of preserving variety, ecological and genetic principles relating to preservation and practical strategies for preservation. Corequisite: BIOL 225L. Spring, alternate years.

#### **BIOL 225L CONSERVATION BIOLOGY LAB - 1 hour**

Data collection and hypothesis testing in conservation biology. Corequisite: BIOL 225.

#### **ECON 303 ENVIRONMENTAL ECONOMICS - 3 hours**

A study of the economics of environmental and natural resource issues. The natural resource issues will include energy, renewable and nonrenewable resources and sustainability. The environmental issues will include the analysis of optimal pollution levels, environmental regulations and alternative policies to reduce pollution and global warming. Prerequisites: ECON 115 or ECON 221.

**ENVS 130 INTRODUCTION TO ENVIRONMENTAL STUDIES - 3 hours**

Basic concepts of ecosystem theory, culture and environment, application of the scientific method in examining global processes and problems and proposed solutions to environmental problems. C-4NN

**ENVS 201 INTERPRETATION OF NATURAL HISTORY - 3 hours**

Survey of geomorphology, ecoregions, flora, fauna and cultural heritage as they relate to principles of natural history interpretation and fundamentals of site administration and management. Prerequisites: FYS or ENG 111; COMM 110.

**ENVS 221 INTRODUCTION TO ENVIRONMENTAL POLICY AND PLANNING - 3 hours**

This course will use an interdisciplinary approach to examine policies and planning strategies at the Local, State and Federal level that have an effect on natural resources and/or the environment. Students will examine how scientific information is used to shape and implement environmental policies and planning. Prerequisite: ENVS 130.

**ENVS 215 GEOGRAPHIC INFORMATION SYSTEMS APPLICATIONS - 3 hours**

Application of the ArcGIS software is introduced. Students will develop skills to navigate this software and to capture, display, analyze and manipulate complex spatial geographic data. Prerequisite: FYS or ENG 111.

**ENVS 278 PRACTICUM IN ENVIRONMENTAL STUDIES - 1-4 hours**

Observation of and participation in the activities of a professional in an applied field that is related to the environment. Examples of appropriate mentors include, but are not limited to, foresters, environmental lobbyists, research scientists, environmental consultants, environmental chemists and wildlife biologists. May be repeated once for credit. Prerequisite: Appropriate coursework in disciplines; varies with practicum.

**ENVS 380/480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean must also approve. A set of guidelines is available at the Office of the Registrar.

**ENVS 401 ENVIRONMENTAL SCIENCE (W) - 3 hours**

A study of contemporary issues related to human populations and the ecology of survival. Analysis of the human population explosion, rates of population growth and the distribution of population. The relation of human populations and the physical environment with a special concern for the effect of pollution on human health and survival and the demands for raw materials by our industrial activities, both in the developed and the developing segments of the world. An integrative senior level course for environmental studies majors and minors. Prerequisite: ENVS 130. Spring, alternate years.

**ENVS 403 ENVIRONMENTAL LAW - 3 hours**

This course examines the role of environmental regulations and how they affect the conduct of individuals in modern American society.

**ENVS 475 INTERNSHIP IN ENVIRONMENTAL STUDIES - 3-6 hours**

Student interns will function as environmental professionals. Internships involve significantly more independence and decision-making responsibility than do practica. Juniors and seniors majoring in environmental studies only. May not be repeated for credit. Prerequisite: appropriate coursework in disciplines; varies with practicum.

**INTD 425 ENVIRONMENTAL PHILOSOPHY - 3 hours**

A study of: 1) competing theories of distributive justice and their implications for various environmental issues (land use, famine relief, population control, pollution abatement, etc.), 2) animal liberation and animal rights, 3) the possibility of a land ethic, and 4) the relation between one's religious beliefs and one's attitudes towards nature. Prerequisites: one course in philosophy or consent of instructor; junior or senior standing. C-5CC. Spring.

**POSC 253 ENVIRONMENTAL POLITICS - 3 hours**

An examination of how political forces shape environmental choices and how political processes are used to address and manage environmental problems. The interplay of local, national and international environmental problems and policies will be examined. Fall, even years.

## **Exercise Science and Athletic Training**

*Chair J. Beer, L. Dargo, K. Duchane, E. Foreman, M. Huntington*

The goal of the department is to develop knowledgeable and skillful leaders and practitioners in various fields of exercise and sport sciences. Students will be cognizant of scientific principles underlying movement patterns and analyses, as well as physiological, psychological and sociological perspectives of sport and fitness participation and management.

Formal application to the athletic training and exercise science and fitness majors is made typically in either the spring semester of the first year (deadline: April 15) or the fall semester of the sophomore year (deadline: December 1). Application to the physical education teaching major is made by December 1 of the sophomore year. Application forms for the majors are in the *Exercise Science Student Handbook*, available on the ESAT department website.

## **Baccalaureate Degrees**

### **Exercise Science and Fitness Major**

This major prepares students for programs in one of the exercise sciences (e.g., biomechanics, exercise physiology, pre-occupational therapy, pre-physical therapy). It is an appropriate preparation for graduate school, or for entry-level positions in fitness and wellness.

Major in exercise science and fitness, Core: ESAT 103, 200, 325, 325L, 410, three hours of 476; BIOL 202, 202L, 204, 204L.

Exercise science concentration, 51 hours: core courses plus; BIOL 422, 422L; MATH 210; CHEM 105/105L and 106/106L or CHEM 111/111L and 113/113L; 12 hours of directed electives approved by department chair.

Fitness and recreation concentration, 48.5 hours: core courses plus; ESAT 205, 206, 209, 243, 250, 260, 276 (2 hrs), 339, 345, four hours of 476; PE 105N; 4 hours of directed electives approved by department chair.

### **Physical Education Teacher Education Major**

Students may elect to major in teacher education and earn certification in All-Grade Teaching in Physical Education. Requirements for the teaching major are available from the department chair or the Office of Teacher Education.

Exercise science and fitness and physical education teaching majors must successfully complete the senior comprehensive evaluation. Details are published in the *ESAT Student Handbook* on the department website.

## **Minors**

Adapted physical activity minor — Chosen by students who want basic knowledge and skills for modifying physical activity for individuals of varying abilities.

Adapted physical activity minor, 16 hours: ESAT 363, 363L, 460; nine hours selected in consultation with advisor from: EDUC 211, 245, 263, 315; ESAT 103, 145, 243, 335, 339, 475, 476.

Coaching minor — This option prepares students for coaching at various levels within a community. Scientific, psychological and administrative principles are presented that focus on appropriate coaching behaviors with young people.

Coaching minor, 19-27 hrs: ESAT 121, 150, 209, 345, 410; BIOL 204; 2-6 hrs from ESAT 210, 211, 212, 213, 214, 215, 218; 2-6 hrs from ESAT 145, 243, 275, 325, 475.

Health promotion minor — This focus is chosen by students who want basic knowledge and skills in the area of promoting behaviors which positively affect health, including exercise adherence and access to health care.

Health promotion minor, 15 hours: ESAT 103, 262, 264, 333, 366; three hours electives selected in consultation with advisor from: ESAT 200, 276, 339, 343; SOC 333.

Physical education minor — This focus is chosen by students in another discipline who want basic knowledge and skills of physical education for alternative career options.

Physical education minor, 27 hours: BIOL 204, 204L; ESAT 103, 145, 205, 206, 243, 250, 260, 325 or 345, 410, 414.

## **Courses ESAT**

### **103 FOUNDATIONS OF HEALTH, PHYSICAL EDUCATION AND SPORT SCIENCES - 2 hours**

An introduction to the historical, philosophical, sociological and psychological foundations that provide the framework for diverse career opportunities as health professionals, fitness specialists, physical education teachers, therapists and sport personnel.

### **106 MEDICAL TERMINOLOGY FOR ALLIED HEALTH - 1 hour**

Self-paced instruction in the essentials of medical terminology including word roots, suffixes, prefixes, terms of anatomical orientation, commonly-used abbreviations and medical specialty nomenclature.

### **115 PREVENTION AND EMERGENCY CARE - 3 hours**

A survey of strategies for the prevention of injury and illness and emergency management of common injuries. Hands on experience with prophylactic taping, padding and bracing techniques, protective equipment, universal precautions, disease transmission, environmental threats to safety, Cardiopulmonary resuscitation (CPR), automatic external defibrillators and spine boarding assessment and treatment.

### **121 DEVELOPING THE STUDENT-ATHLETE LEADER - 1 hour**

Students will develop skills to effectively lead in athletic team settings. Students will investigate (within team settings) effective communication, motivation, how to reduce conflict and how to promote team cohesiveness.

### **145 MOTOR DEVELOPMENT - 3 hours**

A study of the progressive change in movement behavior throughout life from infancy through older adulthood. Emphasis is placed upon developing the ability to identify the stages in a variety of motor skills. Attention will also be given to the study of physical growth patterns and biological maturity and the relationship of each to motor performance.

**200 BASIC PRINCIPLES OF NUTRITION - 3 hours**

Basic nutrition with emphasis on the principles and theories of the function and interrelationships of the nutrients. The application of nutrition for the needs of the various life stages. Therapeutic diets are reviewed. Research paper is required.

**205 TEACHING TEAM ACTIVITIES - 3 hours**

Students will develop personal skills, learn basic rules, and focus on teaching progressions, analyzing skills and selecting appropriate skill tests for specific team activities. Concurrent enrollment in ESAT 250.

**206 TEACHING INDIVIDUAL AND DUAL ACTIVITIES - 3 hours**

Students will develop personal skills, learn basic rules, and focus on teaching progressions, analyzing skills and selecting appropriate skill tests for specific individual and dual sports and noncompetitive lifetime activities. Concurrent enrollment in ESAT 260. Prerequisite: ESAT 205 and 250.

**207 TEACHING AND PERFORMANCE OF ADVANCED SPEED AND AGILITY TECHNIQUES – 3 hours**

Lecture/laboratory course that investigates advanced speed and agility performance techniques for strength and conditioning. This course will focus on the speed and agility training a student must have in personal training or strength and conditioning through the National Strength and Conditioning Association.

**209 PRINCIPLES OF COACHING - 2 hours**

An overview of basic techniques and procedures involved in coaching at the elementary through secondary level. Administrative, scientific and psychological concepts facing the coach are discussed.

**210-218 - COACHING**

Coaching techniques, fundamental skills, conditioning and rules relating to participation and management of meets and games. Methods of coaching a specific system as it relates to the sport.

**210 COACHING OF BASKETBALL - 2 hours****211 COACHING OF BASEBALL/SOFTBALL - 2 hours****212 COACHING OF FOOTBALL - 2 hours****213 COACHING OF SOCCER - 2 hours****214 COACHING OF TRACK AND FIELD - 2 hours****215 COACHING OF VOLLEYBALL - 2 hours****216 COACHING OF SWIMMING AND DIVING - 2 hours****218 COACHING OF WRESTLING - 2 hours**

**222 WATER SAFETY INSTRUCTION - 2 hours**

Students are prepared to be certified teachers of American Red Cross swimming courses. Classroom instruction and practical skills are assessed. Prerequisite swimming skills will be tested at beginning of course. Note: This course does not certify students to become lifeguards. See PE 101 Lifeguarding.

**240 ETHICS AND PSYCHOSOCIAL ASPECTS OF SPORT - 3 hours**

This course will investigate the impact of psychological and socio-cultural factors on sports structure and participation. Topics such as performance enhancement techniques for both competing and injured athletes, team dynamics and leadership and socialization in sports will be examined. Ethical implications relating to the fields of sport psychology and sport sociology will be discussed.

**243 PRINCIPLES OF FITNESS - 3 hours**

A lecture/laboratory course which investigates basic principles of safe and effective exercise prescription for all age levels. Students will identify strengths and weaknesses of existing fitness testing programs and will field test selected programs with appropriate age groups including self-testing. Students design suitable exercise programs based on test results.

**246 MEDICAL CONSIDERATIONS FOR THE PHYSICALLY ACTIVE - 3 hours**

A survey of non-orthopedic conditions and other factors which affect participation in physical activity. Topics included are diabetes, seizure disorders, the effects of various pharmacological agents and the evaluation of systemic illness by athletic trainers.

**247 PHARMACOLOGY FOR ALLIED HEALTH - 1 hour**

This course is designed to provide students with a basic understanding of pharmacology emphasizing drug law, routes of administration, basic pharmacokinetics and the specific pharmacology of drugs commonly used in physical medicine. Permission of instructor required. Prerequisites: Completion of or concurrent enrollment in ESAT 246.

**250 TEACHING LABORATORY 1 - 1 hour**

An introductory practice teaching experience in physical education with school-age children in an on-campus clinical teaching setting under the direct supervision of a physical educator. Concurrent enrollment in ESAT 205.

**251 MUSCULOSKELETAL ASSESSMENT: UPPER EXTREMITY - 3 hours**

Advanced physical assessment of injury and pathology of the upper extremity, cervical spine, thorax and abdomen. Proper documentation of clinical findings is also addressed and practiced. Prerequisite: ESAT 113, completion of or concurrent enrollment in BIOL 202.

**253 MUSCULOSKELETAL ASSESSMENT: LOWER EXTREMITY - 3 hours**

This course focuses on the principles of orthopedic examination and assessment. Emphasis will be placed on the components of the comprehensive orthopedic clinical evaluation and diagnosis including: history, inspection, palpation, functional testing and special evaluation techniques of the lumbar spine and lower extremity. Prerequisites: BIOL 204, ESAT 113, completion of or concurrent enrollment in BIOL 202.



**255 ORTHOPEDIC EVALUATION - 3 hours**

Orthopedic assessment of injury and pathology of the upper and lower extremity. Emphasis will be placed on the components of the comprehensive orthopedic clinical evaluation and diagnosis including: history, inspection, palpation, functional testing and special evaluation techniques. Proper documentation of clinical findings is also addressed and practiced. Prerequisite: completion of or concurrent enrollment in BIOL 202 and BIOL 202L

**260 TEACHING LABORATORY 2 - 1 hour**

The second practical experience in teaching school-age children in an on-campus clinical setting applies instructional strategies covered in ESAT 206. Students are under the direct supervision of a physical educator. Concurrent enrollment in ESAT 206. Prerequisite: ESAT 250.

**262 HEALTH CONCEPTS - 2 hours**

An introduction of basic health and wellness concepts as a foundation for health professionals, including athletic trainers, fitness specialists, teachers and therapists. Attention will be given to topics such as growth and development, mental and emotional health, nutrition, personal health and alcohol, tobacco and other drugs.

**264 HEALTH PROMOTION - 2 hours**

An investigation of the health content knowledge in communicable and chronic diseases; consumer and community safety; environmental health; family living; and injury prevention and safety. The course will provide a foundation for the promotion of health-enhancing behaviors and disease prevention for health professionals, including athletic trainers, fitness specialists, teachers and therapists.

**265 RESEARCH METHODS IN ATHLETIC TRAINING - 2 hours**

A survey of research methods appropriate for the athletic training discipline. Topics include evidence based practice, types of research, data collection methods, experimental design and analysis. Course includes completion of athletic training evidence-based practice competencies for the Commission on Accreditation of Athletic Training Education (CAATE). Prerequisite: ESAT 150.

**270 CLINICAL EXPERIENCE IN ATHLETIC TRAINING I - 1 hour**

In this first level of clinical experience in athletic training, students have the opportunity to apply clinical techniques addressed in ESAT 113 and 150. Students are under the direct supervision of an athletic training clinical instructor in an athletic training setting. Prerequisite: permission of a clinical instructor.

**273 CLINICAL EXPERIENCE IN ATHLETIC TRAINING II - 1 hour**

First level of field experience in an athletic training setting under the supervision of a certified athletic trainer. Students will be assigned to a particular patient population in a particular health care setting. Prerequisite: ESAT 270.

**275 PRACTICUM IN PHYSICAL EDUCATION OR SPORT MANAGEMENT - 1-4 hours**

Designed to give students supervised work in varsity or intramural sports, physical education classes at any level, recreation settings or sport management settings. The course focuses on administrative aspects of chosen placement and participation suitable to the student's expertise. Sport management students must complete a two-hour block of practicum under the direction of a faculty advisor. May be repeated for a maximum of four hours. Prerequisite: prior written approval by department chair.

**276 PRACTICUM IN HEALTH/FITNESS/WELLNESS - 1-4 hours**

Observation of and participation in a health, fitness or wellness setting. The focus is on allowing the student to observe and participate in the activities related to the particular setting. Practical application of previous learning is expected without a high level of professional responsibility. May be repeated for a maximum of four hours. Prerequisite: Prior written approval by department chair.

**301 PHYSICAL ACTIVITY FOR CHILDREN - 3 hours**

Methods for teaching developmentally appropriate physical activities and fundamental motor skills based on the needs, interest and characteristics of elementary school children are stressed. Concurrent enrollment in ESAT-350.

**303 TEACHING GYMNASTICS AND RHYTHMIC ACTIVITIES - 3 hours**

Methods for teaching tumbling, apparatus and rhythmic activities, including teaching progressions, analyzing skills, selecting appropriate skill tests and designing interdisciplinary activities. Concurrent enrollment in ESAT 360. Prerequisite: ESAT 301 and 350.

**313 INTERNATIONAL SPORTS MEDICINE - 3 hours**

This international study abroad course travels to Ireland & the U.K and offers fantastic opportunities for students to visit and study the European model of sports medicine. These specific regions have unique medical professionals, health care and sports medicine teams to compare and contrast to that of the US. Students will explore the country sides, history, and culture of these two countries. This course will take students inside the European Model of Health Care and Sports Medicine where they will receive firsthand experience and knowledge at various facilities, clubs, universities and other sporting events. Prior completion of ESAT 251 and 253 is preferred. C-3GC

**320 COMMUNITY HEALTH - 3 hours**

An overview of health issues relevant to school, community and public health educators including athletic trainers, fitness personnel, teachers and physical therapists. Attention will be given to topics such as health care delivery systems, drug testing and screening, environmental and consumer health, disease prevention and health promotion.

**325 EXERCISE PHYSIOLOGY (W) - 3 hours**

A course investigating the various physiological adaptations which occur in the human body as a result of physical activity. The functions of various organs and systems involved in these adaptations will be reviewed. Commonly used physical training techniques and the physiological bases for their use are presented. Prerequisite: BIOL 204 and 204L; or consent of instructor; FYS or ENG 111.

**325L EXERCISE PHYSIOLOGY LABORATORY - 1 hour**

Laboratory experience in collection and analysis of human physiological responses to both acute and chronic exercise. Prerequisite: Completion of or concurrent enrollment in ESAT 325.

**330 THERAPEUTIC MODALITIES IN ATHLETIC TRAINING - 3 hours**

A survey of the therapeutic modalities commonly employed in athletic training and other rehabilitation settings. Theory, indications and contraindications for use, and practical application of ultrasound, electrical stimulation, intermittent compression, and various heating and cooling modalities in the treatment of athletic injuries are addressed. Prerequisite: ESAT 150.

**333 ADOLESCENT HEALTH APPLICATIONS - 3 hours**

Application of previous coursework and expertise in presenting comprehensive health programs for today's youth. The course emphasizes current topics in health and fitness, as well as how to plan, implement and evaluate effective programs in health promotion, including behavior management and conflict resolution. Practical experience presenting health content is required.

**335 THERAPEUTIC EXERCISE - 3 hours**

Theory and techniques of restoration of muscular flexibility, strength, endurance and functional ability following injury. Topics included are joint mobilization, proprioceptive neuromuscular facilitation, and other selected rehabilitation strategies and modalities. Prerequisites: BIOL 204 and 204L.

**339 FUNDAMENTAL TECHNIQUES OF EXERCISE AND FITNESS - 3 hours**

The study of exercise techniques used for assessment and exercise prescription. Students will explore and practice the teaching of resistance and cardiovascular training techniques, current research, exercise trends, and motivational techniques. Students will apply the use of kinesiology, anatomy, physiology and exercise prescription for both healthy and special populations in fitness. Prerequisite: ESAT 243.

**343 AGING: HEALTH AND WELLNESS - 3 hours**

Students will study problems and concerns related to health, fitness and wellness in the aging population. Special emphasis will be given to exercise and strength training. Practical experience with older adults is required.

**345 FUNCTIONAL KINESIOLOGY- 3 hours**

A course that qualitatively investigates the principles of mechanics as they relate to the performance of motor skills. Special emphasis is placed on skill analysis through visual observation, video taping and musculoskeletal anatomy.

**350 TEACHING LABORATORY 3 - 1 hour**

The third practical experience in teaching physical education to elementary-age children in an on-campus clinical setting applies instructional strategies covered in ESAT 301. Students are under the direct supervision of a physical educator. PRAXIS I must be completed prior to enrollment in this class. Concurrent enrollment in ESAT 301. Prerequisite: ESAT 260.

**355 ORTHOPEDIC INTERVENTION - 3 hours**

A survey of the therapeutic modalities and rehabilitation techniques commonly employed in orthopedic health care and other rehabilitation settings. Theory, indications and contraindications for use, practical application of current medical modalities, and restoration of flexibility, strength, endurance and functional ability following injury of orthopedic injuries are addressed. Prerequisite or Concurrent Enrollment: BIOL 202 and BIOL 202L

**360 TEACHING LABORATORY 4 - 1 hour**

The fourth practical experience in teaching physical education to elementary-age children in an on-campus clinical setting applies instructional strategies covered in ESAT 303. Students are under the direct supervision of a physical educator. Concurrent enrollment in ESAT 303. Prerequisite: ESAT 350.

**363 ADAPTED PHYSICAL ACTIVITY - 3 hours**

A study of general characteristics of individuals with various disabilities and their capabilities in movement performance. Consideration is given to the means of assessing the performance of people of varying abilities and effective ways of modifying the environment and physical activity to meet the needs of individuals across the lifespan.

**363L ADAPTED PHYSICAL ACTIVITY LABORATORY - 1 hour**

Students will participate in a supervised service-learning experience applying methods, materials, management, and assessment strategies to meet the psychomotor learning needs of individuals with disabilities. Course requires practical experience in the public schools and one all day Saturday commitment. May be repeated for a maximum of three hours. Only one hour can be counted for the major.

**366 HEALTH AND FITNESS FOR CHILDREN - 3 hours**

Provides integration of previous coursework and expertise in comprehensive health programs for elementary-aged children. The course emphasizes current topics in health and fitness, as well as how to plan, implement, and evaluate effective programs in health promotion, including behavior management and conflict resolution. Practical experience presenting health content is required.

**370 CLINICAL EXPERIENCE IN ATHLETIC TRAINING III - 1 hour**

The second level of clinical experiences for athletic training students. Opportunities are provided for students to apply the clinical techniques covered in ESAT 243, 251, 253, 330 and BIOL 202. Students are under the direct supervision of an athletic training clinical instructor in an athletic training setting. Prerequisites: ESAT 243, 251, 270, 330; BIOL 202; and permission of a clinical instructor.

**373 CLINICAL EXPERIENCE IN ATHLETIC TRAINING IV - 1 hour**

Second level of field experience in an athletic training setting under the supervision of a certified athletic trainer. Students will be assigned to a specific patient population in a particular health care setting. Prerequisite: ESAT 370.

**410 ADMINISTRATION OF HEALTH AND PHYSICAL ACTIVITY PROGRAMS (W) - 3 hours**

Management and leadership techniques for diverse careers in health and physical activity programs are presented. Topics include: program design and evaluation, fiscal administration, risk management, human resources, public relations, facility design and other relevant issues. Prerequisite: FYS or ENG 111.

**413 TOPICS IN ATHLETIC TRAINING - 2 hours**

Provides an integration of prior coursework and expertise in athletic training, preparation for the BOC Certification Exam and forum for discussion of athletic training issues of current concern. Prerequisite: ESAT 251.

**440 CURRICULUM AND INSTRUCTION IN HEALTH AND PHYSICAL EDUCATION - 3 hours**

An examination of P-12 health and physical education curricula and effective instructional methodology. Teacher candidates will explore the assessment of student learning, different teaching styles, classroom management, conflict resolution, creative classroom materials in a student-centered classroom. Concurrent enrollment in ESAT 441. Prerequisite: Formal approval to student teach.

**441 TEACHING HEALTH AND PHYSICAL EDUCATION LABORATORY - 1 hour**

Teacher candidates will participate in 20 hours of observation and teaching experience in a public school health and physical education classroom under the direct supervision of the classroom teacher. Concurrent enrollment in ESAT 440. Prerequisite: Formal approval to student teach.

**460 SERVICE DELIVERY IN ADAPTED PHYSICAL EDUCATION - 3 hours**

An in-depth study of the delivery of direct services in adapted physical education for students receiving a special education. Teacher candidates will pursue inquiry of the Adapted Physical Education National Standards and exchange results through discussions and reports. Service-learning experience in the public schools is required. Prerequisite: ESAT 363.

**470 CLINICAL EXPERIENCE IN ATHLETIC TRAINING V - 1 hour**

This course is the third level of clinical experiences for athletic training students. Opportunities are provided for students to apply the clinical techniques covered in ESAT 325 and 335. Students are under the direct supervision of an athletic training clinical instructor in an athletic training setting. Prerequisites: ESAT 246, 325, 335, 370 and permission of a clinical instructor.

**473 CLINICAL EXPERIENCE IN ATHLETIC TRAINING VI - 1 hour**

Third level of field experience in an athletic training setting under the supervision of a certified athletic trainer. Students will be assigned to a particular patient population in a particular health care setting. Prerequisite: ESAT 470.

**475 INTERNSHIP IN PHYSICAL EDUCATION - 1-4 hours**

Work experience in the area of coaching, physical education or sports administration. This experience links classroom instruction to actual career responsibilities. The student is supervised by a professional employed by the specific agency. Open only to juniors and seniors. May be repeated for a maximum of four hours. Prerequisite: approval by department chair.

**476 INTERNSHIP IN HEALTH/FITNESS/WELLNESS - 1-4 hours**

Work experience in the area of health, fitness or wellness. This experience links classroom instruction to actual career responsibilities. The student is supervised by a professional employed by the specific agency. Open only to juniors and seniors. May be repeated for a maximum of four hours. Prerequisite: approval by department chair.

**477 INTERNSHIP IN ATHLETIC TRAINING - 1-4 hours**

Application of classroom theory to actual athletic training practice. Includes supervised injury evaluation, immediate care and long-term rehabilitation of athletic injuries, as well as experience in the administrative aspects of athletic training services. May be repeated for a maximum of six hours. Prerequisite: approval by department chair.

**499 SENIOR RESEARCH PROJECT - 3 hours**

Supervised research into a physical education topic of interest. Prerequisite: second semester junior or senior status and department major.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean must also approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

**Physical Education Activity Courses**

Students are encouraged to select physical education activities to learn new lifetime skills. Students should not take activity courses in which they can already perform the basic fundamentals. Students are permitted to enroll in a maximum of one physical education activity course per half semester.

Student-athletes who compete at the intercollegiate level are not allowed to take an activity course in the same sport in which they compete. Maximum credit toward bachelor's degree is 2.0 hours. Maximum credit toward associate degree is 1.0 hours.

**PE 101 LIFETIME ACTIVITY - 0.5 hour**

Lifetime Activity courses may include, but are not limited to: archery, badminton, bowling, canoeing, golf, karate, racquetball, self-defense, SHARBADE, tennis, ultimate frisbee and volleyball. Bowling and golf have additional fees. Maximum credit toward bachelor's degree is 1.0 hours. Maximum credit toward associate degree is 0.5 hours. C-2LA

Learning Goals:

- Skill acquisition for lifetime participation and enjoyment.
- Knowledge and application of etiquette and rules of the activity.

**PE 105 FITNESS AND WELLNESS ACTIVITY - 0.5 hour**

Fitness and Wellness courses may include but are not limited to biking, Core stability training, fitness walking, hydro aerobics, jogging, lifeguarding, pilates, stress reduction, swimming, tai chi, weight training, and yoga. Lifeguarding, swimming and hydro aerobics have additional fees. Permission of the department chair is required to enroll in lifeguarding. Maximum credit toward bachelor's degree is 1.0 hours. Maximum credit toward associate degree is 0.5 hours. C-2FA

Learning Goals:

- Knowledge and applications of scientific principles of fitness and nutrition for personal programs.
- Discussion of wellness principles related to each activity.

**PE 10110 ULTIMATE FRISBEE**

This course is designed to introduce students to the basic skills and techniques associated with Ultimate Frisbee, as well as provide students with the background necessary to enjoy Ultimate Frisbee as a life-long fitness activity.

**PE 10113 SHOULDERS ARMS BACK DEVELOP**

This physical activity is designed to introduce students to a fun fitness game that provides SHoulder, ARm, and BAcK Development (SHARBADE) through the use of scooters.

SHARBADE is a mixture of hockey, soccer, and lacrosse.

(<http://www.sharbade.com/aboutgame.html>)

**PE 10118 SELF-DEFENSE**

This course is designed to teach students the principles of self-defense and its values for physical and psychological health. Students will become familiar with the techniques encompassed in self-defense and its benefit for personal safety.

**PE 10120 FLOOR HOCKEY**

This course will introduce student to the basic equipment, dress, rules, fundamentals, and strategies of the game of floor hockey. This class will provide students with the knowledge and basic skills to enjoy floor hockey for life.

**PE 10123 INDOOR SOCCER**

This course will introduce students to the basic rules, fundamentals, and strategies of Futsal (indoor soccer). This class will provide students with the knowledge and basic skills to enjoy soccer as a lifetime activity.

**PE 101C BADMINTON**

This course will introduce student to the basic equipment, dress, rules, fundamentals, and strategies of the game of badminton. This class will provide students with the knowledge and basic skills to enjoy badminton for life.

**PE 101K KARATE**

This course is designed to teach students the principles of Karate and its values for physical and psychological health. Students will become familiar with the techniques encompassed in the form of karate and its benefit for lifelong health and physical wellness.

**PE 101N RACQUETBALL**

This course will introduce student to the basic equipment, dress, rules, fundamentals, and strategies of the game of racquetball. This class will provide students with the knowledge and basic skills to enjoy racquetball for life.

**PE 101Q SOCCER**

This course will introduce students to the rules and fundamentals of Soccer. The knowledge gained will provide students the knowledge and skills to play soccer as a life-long physical fitness activity.

**PE 101R SOFTBALL**

This course is designed to introduce students to the basic skills and techniques associated with slow pitch softball, as well as provide students with the background necessary to enjoy softball as a life-long skill.

**PE 101T TEAM HANDBALL**

This course is designed to introduce students to the basic skills, techniques and rules associated with Team Handball, as well as provide students with the background necessary to acquire the skills useful for lifetime participation and enjoyment.

**PE 101V VOLLEYBALL**

This course will introduce student to the basic equipment, dress, rules, fundamentals, and strategies of the game of volleyball. This class will provide students with the knowledge and basic skills to enjoy volleyball for life.

### **PE 1051 CANOEING**

In this course, students will memorize canoeing terminology and be able to recall terms. Students will learn 5 knots important to canoeing and boating, identify uses for each, and demonstrate proficiency at tying each. They will also learn how to manually lift, carry, and launch a canoe and demonstrate understanding by performing these skills independently and in a group. Students will learn basic stream geomorphology and how to “read” a river in order to spot and avoid dangerous canoeing situations as well as learning 6 basic paddling skills and demonstrate their understanding by performing these skills independently and in a group.

### **PE 1052 GOLF**

This course is designed to introduce all students to the basic skills, techniques, rules, and etiquette of golf. The main goal of this course is to provide students with the skills necessary to allow golf to be a lifetime activity.

### **PE 1054 DANCE: BALLROOM**

This course is designed to introduce individuals to the basic skills and techniques of ballroom and Latin dancing. The social benefits associated with partnership dancing and how that will affect you in the professional world of business, etc. will also be presented in the course study. The mental and physical focus required to dance has far reaching effects and will be presented as well.

### **PE 1055 DANCE: LATIN**

This course is designed to introduce individuals to the basic skills and techniques of ballroom and Latin dancing. The social benefits associated with partnership dancing and how that will affect you in the professional world of business, etc. will also be presented in the course study. The mental and physical focus required to dance has far reaching effects and will be presented as well.

### **PE 1056 DANCE: SWING**

This course is designed to introduce individuals to the basic skills and techniques of ballroom and Latin dancing. The social benefits associated with partnership dancing and how that will affect you in the professional world of business, etc. will also be presented in the course study. The mental and physical focus required to dance has far reaching effects and will be presented as well.

### **PE 105C CORE STABILITY TRAINING**

This course is designed to provide the student with the basic understanding of core/stability training and to develop a passion for exercise that will last a lifetime.

### **PE 105 F FITNESS WALKING**

This course is designed to give students a functional understanding of the benefits of walking as an aid to personal health & wellness. Student will gain a working knowledge of equipment, attire, fundamentals, and safety of walking. By the end of the course, students will have the knowledge to assess their personal fitness level.

### **PE 105G TAI CHI**

This course is designed to teach students the principles of Tai Chi and its values for physical and psychological health. Students will become familiar with the eighteen beginner Tai Chi forms and transitions and ‘push hands.’ Basic breathing principles for Tai Chi and meditation will be explained.



**PE 105M SWIMMING**

This course is designed to introduce students to basic swimming skills and techniques, as well as provide students with general pool safety necessary to enjoy swimming as a life-long skill.

**PE 105N WEIGHT TRAINING**

This course is designed to introduce or increase knowledge of the proper way to weight train. The class will learn basic form, lifting techniques, and safety in the weight room.

**PE 105R BICYCLING**

This course is designed to introduce students to the basic skills and techniques associated with bicycling, as well as provide students with the background necessary to acquire the skills useful for lifetime participation and enjoyment.

**PE 105S STRETCH & TONE**

This course is designed to introduce and increase knowledge of ways to stretch and tone the body and develop a passion for fitness. Students will learn basic stretching techniques, various types of exercises/ activities to tone the body, and how to balance exercise and nutrition

**PE 105T NATURE HIKING**

This course is designed to introduce students to proper hiking etiquette including respect for nature and the Leave No Trace method of hiking and basic safety useful for lifetime participation and enjoyment of hiking. Students will learn to appreciate nature and observe the natural beauty on hikes, as demonstrated by taking photographs. Students will learn how to maintain their bearings while hiking and what to do if they get lost while hiking, including how to read a trail map. Students will learn how to use a trail map to plan a hike and how to sketch out a rough trail map. Students will learn basic trail geomorphology, how to “read” a trail to spot and avoid dangerous hiking situations, how to hike as a group, how to assist other hikers, by using the previous skills together, and how to use scientific principles of fitness and nutrition for hiking and apply them. By the end of the course, students should be able to demonstrate an awareness of wellness principles related to hiking.

**PE 105U TENNIS**

This course is designed to introduce students to the basic skills, techniques and rules associated with tennis, as well as provide students with the background necessary to acquire the skills useful for lifetime participation and enjoyment.

**PE 105Y YOGA**

This course is designed to introduce and increase knowledge of ways to stretch and tone the body and develop a passion for yoga. Students will learn basic stretching techniques, various types of exercises/ activities to tone the body, and how to balance exercise, stress and nutrition

**PE 105Z ZUMBA**

This course is designed to introduce students to the history and basic steps and routines of ZUMBA. They will learn numerous dance styles and how to form routines. These routines will allow students to work on certain body parts, cardio, and receive a complete body workout. By the end of the class, the participant should be able to participate in ZUMBA on their own in order to continue a healthy lifestyle and enjoy working out.

## **Gender Studies**

*Director K. Ings*

The interdisciplinary courses in the gender studies minor afford students the opportunity to study gender both as an analytical perspective and as a social and cultural phenomenon. The minor will complement most academic majors, preparing individuals to do the critical thinking required in business and the professions as well as in graduate study in the humanities and the social sciences.

Minor in gender studies, 24 hours: GNST 125; INTD 324; 18 hours of electives from the following courses and others approved by the Gender Studies Council.

Applied Study Area in queer advocacy; Barb Burdge, coordinator: FYS LGBT Lives or GNST 201; three hours from: COMM 256, PEAC 218, PSYC 366, SOC 274; a practicum, internship, or special problems course designed for the development of relevant skills. Applied Experience: Complete a Celebrating Diversity Workshop and complete 6 hours of SafeZone training.

### **Specialized Gender Studies Courses**

#### **ENG 361 WOMEN IN LITERATURE - 3 hours**

A chronological and thematic study of poetry, fiction, drama, essays and journals by women who represent a variety of cultural traditions. Emphasis will be upon works written in English, but translations may be used. C-3RC. Spring, even years.

#### **FYS LGBT LIVES - 4 hours**

Our society sends mixed messages of acceptance and rejection to lesbian, gay, bisexual and transgender (LGBT) people. Same-sex marriage is legal in a majority of states, but many people oppose it. Pride parades are routine events in many cities, but it remains legal to fire gay employees in most states. LGBT celebrities are more visible than ever, yet some youth still commit suicide due to anti-gay bullying. What is life really like for LGBT people? To answer this question, we will uncover the histories, cultures, life experiences and contemporary circumstances of minority groups distinguished by sexual orientation and gender identity. This will involve reading works of fiction and non-fiction, viewing films, hearing from guest speakers and visiting LGBT organizations as we seek to better understand these commonly misunderstood groups.

#### **GNST 125 INTRODUCTION TO GENDER STUDIES - 3 hours**

A basic introduction to the field of gender studies. The course will examine gender as a category for analyzing culture and society. C-3RC. Spring, odd years.

#### **GNST 201 INTRODUCTION TO QUEER STUDIES - 3 hours**

An introduction to the interdisciplinary field of queer studies – the study of historically marginalized sexual orientations and gender identities. Topics include the histories of queer identities and cultures, diversity among queer people, queer representations in society and queer politics and activism. Theoretical emphasis is placed on feminism, queer theory, and social constructionism. C-3RC. Spring, even years.

**HIST 329 WOMEN IN AMERICAN HISTORY - 3 hours**

A survey of the experience of various groups of women in colonial, 19th and 20th-century America. The nature of family life and the technology and management of the household will be an ongoing theme. Specific topics of relevance also will be pursued, including women's roles in religious life of the colonial period, development of women's rights and suffrage in the 19th century and the impact of women's increasing participation in the paid labor force. Spring, even years.

**HIST 337 WOMEN, GENDER STUDIES, AND EUROPEAN HISTORY - 3 hours**

This course explores the historical development of European culture and society through the perspective of women's and gender issues from ancient times to the modern era. Spring, odd years. Prerequisite: HIST 104, 105.

**HUM 210 WOMEN IN THE ARTS - 3 hours**

A study of the role of women in the fine arts. Material will be studied from the following areas: selected women composers and artists of the 18th through 20th centuries; the role of women in theatre, film and dance. Spring, odd years.

**INTD 324 FEMINIST THEORY - 3 hours**

Interdisciplinary examination of the theoretical and methodological questions that arise when women are placed at the center of study. Focus is on significant works and perspectives in feminist theory and on their contributions to understanding human experience. Prerequisite: junior or senior standing. C-5CC. Spring, odd years.

**PSYC 307 PSYCHOLOGY OF MARRIAGE AND FAMILY - 4 hours**

This course focuses on the study and application of marriage and family research and theory. Students learn about a wide range of topics associated with functional and dysfunctional relationships. The emphasis will be on romantic and marital relationships, viewed through the lens of psychological theory and research. Prerequisite: PSYC 110.

**REL 325 FEMINIST AND WOMANIST THEOLOGIES - 3 hours**

An exploration of the critique and vision brought to contemporary theology by women's perspectives represented in texts by feminist and womanist theologians and in women's fiction and essays. Prerequisite: one course in religion or permission of instructor. Spring, even years.

**SOC 305 SELF AND SOCIETY - 3 hours**

Social psychology from a sociological perspective, examining the interaction between individual lives and social structure: how humans are created by their social order and how humans create social orders. Major topics include socialization and the development of the self, language and the social construction of reality and the social construction of gender. Fall, odd years.

**SOC 333 SEXUALITY AND GENDER IN SOCIETY - 3 hours**

Human sexuality as social interaction and as social-cultural construction. Topics include sexuality in historical-cultural context, psychosexual development and socialization, love and sex, sexual attitudes and behaviors, contraception, sexual coercion and commercial sex, with special emphases on sexual identity, sexual orientation and gender. A focus on empirical knowledge with attention to ethical and affective concerns. Spring.

**SOC 335 SOCIOLOGY OF FAMILY - 3 hours**

Primary emphasis on development and maintenance of intimate relationships in the United States; theoretical and empirical materials on family life cycle, dating, sexual behavior, readiness for marriage, social change and emerging family styles. Prerequisite: SOC 101 or permission of instructor. Fall, odd years

## **Gerontology**

*Director C. Krueckeberg*

Ours is a time of dramatic changes in population demographics. One significant change is the growing number of elders in our own country and in most of the rest of the world. By 2030, older people are projected to reach over 20 percent of the U.S. population (doubling today's numbers). As citizens, workers, and family members, we need to know how to meet the multiple needs of older adults - both frail and thriving ones. We also need to learn how to encourage their potential contributions to improving our world. Wonderful opportunities of the later years are just beginning to be more fully understood, especially the potential for lives of purpose.

The gerontology program at Manchester University allows students to explore the physical, psychological, social, environmental, financial, environmental and spiritual aspects of aging. Students have an array of learning opportunities - classroom exercises and activities, field trips, service learning, interviewing of elders, career-related research, and if desired, even practicums or internships in aging-related settings.

Students can elect a minor or an associate degree in gerontology. They work closely with a program advisor to tailor their studies to complement career aspirations in various fields. Successful graduates of the program can work in social work, psychology, business, health care, politics, media, transportation and housing, education, arts, leisure and in many other occupations.

### **Baccalaureate Degree**

Minor in gerontology, 22-25 hours: BIOL 102 or 204; PSYC 110 or SOC 101; PSYC 224 or SOWK 334; INTD 450; SOC/SOWK 220; two electives (6-8 hours) chosen from: ACCT 331; BUS 313; COMM 210; ESAT 200, 335\*, 343, 363; FIN 340\*; INTD 405; NPM 201; POSC 225\*; PSYC 250\*, 325\*, 360\*, 475; SOC/SOWK 222\*, 223\*; SOWK 110, 275, selected in consultation with advisor and approval of gerontology program director.

\*Prerequisite required

### **Associate of Arts Degree**

Major in gerontology, 36 hours: SOC 101, 220; INTD 450; SOWK 110, 274, 275, 334; ESAT 200; (PSYC 110) PSYC 338; three hours in electives in recreation or crafts selected in consultation with advisor.

## **Global Health**

*Director J. Osborne*

The global-health major takes an interdisciplinary and multidisciplinary approach to health issues affecting populations and individuals in Indiana and around the world, spanning both political and socioeconomic boundaries.

Major in global health; 46.5-48 hours: COMM 220; COMM 241; ECON 244; IDIV 485; NASC 315; MATH 210 or PSYC 241; PEAC 112; PEAC 218 or PEAC 320; four courses from the following lecture/lab pairs: BIOL 106/L; BIOL 108/L; BIOL 202/L; BIOL 204/L; two semesters of Chemistry/Lab (CHEM 105/L and CHEM 106/L or CHEM 111/L and CHEM 113/L); one course from: BIOL: 235; COMM 233; ESAT 262; ESAT 264; one course from: CHEM 260; ECON 303; INTD 425; or PHIL 235; one course from COMM 356; NPM 201; POSC 225; POSC 367; or SOWK 350.

## **History and Political Science**

*Chair B. Onyeji, M. Angelos, U. Ganesan, D. McFadden, M. Staudenmaier, L. Williams*

The Department of History and Political Science encourages all students to explore the historical roots and contemporary forms of the world's cultures, institutions and practices. Our programs are rooted in such liberal arts traditions as intellectual integrity, multidisciplinary interests and civic education. Our alumni are well prepared for graduate or professional studies in a number of fields, as well as for careers in education, government, law or business. The department is especially proud of its long-standing commitment to helping our students develop an international awareness and an appreciation for cultural diversity.

**History** is the study and interpretation of the human past. It emphasizes the interrelation of culture, social structure, economic conditions and political institutions. Through the study of history, students gain an understanding and appreciation of diverse points of view and insights into ways of life and perspectives different from their own. Students taking courses in the field will learn about historical events, trends and causation. They will learn to use a variety of research skills and analytical categories in explicating and interpreting the past.

**Political science** focuses on the systematic study of collective decision-making and the interactions between power and interest in human affairs. Students of political science explore such topics as the institutional and socio-economic bases of political behavior; the cultures, institutions and processes of contemporary political systems; the relations between and among nations; and the world's major political philosophies. Through the study of political science, students learn the theories and research methods necessary for analyzing and understanding political life.

### **HISTORY**

Major in history, 35 hours: HIST 104 or 121; HIST 105 or 123; HIST 113, 114, 344; 18 hours of electives at the 200-level or above. These must include 9 hours at the 300-level or above, and must include at least one course in American (3 hours); European (3 hours); Asia/World (3 hours).

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the department chair.

Minor in history, 22 hours: HIST 113 or 114; HIST 104 or 121; HIST 105 or 123; 12 hours of electives at the 200 level or above. Must include at least 3 hours of 300 level or above.

History Teaching Major: Requirements available in the Office of Teacher Education.

### **Courses HIST**

#### **104 INTRODUCTION TO EUROPEAN HISTORY: ANCIENT TO 1500 - 3 hours**

A survey of the development of European society and western civilization from the ancient era through the early modern Renaissance. C-4HH.

#### **105 INTRODUCTION TO EUROPEAN HISTORY: 1500 TO PRESENT - 3 hours**

A survey of the development of European society and western civilization from the Protestant Reformation up to the present era. C-4HH.

**113 NORTH AMERICAN HISTORY TO 1865 - 3 hours**

The transformation of mainland North America, from the pre-1492 period through the US Civil War, including the evolution of social and political institutions during the colonial era, the founding and early development of the United States, and the economic and cultural aspects of the developing country. C-4HH

**114 UNITED STATES HISTORY SINCE 1865 - 3 hours**

A continuation of HIST-113. The transformations following the Civil War, including the emergence of the United States as a world power, the rise of the industrial economy, and political and cultural trends and social conflicts. C-4HH

**121 WORLD HISTORY TO 1500 - 3 hours**

This course examines the emergence and development of political and social institutions in the world from ancient times to 1500, from a comparative perspective. It will examine the various ways in which societies have sought to legitimate political authority, how they have grappled with religious and philosophical questions and how social classes and hierarchies have developed over time. The interconnectedness of world regions will be emphasized by examining the movement of people and the exchange of goods and ideas. C-4HH.

**123 WORLD HISTORY FROM 1500 - 3 hours**

This course examines the development of political and social institutions in the world from 1500 to the present, from a comparative perspective. It will examine the various ways in which societies have sought to legitimate political authority, how they have grappled with religious and philosophical questions and how social classes and hierarchies have developed over time. The interconnectedness of world regions will be emphasized by examining the movement of people and the exchange of goods and ideas. C-4HH.

**201 MEDIEVAL EUROPE - 3 hours**

A survey of European economic, social and political development from the late Roman period through the later Middle Ages. C-4HH.

**202 RENAISSANCE AND REFORMATION EUROPE - 3 hours**

A survey of European economic, social and political development beginning in the late medieval period and including study of the Renaissance, the Protestant Reformation and the subsequent wars of religion. C-4HH.

**203 EARLY MODERN EUROPE - 3 hours**

A survey of European economic, social and political development from the post-Reformation wars of religion up to the age of revolution, including study of the Enlightenment, the French Revolution and early industrialization. C-4HH

**204 MODERN EUROPE - 3 hours**

A survey of European economic, social and political development from the Industrial Revolution up to the present era. C-4HH

**205 ANCIENT EUROPE - 3 hours**

A survey of European political, social and economic development during the Greek and Roman eras, including study of Celtic and Germanic culture and society. C-4HH.



**210 MODERN CHINA AND EAST ASIA: 1750 TO THE PRESENT - 3 hours**

This course surveys the history of China and East Asia from c. 1750 CE to the present through a focus on the forces, both internal and external, that propelled China to a major revolution in the twentieth century, followed by an examination of the People's Republic of China from the Mao years through to the Deng-Xiaoping era and after. Concurrently, the course broadly surveys the history of modern Japan from the Meiji Restoration in the late nineteenth century to its rise as an imperial power culminating in its aggressive role in World War II and its aftermath. The course thus provides a framework for understanding contemporary East Asia. C-3GC.

**226 IMPERIALISM AND THE MODERN WORLD - 3 hours**

This course examines imperialism and its corollaries of colonialism, empire and nationalism of the nineteenth and twentieth centuries as major shaping forces of the modern world. It also examines the factors that accelerated the process of decolonization in Asia and Africa after 1945 and considers the state of imperialism, colonialism and empire since. C-3GC.

**234 HISTORY OF FOODWAYS - 3 hours**

An exploration of the history of diet, cooking methods, and foods in the Americas from the 16th century through the 20th century. The contributions to American foodways of Native Americans, African Americans, and other ethnic groups will be emphasized in addition to studying changes in cooking technology and ideas about proper nutrition. The class will include hands-on food preparation sessions. Fee required. January.

**236 ASPECTS OF US SOCIAL HISTORY - 3 hours**

The study of a particular aspect of United States social history. This is a variable topics course that will feature offerings that focus on the life experience of specific groups over certain periods of time. These groups will be defined by factors such as age, race, ethnicity, kinship, gender, class, ideology and/or geographic location. Topics could include such things as: Slavery and Emancipation in US History; US Latino History; Grassroots Social Movements in 20<sup>th</sup> (or 19<sup>th</sup>) Century US History; History of the Civil Rights Movement; or Native Americans in the History of the Midwest. This course may be repeated once for credit if on a different topic.  
C-3RC

**237 RACE AND ETHNICITY IN US HISTORY - 3 hours**

A survey of the experience of various racial and ethnic groups in the colonial, 19<sup>th</sup>, 20<sup>th</sup>, and 21<sup>st</sup> century United States. It will offer the opportunity to explore the ways in which US society has reacted to marginalized and oppressed groups, and to explore how these groups have seen themselves and shaped their own interaction with broader US society and culture. C-3RC

**240 ORAL HISTORY TECHNIQUES - 1-3 hours**

A survey of the methodological issues, techniques and applications of oral history. Students will learn the steps necessary to prepare an oral history project, including background research, interviewing techniques and transcription. They also will learn about preservation, cataloging procedures and the legal and ethical issues involved in doing oral history.

**242 SOUTH AND SOUTHEAST ASIA: ANCIENT TO 1500 - 3 hours**

This course primarily surveys the history of South Asia from c.1500 BCE to the advent of the Mughal Empire in the mid-1500s CE through a focus on: the Indus Valley civilization, Hinduism's role in the evolving socio-political structures, the emergence of centralized empires, early religious reform efforts in the form of Buddhism and Jainism and the advent of Islamic kingdoms in the region. Secondly, the course broadly surveys the history of Southeast Asia from c. 300 BCE to 1500 CE with an emphasis on the early kingdoms in the region and the evolution of the economy and religious beliefs during this period. C-3GC.

**244 TOPICS IN CHINESE HISTORY - 3 hours**

This course will focus on the history of a specific period or topic in Chinese history. Topics could include: Ancient China, Late imperial China (1368-1912) and Modern China: From Imperial Rule to the People's Republic. Themes addressed in the course include: the emergence and evolution of social and political institutions, class, and gender. Course may be repeated once for credit on a different topic. C-3GC.

**246 SOUTH AND SOUTHEAST ASIA: 1500 TO PRESENT - 3 hours**

This course primarily surveys the history of South Asia from c.1500 CE to the present through a focus on: the Mughal Empire, European expansion into South Asia, the establishment of the British Raj, the development of nationalism, the establishment of the modern nation-states of India, Pakistan and Bangladesh and major developments of the last 60 years in the region. Secondly, the course broadly surveys the history of Southeast Asia from c. 1500 CE to the present with an emphasis on the region's interactions with the outside world, particularly the West, the spread of colonialism, the development of nationalist resistance to it, the establishment of modern nation-states in the region and the political challenges facing the nations of Southeast Asia today. C-3GC.

**250 HISTORY OF THE HOLOCAUST - 3 hours**

This class will explore the events surrounding the Holocaust. We will study the motives the Nazi regime had in their murderous campaign for a new world order, the reactions of the victims, decisions of bystanders, and the role of religion, psychology and politics in the history of the Holocaust. The effect of the Holocaust on the concept of justice will also be discussed. C-3RC.

**252 COMPARATIVE CIVILIZATION - 3 hours**

An examination of the history of various civilizations of the globe through visits, readings and discussions which focus on areas under study. The course is always an off-campus offering. May be repeated on different topics. C-3GC. January.

**254 LATIN AMERICAN HISTORY - 3 hours**

This course examines the rise of European power and civilization in Latin America after 1492, the wars for independence, and the major developments during the 19th and 20th centuries. It will also cover the contributions of indigenous peoples and those of African descent to Latin American culture. Emphasis will be on major trends and developments in the various regions rather than the details of each of the present countries. C-3GC

**256 AFRICAN AMERICAN HISTORY - 3 hours**

The black experience has been a defining aspect of North American history for five centuries. This course will examine the contributions of African Americans to the United States beginning in the colonial era. Emphasis will be placed on the political, economic, and cultural aspects of black life, including the Middle Passage, slavery, the Civil War, Reconstruction, Jim Crow, the Civil Rights Movement, and recent developments up through the presidency of Barack Obama. C-3RC

**263 THE MAKING OF INDIA AND PAKISTAN - 3 hours**

This course examines a seminal event of the twentieth century – the partition of the Indian subcontinent at the end of British rule in 1947 into India and Pakistan – an event that rivals the Holocaust in the horrors it unleashed. It engages with the Partition through historians' writings as well as through film and literature. The course also explores the legacies of Partition for both the relationship between India and Pakistan and international politics. C-3GC

**270 TOPICS IN HISTORY THROUGH VISUAL MEDIA - 3 hours**

Popular perceptions of the past are often shaped by visual media: films, videos, documentaries, and other forms of modern electronic entertainment and information. This course will examine and analyze selected topics in history by comparing how they appear in visual presentation with evidence gleaned from readings, lectures and discussions. May be repeated on different topics. January.

**315 BRITISH HISTORY - 3 hours**

A broad survey of the political, social and constitutional history of the British Isles. Particular emphasis will be placed on relations between England, Wales, Scotland and Ireland. Prerequisite: HIST 104 or 105 or 121 or 123.

**318 ITALIAN HISTORY - 3 hours**

An examination of historical developments on the Italian peninsula. This course will examine a wide variety of social, political, economic and cultural developments demonstrating the significance of Italy to Western society. Prerequisite: HIST 104 or 105 or 121 or 123.

**329 WOMEN IN US HISTORY - 3 hours**

A survey of the experience of various groups of women in the United States during the colonial era, the 19th, 20th, and 21st centuries. The nature of family life and the technology and management of the household will be an ongoing theme. Specific topics of relevance also will be pursued, including women's roles in religious life of the colonial period, development of women's rights and suffrage in the 19th and 20th centuries and the impact of women's increasing participation in the paid labor force. Spring, even years.

**337 WOMEN, GENDER STUDIES, AND EUROPEAN HISTORY - 3 hours**

This course explores the historical development of European culture and society through the perspective of women's and gender issues from ancient times to the modern era. Prerequisite: 104 or 105 or 121 or 123.

**341 USTHOUGHT AND POPULAR CULTURE: 19TH CENTURY - 3 hours**

An exploration of three or four different themes that were important in defining ways of thinking and cultural life in the United States during the 19th century. The course will focus on how these ideas were understood and expressed in both the intellectual and the popular culture of the period. Prerequisite: HIST-113 or HIST-114.

**342 US THOUGHT AND POPULAR CULTURE: 20TH CENTURY - 3 hours**

An exploration of three or four different themes that were important in defining ways of thinking and cultural life in the United States during the 20th century. The course will focus on how these ideas were understood and expressed in both the intellectual and the popular culture of the period. Prerequisite: HIST 114.

**344 HISTORIOGRAPHY AND RESEARCH METHODOLOGY (W) - 3 hours**

This course will focus on the techniques and methods used in the historical profession. In addition to the study of historiography, students also will begin the process of researching and writing a paper based on primary source materials. Prerequisite: junior standing. Fall.

**353 WOMEN, GENDER, AND SOCIAL REFORM IN INDIA AND CHINA - 3 hours**

This course examines the theme of women, gender, and social reform in India and China from c. 1800 to 1950 CE from a historical perspective. Students will engage with the major events, ideas and processes that have shaped the modern histories of these nations, especially the debate surrounding women's status in India and China. The course complicates assumptions of a general category of 'women' by emphasizing the differing experiences both between women in India and women in China and among women within India and China. It also considers debates and trends within women's history to examine issues related to re-writing the past from a gendered perspective. Prerequisite: HIST 121 or HIST 123.

**475 INTERNSHIP - 3-12 hours**

Student interns will work in the historical field under the supervision of a professional historian. Internships will generally involve work in public history. No more than three hours may be used to meet requirements in the major. Prerequisite: permission of the instructor and department chair.

**499 SENIOR THESIS - 1 hour**

Supervised research in primary source materials culminating in a paper, which will satisfy the requirements of the Senior Comprehensive Evaluation. Prerequisite: HIST 344.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

**POLITICAL SCIENCE****Baccalaureate Degree**

Major in political science, 36-37 hours: POSC 121, 140, 201, 233, 325; POSC 236 or 237; POSC 321 or 322; one course selected from: POSC 225, 311, 344; one course selected from: POSC 360, 365, 367; nine hours of electives in political science.

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the department chair.

Minor in international studies, 24 hours: POSC 131, 140; one course selected from: ECON 221, ECON 222, INTD 320, INTD 425, INTD 427, INTD 441; one course selected from: PEAC 110, PEAC 33, POSC 360, POSC 365, POSC 367; one course selected from: ART 348, COMM 256, COMM 362, ENVS 130, FREN 111, FREN 112, HIST 204, HIST 210, HIST 226, HIST 242, HIST 246, HIST 250, HIST 263, MUS 119, POSC 236, POSC 237, REL 222, REL 223, SPAN 111, SPAN 112, SOC 311; three semester hours of course work taken through a short-term, semester, or year-long study abroad program; students will demonstrate intermediate or higher proficiency in a language other than their native language. This requirement may be waived for students who complete a significant and appropriate international experience without acquiring intermediate language proficiency.

Minor in political science, 24-25 hours: POSC 121, 140, 201, 233; POSC 236 or 237; POSC 321 or 322; one course selected from: POSC 225, 311, 344; one course selected from: POSC 360, 365, 367.

## **Courses POSC**

### **121 American National Politics - 3 hours**

An introductory study of national government, emphasizing contemporary structures and processes and their influence on public policy. C-4HP.

### **122 STATE AND LOCAL POLITICS - 3 hours**

An introductory study of state and local government, emphasizing contemporary structures and processes and their influence on public policy. C-4HP.

### **131 INTRODUCTION TO INTERNATIONAL STUDIES - 3 hours**

This course surveys the emerging global visions in international studies and the issues we face in our increasingly interdependent world. Topics include issues in international politics, international economics, globalization, history, environment and cultural studies. C-3RC.

### **140 INTERNATIONAL POLITICS - 3 hours**

An introductory survey of theories of state behavior and analysis of political and related forces that operate in the international system, including nationalism, ideology and economic interest. C-4HP. Fall.

### **201 POLITICAL CONCEPTS AND IDEOLOGIES - 3 hours**

A discussion of important concepts (such as liberty, equality and democracy) set in the context of contemporary issues and modern ideologies (such as liberalism, conservatism and socialism). C-3RC.

### **225 PUBLIC POLICY - 3 hours**

An overview of the policy-making process, the methods and theories of policy analysis and contemporary policy issues and controversies. Prerequisite: POSC 121 or POSC 122. Spring, even years.

### **233 COMPARATIVE POLITICS - 3 hours**

Comparative analysis of selected national political and economic systems, emphasizing distinctive political cultures, institutions, practices, organizations and decision-making processes. C-4HP. Spring.

**236 COMPARATIVE FOREIGN POLICY - 3 hours**

A survey of foreign policy of both developed and developing countries. The issues studied include non-military concerns such as financial policy, communication technology, human rights, environmental problems, international trade, transnational crime and terrorism. C-3GC.

**237 AFRICAN POLITICS - 3 hours**

This course explores the various aspects of contemporary politics in Africa. It seeks to understand why Africa is lagging behind in world affairs, and what appropriate strategies or policies should Africa pursue in its quest for development. The main objective of this course is to examine the causes and prospects for sustainable development in Africa following centuries of slavery and colonialism. C-3GC.

**274 TOPICS IN AMERICAN POLITICS - 3 hours**

An investigation into a particular topic related to politics and government in the United States. Possible topics: civic skills, election campaigns, voting behavior, political parties, interest groups, law and the courts, liberalism and conservatism, justice. May be repeated on different topics.

**311 SUPREME COURT AND THE CONSTITUTION - 4 hours**

An introduction to the Supreme Court and to constitutional law in the United States. The course will provide students with a framework for understanding major controversies in such areas as civil liberties, civil rights and criminal procedure. Prerequisite: POSC 121. Fall, odd years.

**321 ANCIENT AND MEDIEVAL POLITICAL THOUGHT - 3 hours**

Analysis of the political thought of significant ancient and medieval theorists. Exploration of such topics as human nature, justice, the state, obligation, freedom, equality, the common good and the nature of political thinking. Fall, even years.

**322 MODERN AND CONTEMPORARY POLITICAL THOUGHT - 3 hours**

Analysis of the political thought of significant modern and contemporary theorists. Exploration of such topics as human nature, justice, the state, obligation, freedom, equality, the common good and the nature of political thinking. Spring, odd years.

**325 POLITICAL ANALYSIS (W) - 3 hours**

Introduction to the use and interpretation of the statistical techniques commonly used in political science. Students will also learn how to present the results of an empirical investigation in a research paper. Prerequisite: FYS or ENG 111. Fall, odd years.

**344 CONGRESS AND THE PRESIDENCY - 3 hours**

A study of the political dynamics within and between two primary governmental institutions in the United States. Prerequisite: POSC 121. Spring, even years.

**360 INTERNATIONAL LAW - 3 hours**

A survey of the development of the rules and principles of international law, and their present applications in world politics. Emphasis upon the contributions of international institutions in fostering political and economic change, managing social conflicts and strengthening states and the state system. Prerequisite: POSC 140. Spring, even years.

**365 INTERNATIONAL POLITICAL ECONOMY - 3 hours**

Examination of the basic concepts, mechanisms and concerns of international political economy. Particular attention is given to how the state and market systems operate and interact. Prerequisite: POSC 140. Spring, odd years.

**367 INTERNATIONAL ORGANIZATION - 3 hours**

A study of international organizations. Emphasis upon the United Nations and its peacemaking, peacekeeping, and peace-enforcing roles, as well as its contributions to world order. Prerequisite: POSC 140. Fall, even years.

**370 MODEL UNITED NATIONS - 1-2 hours**

Supervised preparation for and participation in Model United Nations sessions. May be repeated to a maximum of four hours. Prerequisite: permission of instructor.

**372 MOCK TRIAL - 2 hours**

Supervised preparation for and participation in intercollegiate mock trial tournaments. May be repeated to a maximum of four hours. Prerequisite: permission of instructor.

**475 INTERNSHIP - 3-12 hours**

Long-term or extensive participation in formal internships with governmental or non-governmental organizations. No more than three hours may be used to meet requirements in the major. Prerequisite: permission of the instructor and department chair.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and the college dean must also approve. A set of the guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

## **Humanities Courses**

### **Courses HUM**

#### **130 EXPERIENCING THE ARTS - 3 hours**

An introduction to various artistic experiences not primarily dependent on words, including art, cinema, music and theatre. The course emphasizes the interrelatedness of the arts and examines art works of various periods, genres and styles. Includes lab for viewing and listening. C-4AR.

#### **210 WOMEN IN THE ARTS - 3 hours**

A study of the role of women in the fine arts. Material will be studied from the following areas: selected women composers and artists of the 18th through 20th centuries, the role of women in theatre, film and dance.



## **Interdisciplinary Majors and Courses**

### **INTD Courses**

#### **320 NARRATIVE EYE: TOPICS IN HISPANIC FILM AND STORY - 3 hours**

Introduction to the critical study of films and literature about topics from the Spanish-speaking world. Course includes short fiction, films and analysis of the two genres. Prerequisites: junior or senior standing. C-5CC.

#### **324 FEMINIST THEORY - 3 hours**

Interdisciplinary examination of the theoretical and methodological questions that arise when women are placed at the center of study. Focus is on significant works and perspectives in feminist theory and on their contributions to understanding human experience. Prerequisite: junior or senior standing. Spring, odd years. C-5CC.

#### **330 ETHNOBOTANY - 3 hours**

Use of plants by indigenous peoples for food, construction material, medicines, drugs and other purposes; examples from a variety of world cultures. Conservation and use of biodiversity. Origins of agriculture. Lab work and a field trip included. Prerequisites: junior or senior standing. C-5CC.

#### **335 EMOTION IN THE WORKPLACE - 3 hours**

This course explores the different ways emotion is constructed through communication and interaction, and how emotional norms are perpetuated and naturalized through employee talk and organizational structures. Students explore and connect the substantive topic of emotion in the workplace by exploring emotion research from a variety of disciplinary perspectives (communication, education, psychology, business, sociology, and health sciences). In this course, students engage in meaningful discussions and learn strategies for dealing communicatively with emotion in the workplace. Students learn how employees engage in emotional activity through micro-practices including emotional labor, social support, compassion, and empathy. Prerequisites: junior or senior standing. C-5CC.

#### **341 RETHINKING GOD: THE REALITY OF THE VIRTUAL - 3 hours**

This course will explore the relationship between religion, psychoanalysis, ideology, and the question of God. Students will gain exposure to the writings of Sigmund Freud, Jacques Lacan, Karl Marx, the films of Alfred Hitchcock and one of the most influential contemporary philosophers, Slavoj Žižek. Students will engage in the debate between theists, atheists and atheists that assert the importance of religious belief. Beyond the question of God, students will explore and articulate their own theories of the Self, Subjectivity and Love. Prerequisite: Junior or senior standing. C-5CC.

#### **345 RELIGION AND IDEOLOGICAL POWER - 3 hours**

This course will introduce students to the relationship between religion and ideology. Students will explore ways in which religion has been incorporated into fascist, Stalinist, monarchical, anarchist, liberal-democratic capitalist, conservative capitalist and fundamentalist ideological systems, amongst others. The course will also analyze the way secular political and economic discourse remains saturated with religious concepts and how they relate to the exercise of power and authority. Questions of value, human nature, justice and the like will be critically compared in their respective contexts. Prerequisite: Junior or senior standing. C-5CC.

**423 LAW AND PHILOSOPHY – 3 hours**

An in-depth consideration of fundamental conceptual, ethical, and political questions about the nature and functioning of laws and legal systems. Prerequisite: Junior or senior standing. C-5CC.

**403 REQUIEM:THE MASS AND ITS MUSIC – 3 hours**

Study of the history of the Requiem Mass begun in the Catholic church and extending to Protestant religions and how the musical genre grew from that tradition. Students will explore the religious and psychological purposes of the Requiem Mass and how it has historically influenced views on death, damnation and the afterlife. The Requiem Mass has been the church's vehicle for offering comfort to the grief-stricken, or confronting them with their own mortality and sinfulness through poetic symbolism, scripture and musical sound. Prerequisites: COMM 110, Junior or senior standing. C-5CC. Fall.

**401 ARTS AND IDEAS - 3 hours**

Integration of fine arts within the larger context of the humanities. This course surveys cultural developments from ancient Greece to the 20th century. Prerequisites: Junior or senior standing. C-5CC.

**405 LIFE AND DEATH - 3 hours**

Exploration of how knowledge of our finitude inspires us to create, to contemplate, to give life meaning, and how we respond to life's uncertainties. Course content will include many areas of the humanities, especially literature, philosophy and music. Assumes basic introduction to the arts, philosophy and literature. Prerequisites: junior or senior standing. C-5CC.

**407 MEDIA AND RELIGION - 3 hours**

This course helps students develop knowledge of theoretical, technological, and cultural issues at the intersection of media and religion. Course readings, case studies and projects emphasize historical and contemporary issues and help students develop both religious and media literacy. A wide variety of religious traditions and media technologies are discussed. Prerequisite: Junior or senior standing. C-5CC.

**410 CINEMA FOR SOCIAL CHANGE - 3 hours**

This course explores cinema as a vehicle for social change and conflict. In the class, students acquire a vocabulary for cinematic analysis; screen representative movies in film history; and use film as a window to broader ideological, ethical, peace-and-justice issues. While diverse in theme, origin, and technique, the film screenings share one mark: they embody revolutions in either form or content. This is a film studies course, not a filmmaking course. Prerequisite: Junior or senior standing. C-5CC.

**413 THE FASHION POLICE: UNDERSTANDING THE CLOTHES ON OUR BACKS - 3 hours**

Do clothes make the man—and the woman? Where are those clothes made, and by whom? This class explores the various representations of clothing in our culture, from the Paris runways to the local mall; from fiction to non-fiction; from textiles to paintings. We will analyze how clothing constructs meaning by confirming, complicating or challenging social conventions. And we will study the rise of consumer culture through both the development of the department store as well as the global expansion of the garment industry. Prerequisite: Junior or senior standing. C-5CC.

**417 DISPELLING THE MYTHS OF THE WILD WEST - 3 hours**

Westward expansion in the 19<sup>th</sup> and 20<sup>th</sup> centuries brought with it rapid development of communities in the United States. These communities developed unique cultures often impacted by those who held the land before them, European explorers, geographic location, and self-perception. This course will explore the various viewpoints of those living in the Wild West, focusing on cowboys, gunslingers, missionaries, Native Americans and Mexicans. Emphasis will be placed on stereotypes of the Native American, particularly in film and stories associated with the Wild West. A critical analysis of the devastating impact of westward expansion and the belief of Manifest Destiny will be explored. Throughout the course, students will delve into the misperceptions of the Wild West perpetuated by popular culture. Attention will be given to 19<sup>th</sup> and 20<sup>th</sup> century travel literature, captivity narratives, dime novels, television shows and films. Prerequisite: Junior or senior standing. C-5CC.

**421 QUEEN ELIZABETH I - 3 hours**

This course focuses on the life and influence of Elizabeth I, the self-proclaimed “Virgin Queen” who ruled England from 1558-1603. Throughout the semester, we will examine Elizabeth’s powerful roles in key political, religious, and cultural events (including the Spanish Armada, the ongoing establishment of the Church of England and the literary “renaissance”). We will read texts from a variety of genres – sonnets and epic poetry, drama and masques, political tracts, sermons, speeches, private letters and diaries – and also study the visual representation of the monarch in progresses, court celebrations and official portraits. The end of the course will move beyond the context of Tudor England to American and British pop culture; ultimately, we will consider why Elizabeth remains a fascinating figure for critics, royal watchers and filmmakers more than four centuries after her death. Prerequisite: Junior or Senior standing. C-5CC.

**423 LAW AND PHILOSOPHY - 3 hours**

An in-depth consideration of fundamental conceptual, ethical and political questions about the nature and functioning of laws and legal systems. C-5CC.

**425 ENVIRONMENTAL PHILOSOPHY - 3 hours**

A study of: 1) competing theories of distributive justice and their implications for various environmental issues (land use, famine relief, population control, pollution abatement, etc.), 2) animal liberation and animal rights, 3) the possibility of a land ethic and 4) the relation between one’s religious beliefs and one’s attitudes towards nature. Prerequisites: one course in philosophy or consent of instructor; junior or senior standing. C-5CC. Spring.

**427 INTERNATIONAL WOMEN’S RIGHTS - 3 hours**

This course examines the place of women and their rights in the debate on universalism vs. cultural relativism. It analyzes this debate and its consequences for women through a focus on practices such as female genital cutting, sati, honor killings, female infanticide and others. The course will also consider the prospects that feminist intervention in the debate holds for safeguarding women’s rights as it attempts to transcend the limitations of both universalism and cultural relativism. Prerequisite: Junior or senior standing. C-5CC.

**430 EVOLUTION: HISTORICAL AND CULTURAL SIGNIFICANCE - 3 hours**

Historical development of biological evolution; impact of evolutionary thought on modern culture; current controversies. Prerequisites: junior or senior standing. C-5CC.

**435 BIOLOGY AND SOCIETY - 3 hours**

An examination of the societal impact and responsibilities of the scientific community. Emphasis will be on the changing public awareness of complex situations associated with rapidly emerging biological technologies. Legal, ethical, economic, political and scientific issues will be analyzed through discussions, panels and directed essays. Prerequisite: junior or senior class standing. C-5CC.

**437 SCIENCE & ARCHAEOLOGY OF ANCIENT GREECE - 3 hours**

A survey and analysis of the history and development of scientific thought with particular focus on Ancient Greece including the works of Democritus, Aristotle, Plato, and Socrates. Additionally the use of current scientific methods to analyze archaeological finds will be discussed. Prerequisite: Junior or senior standing. C-5CC.

**441 GLOBALIZATION - 3 hours**

An exploration of the sources and consequences of globalization. Is globalization a new phenomenon? Is globalization inevitable and irreversible? Who is in charge of globalization? Does globalization benefit everyone? Does globalization promote or undermine democracy, peace, and social safety nets? What are the effects of globalization on inequality, social justice, and relations between developed and developing countries? These are some of the key issues that will be addressed. Prerequisite: Junior or senior standing. C-5CC.

**443 HISTORY OF AMERICAN MEDICINE - 3 hours**

This course will explore the evolving nature of medical understanding and medical practice. It will include a wide range of topics from the heroic medicine of leeches and purging to epidemics, penicillin, and public health. It will also look at the institutions associated with medical education and medical care like medical schools, nursing schools, public health departments, hospitals, and nursing/convalescent homes. Prerequisite: Junior or senior standing. C-5CC.

**445 DEVELOPMENT OF MODERN SCIENTIFIC THOUGHT IN GREAT BRITAIN - 3 hours**

This course examines the contributions of British scientists to the development of modern scientific theory. By visiting museums and historical sites in Great Britain, the lives and works of many scientists will be explored. The influences of the environment in which these scientists lived will be examined from the perspective of history, politics, social structure, and religion. The period of scientific achievement and discovery to be examined begins in the 17th century and the effects on culture and society then, and now, will be addressed. Prerequisite: Junior or senior standing. C-5CC.

**447 MEDIEVAL FOUNDATIONS OF MODERN SOCIETY - 3 hours**

An advanced study of the European Middle Ages, exploring the impact of medieval European social, political and economic institutions on modern Western society. Examines the creation of western commercial, political, legal and educational systems, the formation of western ideas about gender and class relations, and the relationship of the medieval West to non-Western societies of the time, particularly encounters with the world of Islam. Prerequisite: HIST 104 or 105 or 121 or 123; Junior or senior standing. C-5CC

**450 ADVANCED STUDIES IN GERONTOLOGY - 3 hours**

In-depth study and analysis of aging, including the following areas: development changes, life circumstances, social policies, service programs, and research approaches and findings. Course goals also include development or refinement of specific skills and techniques for studying or working with older adults. Prerequisites: SOC/SOWK 220 and junior or senior class standing. C-5CC. Spring.

**T45 TAPPING INTO BEER CULTURE AND COMMUNITY – 3 hours**

This course is an interdisciplinary exploration of beer as a historical, economic, and cultural product. Topics include the growth of the craft beer industry, identity and representation in marketing and the beer industry, and the environmental and social impacts of beer. Beer consumption is not a component of this course. Prerequisite: junior or senior standing. C-5CC

## **Interdivisional Studies**

### **FYS FIRST YEAR SEMINAR - 3 hours**

This class introduces students to college-level writing through a disciplinary or interdisciplinary topic. Students will improve their thinking skills by examining a topic through multiple perspectives. This course will build community and aid students in their transition to college.

### **FYE FIRST YEAR EXPERIENCE - 1 hour**

The First-Year Experience class is a complement to the 3 cr. FYS content course and emphasizes the co-curricular piece of a student's Manchester education. New college students participate in activities that help them become a part of the MU community, assist in their transition to college life, and connect their learning inside and outside of the classroom. Successful completion of this course is a requirement. Students who do not receive a passing grade must enroll in the course the following semester.

## **Courses IDIV**

### **100 COLLEGE SUCCESS - 2 hours**

This course is designed to assist students in developing strategies for academic success and in making the transition to college-level classes. Students will gain experience in a variety of study strategies and techniques including time management, note taking, test taking, developing college-level reading and listening skills. Students will participate in supplemental study sessions with peer facilitators and will receive extra support navigating the full range of student support services and resources that Manchester provides. First-year or sophomore standing, or approval of instructor.

### **103 CULTURAL COMPETENCY FOR INTERNATIONAL STUDENTS - 1 hour**

This course serves as an introduction to U.S. American culture while exploring other students' respective cultures. The course will explore the concept of culture from social, academic and economic dimensions. By examining how these dimensions interact with each other, students will develop an understanding of culture both individually and collectively. Upon completion of this course, students will have a demonstrated ability to develop/identify strategies that will facilitate their daily negotiation and interaction with American culture while developing an appreciation for cultural differences. Prerequisites: course must be taken by international students during first semester at Manchester with permission of the course instructor.

### **130 CAREER CHOICES AND COMPETENCIES - 2 hours**

This course is designed to introduce students to the concepts of decision making, self-assessment, career exploration and career planning. Helpful for students who are undeclared majors, those changing majors and those exploring career applications of their majors.

### **200 ENTREPRENEURIAL THINKING - 3 hours**

This class covers the foundations of innovation and creativity. Students will learn basic psychological theories of creativity, the group dynamics that foster innovation as well as theories of team building techniques that are essential for getting things accomplished. We will also study creativity in music and art as we connect the dots between creativity and everyday life.

**201 INNOVATION - 3 hours**

Students explore the creative process of converting ideas into useful products and services. Topics include the process by which ideas are generated; the application of information, imagination, and initiative to derive greater or different value from resources; and the translation of the new idea or invention into a good or service that creates value.

**205 TECHNICAL WRITING - 3 hours**

As an introduction to communicating technical information, this course focuses on writing proposals, specifications, reports, instruction and procedures manuals, memos and emails that are clear, concise and unambiguous. Students will participate in individual and group projects that require communication to various audiences. Prerequisite: CORE-1W. Fall even years.

**212 COLLEGE TO CAREER - 1 hour**

This course is designed to provide upper-level students with the necessary career management skills, strategies and methodologies to effectively identify and compete for internships or full-time job opportunities.

**221 RACE, POWER, AND MARGINALIZATION IN SCHOOLS - 3 hours**

A critical examination of the interplay between race, ethnicity, power and marginalization in Western and Industrialized societies. The course will offer the opportunity to explore the ways in which educational systems can perpetuate the marginalization of working class groups across generations. The implications of content for living in civil society, America and a democracy will be explored. C-3RC.

**240 MAKING OF THE MODERN MIND - 3 hours**

This course investigates the wide-spread shift in Europe from a pre-modern (pre-16th century) to a modern world view (as it matured up through the 19th century), with a special focus on the rise of modern science as a way of understanding nature and on the radical shift in how modern humans understood themselves and their relationship to this nature. Course readings will draw from the sciences, philosophy, history and literature; the class will take place in European cities such as London and Paris. C-3GC. January.

**350 THE INDIA STORY - 3 hours**

An intensive seminar-type travel course offered in New Delhi, India. All aspects of Indian culture and history will be covered through lectures given by instructors with expertise in specific topics. C-3GC. Summer.

**395 HONORS PROPOSAL - 1 hour**

This course provides students eligible for the Honors Program an opportunity to prepare their honors thesis proposal. It is not required, but is a guided opportunity to set students up for success with their honors thesis. The honors thesis proposal course focuses on developing a topic, conducting researching, considering methodology, and then finalizing a proposal to be submitted to a student's Honors Thesis Committee. Prerequisite: Eligibility for the Honors Program and approval from the honors program director.

**495 HONORS THESIS - 1-3 hours**

An opportunity for students eligible for the Honors Program to prepare an honors thesis, either for its own sake or as partial fulfillment of the requirements for an honors diploma. The honors thesis addresses a topic in the student's major but also must be interdivisional in scope and approach. The Honors Committee will approve topics for each honors thesis. Prerequisite: eligibility for the Honors Program and approval from the honors program director. May be repeated for a maximum of six semester hours.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The division chair and the college dean must also approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.



## **International Studies**

*Director B. Onyeji*

A minor in international studies is a viable and attractive option for students in a variety of majors, both in Bachelor of Arts and Bachelor of Science programs. This program is an interdisciplinary examination of the cultural, political, economic and social patterns that have defined our modern world. Students who minor in international studies enhance their majors and expand their educational and employment opportunities upon graduation.

The minor in international studies is filled with rich and exciting experiences. It provides students with a wide range of opportunities to:

- gain skills in diplomacy, communication, negotiation and conflict resolution
- participate in the Harvard National Model United Nations Conferences
- acquire social skills and cultural sensitivity through interaction with other people and cultures
- pursue individual, interdisciplinary tracks or areas of interest within the parameters outlined in the program curriculum

Minor in international studies, 24 hours: POSC 131, 140; one course selected from: ECON 221, ECON 222, INTD 320, INTD 425, INTD 441, INTD 4277; one course selected from: PEAC 110, PEAC 33, POSC 360, POSC 365, POSC 367; one course selected from: ART 348, COMM 256, COMM 362, ENVS 130, FREN 111, FREN 112, HIST 204, HIST 210, HIST 226, HIST 242, HIST 246, HIST 250, HIST 263, MUS 119, POSC 236, POSC 237, REL 222, REL 223, SPAN 111, SPAN 112, SOC 311; three semester hours of course work taken through a short-term, semester or year-long study abroad program; students will demonstrate intermediate or higher proficiency in a language other than their native language. This requirement may be waived for students who complete a significant and appropriate international experience without acquiring intermediate language proficiency.

## **Library**

*Co-Directors D. Haines and R. Johnson*

Applied Study Area in Libraries and Literacies; S. Erickson-Pesetski, coordinator: ENG 254, ENG 476; LIB 200; one course selected from ENG 311, LIB 202, COMM 232 or COMM 234.

### **Courses LIB**

#### **200 LIBRARIES AND LITERACIES- 3 hours**

This course provides an overview of the knowledge and skills required to work in academic, school media, public and special libraries, as well as museums, archives and other information professions. Students will analyze the roles these institutions play and the ethical, legal and security issues that exist in today's digital society. Students will learn to locate, evaluate and utilize information effectively, and the final project will require them to design a tutorial that integrates course concepts and demonstrates skills that can apply to a number of information professions.

#### **202 TRANSLITERACY IN A DIGITAL WORLD - 3 hours**

This course will examine the concept of transliteracy (the ability to design, communicate and interact with digital content using multiple media) in various information settings. Students will assess the ways institutions use social media and web 2.0 tools in order to analyze the impact these tools continue to have. Through the use of productivity and information curating tools, along with an understanding of social media privacy and copyright concerns, students will become responsible transliterate citizens, capable of contributing to today's participatory digital society.

#### **210 BURNED AND BANNED: CENSORED CHILDREN'S LITERATURE - 3 hours**

Censorship in public schools is an ongoing and challenging issue. What constitutes "appropriate" reading material? Who decides what is and is not "appropriate?" How do values and morals impact such decisions? The goal of the course will be to explore and analyze a variety of child and adolescent literature which has been historically banned, the nature for such decisions and the implications of those decisions historically, socially, culturally and politically. Censorship will be examined, analyzed and evaluated from multiple perspectives, and in the process of this exploration, class members will clarify our own values about the role of literature in shaping youth. C-4LT.

## **Mathematics and Computer Science**

*Chair T. Brauch, J. Brumbaugh-Smith, Y. Lee, R. Mitchell, A. Rich, E. Sagan*

The Department of Mathematics & Computer Science seeks to graduate students who can: appropriately analyze a wide variety of mathematical and computing problems, understand and apply relevant theory and technology to solve real-world problems, develop and implement insightful and efficient solutions and effectively communicate both abstract ideas and practical solutions.

Entering students take a placement test in mathematics prior to enrolling in courses. The test results in conjunction with other criteria are used to place students in an appropriate mathematics course. Advanced placement credit in calculus, statistics and computer science is possible for students with strong AP scores.

### **MATHEMATICS**

Courses in mathematics are designed for students who want to: acquire cultural knowledge of mathematics and its applications, apply mathematical principles of analysis and modeling in the natural and social sciences and also in industry, prepare for graduate studies in mathematics or related disciplines and become teachers of mathematics at the precollege and college levels.

### **Baccalaureate Degree**

Courses listed in parentheses are prerequisites.

Major in mathematics, 43 hours: MATH 121, 122, 130, 231, 240, 251, 421, 433, three hours of 475 or 499; nine hours of approved electives, selected from: MATH 214, 233, 245, 306, 330, 340, 380 or 480, 385 or 485; (PHYS 210, 220) PHYS 301 or (CHEM 211 and PHYS 210, 220) CHEM 341; (ECON 221) ECON 336; (ECON 221) ECON 352; (CPTR 205) CPTR 310, 499.

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the department chair.

Minor in mathematics, 22 hours: MATH 121, MATH 130 or MATH 202; 14 hrs of electives (at least two of which are departmental courses) chosen from: MATH 122, MATH 210 or MATH 240 or PSYC 241; MATH 214, 231, 233, 242, 245, 251, 306, 330, 340, 380, 385, 421, 433, 480, 485; CHEM 341; CPTR 310; (ECON 221) ECON 336 or (ECON 221) 352; PHYS 301.

Minor in middle school mathematics, 24-26 hours: MATH 121, 130, 251, 306, 440; one course selected from MATH 214, 330, 433; one course selected from MATH 115, 210, 240.

Applied Study Area in scientific computing, Timothy Brauch, coordinator; CPTR 105; MATH 121, 233; successful completion of an applied experience approved by the coordinator.

Math Teaching Major: Requirements available in the Office of Teacher Education.

### **Courses MATH**

#### **100 BASIC MATHEMATICS - 2 hours**

A review of topics in arithmetic including: fractions, decimals, proportions and percents, signed numbers, order of operations, approximation and rounding, unit conversion, exponents, small and large numbers and scientific notation. Fall.

**105 BASIC ALGEBRA - 2 hours**

A review of topics in elementary algebra including: inequalities; graphing of equations; problem solving using linear, quadratic and exponential equations; solving equations involving exponents and roots. Prerequisite: MATH 100 or placement. Fall. January or Spring.

**108 NUMBER SENSE FOR ELEMENTARY TEACHERS - 2 hours**

An in-depth treatment of concepts underlying common topics in the elementary mathematics curriculum including: number theory and representation, operations and their properties, functions and algebraic thinking. Use of selected concrete manipulatives and technology is included. Prerequisite: MATH 105 or high placement.

**113 QUANTITATIVE REASONING - 3 hours**

A survey of skills for understanding quantitative data in modern life. This course focuses on: interpretation (and misinterpretation) of percentages, probabilities and statistics in contemporary decision-making; understanding of survey and experimental results as reported in mass media; and making logical and persuasive quantitative arguments. Course is designed primarily for students seeking the B.A. degree and does not satisfy the quantitative requirement for B.S. students. This course may not be taken by students who have previous credit for (or are concurrently enrolled in) MATH 115, 210 or 240. Prerequisite: MATH 105 or placement. C-1Q. Spring.

**115 ELEMENTARY PROBABILITY AND STATISTICS - 3 hours**

A course focusing on problem-solving and decision-making skills using the tools of probability and statistics. Topics include: basic and conditional probabilities, probability trees, expected value, normal distributions, application of randomization to sampling and experimentation, graphical and numerical summaries of data, uses and abuses of statistical data and introduction to confidence intervals, hypothesis testing and regression models. This course satisfies the Q requirement for both B.A. and B.S. students. This course may not be taken by students who have previous credit for (or are concurrently enrolled in) MATH 210 or 240. Prerequisite: MATH 105 or placement. C-1Q. Fall. January. Spring.

**120 PRECALCULUS - 3 hours**

Topics include: graphs and functions, polynomials and their zeros, complex numbers, exponential and logarithmic functions, trigonometry (functions, graphs and identities) and applications. Prerequisite: MATH 105 or placement. Fall. January.

**121 CALCULUS I - 4 hours**

An introduction to calculus including limits, continuity, derivatives and their applications, curve sketching, integrals and the Fundamental Theorem of Calculus. Trigonometric, exponential and logarithmic functions are included. Graphing calculators will be used. Prerequisite: MATH 120 or placement. C-1Q. Fall. Spring.

**122 CALCULUS II - 4 hours**

Topics include: numerical integration, applications of integration, techniques of integration, inverse trigonometric functions, an introduction to differential equations, improper integrals, sequences and series and Taylor's Theorem. A computer-algebra system will be used. Prerequisite: MATH 121. Fall. Spring.

**130 DISCRETE MATHEMATICS - 4 hours**

An introduction to discrete methods used in mathematics and computer science. Principal topics covered are: logic, sets, algorithms, number theory, reasoning and proof, recursion, combinatorics, relations and graph theory. Prerequisite: MATH 120. Spring.

**202 MATHEMATICS FOR COMPUTER SCIENCE - 4 hours**

An introduction to mathematical methods used in computer science. Students will explore computer number representation and arithmetic, arbitrary number bases, Turing machines, number theory, relations, logic, sets, algorithmic complexity, induction and recursion through computer applications. Prerequisites: MATH 120 or higher math placement; CPTR 113. Enrollment in CPTR 113 may be concurrent. Spring odd years.

**208 MEASUREMENT FOR ELEMENTARY TEACHERS - 2 hours**

An in-depth treatment of concepts underlying common topics in the elementary mathematics curriculum including concepts in data analysis and probability, geometry and measurement. Use of selected concrete manipulatives and technology is included. Prerequisite: MATH 108; MATH 113, 115, 210, or PSYC 241.

**210 STATISTICAL ANALYSIS - 4 hours**

An introduction to statistical techniques used in the social and natural sciences. Topics include: graphical and numerical summaries of data; sampling and experimental design; elementary probability; binomial, uniform, normal, student's t, and chi-squared distributions; hypothesis tests and confidence intervals for means and proportions, ANOVA and linear regression. Statistical software is introduced during weekly lab sessions. Students are expected to be proficient in using computer applications and the campus network. This course satisfies the Q requirement for both B.A. and B.S. students. This course may not be taken by students who have previous credit for (or are concurrently enrolled in) MATH 240. Prerequisite: MATH 105 or placement. C-1Q. Fall. January. Spring.

**214 HISTORY OF MATHEMATICS - 3 hours**

An overview of aspects of the history of mathematics from ancient times through the development of abstraction in the nineteenth century. The course will consider both the growth of mathematical ideas and the context in which these ideas developed in various civilizations. Prerequisite: MATH 121, 130.

**223 MATHEMATICS IN CULTURE - 3 hours**

This course examines the development of some aspect of mathematics at a certain place during a certain time period. The course emphasizes how the history, geography, technology, and culture in that location and time influenced the mathematics that was developed and how the mathematics influenced those aspects of society. Students will explore these topics while visiting the location under study. The place and era will vary. This course is designed for a general audience and may not be used for credit in the mathematics major or minor. Prerequisite: MATH 105 or higher level placement.

**224 CONTEST PROBLEM SOLVING - 1 hour**

Supervised preparation for and participation in intercollegiate mathematics competitions. Participation in at least one competition is required. General problem solving strategies will be discussed. May be repeated to a maximum of four hours. Prerequisite: MATH 122 or concurrent enrollment.

**227 STATISTICAL COMPUTING - 1 hour**

Students will apply a statistics programming language to facilitate computational methods for collecting, organizing, graphing, and analyzing data. They will learn basic statistical data objects such as data frames, matrices, tables, and lists, and how to perform statistical manipulations with these objects. All of the computing methods will be illustrated using a high-level language such as R or Python. Prerequisite: MATH 210, 240 or PSYC-241.

**231 MULTIVARIABLE CALCULUS - 4 hours**

Topics include: vector analysis in two- and three-dimensional spaces, polar and spherical coordinates, curves in space; multivariable functions and their derivatives, multiple integrals, line integrals and Green's and Stokes' Theorems. Prerequisites: MATH 122, 251. Spring.

**233 SCIENTIFIC COMPUTING - 3 hours**

A study of computational issues and methods used in applied mathematics and scientific computing. Topics include: computation errors; interpolation; convergence of numerical methods; approximate integration; numerical solution of ordinary differential equations; and numerical solution to systems of linear and non-linear equations. The course is oriented toward machine computation and involves programming of various solution techniques for problems in science, technology, engineering and mathematics. Prerequisite: MATH 121.

**240 MATHEMATICAL STATISTICS - 4 hours**

Basic concepts of probability; expectation; variance, covariance, distribution functions; bivariate, marginal and conditional distributions. Treatment of experimental data; normal sampling theory; confidence intervals and test of hypotheses; introduction to regression and to analysis of variance. Prerequisite: MATH 122. Fall, odd years.

**242 DATA ANALYTICS - 3 hours**

A survey of quantitative techniques and computing tools used to identify patterns in massively large data sets. Such patterns are used to categorize behavioral trends and customize organizational responses, either toward specific target audiences or on an individualized basis. Applications will include areas such as: on-line behavior, social media usage, purchasing preferences, voting patterns, athletic performance and health outcomes. Prerequisite: MATH 115, 210 or 240, or PSYC-241.

**245 ORDINARY DIFFERENTIAL EQUATIONS - 3 hours**

Topics include: classification of differential equations; methods of solving first order equations, second and higher order linear equations and systems of linear equations; series solutions; and existence theorems. Prerequisite: MATH 122. Spring, even years.

**251 LINEAR ALGEBRA I - 4 hours**

Solution of linear systems, matrices and determinants, eigenvalues and eigenvectors, vector algebra, representation of lines and planes in  $R^n$ , linear transformations and mathematical models using matrix algebra. Prerequisites: MATH 121, 130 or 202. Fall.

**303 MATHEMATICS CURRICULUM AND METHODS - 3 hours**

The study of curriculum, methodology, computer applications, materials and assessment appropriate for early childhood and elementary school (preK-6th grades) mathematics programs. Field experience is a required component. Taken as part of the Elementary Methods Block. Prerequisites: MATH 208 and EDUC 340. Fall.

**306 GEOMETRY - 3 hours**

A study of the logical structure and content of both Euclidean and non-Euclidean geometries. The approach to Euclidean geometry is via Hilbert's axioms. Prerequisite: MATH 251. Fall, even years.

**330 OPERATIONS RESEARCH MODELS - 3 hours**

Introduction to mathematical modeling processes, allocation models involving linear programming, simplex algorithm, dynamic programming, transportation models, network models, graph theory, Markov chain models, queuing theory and game theory. Prerequisite: MATH 130 or 202 or 251.

**340 LINEAR ALGEBRA II - 3 hours**

Numerical methods for solving linear systems, the four fundamental subspaces and applications, orthogonality and approximation, eigenvectors eigenvalues, and diagonalization of matrices and applications. Prerequisite: MATH 251. Spring, odd years.

**421 REAL ANALYSIS - 3 hours**

Topics include: the completeness of the real number system; sequences and their limits; elementary point-set topology; and continuity and uniform continuity. The theory of series, the derivative and the Riemann integral will be treated as time permits. Prerequisites: MATH 130, 231. Fall, even years.

**433 ALGEBRAIC STRUCTURES - 4 hours**

Basic properties of groups, rings, factor groups, ideals, quotient rings, integral domains, fields, polynomials and elementary number theory. Prerequisite: MATH 251. Fall, odd years.

**440 SECONDARY MATHEMATICS METHODS (W) - 3 hours**

The study of standards, curriculum, teaching methods and assessment appropriate for middle and secondary school (5-12) mathematics programs. Topics will include appropriate use of mathematical technology, history of mathematics, approaches to problem solving and modes of mathematical understanding. Prerequisites: EDUC 111, EDUC 230, MATH 130, MATH 240. Enrollment in MATH 240 may be concurrent. Fall odd years.

**475 INTERNSHIP IN MATHEMATICS - 1-3 hours**

Students work in business, industry, government or other agencies applying mathematical tools (e.g., probability, statistics, optimization) to real-world problems. Students are supervised by a professional with significant experience in such applications and also a faculty member. A written report describing the overall project and the student's contribution will complete the course. Students must formally enroll in this course prior to beginning their work experience. Course may be repeated once for a maximum of four hours credit. Prerequisite: MATH 130 or 202; 122; permission of the department.

**499 SENIOR PROJECT (W) - 1-3 hours**

An in-depth study of some area of mathematics under the guidance of a primary and secondary faculty advisor. Students will write a thesis and give an oral presentation based on the thesis. Students will enroll either once or twice for a total of three hours credit. Prerequisite: permission of the department chair.

### **380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and the college dean must also approve. A set of guidelines is available at the Office of the Registrar.

### **385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

## **SOFTWARE ENGINEERING**

The **software engineering major** focuses on the software development process and the implementation of software systems. The foundation of software development consists of soliciting and documenting customer requirements, creative problem-solving, and effective software design. This is followed by constructing, testing, documenting and delivering professional quality software systems that are reliable, maintainable and extensible. Emphasis is placed on working with industries and software companies to provide students with real-world software experience through classroom projects, internships and senior research. Students will be prepared for successful careers in software development in a wide variety of businesses and industries. Graduates in software engineering will also be equipped to pursue a variety of graduate programs in computing.

A **minor in data science** offered for those desiring to be proficient at writing computer programs either for personal or workplace use or for students wishing to prepare for graduate school in computing-intensive disciplines.

### **Baccalaureate Degree**

Courses listed in parentheses are prerequisites.

Major in software engineering, 47 hours: CPTR 111, 113, 225, 310, 340, 342, 420, 422, 424; IDIV 205; MATH 121, 202, 251; three hours of CPTR 475 or 499.

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the department chair.

Minor in computer science, 23-25 hours: CPTR 111, 113; MATH 130 or 202; MATH 121 or 251; three courses from the following: CPTR 225, 310, 410, 424; MATH 233, 242.

Minor in data science, 22-24 hours: BUS 108; CTPR 105 or 111; CPTR 225, ENVS 215; MATH 227; MATH 242; one of the following: MATH 210; PSYC 241; MATH 240; one elective from the following: BUS 310, 420; CPTR 105, 111, 117, 310; ECON 352; MATH 233, 330; PSYC 341.

Minor in systems analysis, 27-29 hours: CPTR 111, 113, 340, 342 or 422; BUS 111; IDIV 205; one course selected from BUS 108; CPTR 224; MATH 242; two courses selected from ACCT 211; BUS 231, 310, 447.



## **Courses CPTR**

### **105 COMPUTER PROGRAMMING - 3 hours**

An introductory course in computer programming. Students will learn how to conceptualize, write and run programs. Programming topics include variables and types, methods, decision structures, loops, arrays, classes and objects. In addition to the syntax and semantics of programming, debugging, documentation, and programming aesthetics are also emphasized. Prerequisite: MATH 105 or higher mathematics placement. Spring.

### **111 FOUNDATIONS OF COMPUTER SCIENCE I - 4 hours**

As a first course in Computer Science, the emphasis will be on problem solving. Students will learn to solve problems by the iterative refinement of object oriented models. Topics include simple Unified Modeling Language (UML) class diagrams, technical writing, design principles and programming using interacting classes, one dimensional arrays, program flow control and simple I/O. An object-oriented language that supports encapsulation, polymorphism and inheritance will be used. Prerequisite: MATH 105 or higher mathematics placement. Fall.

### **113 FOUNDATIONS OF COMPUTER SCIENCE II - 3 hours**

A continuation of Foundations of Computer Science I, the emphasis will be on formalizing and extending student knowledge of analysis, design, technical writing and implementation. Topics include reusability and change tolerance, interface design, coupling, cohesion, polymorphism, inheritance, information hiding, good programming practices and fundamentals of algorithm/data structure design. Prerequisite: CPTR 111. Spring.

### **117 MOBILE APP DEVELOPMENT – 3 hours**

This course assumes no previous programming experience. Students will learn the basics of the mobile environment, mobile development tools and basic programming concepts in order to create their own mobile apps.

### **225 DATABASE PROGRAMMING – 3 hours**

This course introduces the fundamental topics in database design and database-backed application development. Overall focus is on building applications with the efficient use of databases. Topics will include the relational model, SQL, dependencies, normalization, XML, JDBC, Web program. Prerequisites: CPTR 113; MATH 130. Fall, even years

### **310 ALGORITHMS AND DATA STRUCTURES - 3 hours**

This course explores the mathematical modeling of problems in computing. We will study the algorithms and data structures used for common tasks such as searching, sorting, and solving graph and geometric problems. The course will rely heavily on programming as the means for presenting the solutions. The emphasis will be on constructing correct and efficient algorithms and on analyzing their performance. Prerequisite: CPTR 113; MATH 130. Fall, odd years.

### **340 SOFTWARE ENGINEERING METHODOLOGIES - 3 hours**

This survey course focuses on the software engineering processes of requirements engineering, architecture and design and quality. In this course a foundation for later studies will be laid by examining the trade-offs of a variety of software development philosophies/methodologies. Prerequisite: CPTR 113. Spring even years.

**342 SOFTWARE QUALITY - 3 hours**

This course focuses on the software quality process. Students will learn and practice various techniques including test driven development, boundary condition testing, black and white box testing, regression testing and system verification/validation. Prerequisite: CPTR 113. Fall odd years.

**410 TOPICS IN COMPUTER SCIENCE - 3 or 4 hours**

This course will be offered based on sufficient interest of students and faculty in particular areas of computer science. Possible topics include: artificial intelligence, numerical computation, computer graphics, expert systems, real-time systems, simulation, telecommunications, resource utilization, coding theory, UNIX and compiler design. This course requires significant independent work including a major research or programming project. Course may be repeated once on a different topic. Prerequisite: varies depending on topic.

**420 SOFTWARE REQUIREMENTS ENGINEERING - 3 hours**

This course focuses on the software requirements engineering process. Students will learn and practice elicitation, documentation, verification, and validation of software system requirements. Emphasis will be placed on using Unified Modeling Language (UML) and dealing with multiple audiences such as management stakeholders, end user stakeholders, and technical stakeholders. Prerequisite: IDIV 205; CPTR 340. Fall even years.

**422 SOFTWARE ARCHITECTURE AND DESIGN - 3 hours**

This course focuses on the software engineering process of architecture and design. Students will learn and practice creating a software system architecture and design from requirements using Unified Modeling Language (UML), architectural patterns, and design patterns. Prerequisite: CPTR 340. Spring odd years.

**424 CLOUD COMPUTING - 4 hours**

In the Cloud Programming course students will learn how to utilize standard protocols and architectures to develop distributed systems as well as how to handle concurrency within a program. Some of these standards and architectures include eXtensible Markup Language (XML), Simple Object Access Protocol (SOAP), Restful services, and Service Oriented Architecture (SOA). Prerequisite: CPTR 225. Spring even years.

**477 INTERNSHIP IN SOFTWARE ENGINEERING (W) - 1-3 hours**

Students work in a professional software development environment where they engage in one or more software engineering disciplines such as requirements engineering, architecture/design, software construction or software quality. Students are supervised by a software professional and a faculty member. An oral presentation and a written report describing the overall project and the student's contribution will complete the course. Students must formally enroll in this course prior to beginning work experience. Students may enroll twice for up to four hours credit. Prerequisite: Approval of Department.

**499 SENIOR PROJECT (W) - 1-3 hours**

Students will conduct a significant research project to consist of the development, analysis and/or implementation of an algorithm or software system, or an in-depth study in some area of computer science. A formal paper as well as an oral presentation will be required. Course may be repeated once for a maximum of three hours credit. Prerequisite: Permission of the department chair.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and the college dean must also approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

## **Medical Technology**

*Director S. Klein*

The medical technology major prepares students for a job in the clinical laboratory. These professionals provide vital services to the health care profession, including, blood analysis, pathogen identification, transplantation donor matching, and serology. Completion of this major combined with a year of clinical experience and education prepares students for a full career in medical technology. This major may be finished in three years at Manchester University and one year at an affiliated clinical hospital. Upon successful completion of the clinical year and the national exam students receive their degree from Manchester and accreditation for clinical laboratory work.

### **Baccalaureate Degree**

Courses listed in parentheses are prerequisites.

Major in medical technology, 48-49 hours: BIOL 108, 108L, 204, 204L, 229, 229L, 313, 313L, 360, 395, 431; CHEM 111, 111L, 113, 113L, 311, 311L, 312, 312L; CHEM 235/L or CHEM 405; ESAT 106; MATH 210 or (122) 240. Senior year off campus in clinic.

Course descriptions can be found on the [biology](#), [chemistry](#), [mathematics](#) and [physics](#) major fields of study pages.

All medical technology majors must successfully complete a senior comprehensive evaluation before graduating. This will consist of a comprehensive examination and a clinical project.

## **Modern Languages**

*Chair S. DeVries, T. Smithson, S. Thomson, C. Yañez*

The Department of Modern Languages prepares student to (a) communicate effectively in the target language, (b) read and analyze literature from across time and around the world and (c) understand and appreciate the culture of countries in which the target language is spoken. Students in our majors and minors undertake graduate study or employment in a variety of fields that include linguistics, law, teaching, medicine and business. Many of our graduates have received prestigious awards such as the Fulbright and Rotary fellowships.

The Modern Languages Department offers the following majors and minors:

French: minor  
German: minor  
Spanish: major and minor  
Modern Languages: major  
TESOL: minor

Students who major in a modern language spend at least one semester living and studying abroad, usually in the sophomore or junior year. All language majors must complete a senior comprehensive evaluation to verify they have attained (a) advanced-low or better written and oral proficiency according to ACTFL standards, and (b) substantial knowledge of the relevant literatures and cultures. Majors must also take the senior capstone seminar that focuses on research skills, literary analysis and the culture, history and politics of a specific time period.

### **Language Placement Information**

Students who have completed two or more years of a language in high school must (1) take the department's placement examination during the new student orientation period, or (2) submit scores from a national standardized test such as the Educational Testing Service's Advanced Placement (AP) or the College Level Examination Program (CLEP) examination. The student will then be placed at the appropriate level. Students who place into the intermediate level of a language will not receive credit for the elementary level.

Students can receive credit for the intermediate level (six semester hours)

1. by completing the 201/202 sequence at Manchester University,
2. by placing into the advanced level (300) of a language and receiving a grade of C or higher in this coursework,
3. by passing a proficiency examination with a grade of B or higher, in addition to the language placement test, or
4. by forwarding Advanced Placement scores to Manchester University. Students who receive a score of 4 on the AP test will receive nine semester hours of credit for intermediate and advanced language courses; scores of 5 will be awarded twelve semester hours for intermediate and advanced courses.

## **FRENCH**

Minor in French, 24 hours: FREN 201, 202; nine hours selected from FREN 301, 302, 305, 325, electives in French culture and civilization approved by the Department of Modern Languages; FREN 315; six hours in electives in advanced French language, culture and civilization and French literature. These courses must be listed in the Catalog or must be approved by the Department of Modern Languages.

Teaching Minor in French:

Requirements available in the Office of Teacher Education.

Manchester University students of French are encouraged to study for a semester or a year in France, preferably during their junior year. Students with two years of college French or the equivalent proficiency are eligible. Manchester University grants credit for satisfactory work done abroad through accredited programs. Study abroad is expected for those wishing to complete a major in French. Interested students should discuss the possibility of foreign study with the academic advisor as soon as possible.

### **Courses FREN**

#### **110 INSIDE FRANCE - 3 hours**

Introduction to the history, culture and daily life of France. Background reading, slide presentations and lectures will give students a basic sense of the major periods of French history, the outstanding intellectual and artistic movements which shape formal French culture and the distinctive features of French daily life. Much of the time in France will be devoted to activities that illustrate, extend and synthesize the background material. Assignments designed to develop understanding of daily life will require some elementary French. Prerequisite: FREN 111. C-3GC. January.

#### **111 FOOD CULTURES - 3 hours**

An introduction to the French language through the food cultures of French-speaking countries. The course emphasizes listening and speaking skills through task-based activities oriented around the purchase, preparing, serving, and eating of cuisine in Francophone cultures. Class is conducted in French as much as possible. C-3GC.

#### **112 MEMORY AND CULTURE - 3 hours**

Exploration of cultural perspectives in the French-speaking world related to memorable experiences and events. Students develop French language skills to communicate about cultural and personal experiences and to express recollections of these experiences. Course is oriented toward task-based activities to communicate ideas about identity, convictions, and culture and conducted in French as much as possible. C-3GC.

#### **201 COMMUNICATION AND CULTURE - 3 hours**

Exploration of cultural currents and effective communication of ideas in order to broaden and solidify language and intercultural skills. Course features conversation oriented toward cultural competence, reading comprehension of various texts, and language laboratory work geared toward improved proficiency. Class is conducted primarily in French. Prerequisite: Placement via examination in French. C-3GC.

**202 CULTURE AND CONTROVERSIES - 3 hours**

Development of skills in the expression of convictions regarding cultural controversies in areas such as science, technology, media, politics, social culture, etc. in order to strengthen language and intercultural skills. The class emphasizes effective communication in French to articulate ideas and beliefs about identity, current events, and cultural values. Class is conducted primarily in French. Prerequisite: Placement via examination in French. C-3GC

**301 ORAL COMMUNICATION - 3 hours**

Intensive practice in spoken expression via discussion of written texts, art, films, and contemporary issues. Course work is oriented toward improvement of students' oral proficiency through presentation, class-wide discussion, and individualized assessment. Course taught in French. C-3GC

**302 IDEAS AND CULTURE - 3 hours**

Practice of oral and written communication in formal and informal settings using the French language. Students will discuss and analyze several cultural topics through the use of authentic French-language sources for class discussions, research, debate and oral presentations. Course taught in French. C-3GC.

**315 FRANCOPHONE FILM, LITERATURE, AND CULTURE - 3 hours**

Introduction to the critical study of Francophone film, literature, and culture. Course materials will include important examples from the history of French and Francophone canons of literature, film, and other cultural texts. Increased proficiency in oral and written communication is emphasized. C-4LT

**325 GLOBAL ENGAGEMENT - 3 hours**

An intensive language course that prepares students to identify and discuss global issues in the target language as informed individuals. Content and themes are drawn from multiple sources, including newspapers, magazines, journals, television and Internet. This course is taught entirely in the target language. Prerequisite: one 300 or 400-level course in French.

**330 FRENCH CIVILIZATION AND HISTORY - 3 hours**

This course provides an in-depth consideration of the history and cultural traditions (intellectual, artistic, political, social) of France. This course is taught entirely in French and includes attention to skills and content necessary for articulate self-expression in French. Prerequisite: FREN 202 or equivalent proficiency.

**401 FRENCH DRAMA (W) - 3 hours**

Selected plays by French dramatists from the seventeenth through the twentieth centuries, including works by such playwrights as Racine, Moliere, Marivaux, Beaumarchais, Hugo, Musset, Sartre, Ionesco and Beckett. Activities include lectures, class discussion, critical composition, and oral and written explication de texte. Prerequisite: FREN 301.

**413 FRENCH FICTION (W) - 3 hours**

Selected narrative verse, novels and short stories by French and/or Francophone authors from the Middle Ages to the present. Because the content changes from year to year, the course may be repeated once. Activities include lectures, class discussion, critical composition and oral and written explication de texte. Prerequisite: FREN 301.

**423 MODERN FRENCH POETRY (W) - 3 hours**

Important French poets and poetic movements of the 19th and 20th centuries, including such writers as Hugo, Baudelaire, Verlaine, Mallarmé, Valéry, Apollinaire, Prévert, Ponge and selected Francophone poets. Activities include lectures, class discussion, versification and scansion, critical composition and oral and written explication de texte. Prerequisite: FREN 301.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

**GERMAN**

Minor in German, 24 hours: GER 201, 202; MODL 485; nine hours selected from electives in German language and culture approved by the Department of Modern Languages; three hours of German literature; three hours in electives in advanced German language, culture and civilization, and German literature. These courses must be listed in the Catalog or must be approved by the Department of Modern Languages.

Manchester University students of German are encouraged to study for a semester or a year in Germany. Students with two years of college German or the equivalent proficiency are eligible. Manchester University grants credit for satisfactory work done abroad through accredited programs. Interested students should discuss the possibility of foreign study with the academic advisor as soon as possible.

**Courses GER****111 IDENTITY AND CULTURE - 3 hours**

Exploration of personal and public identities in German-speaking countries. This course emphasizes developing listening and speaking skills through task-based activities that focus on family, food, fashion, interests and hobbies, daily living, etc. Class is conducted in German as much as possible. C-3GC.

**112 COMMUNITY AND CULTURE - 3 hours**

Exploration of community life in German-speaking countries. This course emphasizes developing listening and speaking skills through task-based activities that focus on local and regional geography, transportation, festivals and holidays, religion, industry, etc. Class is conducted in German as much as possible. C-3GC

**201 CULTURES IN CONTACT - 3 hours**

Exploration of the internal and external histories of German-speaking countries. This course emphasizes broadening and solidifying language and intercultural skills through task-based activities that focus on social and political institutions, art, literature, media, science, technology, etc. Class is conducted primarily in German. Prerequisite: Placement via examination in German. C-3GC.



## **202 CRISES AND CONTROVERSIES**

Exploration of crises and controversies that affect the global community, particularly from the perspective of German-speaking countries. This course emphasizes broadening and solidifying language and intercultural skills through task-based activities that focus on the environment, immigration, security, poverty, conflict, etc. Class is conducted primarily in German. Prerequisite: Placement via examination in German. C-3GC.

## **301, 302 ADVANCED GERMAN I, II - 6 hours**

Introduction to more complex linguistic structures and to German culture and civilization. Increased proficiency in oral and written communication is emphasized. Class is conducted exclusively in German. Prerequisite: GER 202 or placement via examination. Fall, even years (301). Spring, odd years (302).

## **315 INTRODUCTION TO LITERARY ANALYSIS - 3 hours**

Introduction to the critical study of literature. Readings will include selections from a variety of German authors. Increased proficiency in oral and written communication is emphasized. Prerequisite: GER 202 or placement via examination.

## **380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

## **385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

## **SPANISH**

### **Baccalaureate Degree (Bachelor of Arts only)**

Major in Spanish, 36 hours: SPAN 201, 202; MODL 485; nine hours of courses selected from: SPAN 301, 302, electives in Spanish culture and civilization approved by the Department of Modern Languages; two literature courses from SPAN 315, 403, 413, 385/485; twelve hours from SPAN 230, 301, 302, 321, 325, 330, 333, 340, 380, 385, 403, 413, 480, 485. These courses must be listed in the Catalog or must be approved by the Department of Modern Languages.

Minor in Spanish, 24 hours: SPAN 201, 202; one literature course from SPAN 315, 403, 413, 385/485; fifteen hours of electives from SPAN 230, 301, 302, 321, 325, 330, 333, 340, 380, 385, 403, 413, 480, 485. These courses must be listed in the Catalog or must be approved by the Department of Modern Languages.

Teaching Major or Minor in Spanish:  
Requirements available in the Office of Teacher Education.

Manchester University students of Spanish are encouraged to study for a semester or a year in a Spanish-speaking country, preferably during their sophomore or junior year. Students with two years of college Spanish or the equivalent proficiency are eligible. Manchester University grants credit for satisfactory work done abroad through accredited programs. Study abroad is required

for those wishing to complete a major in Spanish. Interested students should discuss the possibility of foreign study with the academic advisor as soon as possible.

## **Courses SPAN**

### **111 FOOD CULTURES - 3 hours**

An introduction to the Spanish language through the food cultures of Spanish-speaking countries. The course emphasizes listening and speaking skills through task-based activities oriented around the purchase, preparing, serving, and eating of Spanish and Latin American cuisine. Class is conducted in Spanish as much as possible. C-3GC

### **112 MEMORY AND CULTURE - 3 hours**

Exploration of cultural perspectives in the Spanish-speaking world related to memorable experiences and events. Students develop Spanish language skills to be able to communicate about cultural and personal experiences and to express recollections of these experiences. Course is oriented toward task-based activities to communicate ideas about identity, convictions, and culture. C-3GC.

### **201 COMMUNICATION AND CULTURE - 3 hours**

Exploration of cultural currents and effective communication of ideas in order to broaden and solidify language and intercultural skills. Course features conversation oriented toward cultural competence, study of brief literary works, film, and other texts and language laboratory work geared toward improved proficiency. Class is conducted primarily in Spanish. Prerequisite: Placement via examination in Spanish. C-3GC.

### **202 CULTURES AND CONTROVERSIES - 3 hours**

Development of skills in the expression of convictions regarding cultural controversies in areas such as science, technology, media, politics, social culture, etc. in order to strengthen language and intercultural skills. The class emphasizes effective communication in Spanish to articulate ideas and beliefs about identity, current events, and cultural values. Class is conducted primarily in Spanish. Prerequisite: Placement via examination in Spanish. C-3GC

### **203 MEDIA AND CULTURE - 3 hours**

Analysis of social, cultural and political currents and their portrayal in modern Spanish-language media. Films, online media, television broadcasts, and other manifestations of visual culture as well as a variety of written texts and other cultural artifacts are explored in order to broaden and solidify Spanish language proficiency and intercultural skills. C-3GC

### **230 LIVING THE SPANISH LANGUAGE - 3 hours**

This intensive course introduces students to a wider understanding of language, culture, and history in Spanish-speaking countries. All classes, excursions, talks and other activities will be conducted in Spanish. Much of the time will be devoted to activities that help the students to understand, broaden and value cultural manifestations and historical development. Course may be taken up to two times for credit. Credit for this course will apply toward the Spanish major or minor. C-3GC. January. Summer.

### **301 ORAL COMMUNICATION - 3 hours**

Intensive practice in spoken expression via discussion of written texts, art, films, and contemporary issues. Course work is oriented toward improvement of students' oral proficiency through presentation, class-wide discussion, and individualized assessment. Course taught in Spanish. Course may be taken twice for credit under different syllabi.

**302 IDEAS AND CULTURE - 3 hours**

Practice of oral and written communication in formal and informal settings using the Spanish language. Students will discuss and analyze several cultural topics through the use of authentic Spanish-language sources for class discussions, research, debate and oral presentations. Course taught in Spanish. Course may be taken up to two times for credit under different syllabi. C-3GC

**315 INTRODUCTION TO LITERARY ANALYSIS - 3 hours**

Introduction to the critical study of literature. Readings will include selections from a variety of Spanish and Latin American authors. Increased proficiency in oral and written communication is emphasized. Prerequisite: SPAN 301 or 302. C-4LT.

**321 HISTORY AND LINGUISTICS OF SPANISH - 3 hours**

A history of the Spanish language, its phonetics, phonology, morphology and syntax. The course also focuses on regional variations as well as the Spanish spoken in the United States. This class is taught in Spanish. Prerequisite: SPAN 302.

**325 GLOBAL ENGAGEMENT - 3 hours**

An intensive language course that prepares students to identify and discuss global issues in the target language as informed individuals. Content and themes are drawn from multiple sources, including newspapers, magazines, journals, television and Internet. This course is taught entirely in the target language. Course may be taken up to two times for credit under different syllabi.

**330 CULTURES AND CIVILIZATIONS IN SPAIN - 3 hours**

This course provides an in-depth consideration of the culture, history, art, film and architecture of Spain. The course is taught entirely in Spanish and may be taken up to two times for credit under different syllabi.

**333 INTENSIVE STUDIES IN SPANISH - 3 hours**

A combination of research and onsite exposure to language and culture. The course is designed for students seeking Spanish credit for participating in an off-campus travel course. Enrollment in this course replaces the student's enrollment in the non-language course. May be repeated for credit; a maximum of 6 hours may be used towards the Spanish major or minor. All work is done in Spanish. Prerequisite: permission of the travel course professor and permission of the Department of Modern Languages.

**340 HISPANIC-AMERICAN CULTURE AND CIVILIZATION - 3 hours**

This advanced course provides an in-depth consideration of colonial societies and cultures of Spanish-speaking countries in America. This course is taught entirely in Spanish. Course may be taken up to two times for credit under different syllabi.

**385 SEMINAR - 3 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions. Course may be taken up to two times for credit under different syllabi.

**403 SURVEY OF LATIN AMERICAN LITERATURE - 3 hours**

A chronological study of the poetry, drama and fiction of Latin America from the Discovery (1492) to the boom of the 60s and 70s. Activities include lectures, oral reports, class discussions and a term paper. Prerequisite: SPAN 315.

**413 SURVEY OF SPANISH LITERATURE - 3 hours**

A chronological study of the poetry, drama and fiction of Spain from the Medieval Period (1140) to the post-war period (1970). Activities include lectures, oral reports, class discussions and a term paper. Prerequisite: SPAN 315.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**485 SEMINAR**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions. Course may be taken up to two times for credit under different syllabi.

**MODERN LANGUAGES**

Major in modern languages, 36 hours: MODL 385; Intermediate-high language proficiency in one language: 24 hrs of coursework at the 200-level or higher (FREN/GER/SPAN 201, 202, 301, 302, and courses in language, literature, culture). Novice-High proficiency in a second language (200-level): 6 hours. Three hours of elective course chosen in consultation with MODL department chair. One semester study abroad at a Spanish, French or German speaking site.

**TESOL**

Minor in teaching English to speakers of other languages, 24 hours: ENG/MODL 350, 352, 354; ENG 310 or 311; six hours intermediate French, German or Spanish; one 300 or 400-level course in French, German or Spanish\*; one course chosen from COMM 256; ENG 238, 310 or 311 (not used to meet above requirements); FREN 110; HIST 227; MODL 241 or 411; SOC 228; SPAN 230.

\*International students will be exempt from the language courses if their native language is not English. Students who have completed one semester of study abroad may substitute (upon approval of the program coordinator) an appropriate course from their study abroad if their non-English academic experience is substantial.

**Courses MODL****201 EUROPEAN LITERATURE - 3 hours**

Study and comparison of works of European literature within the framework of a period in literary history, of a literary genre or of dominant themes and motifs. C-4LT.

**225 LEGENDS REVISITED - 3 hours**

Students will analyze works from classical and medieval legend (especially epic and romance) and will compare and contrast them with reworkings from later periods. Students will acquire basic information about the genres that convey legend and the historical contexts of specific legends; they will develop skills in literary analysis, especially techniques necessary to compare, contrast and evaluate early occurrences of archetypes and themes along with their counterparts in literature of more recent date. Syllabus will include material from Greek and Roman mythology (Oedipus, the Trojan war, Aeneas and Dido) as well as medieval legend (El Cid, the Nibelungenlied, King Arthur, Charlemagne). All works taught in English. C-4LT.

**231 PRE-HISPANIC MESOAMERICAN/ANDEAN CULTURES - 3 hours**

This course provides an introduction to the history of Pre-Columbian America. It will focus on the developmental stages, cultural achievements, cultural diversity and characteristics of the most salient Mesoamerican and the Andean civilizations, before the arrival of the Europeans. It will also focus on the cross-cultural interactions between indigenous and European populations. C-3GC.

**241 US LATINO LITERATURE AND CULTURE - 3 hours**

An investigation of US Latino culture through artistic texts. Students will read a variety of literary genres and explore the contributions of US Latinos to art, music, television and film. Along the way, students will consider the particular challenges for this unique and diverse group of Americans and examine the stereotypes that exist about Latinos in US culture today. C-4LT.

**350 TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES - 3 hours**

Instruction and practice in the theory, techniques, and skills of teaching English to speakers of other languages, Observing ESL and foreign language classes, tutoring international students, diagnosing language acquisition problems, planning lessons and curricula, evaluating ESL texts and doing related research. Fall. Prerequisite: ENG 310 or ENG 311 or a modern language course at the 300 level.

**352 PRACTICUM IN TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES - 3 hours**

Supervised experience in teaching English to speakers of other languages. Students will apply the theories and techniques of second-language acquisition which were covered in the prerequisite course. Practicum may be done anywhere in the world. Prerequisite: ENG 350.

**354 SECOND-LANGUAGE ACQUISITION - 3 hours**

Course explores how people learn language and what methodologies respond to different linguistic needs and learning styles. Topics include: theories of language learning, diagnosis of language learning problems, assessment techniques, pedagogies appropriate to second language acquisition, relationship of culture to language development. Prerequisite: intermediate proficiency in a second language.

**375 PRACTICUM IN LANGUAGE AND CULTURE - 3-6 hours**

This course allows students to gain practical experience related to their language studies while they are enrolled in off-campus language-related courses. A maximum of three hours may be used toward a departmental major or minor. May not be repeated for credit. Prerequisite: One 300-level language course.

**411 INTRODUCTION TO LITERARY TRANSLATION - 3 hours**

A seminar that serves as introduction to the history, theory and practice of literary translation into English. Students will become familiar with various theories of translation and learn to implement them in their own translations. Students will produce a readable translation that reflects the language, meaning and purpose of the original. Students must have knowledge of literary analysis and the ability to read and write well in both the source and target languages. Prerequisites: A minimum of two courses (one in literature) at the 300-level or higher, in the source language.

**475 PRACTICUM IN LANGUAGE PEDAGOGY - 3 hours**

Students with advanced status (junior/senior) in language will gain practical experience in how to plan language curriculum, develop language activities, and evaluate learning in a university classroom setting. May not be repeated for credit. Prerequisite: Major or minor in language, ENG/MODL 354.

**485 SEMINAR (W) - 1-4 hours**

An in-depth consideration of a significant scholarly problem or topic. Students pursue a supervised, independent inquiry and exchange results through reports and discussions. Course is taught in English, but students complete written work in the language of their major. Prerequisite: senior standing.

## **Music**

*Chair T. Reed, D. Lynn, C. Humphries, P. Haynes*

The curriculum of the Music Department is designed (a) to provide a course of study for majors and minors in the department that will prepare them for careers in music, (b) to provide background for graduate study, (c) to provide study and performance of music for their cultural values, (d) to enrich the cultural climate of the University and surrounding communities, (e) to provide music for campus worship and assist area and constituent churches, (f) to foster a lifelong desire to perform and listen to music.

Entrance into the degree programs in music for music majors presupposes: (a) musical sensitivity, a sense of rhythm and a capacity for accurate aural perception, (b) familiarity with the rudiments of music, such as scales, keys, signs and musical terms, and (c) at least college level entrance ability in piano, voice or band or orchestra instrument. Students who are deficient shall study without credit until such proficiency is obtained. Students who wish to study music but who wish no degree are classified as special students. They may elect subjects for which they are prepared without reference to University requirements.

### **Baccalaureate Degrees**

Courses listed in parentheses are prerequisites.

Major in music, general concentration, 44-46 hours: MUS 109, 121, 113,125 (MUS 106), 148, 201, 212, 213, 225, 226, 248, 332, 341, 347, 370,432; seven hours of applied lessons; four hours of ensembles; five hours of approved electives.

Major in music, theory-composition concentration, 54-56 hours: MUS 109, 113, 119, 121,125 (MUS 106), 141, 148, 201, 212, 213, 225, 226, 243, 248, 341, 347, 353, 370, 430; four hours of applied lessons; four hours of ensembles; seven hours of approved electives.

Major in music, vocal performance concentration, 51-53 hours: MUS 109, 13, 121, 125 (MUS 106), 148, 201, 212, 213, 225, 226, 242, 248, 254, 332, 341, 347, 370, 432, 472; MUS 131 or 133; seven hours of applied lessons; four hours of ensembles; seven hours of approved electives.

Students with an applied concentration in piano or organ must meet their alternative area requirement in one or two different applied areas: a second keyboard instrument, an orchestral or band instrument or voice.

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the department chair.

Music education offers majors that lead to all-grade certification in choral music and instrumental music. Requirements for teaching majors are available in the Education Department.

Minor in music, 26-28 hours: MUS 109, 113,125 (MUS 106), 148, 212, 213, 225, 341, 432; four hours of applied lessons; four hours of ensembles; two hours of approved electives. Students fulfilling the applied concentration in piano must pass the requirements for MUS 201 Piano.

## **Courses MUS**

### **106 MUSIC FUNDAMENTALS AND BASIC EAR TRAINING - 2 hours**

Introductory study of the vocabulary of music. Topics covered include note reading in all standard clefs, major and minor scales, key signatures, meter, rhythm, intervals, triads, and basic Roman numeral chord analysis. Ear training supplements these areas through melodic and rhythmic dictation, chord identification, and an introduction to sight-singing using solfeggio. This is structured as a preparatory course for music majors. The class would be appropriate for non-majors who have some music-reading background. Fall

### **113 AURAL SKILLS I – 1 hour**

Development of skill in sight-singing and aural perception. Dictation material includes scales, intervals, triads, cadences, as well as diatonic melodies and simple harmonic patterns. Fall.

### **121 COMPUTER APPLICATIONS IN MUSIC – 1 hour**

Study of computer applications in music including music notation software for sequencing, music education and digital recording. Course culminates with a student project in one of these areas.

### **123 AMERICAN MUSIC – 3 hours**

Covers American Music from the Colonial period to present day musical trends. Included topics will be early vocal music, an in-depth look at Native American music, Appalachian music and the evolution of rock, pop, jazz and musical theater. This course will examine musical elements that distinguish “art” from “pop” in the American musical landscape and how American “art music” developed its own nationalistic sound and texture apart from music originating from countries with a longer history of original music in the genre. C-4AR.

### **125 MUSIC THEORY I: TONAL HARMONY – 3 hours**

The study of the diatonic vocabulary and selected compositional techniques of Western composers of the 18th and 19th centuries. Emphasis is placed on voice leading, harmonization and analysis. To be taken concurrently with MUS 113. Prerequisite: MUS 106 or placement. Spring.

### **119 WORLD MUSICS - 3 hours**

A survey of the folk and traditional musics of the world, emphasizing non-Western countries. Also studied are the art musics of China, Japan, Southeast Asia and the Near East. C-3GC.

### **120 INTRODUCTION TO MUSIC - 3 hours**

This course is designed to explore music originating from Western European cultures from antiquity to present day. Topics include the ancient origins of music, Gregorian chant, music from the Baroque, Classical, Romantic and 20th Century style periods. The class will also explore modern musical genres. C-4AR.

### **122 JAZZ HISTORY - 3 hours**

This class is designed to introduce students to the history and cultural contexts of jazz music. The course will develop chronologically moving from the early roots of jazz music through contemporary jazz. Jazz styles and genres covered will include ragtime, blues, swing, bebop, modal jazz, free jazz and fusion. The course requires no previous musical experience. C-4AR. January, odd years.



**141 RECORDING TECHNIQUES - 3 hours**

The study and development of skills in audio recording, editing and mixing. Emphasis is placed on the application of skills through projects in order to develop a practical understanding of the essential concepts behind recording and audio production. Prerequisite: MUS 110. January.

**171 IPA AND ENGLISH DICTION - 1 hour**

Study of the International Phonetic alphabet and English Diction as used by singers and choral conductors. Fall.

**173 LATIN AND ITALIAN DICTION – 1 hour**

Study of Latin and Italian Diction as used by singers and choral conductors. Prerequisite: MUS 171. Spring.

**206 PIANO PEDAGOGY – 2 hours**

The study of skills and techniques for teaching piano in individual and group settings. Students will explore various methods and literature for teaching piano at the beginning, intermediate, and advanced level. Includes a practice teaching component. Prerequisite: MUS 201. Fall even years.

**211 ESSENTIAL SKILLS IN MUSIC - 2 hours**

Basic instruction in music fundamentals including symbols, terms and notation. Skill is developed in reading and performing melodies typical of those found in elementary level music textbooks. Students will learn methods of teaching basic music concepts and rote songs through demonstration teaching in the University classroom. This course is for elementary education majors and is not open to music majors. Includes a one-hour lab for directed practice on instruments.

**212 AURAL SKILLS II – 1 hour**

Continued development of sight-singing and aural perception. Emphasis is placed on recognition of harmonic function, non-harmonic tones and seventh chords. To be taken concurrently with MUS 225. Fall.

**213 AURAL SKILLS III - 1 hour**

Advanced work in aural perception and sight singing. Materials covered include chromatic harmony, modulation, two-voiced contrapuntal exercises, and four-voiced homophonic exercises. To be taken concurrently with MUS 226. Prerequisite: MUS-212 and MUS-225. Spring.

**220 MUSIC FOR STAGE AND FILM - 3 hours**

The study of music's contribution to theatrical and cinematic development from the 17th Century to the present – including primarily opera, ballet, musical theater, and film. Music's impact on advertising, newsreels, and documentaries will also be explored. Prerequisite: COMM 110. C-4AR.

**225 MUSIC THEORY II: CHROMATIC HARMONY - 3 hours**

Continuation of the study of 18th and 19th century harmony with emphasis on chromatic harmony and selected compositional techniques of Western composers. Emphasis is placed on modulation, and expanded chromatic vocabulary, four-part chorale harmonization and analysis of functional and non-functional harmonies. To be taken concurrently with MUS-212. Prerequisite: MUS125 or advanced placement. Fall.

**226 MUSIC THEORY III: CENTURY/CONTEMPORARY TECHNIQUES - 3 hours**

Study of contemporary compositional techniques through examination of works by 20th and 21st century composers. Emphasis on creative work by the student. To be taken concurrently with MUS-213. Prerequisite: MUS 225. Spring.

**227 KEYBOARD HARMONY - 1 hour**

Analysis and implementation of various harmonization techniques at the piano, including but not limited to: harmonizing a single melodic line, transposition, sight-reading, open score-reading and improvisation. For music majors and minors. Prerequisite: MUS 201, MUS 225. Spring.

**237 GERMAN DICTION – 1 hour**

Study of German Diction as used by singers and choral conductors. Prerequisite: MUS 173. Fall.

**238 FRENCH DICTION – 1 hour**

Study of French Diction as used by singers and choral conductors. Prerequisite: MUS 173. Fall.

**241 PIANO LITERATURE – 2 hours**

The study of the history of piano keyboard literature with focus on techniques, musicianship, performance practice and aspects of interpretation from the Baroque Era to the present. Prerequisite: MUS 101. Spring odd years.

**242 CHORAL AND VOCAL LITERATURE – 2 hours**

Exploration of choral and vocal solo literature appropriate for theory/composition and choral music education majors. Students will learn principals of teaching, and rehearsing choral ensembles in public school and worship music programs. Prerequisite: MUS 202. Spring, odd years.

**243 BEGINNING COMPOSITION - 1 hour**

Private study in music composition. Students will compose original compositions based on contemporary models. Emphasis will be placed on techniques of melodic, rhythmic and harmonic organization and development. Prerequisite: MUS 125.

**244 PERCUSSION LITERATURE AND TECHNIQUES – 2 hours**

Exploration of percussion solo and ensemble literature for composition and instrumental music education majors. Students will learn principals of teaching percussion instruments in public school music programs. Prerequisite: two semesters applied study on primary instrument. Fall, even years.

**246 BAND LITERATURE I: WOODWIND TECHNIQUES – 2 hours**

Exploration of beginning band literature for composition and instrumental music education majors. Students will learn principals of teaching woodwind instruments in public school music programs. Prerequisite: two semesters of 100-level study on primary instrument. Fall, odd years.

**254 VOCAL PEDAGOGY - 3 hours**

The study of vocal and respiratory physiology and strategies for teaching healthy tone production. Includes a practice teaching component. Prerequisite: MUS 202. Spring, even years.

**261 BRASS TECHNIQUES - 0.5 hours**

Principles of teaching brass instruments in the public schools. Fall, seven weeks.

**263 STRING TECHNIQUES - 0.5 hours**

Principles of teaching string instruments in the public schools. Spring, seven weeks.

**311 ELEMENTARY MUSIC METHODS – 4 hours**

A study of the teaching and supervision of music in the elementary school with special emphasis on methods, materials, techniques, skills, and literacy in the content area. The relationship of music curriculum to the general elementary curriculum will be explored. Also covered are problems of administration, the history of public school music, curriculum planning, classroom management, and assessment methods. Spring, odd years.

**313 ORCHESTRATION - 2 hours**

Examination of the capabilities of band and orchestral instruments; arrangement of music scores for various instrumental ensembles; analysis of representative scores. Spring, even years.

**331 MARCHING BAND TECHNIQUES - 2 hours**

Principles of teaching athletic bands in the public schools including: Technology-based marching band drill-writing, ISSMA-based adjudication techniques, composing/arranging/editing music for marching and pep bands and administrative elements concerning bands for indoor and outdoor athletic events. Fall, odd years. Prerequisites: MUS 121 and 125.

**332 MUSIC HISTORY I – 3 hours**

Study of the history of Western music from ancient Greece through the middle baroque. Composers, trends, forms, and innovations are placed in their historical and cultural context. Prerequisite: MUS 225. Spring, odd years.

**341 BASIC CONDUCTING - 2 hours**

An investigation of the role and responsibility of the conductor, with experiences for the development of conducting skills. Emphasis is on history of conducting, terms, gesture and score study. Prerequisite: MUS 125. Fall, even years.

**343 ADVANCED CONDUCTING - 3 hours**

Continued application of the skills of MUS 341 with advanced gestural and score study skills necessary for conducting large instrumental ensembles. Includes an emphasis upon specific instrumental rehearsal techniques. Prerequisite: MUS 341. Spring, odd years.

**344 ORCHESTRA LITERATURE: STRING TECHNIQUES – 2 hours**

Exploration of beginning orchestra literature for composition and instrumental music education majors. Students will learn principals of teaching string instruments in public school music programs. Prerequisite: 2 semesters applied study on primary instrument. Spring, odd years.

**345 ADVANCED CHORAL CONDUCTING - 3 hours**

Continued application of the skills of MUS 341 with advanced gestural and score study skills necessary for conducting large choral ensembles. Includes an emphasis upon specific choral rehearsal techniques. Prerequisite: MUS 341. Spring, odd years.

**346 BAND LITERATURE II: BRASS TECHNIQUES – 2 hours**

Exploration of beginning band literature for composition and instrumental music education majors. Students will learn principals of teaching brass instruments in public school music programs. Prerequisite MUS 246 and two semesters applied study on primary instrument. Spring, even years.

**347 COUNTERPOINT, FORM, AND ANALYSIS – 2 hours**

A study of the rules of counterpoint and structural analysis of inventions and fugues. Identification and study of the elements of key musical forms including binary, ternary, rondo, and sonata-allegro. Prerequisite: MUS 225. Fall.

**353 INTERMEDIATE COMPOSITION - 1 hour**

Private study in music composition. Students will compose original works determined on an individual basis. Prerequisite: MUS 226, 243.

**355 CHORAL ARRANGING - 2 hours**

An examination of the capabilities of various voices and ensembles. Students will arrange music for various vocal ensembles and analyze representative scores. Prerequisites: MUS 110, 225. Spring, odd years.

**362 SECONDARY MUSIC METHODS - 3 hours**

The study of teaching strategies for middle and high school music educators, including methods of assessment and classroom management in accordance with state certification requirements. Includes observation/practicum experiences and participation in the state music educator's conference. Must be taken prior to student teaching. Prerequisite: MUS 125, EDUC 111 and EDUC 237. Fall, even years.

**430 ADVANCED COMPOSITION - 1 hour**

Private study in music composition. Students will compose original works determined on an individual basis in preparation for a senior recital. Prerequisite: MUS 353

**432 MUSIC HISTORY II – 3 hours**

Study of the history of Western music from the late baroque through the early 20th Century. Composers, trends, forms, and innovations are placed in their historical and cultural context. Pre-requisite: MUS 225. C-4AR. Spring even years.

## **APPLIED MUSIC**

Private lessons and ensembles are available to the general University student either with or without credit. Students studying for credit must meet standards of performance established by the music faculty. The teaching aims in private lessons are the development of performance skills and the presentation of representative literature. Each course is adapted to the ability and background of the individual student, subject to minimum standards of progress for each year of study. All students studying for credit are tested for achievement at the end of each semester by an examining board from the music faculty. All students majoring in music are required to take four years of private instruction in one performance area, and present a graduation recital.

Music majors must pass the second-year examination in keyboard. The student must either pass the examination during first year student orientation or immediately enroll for keyboard lessons. Recitals are given throughout the year. Music majors and minors are expected to attend a designated percentage of the recitals. Students taking private lessons are expected to consult with their instructors before public performances on or off campus. Each lesson in applied music is to be supported by a minimum of five hours of practice. Practice expectations are higher for applied music majors and for students preparing a full or half recital. All private lessons are normally given at the rate of one half-hour lesson per week. Lessons in applied music missed by the student will not be rescheduled unless arrangements are made with the instructor prior to the scheduled time of the lesson. Private lesson fees are outlined on the charge page.

### **Applied Music Courses MUS**

#### **Piano: non-majors**

##### **100 PIANO: NON-MAJORS - 1 hour**

For non-majors who have little or no previous experience in piano. Requirements: selected major and minor scales, one octave, hands together; selected major and minor arpeggios, two octaves, hands alone; triads and their inversions; cadences using the I, IV and V chords; sight-reading; and standard repertoire for adult beginners. May be repeated.

##### **128 BEGINNING CLASS PIANO: NON-MAJORS – 1 hour**

For non-majors who have little or no prior piano experience. This class focuses on the development of music reading, basic piano technical and artistic skills, and exposure to various styles of music in a group setting.

##### **200 PIANO: NON-MAJORS - 1 hour**

For non-majors who have at least moderate ability in piano. Can be repeated. Requirements: selected major and minor scales, two octaves, hands together; selected major and minor arpeggios, two octaves, hands together; prepared instrumental or song accompaniment; sight-reading; easier repertoire chosen from different periods of music. Prerequisite: MUS 100. May be repeated.

##### **300 PIANO: NON-MAJORS - 1 hour**

For non-majors who are at the intermediate level in piano. Requirements: greater facility of scales and arpeggios; a variety of intermediate repertoire chosen from different periods of music. May be repeated. Prerequisite: MUS 200.

**400 PIANO: NON-MAJORS - 1 hour**

For non-majors who are at least at the advanced intermediate level in piano. Requirements: greater facility of scales and arpeggios; a variety of advanced- intermediate to advanced repertoire chosen from different periods of music. May be repeated. Prerequisite: MUS 300.

**Piano: majors and minors****101 APPLIED PIANO: MAJORS - 1 hour**

For music majors and minors who have at least moderate ability in piano. Requirements: all major and minor scales, one octave, hands together, all major and minor arpeggios, two octaves, hands alone; triads and their inversions; harmonization of melodies using the I, IV and V chords; cadences involving primary and secondary triads, secondary dominants and leading tone chords; and representative repertoire from different periods of music.

**109 CLASS PIANO I: MAJORS/MINORS – 1 hour**

This class focuses on the development of basic piano technical skills. For music majors whose primary applied area is not keyboard, this course is the first in a three-semester sequence in preparation for the piano proficiency exam. Technical study includes five-note patterns, introduction to musical styles, scales, triads, arpeggios, pedal use, playing by ear, harmonization and transposition of melodies and sight reading.

**148 CLASS PIANO II: MAJORS/MINORS – 1 hour**

A continuation of Class Piano I, this course is the second in a three-semester sequence in preparation for the piano proficiency exam. Technical study includes major and minor scales, major/minor arpeggios, triad and seventh chord inversions, chord progressions, greater depth in harmonization/transposition of melodies and sight reading. Prerequisite: MUS-109.

**201 APPLIED PIANO: MAJORS - 1 hour**

For music majors and minors. Requirements: greater facility of scales and arpeggios; playing of dominant seventh chords in all positions and keys; cadences involving chromatic harmony; free accompaniment of songs; sight-reading; a variety of more difficult repertoire including such materials as Bach Inventions, classical sonatinas or sonatas, and romantic and contemporary compositions. Prerequisite: MUS 101.

**248 CLASS PIANO III: MAJORS/MINORS – 1 hour**

A continuation of Class Piano II, this course is the third in a three-semester sequence in preparation for the piano proficiency exam. Technical study includes major/minor scales and arpeggios, with more advanced chord progressions and resolutions, harmonization/transposition of melodies, open-score reading, accompanying and sight reading. Prerequisite: MUS-148.

**301 APPLIED PIANO: MAJORS - 1 hour**

For music majors and minors. Requirements: diminished seventh arpeggios; advanced repertoire, such as preludes and fugues from the Well-Tempered Clavier by Bach, classical sonatas, romantic, and impressionist or contemporary compositions. Prerequisite: MUS 201.

**306 COLLABORATIVE PIANO – 1 hour**

For third and fourth-year students who accompany senior recitals, A Cappella Choir or a major musical production presented by the University. May be repeated in different semesters for up to three hours. Prerequisites: MUS 201 or 205 and consent of instructor.

**401 APPLIED PIANO: MAJORS - 1 hour**

For music majors and minors. Requirements: advanced technical material and literature; graduation recital. Prerequisite: MUS 301.

**Voice: non-majors****107 BEGINNING VOICE: NON-MAJORS - 1 hour**

Voice class for non-majors with little or no previous experience as solo singers. Basic singing skills are explored through private and/or class instruction, as deemed appropriate by the instructor. Study includes basic vocal anatomy, vocal exercises and beginning level vocal repertoire. May be repeated once for credit.

**207 VOICE: NON-MAJORS - 1 hour**

Intermediate private voice study for non-majors. Repertoire determined by instructor according to ability of student. May be repeated once for credit. Prerequisite: two semesters of MUS 107 or MUS 102.

**307 VOICE: NON-MAJORS - 1 hour**

Advanced intermediate private voice study for non-majors. Repertoire determined by instructor according to ability of student. May be repeated once for credit. Prerequisite: two semesters of MUS 207.

**407 VOICE: NON-MAJORS - 1 hour**

Advanced private voice study for non-majors. Repertoire determined by instructor according to ability of student. May be repeated once for credit. Prerequisite: two semesters of MUS 307 (May include MUS 370).

**Voice: majors and minors****102 VOICE - 1 hour**

Study of basic concepts of breathing, resonance and diction. Emphasis is on English language repertoire; however, Italian is also explored. Prerequisite: audition into department or permission of instructor.

**202 VOICE - 1 hour**

Intermediate level study, a continuation of MUS 102. French or German song literature is begun and added to English and Italian repertoire. Intended for music majors and minors. Prerequisite: MUS 102.

**302 VOICE - 1 hour**

Study of advanced intermediate solo vocal technique and diction, a continuation of MUS 202. Emphasis is on English, Italian, French and German repertoire. Operatic and/or oratorio repertoire is also explored. Intended for music majors and minors. Prerequisite: MUS 202.

**402 VOICE - 1 hour**

Study of advanced vocal technique, a continuation of MUS 302. Senior recital repertoire is explored, representative of various languages and genres deemed appropriate by the instructor. Intended for music majors and minors. Prerequisite: two semesters of 300-level voice study for majors (may include MUS 370).

## **Beginning Instruments**

### **104A BEGINNING WIND, STRING, AND PERCUSSION INSTRUMENTS - 1 hour**

For those students who have little or no previous experience with the instruments to be studied. As a minimum requirement, the student will be expected to complete one of the standard beginning method books and to play the major and minor scales and easy solo material.

### **204A INTERMEDIATE WIND, STRING AND PERCUSSION INSTRUMENTS - 1 hour**

Continuation of 104A at the intermediate level of study. Prerequisite: MUS 104A.

## **String, Wind, and Percussion Instruments**

### **103 STRING INSTRUMENTS - 1 hour**

Basic principles for tone production and technical development, including scales and arpeggios in two and three octaves. The standard etudes, sonatas and concertos studied to provide a balanced repertoire.

### **203 STRING INSTRUMENTS - 1 hour**

Continued emphasis on scales and arpeggios with various bowing styles and progressively more difficult etudes and concertos in the standard repertoire. Prerequisite: MUS 103.

### **303 STRING INSTRUMENTS - 1 hour**

Continued technical emphasis in the study of advanced etudes, sonatas and concertos representative of the literature for the instrument. Prerequisite: MUS 203.

### **403 STRING INSTRUMENTS - 1 hour**

Further development of acquired techniques to complete the undergraduate requirements in literature for the instrument. Includes a graduation recital. Prerequisite: MUS 303.

### **104 WIND AND PERCUSSION INSTRUMENTS - 1 hour**

For those students who have the instrumental ability expected of a person entering the special music course. Work in one of the standard music books with supplementary etudes and solos. Emphasis on tone and development through proper use of the breath and embouchure or mallets and sticks and on training in basic musicianship. Prerequisite: Grade three ability.

### **204 WIND AND PERCUSSION INSTRUMENTS - 1 hour**

Continuation of MUS 104 with emphasis on further technical development and study of the standard repertoire. Prerequisite: MUS 104.

### **304 WIND AND PERCUSSION INSTRUMENTS - 1 hour**

Continuation of 204 with more advanced etudes and solos. Prerequisite: MUS 204.

### **404 WIND AND PERCUSSION INSTRUMENTS - 1 hour**

Continued study of etudes and representative concertos. Graduation recital required. Prerequisite: MUS 304.



## **Organ**

### **105 ORGAN - 1 hour**

Emphasis on development of manual and pedal technique. Repertoire includes the easier works of Bach and compositions by contemporary composers. Attention given to the study of hymn playing. Prerequisite: demonstrated keyboard facility satisfactory to the instructor.

### **205 ORGAN - 1 hour**

Continued development of technical skills. Repertoire includes chorale preludes from the Orgelbuchlein of Bach and pieces of comparable difficulty by composers from the Romantic and Contemporary Periods. Prerequisite: MUS 105. Music education students studying to meet keyboard requirements must have proficiencies listed in MUS 201A.

### **305 ORGAN - 1 hour**

Emphasis on the development of repertoire. More difficult works by composers from all periods are selected. Prerequisite: MUS 205.

### **405 ORGAN - 1 hour**

Devoted to expanding the student's repertoire and preparing a graduation recital. Prerequisite: MUS 305.

## **Guitar**

### **108 BEGINNING GUITAR - 1 hour**

Guitar class for non-majors with little or no previous experience with the instrument. Basic skills are explored through a study of scales, musical exercises and beginning-level repertoire. Students must provide their own acoustic guitar. May be repeated once for credit.

## **Ensembles**

### **130 A CAPPELLA CHOIR - 1 hour**

An ensemble of mixed voices open to students by audition. Standard accompanied and unaccompanied choral repertoire is prepared and performed for tours and other concert programs on and off campus. Fee required.

### **131 CHAMBER SINGERS - 0.5 hour**

Vocal ensemble specializing in madrigals, vocal jazz and chamber choir repertoire. Open to A Cappella Choir members by audition. Fee required.

### **132 OPERA WORKSHOP - 0.5 hour**

Students will prepare and perform excerpts from various operas roles. The course will culminate with a fully staged and costumed opera scenes performance. May be repeated. Prerequisite: audition. January. Spring.

### **133 SMALL VOCAL ENSEMBLES - 0.5 hour**

Chosen from the more advanced singers at the University. Repertoire is selected based on the various interests of the students enrolled. Regular rehearsals emphasize the growth of auditory and interpretive sensitivity. Prerequisite: consent of instructor. Fee required.

**135 MANCHESTER SYMPHONY CHORUS - 0.5 hour**

A mixed vocal ensemble open to University students, faculty, staff and area residents without audition. Standard choral repertoire is explored, including extended works with orchestra. Fee required.

**136 CANTABILE - 0.5 hour**

A women's ensemble open to students by audition. Standard treble accompanied and unaccompanied repertoire is prepared and performed for concert programs on and off campus. Fee required. May be repeated. Prerequisite: audition.

**140 SYMPHONY ORCHESTRA - 0.5 or 1 hour**

Opportunity for the study and public performance of orchestral literature. Membership selected by auditions open to all students and community musicians. One hour, strings; 0.5 hour, winds and percussion.

**143 STRING ENSEMBLES - 0.5 hour**

Chosen from the more advanced string students in the University. Regular rehearsals emphasize the growth of auditory and interpretive sensitivity. Performances given at campus concerts and recitals as well as in churches and clubs in the area served by the University.

**144 WIND AND PERCUSSION ENSEMBLES - 0.5 hour**

Chosen according to the talent and interest present. Regular rehearsals emphasize the growth of auditory and interpretive sensitivity. Performances given at campus concerts and recitals as well as in churches and clubs in the area served by the University. Fee required.

**146 SYMPHONIC BAND - 1 hour**

Open to any instrumentalist who meets the audition standard. Entire year utilized for rehearsing concert literature representative of many styles and composers. Local concerts and an annual tour. Fee required.

**147 JAZZ ENSEMBLE - 0.5 hour**

Open to any instrumentalist who meets the audition standard. Rehearsals consist of developing improvisational ability, studying characteristic literature and preparing for performances. Fee required.

**149 ATHLETIC BAND: GOLD AND BLACK ATTACK - 0.5 hour**

Students will prepare repertoire to perform at home basketball games from January Session to the end of the season. May be repeated.

**Other****306 KEYBOARD ACCOMPANIMENT - 1 hour**

For third and fourth-year students who accompany senior recitals, A Cappella Choir or a major musical production presented by the University. May be repeated in different semesters for up to three hours. Prerequisites: MUS 201 or 205 and consent of instructor.

**370 HALF RECITAL - 1 hour**

Applied lesson in student's major concentration emphasizing advanced technical material and literature. Course culminates with a 25-30 minute public performance of literature appropriate for student's major. For music majors and minors. Prerequisite: completion of 200-level applied lessons.

**472 FULL RECITAL - 2 hours**

Applied lessons in student's major concentration, emphasizing advanced material and literature. Course culminates with a 45-50 minute public performance of literature appropriate for student's major. For music majors and minors. Prerequisite: completion of 300-level applied lessons, or MUS 370.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

**Courses THTR****140 TOURING CHILDREN'S THEATRE - 3 hours**

The principles and practices of organizing, performing and directing a touring theatre company for child audiences. Particular emphasis is on participatory plays and a significant proportion of the course is devoted to touring. January.

**201 THEATRE AND SOCIETY - 3 hours**

A study of the complex relationship between theatre and Western culture. Designed to increase the student's awareness of theatre as a fine art, the course will study significant playwrights, plays, performances and productions that illustrate the continuing development of theatre as a social force and as an artistic form. C-4AR. Spring.

**273 ACTING - 3 hours**

Basic techniques of acting, including work in play analysis, pantomime and improvisation. Presentation of selected scenes. Fall, odd years.

**302 APPLIED THEATRE ARTS - 0.5 hour**

Credit for supervised participation in dramatic productions as a crew member, staff member or actor. Students may enroll for a maximum of four hours. Prerequisite: consent of instructor.

**308 CREATIVE DRAMATICS - 2-3 hours**

How one draws out and channels creativity in children and adults by using such methods as pantomime, improvisation, movement activities and improvised story dramatization. The course is for elementary and secondary teachers, camp counselors and park or playground supervisors. Fall. Spring.

**325 INTERCULTURAL THEATRE - 3 hours**

Characteristic theatre forms of non-Western cultures and their development will be surveyed. Special attention will be paid to the aesthetics of these theatre forms and the impact that social and political factors have had on their development. The course will be offered during alternating January sessions and, when feasible, will be off campus.

**330 DIRECTING - 3 hours**

The principles and practices of play production including play selection and rehearsal procedures. Each student will be responsible for the analysis and interpretation of at least six different full-length plays. Practical experience will be gained by directing selected scenes. Spring, even years.

## Natural Science Courses

### Courses NASC

#### **103 PHYSICAL SCIENCE - 3 hours**

A survey of elements of physical science with a focus on the important role of energy in our society. Topics include elementary aspects of astronomy, Newtonian mechanics, energy conservation, electricity and magnetism and modern physics. Laboratory activities are a required part of this course. This course is NOT intended for students majoring in mathematics or the natural sciences. C-4NP.

#### **202 EXPLORING STEM CAREERS I - 1 hour**

Students will gain exposure to the large variety of STEM careers by researching potential career paths, interviews with STEM professionals, and site visits to local employers. They will evaluate their own career goals in light of their personal strengths and values, and they will reflect on what it means to do meaningful work in STEM fields that improves the human condition.

#### **203 DESCRIPTIVE ASTRONOMY - 3 hours**

A study of our universe with an emphasis on matching scientific models to astronomical observations. Objects studied include planets, stars, galaxies and the universe as a whole. The class will concentrate on interpreting scientific theories and observations using these objects as examples. Recent research will also be studied and evaluated by reading scientific journal articles. C-4NE.

#### **209 PHYSICAL GEOLOGY - 3 hours**

A study of the earth and the changes that it undergoes. Topics include minerals, rocks, weathering, volcanism, glaciation, mountain building, and earthquakes discussed in the context of the theory of plate tectonics. The course has a laboratory component and may include one required field trip. Lab fee. C-4NE.

#### **211 WEATHER, CLIMATE AND CIVILIZATION - 3 hours**

Physical principles underlying weather and climate processes, microclimate, global climates in relation to astronomical and geographic factors, regional climates, climate and human well-being (health and agriculture), reconstructing past climates, climate change and its effects on the biosphere. Prerequisite: MATH 105 or higher. C-4NE.

#### **302 EXPLORING STEM Careers II - 1 hour**

Students will study a single STEM career path of their choosing in depth through interviewing professionals in that field, shadowing professionals, and/or completing a practical experience in the field. They will analyze the skills, attributes, and preparation required, and evaluate how those aspects align with their personal goals and values.

**315 GLOBAL DISEASE - 3 hours**

This course will examine the major communicable and noncommunicable human diseases within the context of the global burden of human disease. In addition, it will cover causes, origins, and nature of communicable (infectious) diseases, which are transmissible via direct contact with by person to person, water or food, animals or vectors. Special consideration will be given to Neglected Tropical Diseases. The course will also cover causes, origins, and nature of non-communicable diseases, which are of non-infectious origin. Finally, it will analyze the prevalence of given disease/risk factors as well as the relative harm each cause, in terms of both morbidity and mortality.

**310 MEDICAL PRACTICUM - 3 hours**

An opportunity for students to experience the culture of a rural Third World area and to learn the needs and problems in health care delivery systems in a work/study program. Prerequisite: consent of instructor. January. P/NP.

**375 HEALTH SCIENCES PRACTICUM - 2-3 hours**

A course designed to provide qualified students on-the-job experience in a professional setting. Students will be placed in a selected clinic or office, under the supervision of a licensed professional, and will observe a full complement of diagnostic and therapeutic regimens, familiarize themselves with the theory and practice of the selected discipline and, when possible, participate in the program. Prerequisite: consent of instructor.

## **Peace Studies**

*Director K. Gray Brown, E. Skendaj*

Peace studies explores the nonviolent alternatives to conflict, whether in our personal lives or international relations. This major and minor consist of courses drawn from a number of disciplines that relate to the analysis and transformation of conflict. Formal concentrations within the major are: interpersonal and intergroup conflict studies, religious and philosophical bases, international and global studies and social inequality studies. Students may also choose to design an individualized concentration within the major.

### **Baccalaureate Degree**

Courses listed in parentheses are prerequisites.

Major in peace studies: core courses (30 hours): PEAC 110, 218 or 320, 235, 330; INTD 425; PHIL 444; POSC 140; REL 205; (SOC 101) SOC 328.

Concentration in international and global studies, 42 hours: core courses plus POSC 367; one course selected from: POSC 233, 236, 360; one course selected from: HIST 210, 220, 226; POSC 237; SOC 311; one course selected from: ECON 328, INTD 441, POSC 365.

Concentration in Interpersonal/intergroup conflict, 45 hours: core courses plus COMM 210, 212; \*PEAC 218, 320; SOC 228; one course selected from: COMM 324; PSYC 201, 352; SOSC 102. \*both PEAC 218 and 320 are required.

Concentration in religious and philosophical bases, 42 hours: core courses plus PHIL 201; POSC 321 or 322; PHIL 330 or SOC 347; one course selected from: REL 131, 210, 222, 223, 228.

Concentration in social inequality studies, 42 hours: core courses plus one course selected from: ECON 328; INTD 441; POSC 365; SOC 345; one course selected from: ENG 242; HIST 227, 250; INTD 361; SOC 228; one course selected from: GNST 125; INTD 324; HIST 337, 329; REL 225; one course selected from: POSC 201, 225; SOC 220, 233; SOWK 110.

Individualized concentration, 45 hours: core courses plus 15 hours of electives designed by the student and submitted with rationale for approval by the Peace Studies Council.

Majors must successfully complete the senior comprehensive evaluation. Details are available from the chair of the Peace Studies Council.

Minor in peace studies, 18 hours: PEAC 110; 15 hours of electives approved by the Peace Studies Council.

Applied Study Area in mediation and conflict resolution; Katharine Gray Brown, coordinator: PEAC 218, PEAC 320; one of the following to; 6-10 hours of community mediation work; workshop planning and facilitation; semester-long internship with an appropriate conflict resolution organization or agency.

## **PEAC Courses**

### **110 INTRODUCTION TO PEACE STUDIES - 3 hours**

An introduction to the interdisciplinary field of peace studies. This course explores the causes and effects of violence and conflict and examines the possibilities for the nonviolent transformation of interpersonal, intergroup and international conflict. C-3RC.

### **112 CONCERNING POVERTY - 3 hours**

This interdisciplinary course examines poverty, its consequences, and individual and collective responses to address these problems. Course materials explore poverty in a broad range of contexts, from within Wabash County to global disparities. Readings and course activities establish the relationship between poverty and peace studies; examine definitions of poverty and methodologies for its measurement; explore significant differences related to social location or context; describe correlated conditions; and analyze diverse philosophical, theological, and political responses. C-3RC.

### **120 CURRENT ISSUES IN PEACE AND JUSTICE - 2 hours**

Study and application of conflict theory to current problems of peace and justice. The topics and materials for this course will change each term and the course, therefore, may be repeated. A student may enroll twice for credit, thereafter without credit.

### **218 MEDIATION AND CONCILIATION - 3 hours**

Study and practice of the psychological components and skills inherent to mediation and conciliation. Fall. Spring.

### **235 LITERATURE OF NONVIOLENCE - 3 hours**

Study of the lives and writings of modern theorists and practitioners of nonviolence, including Thoreau, Tolstoy, Gandhi and Martin Luther King Jr. Spring, odd years.

### **250 PEACEMAKING IN PRACTICE ABROAD - 3 hours**

An examination of social justice issues, models of peace building, transitional justice and reconciliation in a context outside the United States. Specific attention is given to the significance of transnational factors in a conflict and the potential of global partnerships to address injustice. This study will include a survey of the historical, social and cultural context; principle peacemakers; and examples of collective action to promote justice and reduce violence. Coursework involves a combination of site visits, sessions with practitioners, readings and discussions. This course may involve community service projects. The course is designed as an off-campus travel course conducted outside the United States, and may be repeated to different locations. C-3GC.

### **275 PRACTICUM IN PEACE STUDIES - 1-6 hours**

Student participation in off-campus projects that are related to the major. Students, in consultation with teaching faculty in the program, plan readings, reports and/or other means of evaluation.

### **320 CONFLICT RESOLUTION - 3 hours**

An advanced study of how to deal constructively with interpersonal, intra-organizational and intergroup conflict.



**330 ANALYSIS OF WAR AND PEACE - 3 hours**

Analysis of the causes and nature of war, influences that determine the conduct of wars and the impact of wars on participants and civilians. Prerequisite: POSC 140. Spring, even years.

**333 PEACE ISSUES - 3 hours**

Summary study of moral, political and religious perspectives on such problems as violent and nonviolent social and political change, racial justice, human rights, the population explosion, militarism and pacifism. Historical analysis and philosophical insight on major problems which threaten peace and the development of civilization.

**475 INTERNSHIP IN PEACE AND CONFLICT STUDIES - 3-9 hours**

Work performed in service for a public or private organization concerned with peace and/or justice issues. Open to junior and senior students who demonstrate academic and personal qualifications appropriate to the position. Prerequisite: consent of instructor.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR IN PEACE STUDIES - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

## **Philosophy and Religious Studies**

*Chair S. Naragon, K. Eisenbise Crell, K. Gray Brown, J. Lasser, S. Mayer*

### **PHILOSOPHY**

The philosophy program studies questions of being, knowledge, action and the good, as well as examining conceptual frameworks and practices of other disciplines such as religion, art, psychology and the natural sciences. Students will develop strong oral, written and analytical skills in creating and critiquing arguments while exploring the major philosophical traditions; they will articulate a philosophical understanding of their own; and they will work through some of the most basic questions concerning human existence.

### **Baccalaureate Degree**

Major in philosophy — philosophical traditions concentration, 33 hours: PHIL 201, 215, 230, 316, 330; two courses selected from: PHIL 318, 320, 423; one course selected from: REL 222 or 223; nine hours of electives from departmental courses and with departmental approval.

Major in philosophy — ethics, politics, and law concentration, 33 hours: PHIL 201, 215, 219, 230, 235, 316; one course selected from: PHIL 444, INTD 423, 425; one course selected from: PHIL 318, 320, 423, POSC 321, 322; two courses selected from the following and in consultation with the department: ACCT 241, BUS 313, 365, COMM 360, ECON 328, ENVS 403, HIST 226, INTD 324, 345, 427, 441, PEAC 330, POSC 140, 201, 225, 311, 360, 365, REL 205, SOC/SOWK 228, 233, 244, SOC 240, 262, SOWK 366; three hours of electives approved by the department chair.

Minor in philosophy, 21 hours selected from departmental courses and with departmental approval.

### **Courses PHIL**

#### **201 INTRODUCTION TO PHILOSOPHY - 3 hours**

An introduction to the philosophical tasks of (a) reflective thinking about life and the universe as a totality; (b) critical examination of presuppositions, words and concepts; (c) examination of ways in which we gain knowledge; (d) the quest for criteria which determine our value judgments of the good and the beautiful. C-4PH. Fall. Spring.

#### **215 ETHICAL DECISION MAKING - 3 hours**

A study of ethical principles and their application to practical decision making in such areas as sex, criminal justice, economics and euthanasia. C-4PH. Fall. Spring.

#### **219 BUSINESS ETHICS - 3 hours**

A study of ethical principles and theories in the context of business and the economy. C-4PH.

#### **230 LOGIC - 3 hours**

A study of various deductive logics (categorical, propositional and predicate), inductive logics and common informal fallacies. The aim of this study is to improve abilities: (1) to identify arguments from other kinds of discourse and separate what is relevant to an argument from what is not, (2) to evaluate arguments in a reasoned and constructive way, and (3) to construct your own arguments, such that they are clearly stated and free of fallacies.

**235 BIOETHICS - 3 hours**

A study of ethical principles and theories in the context of current controversies in health care such as: genetic engineering, abortion, euthanasia, reproductive technology and access to health care. C-4PH.

**316 ANCIENT AND MEDIEVAL WESTERN PHILOSOPHY (W) - 3 hours**

A study of Western philosophy from the Presocratics to William of Ockham. Prerequisite: PHIL 201. Fall, odd years.

**318 17TH AND 18TH CENTURY WESTERN PHILOSOPHY - 3 hours**

A study of Western philosophy from Hobbes and Descartes to Kant. Prerequisite: PHIL 201. Spring, even years.

**320 19TH CENTURY WESTERN PHILOSOPHY - 3 hours**

A study of Western philosophy from the German Idealists to Kierkegaard and Nietzsche. Prerequisite: PHIL 201. Fall, even years.

**330 PHILOSOPHY OF RELIGION - 3 hours**

A philosophic approach to the problems of religion with emphasis on ways of knowing, religious language, the theistic hypotheses, basic conceptions of God, the nature and destiny of humanity and the problems of freedom and evil. C-4PH.

**423 20TH CENTURY WESTERN PHILOSOPHY - 3 hours**

A study of Western philosophy from C.S. Peirce to Sartre and Quine. Prerequisite: PHIL 201. Spring, odd years.

**427 PHILOSOPHY OF SCIENCE - 3 hours**

A critical analysis of the sciences and their methods that explores why – and to what extent – the sciences provide knowledge about reality. Topics include the demarcation of science from nonscience, inductive inference, the nature and justification of scientific theories, realism versus anti-realism, scientific change and revolution, comparison between natural and social sciences and the relationship between the sciences and other methods of human inquiry. Prerequisite: junior or senior standing.

**444 PHILOSOPHY OF CIVILIZATION (W) - 3 hours**

The ideas of philosophers, historians, and political analysts as to how society may best be ordered, what causes the development and breakdown of civilization and the highest ideals on which human life may be built. The nature of historical analysis and the role of the individual, both as thinker and actor in historical development. Prerequisite: FYS or ENG 111. Fall.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

## RELIGIOUS STUDIES

The academic study of religion is a scholarly discipline involving historical, critical, analytic and constructive methodologies to understand religious phenomena, including texts, beliefs, doctrines, practices and world views. It provides excellent background and thinking skills for various academic pursuits, career goals and community leadership.

This department aims to help students gain the following skills: (a) acquire a sympathetic and critical understanding of the Bible and other sacred texts, the Christian faith, and other world religions, (b) articulate and reflect upon the core claims that distinguish the Christian tradition, (c) become acquainted with the major methodologies and issues in the study of religion, (d) prepare for graduate study and (e) understand a world in which compassion reveals the divine.

### **Baccalaureate Degree**

Major in religious studies, international/global concentration, 36-39 hours: REL 101, 102, 120, 131, 205, 210, 222, 223, 435; INTD 341; six hours of electives chosen from: COMM 256; ENG 250; HIST 255; INTD 441; PEAC 330; POSC 131, (POSC 140) 367; REL 316.

Major in religious studies, politics/law concentration, 33-39 hours: REL 101, 102, 120, 205, 435; INTD 341, 345; fifteen hours of electives chosen from: COMM 221, 415; INTD 441; PEAC 330; PHIL 230, 311; POSC 140, (POSC 121 or 122) 225, 311, 322, 360; (SOC 101) SOC 262.

Major in religious studies, psychology of religion concentration, 36-48 hours: REL 101, 102, 120, 435; INTD 341, 345; PSYC 235, 385 (Psyc of Religion); ten hours of electives chosen from: PSYC 201, (PSYC 110) 224, 225, 357; (SOC 101) SOC 347.

Major in religious studies, religion and society concentration, 36 hours: INTD 341; REL 101, 102, 120, 225, 435; SOC 347; 15 hours selected from the following courses: REL 131, 205, 210, 222; SOC 228, 305 (SOC 101), 311, 328, 333, 335, 345.

Major in religious studies, social justice concentration, 36-39 hours: REL 101, 102, 120, 205, 325, 435; INTD 341; fifteen hours of electives chosen from: COMM 415; HIST 225; IDIV 221; INTD 425; PEAC 235, 330; PHIL 444; SOC 228, (SOC 101) 345.

Major in religious studies, individualized concentration, 36 hours: REL 101, 102, 120, 435; INTD 341; twenty-one hours of electives approved by department chair.

Majors must successfully complete the senior comprehensive evaluation. Details are available from the department chair.

Minor in religion, 21 hours: twenty-one hours from religion courses and with departmental approval.

### **Courses REL**

#### **101 INTRODUCTION TO THE HEBREW BIBLE - 3 hours**

A survey of the literature, history and religion of ancient Israel using selected portions of the historical and prophetic books of the Hebrew Bible as primary sources. Includes an introduction to the methods and results of modern biblical scholarship. C-4RL. Fall.

**102 INTRODUCTION TO THE NEW TESTAMENT - 3 hours**

A survey of the literature, history and religious faith of first century Christianity using the New Testament as a primary source. Includes an introduction to the methods and results of modern biblical scholarship. C-4RL. Spring

**111 CHRISTIAN TRADITIONS - 3 hours**

Introductory explorations of how Christians throughout their history and across different cultures have understood and practiced their faith in response to the life and teachings of Jesus and the challenges of human existence. C-4RL.

**120 INTRODUCTION TO RELIGIOUS STUDIES - 3 hours**

An introduction to the academic study of religion, exploring the ways Christianity and other religious traditions confront some of the largest questions and dilemmas of human existence. C-4RL. Fall. Spring.

**131 THE JEWISH FAITH, CULTURE AND PEOPLE - 3 hours**

A broad introduction to Jewish religious beliefs, festivals, calendar, art, music and literature. C-3GC.

**205 RELIGIONS AND WAR - 3 hours**

An examination of the role of religion as a factor influencing social and political conflict. Theoretical principles are applied to contemporary cases in which religion functions as a cause and/or mediating force in occurrences of war. January.

**210 JUDAISM, CHRISTIANITY AND ISLAM - 3 hours**

Study of the origins, development and interaction of Judaism, Christianity and Islam, including contemporary relationships among these faiths. C-4RL.

**222 RELIGIONS OF EAST ASIA - 3 hours**

Key historical developments in the civilizations of East and Southeast Asia, stressing broad cultural and religious themes, along with political and philosophical perspectives, including the variations in forms of Buddhist life, the pluralistic and non-disjunctive thought patterns of Taoist naturalism and the new divergent social and religious movements of nationalism. C-3GC.

**223 RELIGIONS OF INDIA - 3 hours**

A study of the ancient roots and contemporary forms of the religions and philosophies native to India such as Vedanta, Hinduism, early Buddhism, Jainism and Sikhism, including their interactions with religions of foreign origin such as Islam and Christianity. C-3GC.

**325 FEMINIST AND WOMANIST THEOLOGIES - 3 hours**

An exploration of the critique and vision brought to contemporary theology by women's perspectives represented in texts by feminist and womanist theologians and in women's fiction and essays. Prerequisite: one course in religion.

**228 THE BRETHERN HERITAGE - 3 hours**

A critical study of the history, practice and teaching of the Brethren in relationship to major social and intellectual currents and to other religious movements, including both those Christian groups that profess a creed and those which identify themselves primarily in a non-creedal fashion. C-4RL.

**241 JESUS AND THE GOSPELS - 3 hours**

A study of the ministry and significance of Jesus as portrayed in the New Testament gospels. Some or all of the gospels will be examined and compared. C-4RL.

**266 RELIGIOUS CLASSICS - 3 hours**

A study of outstanding classics of faith from many areas. Seeks critical appreciation of the ideas, faith stances and aesthetic qualities of the works studied. C-4LT.

**311 ANCIENT AND MEDIEVAL CHRISTIANITY - 3 hours**

The encounter of Christianity with the classical, Islamic, and barbarian worlds from the first to the 14th century, dealing with sectarianism, heresy, creedal orthodoxy and Catholicism.

**312 REFORMATION TO VATICAN II - 3 hours**

Study of the relationship of Christianity to major cultural and intellectual movements from the Renaissance and Reformation through the early 20th Century.

**435 CONTEMPORARY CHRISTIAN THOUGHT (W) - 3 hours**

A study of Christian theology from 1968 to the present, including movements such as liberation theologies, feminist/womanist theologies, process theology, eco-theology, etc.

**475 INTERNSHIP IN MINISTRY - 1-3 hours**

Supervised ministry with a mentor that includes an examination of ministry techniques and an applied academic project. Students must submit a proposal for study that includes a description of the duties to be performed, the area of study to be pursued, an explanation of the applied project and a rationale for how the project enhances the understanding of the area of study. Students and faculty will work together to implement a plan for evaluation of the project as well as the number of semester hours to be earned. Prerequisite: Permission of Department Chair.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

## **Physics**

*Chair G. Clark, C. Watson*

The Physics Department offers (a) cultural knowledge of physics for students not specializing in the sciences, (b) supporting courses for students specializing in the sciences, (c) pre-professional training for students expecting to enter medical or engineering schools, (d) preparation for high school science teaching or for a science-related occupation in industry or in government, (e) preparation for graduate study in physics or related sciences.

Two levels of introductory physics courses are offered by the department. The college physics sequence is algebra-based; the general physics sequence is calculus-based and intended primarily for majors in the sciences and mathematics.

### **Baccalaureate Degree**

Major in physics, 34-35 hours: PHYS 210, 220, 301, 310; two hours selected from PHYS 301L, 310L, 320L, 345L; 18 hours selected from; PHYS 241, 315, 320, 340, 410, 425, 432, 380/480, 385/485, 499.

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the department chair.

Minor in physics, 18-19 hours: PHYS 210, 220, 310; one hour selected from PHYS 301L, 310L, 320L, 345L; six hours selected from; PHYS 241, 301, 315, 320, 340, 410, 425, 432, 380/480.

Teaching Major: Requirements available in the Office of Teacher Education.

### **Courses PHYS**

#### **111 COLLEGE PHYSICS I - 4 hours**

Primarily for students with no high school physics background. The main topics include classical mechanics and thermal physics. Instruction is by lecture, demonstration, discussion, problem solving and laboratory experiences. Includes three lecture periods and a two-hour laboratory per week. This course is not intended for majors in the physical sciences and does not count toward a physics or engineering science major. Course is first of a two-semester sequence although it may be taken as a stand-alone course. Prerequisite: MATH 105 or higher. Enrollment in MATH 105 may be concurrent. C-4NP. Fall.

#### **112 COLLEGE PHYSICS II - 4 hours**

This course is a continuation of PHYS 111. The main topics include electricity and magnetism, optical physics and modern physics. Instruction is by lecture, demonstration, discussion, problem solving, and laboratory experiences. Includes three lecture periods and a two-hour laboratory per week. This course is not intended for majors in the physical sciences and does not count toward a physics or engineering science major. This course is the second of a two-semester sequence. Prerequisite: PHYS 111. Spring.

**210 GENERAL PHYSICS I - 4 hours**

This course is the first of a two-semester sequence in calculus-based physics. Topics include an introduction to derivatives, integrals and vectors, motion in one and two dimensions, rotational motion, energy, gravitation, sound and thermal physics. This course is intended for physics, chemistry, engineering science, mathematics and other science majors. Includes three class meetings and a two-hour laboratory per week. Prerequisites: MATH 121. Enrollment in MATH 121 may be concurrent. C-4NP. Fall.

**220 GENERAL PHYSICS II - 4 hours**

This course is the second of a two-semester sequence in calculus-based physics. Topics include electrostatics, basic LCR circuits, magnetism, optics, electromagnetic waves, and modern physics. This course is intended for physics, chemistry, engineering science, mathematics and other science majors. Includes three class meetings and a two-hour laboratory per week. Prerequisites: MATH 122; PHYS 210. Enrollment in MATH 122 may be concurrent. C-4NP. Spring.

**241 FUNDAMENTALS OF ELECTRONICS - 4 hours**

An introduction to analog and digital electronics. Main topics include semiconductor principles, power supplies, amplifier circuits, application of linear and digital integrated circuits, and the principles and applications of electronic instruments. Circuit design problems and laboratory experience are major components of the course. Prerequisite: PHYS 112, 210. January, even years.

**301 Electricity and Magnetism - 3 hours**

A review of the mathematics of vector fields and an in-depth study of Maxwell's equations as applied to electrostatic fields in vacuum and dielectrics, magnetostatic fields and magnetic fields in matter. Prerequisites: MATH 122; PHYS 220. Fall, odd years.

**301L ELECTRICITY AND MAGNETISM LABORATORY - 1 hour**

Laboratory to accompany PHYS 301.

**310 MODERN PHYSICS (W) - 3 hours**

For students with an introductory physics background who wish to extend their knowledge of atomic, nuclear and solid state physics. Emphasis on the basic phenomena and fundamental physics principles involved in special relativity and quantum mechanics and their subsequent application to atomic, nuclear and solid state models. Prerequisite: PHYS 220. Fall, odd years.

**310L MODERN PHYSICS LABORATORY - 1 hour**

Laboratory to accompany PHYS 310.

**315 INTRODUCTION TO ASTROPHYSICS - 3 hours**

A study of stellar and galactic astronomy and cosmology with an emphasis on the physical processes that are observable. Topics will include the birth, structure and death of stars, black-holes, components of spiral galaxies like our Milky Way and the basic structure of the universe. Prerequisite: PHYS 220.

**320 ANALYTICAL MECHANICS (W) - 3 hours**

Applications of vector methods to statics, kinematics and dynamics of a particle; use of momentum and energy methods; oscillating systems; and central force fields. Prerequisites: MATH 122; PHYS 220. Fall, even years.



**320L MECHANICS LABORATORY - 1 hour**

Laboratory to accompany PHYS 320.

**340 THERMAL PHYSICS - 3 hours**

Theories and applications of thermodynamics, kinetic theory, statistical physics and properties of matter, including temperature, entropy, diffusion, thermal conductivity, thermal radiation and thermionic emission of electrons. Prerequisites: MATH 122; PHYS 220. Fall, even years.

**345L ADVANCED PHYSICS LABORATORY - 1-2 HOURS**

A study of the major results of physics through laboratory experience. Each lab will involve two to four lab periods to allow a detailed understanding of each piece of equipment along with a sophisticated analysis of the errors. Prerequisite: PHYS 220.

**410 QUANTUM PHYSICS - 3 hours**

Physical and mathematical aspects of the quantum theory; solutions of the Schrodinger wave equation, including approximation methods; and applications to atomic, molecular and nuclear structure. Prerequisites: MATH 122; PHYS 310. Spring, even years.

**425 FIELD AND WAVE PHENOMENA - 3 hours**

A study of the theory of waves as applied to electromagnetic, mechanical, and sound phenomena, with particular emphasis on light. Topics will include interference, diffraction, waves in dispersive media, energy, polarization and radiation. Prerequisite: MATH 122; PHYS 301.

**432 MATERIALS PHYSICS - 3 hours**

An introduction to the physics of solids and surfaces. Topics will include crystal structure, energy band theory, electrical and optical properties of metals and semiconductors, solid state devices and surface physics. Prerequisite: MATH 122; PHYS 310 or PHYS 340 or CHEM 341.

**499 RESEARCH - 1-4 hours**

Independent research under the supervision of a faculty member or other designee. May be used to fulfill the Senior Comprehensive Evaluation research requirement. Prerequisite: PHYS 220, MATH 122.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

## Pre-pharmacy

Coordinator J. Osborne

The pre-pharmacy program combines science fundamentals – studying molecular biology, human anatomy and physiology and physics – with writing and communication courses that prepare students to work closely with patients and other health care professionals. Electives in psychology, sociology, business, economics or ethics allow students to explore other interests. The two-year curriculum covers the minimum course work required to apply to schools of pharmacy; some students choose to complete three of four years of undergraduate courses – or complete the baccalaureate degree – to be more competitive in the application process.

The pre-pharmacy curriculum does not lead to a degree; however, students wishing to complete a baccalaureate degree can transition easily to the biology-chemistry major. Students who are placed into CHEM 105 Introduction to Inorganic Chemistry or a mathematics course lower than MATH 210 should plan three years to complete the pre-pharmacy curriculum.

### Two-Year Pre-Pharmacy Curriculum

<b>Fall 1</b>	16 hours	BIOL 204, 204L; CHEM 111, 111L; FYS; MATH 121
<b>January 1</b>	3 or 4 hours	One Core or elective course
<b>Spring 1</b>	15 hours	BIOL 202, 202L; CHEM 113, 113L; COMM 110; MATH 210
<b>Fall 2</b>	14 hours	BIOL 229, 229L; CHEM 311, 311L; PHYS 111 and 111L, or PHYS 210 and 210L; one Core or elective course
<b>January 2</b>	3 or 4 hours	One Core or elective course
<b>Spring 2</b>	15 hours	BIOL 313, 313L; CHEM 312, 312L; PHYS 112 and 112L, or PHYS 220 and 222L; one Core or elective course

Course descriptions can be found in the Major/Minor Fields of Study sections.

More information about the pre-pharmacy program and the Pharmacy Program is available on the Manchester University website.

## **Psychology**

*Chair M. Coulter-Kern, R. Coulter-Kern, K. Kessie, J. Wiley*

The goals of the department are to assist students in (a) understanding the basic concepts and methods used in psychology, (b) understanding the relation of psychology to other disciplines, (c) preparing for graduate work in psychology, in fields such as clinical psychology, cognitive neuroscience, counseling psychology, industrial organizational psychology, neuropsychology and social psychology, (d) preparing for professional training in such fields as social work, medicine and education, (e) preparing for work in such fields as business, education and mental health.

### **Baccalaureate Degree**

Major in psychology; 42-44 hours: PSYC 110, 201, 224, 225, 227, PSYC 235 or 250; PSYC 241, 341, 444; 3-4 hours of electives selected from departmental courses or PEAC 218; one course selected from PSYC 346, 347, or 349.

Major in psychology, cognitive neuroscience concentration; 43-44 hours: PSYC 110, 201, 224, 225, 227, 235, 241, 250, 341, 360, 444 one course must be selected from PSYC 346, PSYC 347, and PSYC 349.

Major in psychology, industrial organization concentration; 41-44 hours; PSYC 110, PSYC 201, PSYC 224, PSYC 225, PSYC 227, PSYC 235 or PSYCH 250, PSYC 241, PSYC 341, PSYC 345, PSYC 376 or BUS 340, PSYC 44. One course selected from: PSYC 346, PSYC 347, PSYC 349.

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the department chair.

Minor in psychology, 19 hours: PSYC 110; 15 hours of electives selected from departmental courses or PEAC 218.

Minor in cognitive neuroscience; 20 hours: PSYC 110, 235, 250, 360, one course selected from departmental courses.

Minor in industrial organization; 18-20 hours; PSYC 110, 201, 345, 355; one course selected from: BUS 340 (BUS 111), PSYC 372, 376.

### **Courses PSYC**

#### **110 INTRODUCTION TO PSYCHOLOGY - 4 hours**

An introduction to the scientific study of behavior and mental life which includes an overview of the biological, social and cultural influences on behavior. In addition to three hours of lecture meetings per week, all students will participate in a field experience that provides hands-on exposure to course content. C-4HY. Fall, Spring.

#### **201 SOCIAL PSYCHOLOGY - 3 hours**

The scientific study of how people think about, influence, and relate to one another within and across cultures. Topics include the interaction of culture and gender, conflict and peacemaking, social beliefs and judgments, conformity, persuasion, prejudice, aggression and attraction as they vary. All students will participate in applied research or other practical experience. When offered on campus, concurrent enrollment in PSYC 301L is required. C-3RC.

**201L SOCIAL PSYCHOLOGY LAB - 1 hour**

Students will participate in applied and field-based research. When PSYC 301 is offered on campus, concurrent enrollment in PSYC 301L is required.

**224 DEVELOPMENTAL PSYCHOLOGY - 4 hours**

In this course we study and apply theory and research in developmental psychology across the life-span. Emphasis is placed on the interaction of physical, cognitive, and social aspect of development from conception to old age, death and dying. Prerequisite: PSYC 110

**225 BEHAVIOR DISORDERS - 4 hours**

The scientific study of the causes (etiology), symptoms (diagnosis) and treatment of various forms of psychopathology. Topics include a review of anxiety, mood disorders, psychosis, personality disorders and childhood disorders. All students will participate in a laboratory experience. Prerequisite: PSYC 110. Fall.

**227 ORGANIZATION PSYCHOLOGY – 4 hours**

This course focuses on psychological research centered on how organizations are structured and factors that help employees to thrive in these settings. In this course students will examine research and theory related to motivation and engagement, stress and well-being, fairness and diversity, leadership, and working in teams. Prerequisite: PSYC 110

**235 COGNITIVE PSYCHOLOGY - 4 hours**

An introduction to topics in cognitive psychology including: attention, perception, neurocognition, memory, knowledge, reasoning, decision making, problem solving, language and imagery. Laboratory projects and experiments provide hands-on experience with course topics. Prerequisite: 12 semester hours in psychology.

**241 STATISTICS AND RESEARCH DESIGN I - 4 hours**

This course is designed to introduce students majoring in psychology to common statistical analysis skills rooted in the interpretation of psychological research. This course is the first in a sequence of three statistics and research design courses, and is intended to lay a strong foundation for critical statistical analytical skills required in more advanced coursework in psychology. Topics will include a review of descriptive methods, hypothesis testing, correlation and regression, analysis of variance and an introduction to statistical analysis software. Prerequisite: PSYC 110, MATH 105 or placement. C-1Q. Spring.

**250 COGNITIVE NEUROSCIENCE - 4 hours**

This course examines the biological foundations of mental processes. Specifically, we will explore how neurons, brain structure and neural function (the biological foundation of the brain) enable cognitive processes such as attention, memory, language, decision making and thought. Prerequisite: PSYC 110

**307 PSYCHOLOGY OF MARRIAGE AND FAMILY - 4 hours**

This course focuses on the study and application of marriage and family research and theory. Students learn about a wide range of topics associated with functional and dysfunctional relationships. The emphasis will be on romantic and marital relationships, viewed through the lens of psychological theory and research. Prerequisite: PSYC 110.

**311 ATTENTION AND DISTRACTION - 4 hours**

Attention is a broad term that includes such things as the influence of our expectations and how we allocate our limited mental resources. In this course we will study the following questions: What is attention? What are its manifestations and its functions? Students will discover how disorders of attention affect students in the classroom and how advertisers capture our attention. Prerequisite: PSYC 110.

**341 STATISTICS AND RESEARCH DESIGN II (W) - 4 hours**

A beginning study of experimental and non-experimental research methods in contemporary psychology. Students study the basic methods of measurement, hypothesis formation, data collection, data analysis and interpretation. Laboratory projects provide hands-on experience. Prerequisite: FYS or ENG 111; PSYC 110; PSYC 241 or MATH 210. Fall.

**345 PSYCHOLOGICAL TESTS AND MEASUREMENTS - 4 hours**

An introduction to the theory and practice of psychological measurement. Topics include theory and practice of test construction, validation and interpretation. Laboratory projects include practical experience in course topics. Prerequisite: PSYC 110.

**346 STATISTICS & RESEARCH: APPLIED PSYCHOLOGY - 4 hours**

Students will be introduced to a variety of statistical and research methods used in Industrial-Organizational Psychology, psychological testing or survey development. Students will learn statistical methods used in the development of assessment measures, reliability coefficients, validity coefficients and factor analysis. Specific attention will be given to data input, data transformation, and analysis using SPSS. In addition, students will learn how to accurately interpret and explain research. All students will be expected to present their research at a research conference. This course prepares students for graduate school research. Only one of PSYC 346, PSYC 347, or PSYC 349 may be counted toward electives in the Psychology major or minor. Prerequisite: PSYC 341.

**347 STATISTICS & RESEARCH: COGNITIVE PSYCHOLOGY - 4 hours**

Students will be introduced to a variety of statistics and methods used in cognition research. The class closely mimics the graduate school experience in cognitive psychology, including programming, scheduling participants, conducting experiments and learning lab management skills. Only one of PSYC 346, PSYC 347, or PSYC 349 may be counted toward electives in the Psychology major or minor. Prerequisite: PSYC 341.

**349 STATISTICS & RESEARCH: DEVELOPMENTAL PSYCHOLOGY - 4 hours**

Students will be introduced to a variety of statistical and research methods used in Developmental Psychology. Students will learn advanced SPSS skills and hone advanced statistical skills in using tests such as ANOVA, factorial design, multiple regression, correlation and chi square. Students will conduct research, analyze data and present findings at research conferences. This course prepares students for graduate school research. Only one of PSYC 346, PSYC 347, or PSYC 349 may be counted toward electives in the Psychology major or minor. Prerequisite: PSYC 341.

**352 CULTURE AND PSYCHOLOGY - 3 hours**

The study of how culture influences human development, motivation, thinking, abnormal behavior and social interaction. It includes an in-depth comparison of US culture with one other non-US culture. C-3GC. January.

**355 INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY - 4 hours**

Industrial/Organizational Psychology is the application of scientific methods and psychological principles to industrial and organizational behavior. Topics include: job analysis, personnel selection, performance appraisal, assessment reliability and validity, the legal context for personnel decisions, work motivation, work attitudes, leadership and occupational health. These topics are studied to maximize both employee well-being and organizational effectiveness.

Prerequisite: PSYC 110.

**357 ORGANIZATIONAL DEVELOPMENT - 4 hours**

This course focuses on both theory and practice related to organization development. Practitioners of organization development use behavioral science knowledge to increase organizational effectiveness and well-being. Students will learn about various techniques for planned, organization-wide interventions that are typically managed by those in leadership positions of an organization. Prerequisite: PYSC 110.

**360 NEUROPSYCHOLOGY - 4 hours**

An introduction to the biology of behavior. Topics include a review of the function of the nervous system, brain and behavior. Laboratory projects and experiments provide hands-on experience with course topics. Prerequisite: 12 semester hours in psychology.

**362 SENSATION AND PERCEPTION - 4 hours**

Sensation involves the process of getting information about the external world to our brain via touch, taste, sight, smell and sound. Perception is the active process of selecting, organizing, and interpreting this sensory input. This course will explore theories and experimental methods used to study sensation and perception, addressing issues such as why we see the sky as blue, how we recognize our friend's face and how we perceive the richly detailed visual scenes we encounter. The emphasis is on visual sensation and perception as it is our most well-examined sense. Prerequisites: PSYC 110 and 235.

**366 COUNSELING THEORY AND PRACTICE - 4 hours**

A survey of the major counseling theories. Laboratory projects include practical experiences. Prerequisites: PSYC 110, 224, 325. Spring.

**372 LEADERSHIP & MOTIVATION - 4 hours**

This course focuses on theories of organizational leadership and employee motivation. Students will review research findings which evaluate the validity of alternative theories of leadership and motivation. Special emphasis will be given to new research exploring what employees most want from top leaders and employers. They will then apply these research findings to specific organizational challenges. Prerequisite: PSYC 110.

**374 ORGANIZATIONAL CONSULTING - 4 hours**

This course will focus on research and process-based models of organizational consulting. Students will learn about collecting and analyzing data to provide recommendations for organizational improvement. They will also learn about the personal competencies deemed essential for success as a consultant. In addition, students will gain insight and perspective on how to design and develop a successful consulting practice. Prerequisite: PSYC 110.

**376 PERSONNEL PSYCHOLOGY - 4 hours**

This course focuses on research and theory related to employee selection, training and performance appraisal and feedback. Attention will be given to the evaluation of employee selection methods and the lawful, ethical and practical application of methods such as interviews, ability tests and personality inventories. This course will also cover employee training needs analysis, program design and evaluation. In addition, students will learn about theory and research related to performance appraisal and feedback. Prerequisite: PSYC 110 and PSYC 227.

**444 SENIOR SEMINAR - 4 hours**

A capstone course for psychology majors that includes a review of major historical and contemporary issues in psychology. Topics include a laboratory component designed to help prepare students for the Senior Comprehensive Evaluation in psychology, graduate study and future careers. Prerequisites: Senior standing. Fall.

**460 DIRECTED PSYCHOLOGICAL RESEARCH - 1-4 hours**

Guided research in psychology is carried out under the direction of a faculty mentor. Students will develop a research question, collect and analyze data and communicate results. This course may be repeated for a total of four hours. Prerequisite: PSYC 341.

**476 FIELD PLACEMENT IN PSYCHOLOGY - 1-12 hours**

Supervised field placement in a clinic, hospital, school, agency or laboratory. Three semester hours may be used to meet major requirements. Prerequisites: PSYC 110 and consent of instructor.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

## **Social Science Courses**

### **Courses SOSC**

#### **102 HUMAN CONFLICT - 3 hours**

An exploration of models for the analysis of human conflict within persons, between persons, and between ethnic and cultural groups. The origins of the social sciences, and how the social scientist seeks knowledge, is introduced. Recommended for those students interested in an integrated approach to psychology, sociology and anthropology. C-3RC.



## **Sociology, Social Work, and Criminology**

*Chair B. Burdge, A. Dailey, J. Friesen, C. Krueckeberg, P. Martini*

### **SOCIOLOGY**

Sociology is the study of social life. At the interpersonal level, sociology studies the causes and consequences of such things as identity, romantic love and deviance. At the societal level, it examines and explains such things as poverty, crime and racism. At the global level, it studies such things as immigration, modernization and war.

The sociology major and minor are designed to prepare students to enter career fields such as public policy, human services, research analysis and community organizing, among others. The sociology major and minor can also serve as an academic foundation for advanced study in law, justice studies, social work, sociology or public policy.

#### **Baccalaureate Degree**

Major in sociology, 36 hours: SOC 101, 222, 228, 240, 305, 345, 440; 15 hours of electives in sociology (nine hours at 300 level or above).

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the department chair.

Minor in sociology, 24 hours: SOC 101, 222 or 240, 228, 345; twelve hours of electives in sociology (three hours at 300 level or above).

Requirements for teaching majors are available in the Office of Teacher Education.

### **CRIMINOLOGY**

The criminology program provides students with an overview of the origins of criminal behavior, the consequences of crime for society and the legal responses societies develop to combat crime.

The criminology major and minor provide the foundation for successful careers in areas such as mediation and conflict resolution, juvenile justice, victim assistance, law enforcement, substance abuse prevention, rehabilitation counseling and restorative justice. The criminology major and minor can serve as an academic foundation for advanced study in law, justice studies, social work, sociology or public policy.

A two-year Associate of Arts degree is also available with the option of merging into a four-year degree.

#### **Baccalaureate Degree**

Major in criminology, 39 hours: SOC 101, 222, 228, 240, 244, 262, 275, 305, 340, 345, 440; one course selected from: POSC 121, 122, 140, 233; three hours of electives in sociology.

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the department chair.

Minor in criminology, 21-23 hours: SOC 101, 228, 244, 340; SOC 275 or SOWK 275; two courses approved by the sociology, social work, and criminal justice department.

## **Associate of Arts Degree**

Major in criminology, 27 hours: SOC 101, 228, 244, 340, 345; SOWK 110, 233, 274, 275.

### **Courses SOC**

#### **101 INTRODUCTION TO SOCIOLOGY - 3 hours**

Sociology as a way of knowing and a body of knowledge. Special attention to socialization, inequality in American society and the institutions of family, religion, politics and economy. C-4HS. Fall. Spring.

#### **102 HUMAN CONFLICT - 3 hours**

An exploration of models for the analysis of human conflict within persons, between persons and between ethnic and cultural groups. The origins of the social sciences, and how the social scientist seeks knowledge, is introduced. Recommended for those students interested in an integrated approach to psychology, sociology and anthropology. C-3RC.

#### **220 SOCIAL GERONTOLOGY - 3 hours**

An introductory course in the field of aging. Study areas include perspectives on aging, social roles, family, retirement, living environments, minority and cross-cultural experiences, political and economic implications of aging. Also included is a study of the social institutional response to the needs and problems of older adults in the form of policies, programs and services. Prerequisite: SOC 101. C-3RC. Fall.

#### **222 SOCIAL RESEARCH METHODS - 3 hours**

The methodological framework for planning and implementing qualitative and quantitative social research, including the process of developing research designs, the selection of samples, the construction and use of research instruments and methods of analyzing and interpreting data. Ethical issues and the relevance of empirical research for building knowledge and evaluating service delivery in helping professions are considered. Students are encouraged to satisfy the Core requirement in mathematics before enrolling in the course. Prerequisite: SOC 101. Spring.

#### **223 DEVIANCE AND SOCIAL CONTROL - 3 hours**

The study of how societies come to define certain attributes and behaviors as deviations from social norms and how societies attempt to suppress or regulate them. Topics include alcohol and drug use, crime and elite deviance, sexual assault and family violence, mental disorder, various sexual behaviors and prostitution. Prerequisite: SOC 101.

#### **228 RACIAL, ETHNIC, AND GENDER INEQUALITY - 3 hours**

A sociological approach to the dynamics of racial, ethnic and gender group relations using relevant theories, concepts and empirical studies. Patterns of differential power and intergroup conflict in U.S. society will be examined using examples from several groups. C-3RC.

#### **230 ASPECTS OF AMERICAN POPULAR CULTURE - 3 hours**

The study of a particular aspect of American popular culture using sociological concepts, theories and methods for the analysis of culture. Topics may include: Disney and American culture, American culture and politics through film, the golden age of radio and the malling of America. This course may include field trips or off-campus study as appropriate. Course may be repeated once for credit on different topics. Only three hours may be applied toward the major.

**240 SOCIOLOGICAL THEORY - 3 hours**

Survey of sociological theories from the classical founders (Marx, Durkheim, Weber, and Simmel) to modern schools of thought (such as functionalism, conflict theory, symbolic interactionism, dramaturgy, ethnomethodology, interpretive theory, feminist theory and postmodernism). Emphasis on enduring theoretical contributions as well as their application to contemporary social issues. Prerequisite: SOC 101. Fall.

**244 CRIMINAL BEHAVIOR AND THE CRIMINAL JUSTICE SYSTEM - 3 hours**

The study of theories about crime and delinquency, and an overview of all major elements of the criminal justice system. Examination of the use of the criminal sanction in the United States, through major statutory, case and Constitutional law. Prerequisite: SOC 101. Fall.

**262 SOCIOLOGY OF LAW - 3 hours**

This course is a sociological analysis of the legal order of the United States which views law as a living, evolving organism that both shapes social structure, and is shaped by it. Includes some examination of contrasting definitions of law and legal systems across time and cultures. Surveys theoretical and empirical perspectives on the dynamics of the current US legal structure: actors, functions, processes, and outcomes. Law as a mechanism for social control and an impetus for social change. Includes the role of law in reinforcing and changing social class and social inequality. Prerequisite: SOC 101. Fall, even years.

**275 PRACTICUM IN SOCIOLOGY - 1-3 hours**

Observation and participation in any of a wide range of human experiences and social systems. May be repeated for a total of six credit hours, three credit hours of which may be used to meet requirements in the sociology or criminal justice majors. Prerequisite: consent of the instructor. Fall. January. Spring.

**305 SELF AND SOCIETY - 3 hours**

Social psychology from a sociological perspective, examining the interaction between individual lives and social structure: How humans are created by their social order and how humans create social orders. Major topics include socialization and the development of the self, language and the social construction of reality and the social construction of gender. Prerequisites: PSYC 101, SOSC 102, or SOC 101. Spring.

**311 CULTURAL ANTHROPOLOGY - 3 hours**

Provides a theoretical framework and methods for the study of cultures. Questions related to the unity of humankind and the diversity of human custom are central concerns. Study of several related non-Western cultures enables students to consider the relationship among the individual, culture and society and encourages them to develop respect for other cultures and a better understanding of their own. C-3GC.

**328 SOCIAL MOVEMENTS - 3 hours**

Examines the importance of social movements as a force for social change, why social movements emerge and develop, why people join them; strategies and tactics used and factors influencing success or failure. Focus is on social movements in United States society. Prerequisite: SOC 101. Fall.

**333 SEXUALITY AND GENDER IN SOCIETY - 3 hours**

Human sexuality as social interaction and a social-cultural construction. Topics include sexuality in historical-cultural context, psychosexual development and socialization, love and sex, sexual attitudes and behaviors, contraception, sexual coercion and commercial sex, with special emphases on sexual identity, sexual orientation and gender. A focus on empirical knowledge with attention to ethical and affective concerns. Prerequisite: SOC 101. Spring.

**335 SOCIOLOGY OF FAMILY - 3 hours**

Primary emphasis on development and maintenance of intimate relationships in the United States; theoretical and empirical materials on family life cycle, dating, sexual behavior, readiness for intimate partnership, sexual behavior, social change and emerging family styles. Prerequisite: SOC 101. Fall, odd years.

**340 YOUTH AND THE JUVENILE JUSTICE SYSTEM - 3 hours**

Examination of the problem/need-definition process with youth and young offenders, including the ambiguity of social policies and adolescent roles in the United States. Adolescent needs and need-meeting structures. Historic landmarks in juvenile justice, including major movements and court decisions. Elements of current U.S. youth justice systems and examination of policy and program alternatives for intervention. Prerequisite: SOC 101. Spring.

**345 CLASS, STATUS AND POWER - 3 hours**

Classical and modern theories of class structure and mobility used to analyze the forms and conditions of social inequality, primarily in U.S. society. Relationships of class position to behavior in family, religion, politics and education are included. Prerequisite: SOC 101. Fall.

**347 SOCIOLOGY OF RELIGION - 3 hours**

Religion from the sociological perspective: theoretical approaches, individual religiosity, social organization of religion, contemporary trends, and religion in interaction with family, politics, economy, class and race. Prerequisite: SOC 101. Fall.

**350 HEALTH, MEDICAL CARE AND SOCIETY - 3 hours**

An examination of health, illness and medical care from a sociological perspective. Topics include social epidemiology, the social psychology of illness, the recruitment and socialization of health professionals, patient/physician relationships, and the organization of health and medical care. Policy considerations are emphasized and the concerns of women, minorities and the disadvantaged receive special attention. Prerequisites: SOC 101 and junior standing or above.

**372 SOCIOLOGICAL RESEARCH PRACTICUM - 1-3 hours**

Experience in the process of using existing research findings for a better understanding of community problems, client needs, service programs, etc. The student is assigned to a setting where a realistic application of research knowledge is done under the direction of both a setting supervisor and the University instructor. Concurrent with or following SOC 222. Fall. January. Spring.

**440 SENIOR SEMINAR (W) - 3 hours**

A capstone course for sociology majors to integrate the diverse elements of their coursework into a coherent and mature conception of sociology as an approach to inquiry and to life. Prerequisites: FYS or ENG 111; SOC 101, 222, 240. Spring.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.

**SOCIAL WORK**

*Director B. Burdge*

The Manchester University Social Work Program, a baccalaureate degree program accredited by the Council on Social Work Education, graduates generalist social work professionals of ability and conviction who respect the infinite worth of every individual. Graduates of the program improve the human condition by applying social work knowledge, values, and skills to enhance the well-being of all people, especially those who are vulnerable, oppressed, or living in poverty; to alleviate poverty and oppression; and to promote social and economic justice and peace. The program also prepares students for graduate studies in social work.

Admission into the social work program takes place in two phases: 1) initial admission to major and 2) admission to the senior social work practice block (SOWK 375, 475, 476 and 477).

1. Admission to the major should be completed during the sophomore year and requires:
  1. Regular admission into Manchester University;
  2. Achievement of sophomore status;
  3. Minimum cumulative grade point average of 2.0 on a 4.0 scale;
  4. Satisfactory completion of SOWK 110 and enrollment in or completion of SOWK 233;
  5. Personal integration and aptitude for generalist social work practice; and
  6. Satisfactory progression toward the program's core competencies, as evidenced by:
    1. student's personal statement,
    2. one reference from one Manchester University social work faculty,
    3. pertinent work or volunteer experience,
    4. unofficial transcript and
    5. an admissions interview.
2. Admission to the senior social work practice block should be completed during the spring semester of the junior year and requires:
  1. Completion of a minimum of 76 credit hours;
  2. Admission to the Social Work Program;
  3. Previous participation in a Celebrating Diversity Workshop;
  4. Demonstration of satisfactory progress (e.g., minimum 2.0 overall GPA, progress toward program's core competencies); and
  5. Remediation of any areas of concern identified at admission to the social work program, as evidenced by:
    1. student's personal statement and self-evaluation,
    2. pertinent work or volunteer experience,

3. unofficial transcript and
4. an admissions interview.

Applications for admission to the social work major and to the senior social work practice block are available from the social work program director or on the Social Work Program website.

### **Baccalaureate Degree**

Major in social work, 58 hours: BIOL 102 or 204; PSYC 110; one course selected from: ECON 115, 221, 222; one course selected from: POSC 121, 122, 140, 233; SOC 101; SOWK 110, 222, 228, 274, 334, 366, 375, 384, 475, 476, 477.

Academic credit for life experience and previous work experience is not granted, in whole or in part, in lieu of field instruction or of courses in the professional foundation of the social work major.

Majors must successfully complete the senior comprehensive evaluation prior to graduation. Details are available from the social work program director.

### **Courses SOWK**

#### **110 INTRODUCTION TO SOCIAL WORK: SERVICE, EMPOWERMENT, AND JUSTICE - 3 hours**

Introduction to the helping professions, with particular emphasis on the nature of generalist social work. Content includes professional values and ethics, social problems and inequities, populations-at-risk and social service delivery philosophies and settings. Social work perspectives, including systems models, strengths perspective, social and economic justice, person-in-environment and evidence-based practice are highlighted. C-3RC. Fall. Spring.

#### **220 SOCIAL GERONTOLOGY**

See SOC 220. C-3RC.

#### **222 SOCIAL RESEARCH METHODS**

See SOC 222.

#### **228 RACIAL, ETHNIC, AND GENDER INEQUALITY**

See SOC 228.

#### **244 CRIMINAL BEHAVIOR AND THE CRIMINAL JUSTICE SYSTEM**

See SOC 244.

#### **274 SOCIAL WORK PRACTICE I: BECOMING A SKILLED HELPER - 3 hours**

Introduces a variety of generalist social work intervention approaches through written work, volunteer service, and experiential learning. Students learn how to apply social work knowledge, skills and values, to micro, mezzo and macro practice situations. Attention given to self-awareness, communication, the helping relationship, use of theory, phases of problem solving, ecosystems and strengths perspectives, diversity, advocacy, case management, recordkeeping, team functioning, peacemaking, self-care and evaluating effectiveness. Prerequisite: SOWK 110. Fall.

**275 PRACTICUM IN HUMAN SERVICES - 1-3 hours**

Observation and participation in a human services organization. Focus on exposing students to social service delivery systems and potential roles in human services. May be repeated for a total of six hours. Prerequisite: consent of department chair. Fall. January. Spring.

**334 HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT (W) - 4 hours**

Examination of human development over the life span as the individual participates in families, groups, organizations, and communities. Empirically-supported theories and knowledge are used to understand reciprocal relationships among human biological, psychological, spiritual, social, and cultural systems. Appreciation of diversity is fostered, including understanding the consequences of oppression for “at-risk” populations. Students apply an interdisciplinary knowledge base to the generalist social work assessment process. Prerequisites: BIOL 102 or 204; ECON 115, 221, or 222; POSC 121, 122, 140, or 233; PSYC 110; SOC 101. Spring.

**340 YOUTH AND THE JUVENILE JUSTICE SYSTEM**

See SOC 340.

**350 POLICY AND PRACTICE ISSUES IN SOCIAL WELFARE - 3 hours**

A group study of issues and programs in a selected field of social welfare such as child welfare, rural or industrial social services, drugs and social behavior, or international social welfare. Focus of study and location vary according to faculty resources and student interest. Aspects of need definition, policy goals, program design and service delivery are addressed. May be repeated on different topics with permission.

**366 SOCIAL WELFARE POLICY - 3 hours**

The evolution of social welfare policy in the United States and its interrelationship with the evolution of the social work profession. Particular emphasis on the impact of values and power on policy development and implementation in public and private programs; social allocation and integrated service delivery; social planning and other mezzo- and macro-level intervention strategies; analysis of policies and programs with potential to promote social and economic justice, and advocacy skills required for effective policy practice.

**372 SOCIAL WORK RESEARCH PRACTICUM - 1-3 hours**

Experience in the process of conducting research to build knowledge relevant to generalist social work practice (client needs, community problems, policy or program effectiveness, etc.). The student is assigned to a setting where research is done under the direction of a setting supervisor and the College instructor. Prerequisite: Completion of or concurrent enrollment in SOC/SOWK 222.

**375 SOCIAL WORK PRACTICE II: INDIVIDUALS, FAMILIES, AND GROUPS - 3 hours**

Integration of social work knowledge, values, and skills for entry-level generalist practice with diverse individuals, families, and groups. Application of current research and theoretical perspectives to engagement, assessment, intervention, and evaluation processes. Emphasis on advanced critical thinking, empowerment, peacemaking, and students' emerging professional identities. Includes retreat and service learning project.

**384 SOCIAL WORK PRACTICE III: ORGANIZATIONS AND COMMUNITIES – 3 hours**

The third course in the social work generalist practice sequence, this course prepares students for effective macro practice within complex governmental, political, organizational, and community social service settings. Macro practice includes agency administration, program planning, policy analysis, community organization, and community development. Emphasis is placed upon generalist social work practice with, or on behalf of, oppressed populations to promote community empowerment and social and economic justice.

**475 FIELD INSTRUCTION - 4 or 6 hours**

Observation and participation in a social service setting under supervision of a qualified practitioner. Students carry limited administrative and case load responsibilities congruent with entry-level generalist social work practice and program mission. Total of 10 semester hours (completed consecutively) are required for the major. Prerequisites: Admission to the Social Work program and the senior social work practice block, and completion of SOWK 110, 222, 228, 274, 334 366, 375, 384. January and Spring.

**476 FIELD INSTRUCTION SEMINAR - 4 hours**

Weekly group and individual supervision from faculty for analysis and evaluation of field instruction experience. Students complete integrative written projects and presentations on topics related to generalist social work. Includes retreat, extended field trip on urban social issues, workshop on sexual orientation and gender identity. Fees required. Concurrent enrollment with SOWK 475. Spring.

**477 SOCIAL WORK PRACTICE IV: SYNTHESIZING A PROFESSIONAL IDENTITY - 3 hours**

Integration of the theoretical social work practice models and principles conceptualized during earlier social work courses and tested in generalist practice roles during field instruction. Development within each student of a coherent personal practice model based on practice values, validated knowledge and practice skills. Course requires individualized learning objectives developed during retreat that ends field instruction and begins this seminar. Prerequisites: SOWK 475, 476.

**380 or 480 SPECIAL PROBLEMS - 1-4 hours**

A student who has demonstrated ability to work independently may propose a course and pursue it with a qualified and willing professor. The department chair and college dean also must approve. A set of guidelines is available at the Office of the Registrar.

**385 or 485 SEMINAR - 1-4 hours**

An in-depth consideration of a significant scholarly problem or issue. Students pursue a supervised, independent inquiry on an aspect of the topic and exchange results through reports and discussions.



## Applied Study Areas

Applied Study Areas (ASAs) combine 2-3 academic courses and a supervised practical experience through which students develop an identifiable competency. These study areas are intended to demonstrate to a graduate school or potential/current employer that students have a focused experience in an area other than the major or minor.

### **Applied Study Area in interfaith literacy:** *K. Eisenbise Crell, coordinator*

Two courses from REL-210, 222, 223, 131, 205, or other varying courses (January study abroad cross-cultural opportunities approved by the administrators of the certificate). Applied experience: Students will complete one experiential learning component offered by the Office of Religious Life or other offices/programs on campus. The experience will be selected in consultation with the certificate administrators. These experiences could include one of the following:

- A Campus Interfaith Board “Sacred Spaces” trip and reflective paper
- A visit to and in-depth experience with a house of worship in Fort Wayne from outside the student’s own faith tradition and reflective paper
- An internship in an ecumenical and/or multi-faith environment and reflective paper
- Attendance at relevant VIA events and other campus programs and reflective paper
- A combination of these and other opportunities as they arise on the campus or in the community/region.

The goal of this certificate is to expose students to (and possibly inspire in students) the idea of interfaith leadership, which noted interfaith leader Eboo Patel defines as “someone with the framework, knowledge base, and skill set needed to help individuals and communities who orient around religion differently in civil society and politics build mutual respect, positive relationships, and a commitment to the common good.”

### **Applied Study Area in libraries and literacies:** *S. Erickson-Pesetski, coordinator*

ENG 254, 476; LIB 200; ENG 311, LIB 202, COMM 232 or COMM 234.

This ASA will help prepare students for graduate study or for work in libraries, museums, archives, or publishing; emphasis is on book culture (both print and digital) and the history of authorship, readership, and publishing.

For more information, see: <http://libguides.manchester.edu/LibrariesLiteraciesCertificate>

### **Applied Study Area in mediation and conflict resolution:** *K. Gray Brown, coordinator*

PEAC 218, PEAC 320; one of the following; 6-10 hours of community mediation work; workshop planning and facilitation; semester-long internship with an appropriate conflict resolution organization or agency.

**Applied Study Area in queer advocacy:** *B. Burdge, coordinator*

The ASA in Queer Advocacy involves two classes and two experiential trainings to help you develop knowledge and skills necessary for increasing the inclusion and equality of LGBTQ people in your community.

FYS LGBTQ Lives or GNST 201; three hours from: COMM 256, PEAC 218, PSYC 366, SOWK 274 or a practicum, internship, or special problems course designed for the development of relevant skills. Applied Experience: Complete a Celebrating Diversity Workshop and complete 6 hours of SafeZone training.

**Applied Study Area in scientific computing:** *T. Brauch, coordinator*

Requirements: CPTR 105 or CPTR 111, MATH 121, MATH 233, an applied experience. The applied experience could be: An extension of a project from a science course but will be beyond what is done in the course, a summer research experience that is not for academic credit, joint work with a professor outside of normal class or other ideas that are approved by the coordinator of the program and another faculty member.

Much of modern scientific research is done using computational methods and computer modeling. The area has been steadily growing in the past few years. As computing power increases and data storage costs decrease, the need for computationally aware science students is going to continue to increase. This certificate program looks at how to use mathematics and computer programming to analyze, perform research on and model quantitative questions in science. Students who complete this certificate will stand out in both job and graduate school applications.

**Applied Study Area in social media:** *M. Calka, coordinator*

COMM 234; COMM 232; MATH-242 (prerequisites: MATH 115 or 210 or 240 or PSYC 241); Applied experience in social media. The applied experience is non-credit bearing, but is required for the complete of the ASA. Students must complete a social media project for a client, on- or off-campus. This could be as part of an existing internship or coursework in addition to the required coursework for the ASA. The ASA coordinator must approve the applied experience. Pre- requisite: COMM 234: Intro to Social Media.

The purpose of the applied study area in social media is to develop knowledge and skills necessary for professional social media use in your internships and workplaces.

## **CAMPUS AND FACILITIES**

### **Campus**

The North Manchester campus of Manchester University is located on a large, wooded campus in northern Indiana, about one mile north of the business section of North Manchester, a town with a population of 6,700.

The original campus, a 10-acre plot with large oak trees, fronts on College Avenue, with the Administration Building at the center. The entire campus and grounds, including the athletic fields and the University woods, cover an area of more than 120 acres. The Koinonia Environmental and Retreat Center in Kosciusko County adds 100 acres of natural land to University resources.

The Fort Wayne campus is located at Dupont and Diebold roads just east of Interstate 69.

### **Academic Buildings**

**Academic Center.** Formerly known as Holl-Kintner Hall, the Academic Center houses the campus Welcome Center, home of the Admissions Office and the Sisters' Cafe. Classrooms and offices for the Communication Studies, Education, English, History and Political Science, Modern Languages, Peace Studies, Philosophy and Religious Studies, Psychology and Sociology, Social Work & Criminal Justice departments are located in the Academic Center.

**Administration Building.** The central portion of the Administration Building was erected in 1921, combining the original Bible School and Bumgardner Hall.

**Chinworth Center.** Made possible by a generous gift from alumnus Herb Chinworth to honor his parents, the Chinworth Center creates more functional spaces that support student learning and improve their experience. The first floor is home to Residential Life, Career & Professional Development, Civic Engagement, Acorn Service & Resource Center, Student Life, Student Financial Services, Success Advisory, First Year Experience & Transitions, Student Involvement and SAC. The second floor is dedicated to the Arthur L. Gilbert College of Business.

**Clark Computer Center.** Through a generous gift by John G. Clark, a 1932 graduate, the former Goshorn Building was renovated in 1984 into a multi-functional computer center. The Office of Information Technology Services and the Office of University Safety are housed in this building.

**Funderburg Library.** The library provides materials to serve the University curriculum, bibliographic and interlibrary loan support for research and instruction in the use of information sources. Lounge Twelve is located inside the after-hours study lounge.

Funderburg's three floors can accommodate more than 200 students. Comfortable lounges for relaxed reading are balanced by a computer lab, audio and video equipment, group conferences and after-hours study. The Teaching Resource Center contains thousands of textbooks and curricular materials for education majors. Special collections include the University archives, Brethren historical materials and the peace studies collection.

**Otho Winger Memorial Hall.** This building, named for former Manchester President Otho Winger, contains the art and music departments. There are a number of art studios, classrooms, practice rooms for student use, a four-station computer music laboratory and a 14-rank pipe

organ. The Norman and Grace Wine Recital Hall and Link Gallery provide attractive and welcoming settings for recitals, lectures, meetings and art shows.

**Physical Education and Recreation Center.** Constructed in 1982 and renovated and expanded in 1997 and 2010, this building houses the exercise science and athletic training department, intercollegiate and intramural sports and is the center for recreational activities. The multipurpose Stauffer-Wolfe Arena, seating 1,800, provides one competition or three practice basketball courts. Other facilities include the auxiliary gym, Brown Fitness Center, dance/multipurpose room, athletic training facilities, exercise science and athletic training offices, four classrooms, human performance laboratory and two racquetball courts.

**Science Center.** The Science Center contains 60 classrooms and laboratories, a large lecture hall, faculty offices, a greenhouse and an atrium. The Physics and Mathematics and Computer Science departments are located on the first floor. The Biology Department offices are located on the second floor, and the Chemistry Department is located on the third floor. Various artworks are on display in the three-story atrium, and displays highlighting the history of science at Manchester University are located along the hallways.

### **Residence Facilities**

To meet the preferences and needs of its diverse student body, Manchester provides a variety of living options in five residence halls, each representing distinctive small groups within the larger University community. To complement classroom learning, to stimulate personal growth, and to spark interpersonal relationships, the residence hall councils and staff present programs and activities for students. A major responsibility of residence hall staff members is to motivate, encourage and advise students in the residential environment.

All residence hall rooms are wired to the campus computer system, which includes internet capability. In addition, each traditional residence hall houses a computer lab equipped with computers and laser printers available for student use.

**East Street Apartments** houses 46 students classified as juniors and seniors in apartments with 2 double occupancy bedrooms, a bathroom, living room and kitchen.

**East Hall** is a residence hall for 219 men and women. The ground floor provides a large social room, cooking areas, laundry facilities and a TV lounge. The hall has a main lounge and smaller study rooms/ lounges.

**Garver Hall** provides a home for 269 men and women. This hall, named in honor of a former professor and dean, Earl S. Garver, has two separate residential areas with a shared lounge and recreational area. Garver also has a piano, a TV room and several smaller lounges.

**Helman Hall**, named in honor of former Manchester President A. Blair Helman, was constructed in 1993. This air-conditioned, co-ed residence hall houses 129 men and women in an alternate floor arrangement. Each suite contains two, two-student rooms and a bath. The Patricia Kennedy Helman Lounge on the first floor provides recreational, TV, meeting and informal conversation areas. Other amenities include elevator service, a kitchenette and vending area on the first floor and laundry facilities and study rooms on each floor. In addition, the hall has two guest suites with the following amenities: two twin beds, private bathroom, cable TV and telephone, furnished kitchenette, ironing board and iron, Wi-Fi and internet connection port.

**Oakwood Hall**, located on College Avenue, mirrors Helman Hall's design, housing 129 students in four-student suites. A lounge on the first floor provides areas for recreation, conversation and watching TV. It has an elevator, a kitchenette and vending area on first floor and storage rooms, laundry facilities and study areas on each floor. In addition, the hall has two guest suites with the following amenities: two twin beds, private bathroom, cable TV and telephone, furnished kitchenette, ironing board and iron, Wi-Fi and internet connection port.

**Schwalm Hall** is named for a former Manchester President Vernon F. Schwalm. This formerly all-male residence hall was renovated and refurnished in summer 2004 to accommodate 251 men and women in double rooms. A TV lounge and a recreational area are available for student use.

### **Computer Facilities**

The University maintains multiple student-accessible computer labs with more than 150 computers in total. A 30-seat lab is located in Funderburg Library, two 25-seat labs in the Academic Center, and Science Center houses a 16-seat lab. Each of the five residence halls contains a computer lab. In addition to these main labs, some academic departments have computer equipment. Lab hours are generally posted. Public labs contain computers running Windows 7/10. Software applications installed on the machines include Microsoft Office 2016 (Outlook, Word, Excel, Access, PowerPoint, Publisher, Visio, Project, and Expression Web) and several academic packages. Comprehensive wireless connectivity is available in the Academic Center, Clark Computer Center, Funderburg Library, the Science Center, the Jo Young Switzer Center and the residence halls. Most other buildings and some outdoor locations also have wireless access.

### **Laboratories**

#### **Human Performance Laboratory**

The Human Performance Laboratory, located in the Physical Education and Recreation Center, houses the laboratory areas for kinesiology, exercise physiology and athletic training courses. Laboratory equipment includes an isokinetic dynamometer for quantifying muscle function, oxygen analyzer, motorized treadmill, lactic acid and blood glucose analyzers, cycle ergometer and orthopedic evaluation tools and modalities.

#### **Natural Sciences Laboratories**

The Science Center contains laboratories for biology, chemistry, physics and computer science. Located on the first floor are laboratories for computer science, physics, electronics, electricity and magnetism/optics, modern physics and physics research. A scanning probe microscopy laboratory allows for the study of nanoscale phenomena.

Biology laboratories are located on the second floor. These laboratories are for introductory molecular biology, physiology and anatomy, ecology and biodiversity and microbiology. Molecular biology facilities include a DNA sequencer and a polymerase chain reaction thermocycler, and real-time polymerase chain reaction cyler. Additionally, three research laboratories and a special support room containing walk-in warm and cold rooms are located on the second floor. The greenhouse is located near the third floor of the atrium.

Third-floor laboratories are for analytical, organic and physical chemistry, and biochemistry. Four chemistry research laboratories and two instrumental support rooms including a separate nuclear magnetic resonance laboratory are also located on the third floor.

## **Other Facilities**

### **Athletic Fields**

The Kenapocomoco Athletic Fields are located on the east side of campus. The Carl W. Burt Field provides football facilities along the Eel River.\* The stadium was named in honor of Burt, a coach and teacher from 1925 to 1942. The baseball team plays on Gratz Field, named in honor of Jim Gratz, a coach and teacher from 1962 to 1987. The soccer teams play on Good Field, named in honor of Dave Good, head men's soccer coach from 1981 to 2016. The university also maintains a softball field, six tennis courts, an outdoor track and a cross country course and numerous intramural athletic spaces.

**Calvin Ulrey Hall.** Once a residence hall, this building now houses offices. Human Resources and the Office of Health and Counseling Services are located on the first floor. Business Application Services offices are located on the third floor.

### **Charles S. Morris Observatory**

The observatory was built in 1973. A 14½-foot motorized dome and a 10-inch Newtonian reflector telescope are located in the dome building. The adjacent laboratory building includes a darkroom facility and other telescopes. Funds to build the observatory were provided by the family, friends and former students of Dr. Charles S. Morris, distinguished physics professor at Manchester University for 36 years.

### **Cordier Auditorium**

This auditorium was named for Dr. Andrew W. Cordier, a 1922 graduate of Manchester and former distinguished professor. Dr. Cordier also was a scholar, diplomat, conciliator, negotiator and administrator. Cordier Auditorium was completed in spring 1978. This spacious building seats 1,100 people continental style. A three-manual, 45-rank pipe organ was installed in 1981, funded in part by a generous gift from William H. and Miriam Waybright '39 Cable. Dressing rooms, stage preparation, storage areas and fly loft are provided in this facility. A large dividable meeting room is available on the lower level.

### **Jo Young Switzer Center**

The Jo Young Switzer Center houses student dining, the Campus Store, The Oaks snack bar, an art gallery, the Success Center, and the offices of career and professional development, and conference services. The facility also includes meeting and conference rooms available to faculty, students and guests.

### **Koinonia Environmental and Retreat Center**

Located 12 miles north of the campus, this 100-acre nature reserve includes a 5-acre lake and wetland complex, restored prairie, woods and a mineral resources trail created by Indiana Mineral Aggregates Association. A two-story building on the property houses the nature center, biological field station and retreat center. Class and seminar rooms, environmental laboratories, food preparation and overnight housing facilities are also part of the building. The original 80 acres was given to Manchester University in 1974. An adjacent 20 acres was added in 1992 as a gift from Ortho '50 and Dr. Ruth Mangon '50 Holland.

### **Jean Childs Young Intercultural Center**

The Intercultural Center located on the corner College Avenue and East Street across from the Administration Building houses the Office of Multicultural Affairs, lounge, kitchen, conference room, and the Toyota Round. It offers a place for all students, with an emphasis on marginalized students, to meet, socialize and study in a comfortable, home-like environment. These materials

are available for check out to the general University community. There is also a computer lab and a conference/ multipurpose room. The Center is overseen by the Office of Multicultural Affairs and is open until 10 p.m. each day throughout the academic year, except during official breaks.

### **Neher Maintenance Center**

This building was named for Oscar W. Neher, a valued member of the Manchester University community from 1932 until his death in 1976. Mr. Neher was a teacher of biology until 1954 when, upon retirement, he joined the maintenance department, first as its administrator and later as a skilled cabinet maker. Maintenance administration offices are located there, as are several workshops and printing services.

### **Peace House**

The Gladdys Muir Peace Garden, located on Wayne Street at the entrance to the University, was completed in 2001. It was built to acknowledge and celebrate the 50th anniversary of the University's distinguished peace studies program and recognize it as the first of its kind in the nation. The peace garden is a place for quiet reflection and the refurbished small cottage is a "meeting house."

### **Petersime Chapel**

As a gift from the Ray M. Petersime family of Gettysburg, Ohio, this chapel, cruciform in shape, is the focal center on the south end of the campus quadrangle. The sanctuary seats up to 70 and has a six-rank pipe organ. Faith, higher education, and their relationship are illustrated in 30 stained glass windows. The structure also houses a meditation room, prayer rooms for individuals, conference room and lounge for groups and offices for the campus ministry staff.

### **Power House**

The central heating plant, constructed in 1967, furnishes heat for all the buildings on campus.

### **University Chime**

A long-standing tradition at Manchester University is the ringing of the chime each morning and evening while school is in session. The 10-bell chime, a gift of friends and alumni of the University, is located in the tower of the Administration Building.

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\*The Eel River is better known to Manchester University students as the Kenapocomoco because of Native American history associated with it and brought to light by the research and publicity of a former Manchester president, Dr. Otho Winger.

## **ADMISSIONS**

### **First-Year Admission Requirements**

First-time college students applying for admission to a degree program are expected to present the following qualifications:

1. Graduation from an accredited high school or its equivalent or successful completion of the General Education Development (GED) exam.
2. Submit an official high school transcript.
3. Satisfactory class rank in the high school graduating class.
4. Satisfactory completion of a high school curriculum preparing the student for college. Although no specific distribution of high school credits is required for admission, a college preparatory curriculum is recommended, including:
  - a. four years of English (grammar, composition, literature).
  - b. two years of a foreign language.
  - c. three or four years of college preparatory mathematics (algebra, plane geometry and advanced algebra as a minimum).
  - d. two or three years of laboratory science (at least two from among biology, chemistry and physics).
  - e. two years of social science (selected from U.S., world and European history; government, sociology, psychology, geography, and economics).
5. Satisfactory personal reference information and recommendation from the student's high school guidance counselor or principal. Appropriate references from other people may be submitted by applicants 25 years of age or older.

### **Application Procedures**

1. Apply online at [www.manchester.edu](http://www.manchester.edu), or via the Common Application at [www.commonapp.org](http://www.commonapp.org).
2. Once your application is submitted, please provide an official high school transcript, including current course work and most recent grades available.
3. Students should submit their completed application as early as possible following completion of their junior year in high school, but at least 30 days prior to the beginning of the semester in which they plan to enroll.

### **Fast Forward**

Students motivated to earn a bachelor's degree in three years may consider the Manchester University Fast Forward program. Fast Forward students can complete most majors by following an aggressive three-year schedule of fall, January, spring and summer classes, as well as designated online classes. In addition to the first-year admissions requirements, applicants to the Fast Forward programs are required to:

1. Receive a qualifying academic scholarship.
2. Select a specific major
3. Apply by May 1 prior to beginning first-year classes

### **Admission and Enrollment**

1. An admission decision will be made when the application is complete. The applicant will usually be notified within two weeks.
2. A \$250 enrollment fee is expected of all admitted students to confirm their intention to enroll. This fee is refundable through May 1 for the fall semester.



3. Residential life information is sent to all admitted students. Students complete a housing intent form to live in University facilities or a request to live off campus form to commute from home.
4. Course selection and registration is completed in coordination with the summer orientation experience.
5. All full-time and part-time students are required to complete a health record form that requires personal history, an updated physical examination and a complete immunization record. The completed Health Record form must be on file with the University prior to the start of classes in the student's first semester.

### **Advanced Standing (Transfer) Admission**

In addition to the first-year admission requirements, a student transferring to Manchester must have official transcripts sent directly to the Office of Admissions at Manchester from the registrar of each post-secondary institution previously attended.

A transfer candidate must have a cumulative transfer grade point average of a 2.0 (4.0 scale) to be eligible for admission. A transfer candidate who is ineligible to re-enroll at the last attended college will normally be considered ineligible to enter Manchester University for at least one semester.

Transfer credit evaluation is completed by the registrar only after all official transcripts from other institutions have been submitted to Manchester. If only partial information is available, a tentative evaluation may be requested but cannot be considered official until all documents are received.

Credits earned at regionally accredited institutions with a grade of C or higher may be transferred upon approval by the registrar. Grades, however, are not transferable. Credits accepted will be applied toward Core and major requirements as appropriate and verified by the registrar's Transfer Credit Report. Students currently enrolled at Manchester University who wish to transfer credit for courses taken at other academic institutions (for example, in summer school programs) should secure approval from the University registrar before taking the course. Without prior approval, no assurance of transfer credit can be made.

### **Admission Classifications**

Each student admitted to the University is classified in one of the following categories:

#### **Regular Admission**

Applicants who are admitted without reservation are granted regular admission. Students must have regular admission status to become candidates for degree.

#### **Provisional Admission**

Provisional admission may be granted to an applicant whose application file is incomplete at the time an admission decision is made. The materials received must be strong enough to warrant provisional admission pending receipt of the missing materials. The missing materials must be received prior to the beginning of the semester. As soon as the student's file is complete, it will be reviewed and acted upon by the Office of Admissions.

#### **Conditional Admission**

Conditional admission may be granted to an applicant whose academic record shows certain

deficiencies. The student must demonstrate the ability to do acceptable college-level work before being considered for regular admission status. After satisfying conditions specified when admitted (e.g. participation in the Student Success Program), the student will be advanced to regular admission status. A student who fails to satisfy the specified conditions will be disqualified from continued enrollment. Any student who is disqualified from continued enrollment has the right to appeal the disqualification to the Academic Standards Committee or apply for reinstatement at a later date.

## **Special Admission**

### **Early Admission of High School Students**

High school students with strong academic backgrounds may be admitted to take Manchester University courses for credit either on campus or at the high school. Interested students must submit the High School Student Enrollment Application to the Office of the Registrar. The University reserves the right to limit course options for high school students.

### **Non-Degree Admission**

Non-degree status is designed for the high school graduate who desires to take college work for self-improvement, developing or maintaining skills for employment, transfer of credit toward a degree or program at another institution or teacher certification. Students may apply by completing an application for admission as a non-degree candidate, available in the Office of Admissions. Students with a prior bachelor's degree may pursue additional work as a degree-seeking student if the student is working toward a new major. The Office of the Registrar will determine which courses from the prior degree will satisfy the new major's requirements.

### **Readmission**

Students who have previously attended Manchester University but who have not been enrolled in the immediately preceding regular semester must file an application for readmission with the Office of Admissions in advance of the anticipated return.

A student who has been disqualified from further attendance may apply for reinstatement by submitting an application for readmission accompanied by a letter presenting evidence that the applicant is prepared to meet the minimum academic standards of the University.

## **FINANCIAL INFORMATION**

### **University Expenses**

Traditionally at private colleges, tuition covers only a portion of a student's full educational costs.

This is true at Manchester University. Tuition charged at Manchester covers less than 70 percent of the total instructional cost for a student. Endowment income, gifts from friends, alumni, foundations and corporations provide the balance of funds for educational expense of the University.

Personal effort and financial investment in a college education result in dividends to the individual throughout a lifetime of service. To maximize the return on such an investment, Manchester University strives to keep the expense to the student as reasonable as rising costs or providing a high quality educational program will allow.

### **Tuition, General Fees**

#### **Tuition and Fees**

Tuition and fees for full-time students are assessed on the basis of credit load in the fall and spring semesters. Enrollment in 12 or more semester hours is considered full-time enrollment status. The normal credit load for the year is 14-16 credit hours in the fall and spring semesters and three semester hours in the January session. Tuition and fees include subscriptions to Oak Leaves and Aurora; Student Government Association fees; basic University health services; admission to University-sponsored cultural, educational, and athletic events, technology, parking, laundry and use of other campus facilities and services.

Additional fees for full time students include a separate Programming Fee (residential and non-residential) that is assessed for programming under the jurisdiction of the Student Budget Board (SBB) and Residence Hall Association (RHA).

Not included in tuition and fee charges are the costs of books, supplies, class materials, travel expenses for academic field trips and off-campus experiences, applied music instruction, residence hall damages, organizational dues, fines and some campus recreational and social activities.

#### **Room and Board**

Manchester University is a residential campus. All students are required to live on campus for three years unless they qualify for an exemption by one or more of the following criteria:

- They are married and/or have dependent children living with them;
- They are classified as a senior with 92 credit hours completed;
- They are living in their parents' primary place of residence within 40 miles of North Manchester;
- They are non-traditional (age 24 or older);
- They have been officially approved to live off campus.

All students residing in University residence halls-with the exception of East Street Apartments-are required to be on a meal plan.

- All first-year students residing in the University residential halls are required to be on the Haist Unlimited +25 meal plan.
- Sophomores may choose the Haist Unlimited +25 or Flex meal plan.
- All other students may choose the Haist Unlimited, Flex or Basic meal plan.

Please contact Manchester Dining for the explanation of each plan.

Charges for room and board do not include occupancy or service during recess periods.

## **Other Expenses**

### **January Session**

Full-time students in either the fall or spring semester may enroll for January session without additional payment of basic tuition, fees, room and board costs. All other students enrolled in January session will be assessed tuition, fees, room and board. January session courses that involve travel and living off campus bear additional fees above the costs listed for basic tuition, fees, and room and board charges. These are indicated on the schedule of courses for the January session.

### **Additional Instructional Fees**

Enrollment for private instruction in voice, piano, organ, strings, wind and percussion instruments is available for both music majors and non-music majors. Additional fees are assessed for private instruction.

### **Personal Expenses**

Students incur additional out-of-pocket expenses during the academic year. Other estimated annual expenses include \$1,000 for books and supplies and \$2,000 for discretionary items.

## **Financial Policies**

The primary responsibility for financing a college education rests with the student. Financial aid from the University and other sources is viewed only as supplementary to the efforts of the student and the student's family. Students requesting financial aid are expected to contribute toward their educational expenses through summer or college employment and/or loans in any reasonable combination.

Students with unpaid balances may lose current enrollment and will not be allowed to register for any subsequent terms. Academic transcripts and diplomas are withheld from those who have not settled their financial obligations to Manchester University, which may include collection fees, attorney's fees and court costs.

Students are not fully registered, nor will they have the privilege of class attendance, participation in activities, or use of University facilities until their charges are paid. A service charge of 1.5 percent or \$30, whichever is greater, may be added to any unpaid balance as of the due date. Additional service charges will be added to remaining balances as of the last working day of each month.

### **Payment of University Charges**

All accounts are to be paid in full by August 1 for the fall semester and by January 1 for the spring semester. Methods of payment accepted include:

- **Check or Money Order** payable to Manchester University, mailed to:

Manchester University  
 Attention: SFS  
 604 E. College Ave  
 North Manchester, IN 46962

- **In Person Payment** - Check, cash, or money order  
 Payments can be made Monday through Friday, 8 a.m. to 5 p.m. in Student Financial Services located in the Chinworth Center, Room 104.
- **Online Payment Options through the Student Account Center**  
 Students can access the Student Account Center through Spartan Self-Service on ChetNet. Parents/others who have been added as an Authorized User can access through the Student Financial Services website.
- **Electronic Check**  
 Make a payment of any amount using an e-check. There is no fee for this service.
- **Credit or Debit Card**  
 Make a payment of any amount online using a Visa, MasterCard, Discover, or American Express card. Please note that a convenience fee of 2.75% or a minimum of \$3.00 (whichever is greater) will be charged by Pay Path for the processing of credit or debit card payments. Manchester University does not receive any portion of this non-refundable fee.
- **Monthly Payment Option** - Spartan Payment Plans  
 Manchester University offers Spartan Payment Plans for interest-free, monthly payments. Yearly and semester only plans are available. Student and parents will enroll through the Student Account Center. Full details are available at <http://www.manchester.edu/sfs/spartanpayplan.htm>.

### **Veterans Affairs (VA) Delayed Payment Policy**

As part of the Veterans Benefits and Transition Act of 2018, section 3679 of title 38, United States Code was amended, effective August 1, 2019, Manchester University has confirmed its compliance with the requirements as outlined.

**NOTE: A Covered Individual** is any individual who is entitled to educational assistance under Chapter 31, Vocational Rehabilitation and Employment, or Chapter 33, Post-9/11 GI Bill benefits.

- Any covered individual is permitted to attend or participate in the course of education during the period beginning on the date on which the individual provides to the educational institution a certificate of eligibility for entitlement to educational assistance under Chapter 31 or 33 (a “certificate of eligibility” can also include a “Statement of Benefits” obtained from the Department of Veterans Affairs’ (VA) website e-Benefits, or a VAF 28-1905 form for chapter 31 authorization purposes) and ending on the earlier of the following dates:
  1. The date on which payment from VA is made to the institution.
  2. 90 days after the date the institution certified tuition and fees following the receipt of the certificate of eligibility.

- Manchester University will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under Chapter 31 or 33.

In addition, statute allows Manchester University to require Chapter 31 and Chapter 33 students to take the following additional actions:

1. Submit a certificate of eligibility for entitlement to educational assistance.
2. Submit a written request to use such entitlement each semester.
3. Provide additional information necessary to the proper certification of enrollment.
4. Make payment arrangements for the amount that is the difference between the amount of the student's financial obligation and the amount of the VA education benefit disbursement.

## **Refunds**

### **Refund of Tuition/Fees**

In the case of official withdrawal from the University, a refund, less a withdrawal charge, is made according to the following schedules:

#### **Fall and/or spring semester refund schedule:**

- Withdrawal before the official start of classes: 100 percent refund
- Withdrawal during class days 1-3: 100 percent refund less \$250 cancellation fee
- Withdrawal during the first and second weeks (4-10 class days): 75 percent refund
- Withdrawal during the third and fourth weeks (11-20 class days): 50 percent refund
- Withdrawal during the fifth and sixth weeks (21-30 class days): 25 percent refund
- Withdrawal after the sixth week (class day 31): NO REFUND

#### **Six-week online summer session refund schedule: (days to include weekends)**

- Withdrawal before the official start of classes: 100 percent
- Withdrawal during day 1: 100 percent refund
- Withdrawal during days 2 - 4: 75 percent refund
- Withdrawal during days 5 - 8: 50 percent refund
- Withdrawal during days 9 - 12: 25 percent refund
- Withdrawal after day 12: NO REFUND

No refunds are made for the Programming Fee (residential or non-residential) after the official start of classes.

### **Refund of Room/Board**

Housing refunds are not available to students who accept occupancy in a room and then are released from a housing contract to live at home or to move off campus. Occupancy is understood to mean staying in an assigned residence hall room one or more nights. Students who remain enrolled at the University and choose to leave the pre-paid board (meal) plan are refunded based on the schedules above.

### **Changes in Enrollment**

Students are allowed to make course load changes during the Change of Course days and the student's financial aid and billing information will be adjusted accordingly to accommodate the change in enrollment based on the published charges.

Students who complete a partial withdrawal after the published Change of Course days will not receive a refund of tuition/fees and/or room/board charges.

Increases in enrollment will be charged at the appropriate tuition/fee charges and financial aid will be calculated accordingly.

Students must maintain enrollment in six or more semester hours to qualify for the in-school loan deferment.

January session enrollment may affect a student enrolled less than full time for spring semester. Contact Student Financial Services for details.

### **Return of Title IV Federal Student Aid –Undergraduate and Graduate:**

Students who receive Title IV funding (Federal Pell Grant, Federal Supplemental Education Opportunity Grant (FSEOG), Federal Direct Loans, PLUS or Perkins Loan) and completely withdraw from the University are subject to the Title IV return of funds calculation, as mandated by the Department of Education. The Title IV refund calculation is different than the University's refund calculation; therefore, a student who withdraws before completing 60 percent of an enrollment period may owe the University for charges no longer covered by returned federal aid.

Under the Title IV Return of Funds calculation, the amount of Title IV aid a student has earned is determined by the percentage of days enrolled during a semester. This percentage is determined by dividing the number of days enrolled by the number of calendar days in the semester, including weekends and holidays. The student may retain the amount of aid earned. Any aid not earned will be returned to the appropriate programs. Once the attendance percentage has reached 60 percent, all Title IV aid is considered earned.

The date of a student withdrawal is determined by the University as follows:

- The student began the prescribed official withdrawal process in the Student Success Center;
- The student otherwise provided the school with official notification of the intent to withdraw; or
- For "unofficial withdrawals," the last date of attendance or the last date of participation in a class as determined by faculty. If no date can be documented then the midpoint of the semester for which Title IV aid was disbursed will be used.

The federal return of funds policy requires that Title IV funds be returned in the following order:

Unsubsidized Federal Direct Loans  
Subsidized Federal Direct Loans  
Perkins Loans  
Federal Direct PLUS Loans

Federal Pell Grants  
Federal SEOG

Return of Title IV Federal Student Aid funds will be completed no later than 45 days after the date of the school's determination the student withdrew.

### **Post-Withdrawal Disbursement**

If Title IV Federal Student Aid has been earned by the student but not disbursed prior to withdrawal, the student is entitled to a post-withdrawal disbursement. If a post-withdrawal disbursement includes loan funds, Manchester University will request the student's permission (or parent's for a Direct Parent PLUS Loan) prior to disbursing the loan funds to the student's account. A letter will be mailed to the student's address of record within 30 days of the date of determination the student withdrew, requesting that the student (or parent for a Direct Parent PLUS Loan) provide authorization in writing to disburse the funds. We ask that you respond within 14 days of receiving the letter to inform us if you want to accept the funding. If we do not receive a response, we are not required to make the post-withdrawal disbursement.

### **Payment of Refunds**

Refunds are distributed according to the guidelines governing refunds for each source of funds drawn upon to pay educational costs, including any or all Federal Title IV funds. Refunds will be paid directly to the student in all cases except where a Federal Parent PLUS loan has been disbursed to the student account. In the case of Federal Parent PLUS loan funds, the refund will be sent to the parent borrower. The parent may authorize the school (in writing) to transfer the proceeds of a PLUS loan to the student directly or to a bank account in the student's name.

### **Additional Information**

See the Manchester University [Student Financial Services website](#) for additional information regarding financial policies.

### **Charges for 2019-2020**

Charges can be found online at <https://www.manchester.edu/about-manchester/office-directory/student-financial-services/tuition-and-fees>

### **Financial Aid**

Financial aid is an important factor for many students, and 100 percent of eligible Manchester University students receive some combination of grants, scholarships, loans and work. Student Financial Services will determine a student's eligibility for financial aid by using the results of the Free Application for Federal Student Aid (FAFSA), as well as the student's academic records and funds available.

The following steps must be taken for a student to receive a financial aid package from Manchester University:

1. Apply for admission and be admitted to Manchester University. Eligibility for academic scholarships from the University is determined through the admission process.



2. Submit a FAFSA. Eligibility for federal and state grants and loans is determined through this process. The student must designate the results be sent to Manchester University, and Indiana students must have a receipt date to be received by March 10 prior to the academic year of application to be considered for state grant eligibility.
3. Submit any additional documentation requested by the Student Financial Services.

## General Financial Aid Guidelines

**Enrollment Requirements.** Students receiving financial aid must maintain full-time enrollment, (a minimum of 12 semester hours) in each of the fall and spring semesters. There are circumstances in which part-time students demonstrating need may be awarded financial aid depending on the guidelines and availability of federal, state and institutional funding. Part-time students must enroll in a minimum of six semester hours to maintain eligibility for federal loans.

**Degree Requirements.** Students must be working toward their first baccalaureate degree to be eligible for federal, state or institutional grants and scholarships. Students who have completed a baccalaureate degree are eligible for loans only.

**Satisfactory Academic Progress Requirements.** All sources of financial aid require that students make satisfactory, measurable academic progress toward completion of a degree. Students must maintain Satisfactory Academic Progress (SAP) requirements to remain eligible for assistance through Title IV federal grants, work, and loan programs, Indiana state grants and gift aid administered by the University. These financial aid standards do not replace or override University academic policies.

Students must meet the SAP standards outlined below to maintain aid eligibility:

1. Cumulative Grade Point Average: Students must earn the GPA for the number of attempted credit hours listed below.\*

1-24 hours: 1.6

25-47 hours: 1.8

48+ hours: 2.0

1. Ratio of completed credit hours to attempted credit hours: Student must earn/complete a minimum of 67% of the hours in which they enroll.\*
2. Maximum Time Period for Degree Completion:\* Students are eligible to receive financial aid for up to 150% of the credit hours to complete a baccalaureate degree. Baccalaureate degrees at Manchester University require 128 hours for students who enrolled prior to the Fall Semester of 2015; therefore, these students may receive financial aid for up to 192 attempted credit hours. Students who enrolled in the Fall Semester of 2015 and subsequently are required to complete 120 hours; therefore, these students may receive financial aid for up to 180 attempted credit hours.”

\*Transfer credits officially accepted by the University are included in the completed/attempted calculation and the maximum time period for degree completion.

Satisfactory Academic Progress is evaluated at the end of each spring semester using the official records of the Registrar. Students will be notified of their suspended financial aid

eligibility if they have not maintained academic progress and may contact Student Financial Services or the Registrar about possible solutions. Financial aid will be reinstated when satisfactory academic progress has been re-established.

The complete Satisfactory Academic Progress policy can be found on the Student Financial Services website.

**Length of Eligibility.** Financial aid packages are awarded one year at a time. All students must reapply for need-based financial aid each year. Manchester University funds are available for up to eight semesters of undergraduate study. Students from Indiana receiving state funds may receive up to eight semesters of funding for undergraduate study. A Federal Pell Grant is available for undergraduate enrollment in a first baccalaureate degree program, not to exceed federal program aggregate limits.

**Payment of Awards.** Most scholarships, grants and loans are applied as a direct payment toward charges for tuition and fees and/or college room and board. Per federal, state and institutional awarding guidelines, one-half of the value of the total award is applied respectively to the fall and spring semester. Awards that exceed the charges listed on the statement of account may be paid to the student through Student Financial Services after the beginning of each semester for educationally related expenses such as books, transportation and personal expenses.

**Adjustments to Aid.** A financial aid award may be reviewed and adjusted at any time during the academic year. All adjustments are contingent upon student eligibility, program regulations and availability of funds.

Adjustments to the total financial aid package may be required if the total amount of scholarship and grant aid awarded by the University and all other sources exceeds billable costs. Total aid for an individual student cannot exceed the total cost of attendance.

Funding from federal and state agencies may be withdrawn if the student does not comply with each agency's requirements for clearing discrepancies.

If a student's financial situation changes after the FAFSA has been completed, the student can request a reevaluation of his or her financial aid eligibility. Requests should be submitted through Student Financial Services. Students will be advised of any additional documentation required. Only one reevaluation of eligibility will be granted per academic year.

**Appeal Procedures.** Students who have lost financial aid eligibility due to extenuating circumstances may appeal in writing to Student Financial Services.

**Confidentiality.** In accordance with the Family Educational Rights and Privacy Act of 1974, as amended (FERPA), students must complete a release form to allow Student Financial Services staff to discuss financial matters with persons other than the student. All information and documentation submitted to Student Financial Services is held in the strictest of confidence, and students are encouraged to consider financial aid awards with the same degree of confidentiality.

\*Financial aid descriptions are current. Rules, regulations and financial information required are subject to change by state and federal law.

## **Types of Financial Aid**

### **Academic Scholarships** (\*first-time and transferring U.S. domestic students)

Academic scholarships are awarded to first-time or transfer students who meet eligibility criteria, regardless of financial need. Recipients must be accepted, enrolled full time, and maintain a minimum cumulative grade point average indicated on the scholarship offer letter for renewal. A student may receive only one Manchester University academic scholarship at a time. Manchester University funds are intended for use toward tuition. For those students who demonstrate financial need, other grants and scholarships may be combined with academic scholarships. Adjustments will be made to aid awarded by the University if the sum of all scholarships and grants from the University exceeds the student's billable tuition costs. (\*International students are eligible for hand-calculated International Scholarships.)

### **Honors Scholarships**

Two full-tuition Honors Scholarships are awarded. Recipients must apply for admission by Dec. 31 and receive a Presidential Scholarship for consideration.

### **Presidential Scholarships**

Presidential Scholarships are awarded automatically at the time of admission based on class rank, college prep curriculum and grade point average.

### **Dean's Scholarships**

Dean's Scholarship recipients are selected automatically at the time of admission based on class rank, college prep curriculum and grade point average.

### **Director's Awards**

The Director's Award is given to selected students at the time of admission based on class rank, college prep curriculum and grade point average.

### **Faculty Scholarships**

Faculty Scholarship recipients are selected automatically at the time of admission based on class rank, college prep curriculum and grade point average.

**Founder's Scholarships** Founder's Scholarship recipients are selected automatically at the time of admission based on class rank, college prep curriculum and grade point average.

### **Other Scholarships (first-time and transferring U.S. domestic students)**

#### **Music Scholarships**

A limited number of music scholarships are available and require ongoing participation in Manchester's musical opportunities. These awards are audition-based and determined by the Department of Music faculty.

#### **Church Matching Scholarships**

Manchester University matches local church scholarships up to a total of \$500 each year. Churches must submit participation forms by June 1 for the next academic year.

#### **Connections Awards**

In recognition of our commitments to the Church of the Brethren and our former students, an

award up to \$1,000 is provided to each full-time student who is a member of the Church of the Brethren or has a family member who attended Manchester University. Students who meet both criteria will receive a single award.

### **Endowed Scholarships**

Manchester University awards more than 150 scholarships and grants funded by gifts to our endowment. These awards vary in criteria and amounts and students cannot apply for these awards.

### **Out of State Grant**

Awards are available to domestic students with residency in a US state other than Indiana.

### **Grants (\*Requires FAFSA)**

#### **Manchester Grants\***

Any student who demonstrates financial need is considered for a Manchester Grant. Academic scholarship recipients who demonstrate additional need beyond the amount of the scholarship also will be considered for a Manchester Grant.

#### **Brethren Volunteer Service Grants**

Students who have completed Brethren Volunteer Service assignments without salary are eligible for a tuition grant for each year of service (maximum of two). To qualify, the student must enroll full time at Manchester University within five years of completing his or her BVS service. The student also must be working on a first baccalaureate degree. The award will range from \$375-\$750 per year over four years of enrollment.

#### **Federal Pell Grant\***

The Federal Pell Grant is awarded by the federal government. Awards are reserved for the neediest students. The U.S. Department of Education determines the award range for those demonstrating eligibility.

#### **Federal Supplemental Educational Opportunity Grant (FSEOG)\***

Students with exceptional financial need and Pell Grant eligibility may be awarded this federal grant in amounts ranging from \$100 to \$4,000 per year. Awards are limited based on federal allocations to the University.

#### **Frank O'Bannon Grant\***

The Indiana Commission for Higher Education, Division of Student Financial Aid awards eligible Indiana residents grants to attend Indiana institutions. A student must demonstrate financial need by filing the FAFSA to be received by April 15 for consideration. The Division of Student Financial Aid determines the amount of a student's award based on financial need, high school diploma type and cost of the education. For additional information on eligibility requirements, please visit <http://www.in.gov/che/4506.htm>

#### **21st Century Scholars Program\***

The Indiana Commission for Higher Education, Division of Student Financial Aid awards grants to 21st Century Scholar students who attend an Indiana institution. The state will award a student attending a private institution an amount comparable to that of a public institution. Income-eligible students enroll in this program as a 7th and 8th grader and are

required to fulfill a pledge of good citizenship. For additional information on eligibility requirements, please visit <http://www.in.gov/21stcenturyscholars/>.

### **Other State Grants**

Some other states permit their residents to utilize state grants at out-of-state colleges. Check the regulations in your home state.

### **Loans**

#### **Federal Direct Loans\***

The Federal Direct loan is a fixed rate loan. The subsidized loan program is available to those students with financial need. The U.S. Department of Education pays the interest on a Direct Subsidized Loan while the student is enrolled at least half time. The Direct Unsubsidized Loan program is available to students who do not demonstrate financial need. Under the unsubsidized program, the student is responsible for any interest that accumulates. Maximum annual loan limits are as follows: \$5,500 for first year students, \$6,500 for sophomores, and \$7,500 for juniors and seniors.

Students have a six month grace period after they leave school, graduate, or fall below half-time status before they go into repayment. All first-time borrowers are required to complete a master promissory note (MPN) and entrance counseling before their loan funds are disbursed to the student account.

#### **Federal Direct Parent PLUS Loan\***

The Federal Direct Parent PLUS Loan is available for credit-worthy parents to borrow on behalf of their undergraduate student. It carries a fixed rate determined by the U.S. Department of Education each July 1<sup>st</sup> with repayment beginning 60 days after the loan is fully disbursed. The parent may request a deferment and should contact the designated servicer for more information. A parent can borrow up to the cost of education minus any financial aid received.

For application information on the federal loan programs please visit <http://studentloans.gov>.

### **Student Employment**

#### **Federal Work-Study Employment\***

Students who have financial need may be awarded Federal Work-Study. Employment for such students indicates that their pay is partially subsidized by the federal government. The Office of Human Resources handles all on-campus student employment. Students can work a maximum of 20 hours per week during the academic year and 40 hours per week during breaks and in the summer. Employment is not guaranteed.

#### **On-Campus Employment**

Part-time campus employment is available to all MU students.

#### **Off-Campus Employment**

Off-campus jobs are available in the surrounding communities. Students may inquire about these opportunities by contacting employers directly or searching on Spartan Jobs. The Office of Career and Professional Development is available to help students with their job search and application needs.

**Other Aid**

Many financial aid funds (scholarships, awards, loans, grants) provided by sponsors such as business, industry, labor unions, service clubs, etc., may be used at Manchester University.

Other possible sources of aid that can be used at Manchester include funds secured through the Veterans Administration and the Vocational Rehabilitation Division of various states.

\*Requires submitting Free Application for Federal Student Aid (FAFSA).

## **Verification of Student Identity Policy**

Manchester University must operate in compliance with the provisions of the United States Federal Higher Education Opportunity Act (HEOA) of 2008, Public Law 110-315, that requires the verification of student identity in distance or correspondence education.

The purpose of this policy is to establish identity verification procedures for students enrolled in distance education courses. According to the provisions of the HEOA, all credit-bearing courses and programs offered through distance education methods must verify that the student who registers for a distance education course or program is the same student who participates in and completes the course or program and receives academic credit.

The HEOA has identified the following as acceptable methods of identity verification:

- An individual secure login and password,
- Proctored activities, and/or,
- Other technologies or practices that are effective in verifying student identification.

This policy applies to all credit-bearing distance education courses and programs offered by Manchester University.

This policy ensures that Manchester University operates in compliance with the provisions of the HEOA concerning verification of student identity in distance and correspondence education. All methods of verifying student identity in distance education must protect the privacy of student information. The student must be notified of any projected fees associated with student identity verification. Responsibilities for the consistent application of student identity verification procedures must be clearly stated and described.

### Verification Methods

Manchester University uses a secure login and password to ensure that the student who registers for a course is the same student who participates in the course.

During the admissions process, each accepted student receives a Manchester University network account to include username and email address.

The network account provides access to a number of systems including Manchester University's learning management system, Canvas, as well as other major applications (i.e. the student information system, Colleague).

Each student must establish a unique, self-generated password upon initial login to the Microsoft Office 365 email system. An optional and highly recommended Office 365 self-service portal allows students to manage their own password resets.

Students that require password reset assistance from the ITS Help Desk must provide three pre-determined identifiers (i.e. birthdate, last four digits of social security number). For in-person Help Desk visits, a valid form of identification (i.e. student ID or driver's license) is preferred.

Students must provide a valid set of network credentials to log into the learning management system to access their course(s).

All online course work that is graded or contributes to a student grade is submitted via a system that verifies the student's identity through a unique set of network credentials. Faculty may only use third-party apps via the University Learning Management System, so that assignments, submissions and grades are secure.

Manchester does not support nor assume responsibility for the security of platforms outside institutionally provided systems.

For courses delivered through interactive video, the student's identity is verified visually by the instructor. For faculty members with visual impairments, alternative arrangements using a proxy will be made.

### Student Privacy

The Family Educational Rights and Privacy Act (FERPA) of 1974 is designed to protect the confidentiality of educational records. The law applies to all schools that receive funds under an applicable program of the United States Department of Education.

Manchester University ensures that FERPA rights of their students through the following methods:

- Students gain access to their education records and courses through a secure login with their unique network credentials.
- Alternatively, students may visit the Registrar to gain access to their education records.

Students can manage their password resets through the Office 365 self-service password portal or by visiting the ITS Help Desk.

Manchester University has installed up-to-date network security that safeguards against unauthorized access that could threaten student privacy. This includes an intrusion prevention system, firewall, and anti-virus software.

In compliance with Indiana law, Manchester University does not collect any personal identifier information from any visitor to their website except for specific university services, such as admissions applications, campus virtual tour, event registration, or other online forms.

Strict identity verification methods are employed by the Manchester University ITS Help Desk as described earlier in this policy.

### Fees

Manchester University does not charge additional fees for student identity verification.

However, it is routine for students in an online course to employ a headset and web camera for audio-visual participation in the online course. Faculty members provide this specific information in their course materials and syllabi.

### Responsibilities

#### Office of Academic Affairs:

The Office for Academic Affairs is responsible for defining and publishing acceptable ethical and academic behavior in the Undergraduate Student Handbook including information on academic dishonesty, plagiarism, and the student code of conduct. These policies are located online at



<https://www.manchester.edu/docs/default-source/default-document-library/thesource.pdf>. A Pharmacy Student Handbook is also available upon request.

The Office of Academic Affairs is responsible for providing instruction and support to faculty members on Manchester University's online teaching protocols and practices.

#### Information Technology Services:

The Information Technology Services department is responsible for having an up-to-date Learning Management System, network security, robust password management protocols, and stringent ITS Help Desk procedures

#### Faculty:

Faculty members who teach online courses at Manchester University can work closely with an Instructional Designer. The instructional designer provides faculty members with best practices in online teaching and pedagogy and can review courses to ensure effective design.

Faculty members are responsible for applying pedagogical practices that are effective in student identity verification. Possible methods used include: video streaming interaction; reviewing student writing samples from assignments; routine interaction with the student (through email, phone, or video call); group assignments, etc.

Faculty members are responsible for including information on academic dishonesty in their course syllabus. Faculty members must also include any hardware or software requirements to participate in the course in the syllabus or course materials.

Faculty members are responsible for using institutionally provided systems for all assignments and grading.

Because technology and personal accountability may not verify identity absolutely or ensure academic integrity completely, faculty members are responsible for noticing changes in student behavior and coursework such as sudden shifts in academic performance, writing styles, or behaving differently in group assignments.

#### Students:

Students are responsible for knowledge of the information contained in the Student Handbook and course syllabi. Failure to read university/college/program/course requirements, guidelines, procedures, and policies will not exempt students from responsibility.

Students have the responsibility to maintain the security of their network credentials and personally identifiable information.

Students must abide by the Manchester University IT Policy Guide located at <https://chetnet.manchester.edu/dept/its/Public%20Documents/Policies/IT%20Policy%20Guide.docx>.

The guide states that students should not reveal network credentials (primarily passwords) to anyone including the ITS team. Students are therefore responsible for all activity associated with their network credentials. The guide also states that users will not violate the privacy of others, intentionally or unintentionally.

#### Definitions

Distance learning/online course: A method of education or a single course that relies on the Internet for the majority of or all communication, collaboration, participation, and assignment submission.

## **STUDENT LIFE COLLECTIVE**

Manchester University is committed to providing quality programs and services that enhance and diversify the personal, academic and social experience of students. The Student Life Collective focuses on building community, retaining students, and supporting student success and is dedicated to a student centered approach to daily operations. The Collective aligns thematically around three pillars—retention, engagement, and resilience.

Students are respected members of the University community with opportunities to participate in a wide range of activities directly affecting the operation of the institution. It is through this involvement that responsible leadership and citizenship are encouraged and nurtured.

### **Retention**

#### **Success Advising**

Student Success Advising is a unique branch of Manchester University that proactively works to assist students by maintaining a holistic view of student development. The mission of Success Advising is to support our students, while challenging them to explore their academic, personal, and professional goals.

Success Advisors will provide deliberate, structured interventions to first year students at critical outreach points to enhance student motivation and success, as well as build strong and lasting relationships with Success Advisors and other university resources.

Through the use of holistic and proactive advising strategies, Success Advisors may be able to anticipate student challenges, intervene early, and implement plans to keep these challenges from becoming insurmountable.

#### **Academic Support**

Academic Support offers an array of comprehensive, student-centered services designed to help students develop the skills and strategies essential for academic achievement at Manchester.

The Academic Support office helps students learn efficiently and effectively, develop college study strategies and develop the critical thinking skill necessary to succeed in college. Support services include one-on-one academic coaching, individualized goal setting advisement, tutorial support at course-specific study tables, workshops to build academic success, assistive technology, proctoring services for administration of exams and outreach contacts and appointments for students referred through Spartan Success-the university's early alert system.

#### **Tutoring**

Peer tutors, under the direction of the Tutoring Programs Coordinator, lead study tables for courses at Manchester. Study tables meet at various times throughout the week and at various locations across campus. Students may request tutoring for any course at any point in the semester.

#### **The Math Center**

The Math Center provides tutoring for all math courses offered at Manchester University. It is open Sunday – Thursday evenings from 7 – 10 pm in SCIC 124. Students can walk-in any time

during these hours to receive help in their math courses. The Math Center is under the direction of the Tutoring Programs Coordinator and is staffed with 2 – 3 students each evening.

### **The Writing Center**

The Writing Center is a place where students can work with writing consultants on any type of writing project, at any stage of the process. Writing consultants teach editing strategies and review rules of grammar and punctuation that writers may apply to their own writing. Consultants also help writers to think critically about their goals, to consider how an audience might respond to key points and to examine the impact of organizational and visual elements of writing. Writing Center staff members visit classes to offer writing direction and offer advice on generating a topic, citing sources, avoiding plagiarism and research strategies. Students may walk in to the Writing Center to meet with consultants at any time or make an appointment with a specific consultant.

### **Disability Services**

In compliance with Section 504 of the Rehabilitation Act and the ADDAA, Disability Services provides support services to students with documented disabilities to give them equal access to academic programs and participation in the total Manchester experience. If a student has a diagnosed physical, learning, sensory or psychological disability or medical impairment, they can access tools and resources to help them succeed academically and personally at Manchester.

The disability services coordinator within the Academic Support department oversees the process which includes reasonable accommodations, student consultations, and promotion of self-advocacy skills.

### **Residential Life**

The University believes that significant social, spiritual and intellectual growth occurs when students live in a residential setting. The interaction between people, the intellectual stimulus when discussing topics with others, the learning to be responsible for one's actions and the education of the total person are all vital parts of the residence hall experience.

Residence halls are operated and staffed by professional hall directors and are assisted by student staff (resident assistants) who are selected based on their judgment, maturity and ability to relate to others. Each hall has elected officers who comprise the hall government. Giving leadership to the hall staff is the director of residential life who is responsible for the management and administration of the program including policy implementation and environmental issues within the residence halls.

Residential Life has designated two residence halls to be first year living communities while reserving the remaining halls for upperclass housing. Residential Life has developed a community development model to target community building efforts at first year students to enhance their first year experience.

Residence hall rooms are designed for double occupancy. When space is available, a single room may be rented at additional cost during the spring semester. Rooms are furnished with beds, dressers, desks, chairs and a bookcase. Students furnish their own linens as well as other supplies that fit personal needs. Laundry facilities are available in each residence hall. All residence hall students are required to be on a food service meal plan. In addition, kitchenettes and microwave ovens are provided in each hall for special meal preparation and snacks.

Manchester has a limited number of on-campus apartments for upperclass students.

### **First Year Experience and Transitions**

The Department of First-Year Experience and Transitions (FYE&T) is committed to creating intentional programming that helps all students seamlessly transition to Manchester University. In doing so, each student will have the tools and knowledge necessary to be successful. Some of the hallmark programs of FYE&T include summer orientation days, welcome week, the First-Year Experience course, and the Student Orientation Leader (SOL) peer mentoring program. The director of FYE&T works closely with many other departments across campus to ensure that students connect with the wide array of resources provided by Manchester University. Through providing intentional programming and a comprehensive, excellent first-year experience, FYE&T partners with students to ensure their success as a Spartan.

### **Engagement**

#### **Student Involvement**

The University offers a wide variety of leadership and participation opportunities that encourage student decision making, activity planning, and accountability in all areas of student involvement, programming and recreation. Guidelines for clubs and organizations can be found in [\*The Source\*](#).

The Student Involvement Office, located in the Chinworth Center, houses the offices of the director of student involvement and leadership development, Student Senate, Student Budget Board and Manchester Activities Council. The Student Involvement Office is the clearinghouse for all student organizations and has several resources available to assist them in their development and growth.

Every full-time student pays an activities fee. These funds are allocated by the Student Budget Board in response to budget requests from registered student clubs and organizations. Students evaluate the overall program of campus activities which influences the student activities fee appropriations for the following year. This process provides the opportunity for all students to have input on out-of-class activities.

#### **Intramural Program**

An extensive intramural sports and recreation program provides opportunities for members of the University community to participate in a variety of individual, dual, and team sports and recreational activities, including co-recreational teams. The IM Staff have responsibility for planning and implementing the program.

#### **Intercollegiate Athletics**

Varsity sports are a key component to campus life at Manchester. Both the men and women compete as members of NCAA Division III and are part of the Heartland Collegiate Athletic Conference (HCAC). Member institutions of the HCAC are Anderson University, Bluffton University, Defiance College, Earlham College, Franklin College, Hanover College, Mount St. Joseph University, Rose Hulman Institute of Technology, Transylvania University and Manchester University. Intercollegiate sports for the men include baseball, basketball, cross country, football, soccer, swimming and diving, tennis, indoor and outdoor track and field and wrestling. Women compete in basketball, cross country, tennis, indoor and outdoor track and field, softball, soccer, swimming and diving, golf and volleyball.

## **Eligibility for Athletics**

To be eligible to compete in athletics at Manchester University a student must meet three standards. They must: (1) be in academic good standing, (2) make normal academic progress, (3) meet the 12 semester hour load requirement.

1. **Academic Good Standing.** Students are not regarded to be in academic good standing if they are placed on academic probation as defined in [Academic Probation and Disqualification](#).
2. **Normal Academic Progress.** To meet the normal academic progress standard, a student must have passed 12 semester hours in the first semester of attendance and thereafter 24 hours in the previous two consecutive semesters of attendance. (January and summer sessions may be used to reach this total.)
3. **Semester Hour Load Requirement.** A student must be enrolled in 12 semester hours to be eligible to practice or compete.

The normal academic progress standard may be met with transferrable credits from other institutions. Credits, not grades, earned at other accredited institutions transfer to Manchester University. Students are advised to check with the registrar in advance as to whether or not coursework will transfer.

Eligibility to compete in athletics is determined at the beginning of fall and spring semesters.

## **Religious Life**

Manchester University provides opportunities to explore, develop and nurture a living faith in an environment of respect for religious diversity. The University maintains a valued relationship with the Church of the Brethren, a Christian denomination recognized as an historic peace church. Church of the Brethren heritage believes in faith actively lived out in reconciliation, service, simple living, community and nonresistant love as taught and modeled by Jesus Christ. The Church of the Brethren also affirms that no one should be compelled to subscribe to a particular creed or doctrine.

Religious life on campus is facilitated by the Campus Interfaith Board, the university pastor and various religious life groups. Students may choose to participate in prayer and Bible study groups, weekly chapel, retreats, service projects, fellowship activities and a variety of student groups. Students also are encouraged to participate in local congregations and faith gatherings.

The university pastor provides leadership for weekly worship and counseling for personal and spiritual issues. Petersime Chapel is always open as a place of prayer, meditation, or quiet reflection. Its two meditation rooms house multi-faith resources and is a space cultivated for interfaith prayer, meditation, and education.

## **Multicultural Affairs**

The Office of Multicultural Affairs is designed to provide enriched social, cultural and educational experiences for diverse students and opportunities for all members of the campus community to learn about the heritage and culture of these traditionally under-represented groups. This mission is accomplished via sponsored programs designed to raise awareness, foster cross-cultural interaction and exchange, increase understanding and ultimately encourage a "global perspective" on education.

From new student receptions, fairs/festivals and organizations, the Office of Multicultural Affairs makes many exciting contributions to Manchester University and the community of North Manchester.

Located in the Manchester University Intercultural Center (701 E. College Ave.), OMA is home to the Asian Awareness Association (AAA), African Student Association (ASA), Black Student Union (BSU), Hispanos Unidos (HU), Manchester University International Association (MUIA), and United Sexualities and Genders (USG).

### **Career and Professional Development**

The mission of the Office of Career and Professional Development is to help individuals learn strategies to explore, evaluate & implement career goals that reflect their life values. Career planning begins during a student's first year and builds throughout their years at Manchester.

Students can utilize individual career coaching, career assessments, events, career classes and workshops. CPD also provides networking events, professional panels, and Spartan Jobs, an online database for jobs and experiential learning opportunities. Students should seek out CPD services to explore career options, define goals and pursue the education, experience and contacts to achieve post-graduation success.

### **Civic Engagement**

Manchester University has a long reputation for its many service projects and volunteer opportunities for students, faculty and staff. theAcorns encompasses service opportunities, the Campus Pantry, Shepherd Internship Program, and resources for students and community members in need.

theAcorns provides:

- Volunteer opportunities with worthwhile initiatives in the community
- Campus Pantry to help address food insecurity
- Clothing Closet to ensure accessibility to professional and safety wear
- Federal Work Study-Community Service job opportunities
- Grant opportunities for volunteer and service ventures
- Placement and monitoring of students for faculty who include service learning in their curricula
- Ideas and programs for service learning classes and projects

**Shepherd Higher Education Consortium on Poverty** As part Manchester's mission, Shepherd Higher Education Consortium on Poverty (SHECP) brings together students from member institutions with agencies that work to benefit our nation's impoverished. Through the Shepherd Alliance internship program, students learn first-hand about the multi-dimensional nature of poverty in the United States. In doing so, students work for eight weeks to strengthen impoverished areas through collaboration efforts with partner agencies and individuals who are working to improve their communities. Shepherd Alliance partner agencies are centered on the areas of education, healthcare, legal services, housing, hunger, social and economic needs, and community-building efforts.

### **Resilience**

#### **The Center for Health & Sports Medicine**

The Center for Health & Sports Medicine's mission is to enhance health, safety and wellness to provide students of Manchester University high quality medical care under a medical model. In collaboration with health services, counseling services, and athletic training, the medical staff strives to allow students to flourish academically by meeting their healthcare needs in a cost-efficient, confidential and timely manner. The center embraces the diversity of its patient

population and the community it serves with mutual respect and understanding and helps further the mission of Manchester University.

The center, located on the first floor of Calvin Ulrey Hall, is staffed by a registered nurse and a certified athletic trainer. Care is given for minor illnesses and injuries, and includes physical therapy, treatments and evaluations of orthopedic injuries for all students.

The center is intended to complement, not replace, a student's personal health care provider. There is no charge for students registered at Manchester University, however more serious problems may be referred to a local physician, family physician or specialist. The cost of health care beyond that provided by the center is the responsibility of the student or the student's family.

All full-time and part-time students are required to have a health history completed which includes personal history, a physical, and immunization records (required: meningitis, two measles, mumps, and rubella, tetanus-diphtheria within 10 years and tuberculin skin test within the last year). The health history form is available online prior to enrollment. It is also located on the Center for Health and Sports Medicine web site. The completed health history form must be on file with the University prior to the start of first semester classes.

### **Sports Medicine**

It is the responsibility of the sports medicine staff to provide the highest quality medical care for the student-athletes at Manchester University. The sports medicine staff consists of designated team physicians, certified athletic trainers, team nutritionist, and various other consultants or specialists provided by Parkview Sports Medicine. The medical staff will provide medical care in the following manner: pre-participation orthopedic screens, injury prevention, emergency care, and treatment for illnesses, injuries, and/or conditions affecting the physical or mental well-being of the student-athlete.

### **Medical Insurance**

Manchester University does not provide insurance coverage for domestic students. International students should refer to the Designated School Official for the institutional policy regarding student health insurance. The medical policy for international students is designed to ease the burden of expense for illness or injury. A brochure describing the plan is located on the Center for Health and Sports Medicine web site.

### **Personal Property Insurance**

The University does not carry insurance on the personal property of faculty members, students or employees, and is not responsible for any damage, loss of property by fire, theft or other contingency.

### **Counseling Services**

Manchester University offers a variety of free counseling services and programs for all enrolled students. This includes individual, couple and/or group counseling in such areas as interpersonal relationships, self-esteem, identity, adjustment, stress management, depression, anxiety, grief and loss and other concerns that are emotional, spiritual or social in nature. The staff in counseling services are licensed clinical social workers.



Counseling staff participate in our Spartan Success Team to offer strategies and input to assist students toward academic success at the University. The confidentiality of the counseling relationship is honored by the University counseling staff.

Registered students have 6-8 free sessions/semester. January term does not count toward the limit of sessions. Connections with community counseling can be made by referral from Manchester University's counseling staff; however, the cost of outside referral is the responsibility of the student or student's family.

### **University Safety**

Manchester University maintains its own University Safety Department that includes patrolling North Manchester campus buildings and grounds, supervision of parking areas, and assisting with maintaining of order in the campus community. A fully trained, uniformed officer is on duty and patrolling the campus 24 hours a day, 7 days a week. The officer may be contacted through their office in The Clark Computer Center or by phoning 260-982-5001. When reporting an emergency or incident, dial 260-982-5999, and an officer will take a report and follow up on your *information*.

### **Campus Policies**

Manchester University has policies and guidelines that define the actions of the University community and govern both the rights and the expectations of its members. The *Source*, the student handbook, provides a listing and rationale for all policies that apply to members of the University community.

More details are available here [www.manchester.edu/\\_img/thesource.pdf](http://www.manchester.edu/_img/thesource.pdf).

Students who seek admission should be aware of University regulations and be prepared to abide by these policies while enrolled at Manchester University.

The University reserves the right to dismiss or suspend any student at any time when, in the judgment of University authorities, such action is advisable. Upon registration at Manchester University, the student expressly concedes this right to the University. It is understood that attendance at Manchester University is a privilege, not a right, and that this privilege may be withdrawn in the case of any student who does not adhere to the objectives or policies of Manchester University.

### **University Residence Policy**

Manchester University supports the intrinsic benefits provided in a residential collegiate experience. All students attending Manchester University are required to live on campus for three years unless they are married, are classified as a senior or are living in their parents' primary place of residence within 40 miles of North Manchester.

### **Automobile Regulations**

The use of automobiles and other vehicles on the campus is governed by regulations published in *The Source*. All students, faculty and staff members' cars must be registered and bear the identification decal, obtained by applying online through ChetNet on a campus computer. The decals will be sent to campus mailboxes.

Owners will be held responsible for the proper use of their vehicles, even when driven by other persons.

## **Privacy and Student Records**

Manchester University collects, records and uses information about students to carry out its educational mission. The University recognizes its responsibility for protecting the privacy rights of students regarding their academic and personal records. Students are provided access to information contained in their own official education records, a procedure for correction or deletion of inaccuracies found in their records and a degree of control over the release of information from their records.

Certain items of personal information are considered directory information and may be published without students' permission. These include name, dates of attendance, degrees earned, local and home address, e-mail address, phone number, major, participation in officially recognized activities and sports, height and weight and honors received.

A student has the right to request in writing prior to the first day of classes of any semester that any item listed as directory information not be released without his/her consent.

Procedures for student access to records may be obtained from the Office of the Registrar.

## **Student Services**

### **Business Office**

The Business Office provides a variety of services to the University community, including check cashing, money orders and other financial services as deemed appropriate. The office hours are 8 a.m. to 5 p.m. weekdays.

### **Campus Employment**

Part-time student employment is available on campus for all MU students. For information regarding on-campus employment opportunities, contact the Office of Human Resources, or visit student openings.

Information about off-campus employment is available at the Office of Career and Professional Development.

### **Campus Store**

New, used textbooks, access codes and some e-books are available as well as a variety of school supplies, clothing, greeting cards and other miscellaneous items. The Campus Store is located in the lower level of the Jo Young Switzer Center. Hours of operation are Monday thru Friday 9 a.m. to 5 p.m. and Saturday 10 a.m. to 1 p.m. or 10 am to 3 pm. We also have an on-line store, too at <https://campusstore.manchester.edu/?q>

### **Dining and Catering Services**

Manchester offers a variety of dining options for meal-plan participants and campus guests throughout the academic year. Meal plans are available to students based on their academic classification. Depending on the dining location, students can use their meal plan, meal exchange, flex money or Spartan Cash. Meal plans are available to students who live on and off campus, as well as faculty and staff. The Manchester University ID card is **required** for meal plan use.

Dining destinations and options are listed below.

- **The Haist Commons**, located in the Jo Young Switzer Center, is an all you-care to eat experience with multiple stations including Simple Servings, salad bar, bakery, grill, homestyle and adventure. The Haist Commons will spotlight culinary trends and special events including late-night breakfast, holiday meals, and other exciting events to give your taste buds a ride of a lifetime! Students are permitted unlimited seconds when using their meal plan and dine in the seating area of Haist Commons. Students need to swipe their student ID with every trip to the servery. Haist Commons is open for breakfast, lunch, and dinner. Students have the choice of taking their meal to go as well. For \$4.99 students can purchase a to-go box as part of our Choose to Reuse program. See cashier for details.
- **The Oaks**, located in the Jo Young Switzer Center, is a grab and go sandwich station offering a build your own breakfast or lunch sandwich or wrap. The Oaks also serves salads, coffee, fountain and bottled beverages. Students may use a meal exchange when The Oaks is open on select menu items.
- **The Sisters Café**, located in the Academic Center, is a destination that proudly serves Starbucks drinks along with a selection of bakery items and made-to-order sandwiches and salads. Some meals are available as meal exchange while others require the use of Flex, Spartan Cash, cash or card.
- **Wilbur's featuring Cru5h**, located on the first floor of the Funderburg Library, students may use their meal plan during certain hours for exchanges. Of course, students are always welcome to use their Flex, Spartan Cash, cash or card to purchase food from this dining location. Wilbur's features hamburgers, spicy wings and tex mex. Wilbur's offers fantastic food blasted with BOLD, unruly flavor – creating a memorable and cravable experience that will keep you coming back for more.
- **Twelve**, located on the first floor of the Funderburg Library, is a 24/7 convenience location for students. During certain hours, students may use their meal exchange for certain items. During other hours, students may use Flex, Spartan Cash, cash or card to make purchases.

The Manchester Dining office is located in the lower level of the Jo Young Switzer Center and can be reached at 260-982-5289. More information can be found at [manchester.sodexomyway.com](http://manchester.sodexomyway.com).

### **Housing for Campus Guests**

A limited number of guest rooms are available at a modest per-night charge. Reservation of these facilities is made through Conference Services. Each room is furnished with bed and bath linens, a small kitchenette, a private bath and cable TV.

### **Identification Cards**

Students who enroll in one or more semester hours of credit will be issued a student identification card. The card provides access to library, meal and printing services as well as school functions. The card is also used as a swipe card for student employees VIA attendance, and personal package pick up at the Campus Store. The card is issued in the University Safety Office on a long term basis and has a replacement fee of \$25 per incident.

### **Student Postal Mail**

All incoming mail is sorted and distributed by the Campus Store. Students will have the same mailbox number the entire time they are enrolled at Manchester University. For student mail and packages, follow the example below:

Manchester University  
Student Name  
MU mailbox number #  
604 E. College Ave.  
North Manchester, IN 46962

### **Registrar**

The Office of the Registrar assists with the following processes: transcript requests, registration, enrollment verification and course changes. They also help with changes related to majors, minors, advisors, and names or addresses.

### **Student Financial Services**

Student Financial Services assists students in the handling of their financial affairs with Manchester University. SFS collects all tuition payments and ensures that all charges for tuition, room, board, fees and other related charges are appropriately applied to student accounts. We also credit student accounts for financial aid, student loans, scholarships, and payments.

## PEOPLE OF MANCHESTER UNIVERSITY

### Board of Trustees 2019

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J. Bentley Peters, Glenwood, Minn.

### **President Emeriti**

**Jo Young Switzer**, president emerita of the University, professor emerita of communication studies  
B.A., Manchester College, 1969; M.A., University of Kansas, 1977; Ph.D., 1980.

### **Faculty Emeriti**

**Stephen A. Batzka**, professor emeritus of art  
B.S., Manchester College, 1962; M.Ed., Miami University, 1966; M.S., University of Tennessee, 1979.

**Dwight B. Beery**, professor emeritus of physics  
B.A., Manchester College, 1959; M.S., Indiana University, 1962; Ph.D., Michigan State University, 1969.

**John W. Beery**, associate professor emeritus of music  
B.M.E., Central Michigan University, 1961; M.A., Central Michigan University, 1962.

**Stanley K. Beery**, professor emeritus of mathematics, Isaac and Etta H. Oppenheim professor of mathematical sciences  
A.B., Manchester College, 1965; M.S., Miami University, 1968; Ph.D., Florida State University, 1975.

**Charles E. Boebel**, professor emeritus of English  
B.A., Luther College, 1960; M.A., University of Iowa, 1962; Ph.D., University of Arizona, 1971.

**Barbara J. Ehrhardt**, instructor emerita of biology, director emerita of Koinonia Environmental and Retreat Center  
B.S., Manchester College, 1989, M.A., 1994.

**Stanley B. Escott**, vice president and dean emeritus of student development, professor emeritus of psychology  
B.S., Ball State University, 1959; M.A., Ball State University, 1962; Ph.D., Purdue University, 1967.

**L. Dwight Farringer**, professor emeritus of physics  
B.A., Manchester College, 1949; B.D., Bethany Theological Seminary, 1952; M.A., The Ohio State University, 1955; Ph.D., 1958.

**Robin J. Gratz**, librarian emeritus  
B.A., Manchester College, 1970; M.A., Duke University, 1971; M.A., University of Chicago, 1974.

**Lana L. Groombridge**, professor emerita of exercise and sport sciences  
B.S., Manchester College, 1966; M.S., Indiana University, 1972; Ed.D. Ball State University, 1998.

**Lila D. Hammer** (1980-1987, 1996), registrar emerita  
B.S., Manchester College, 1979; M.A., Purdue University, 1993.

**Richard B. Harshbarger**, professor emeritus of economics; Howard and Myra Brembeck  
professor of economics  
B.S., Manchester College, 1956; M.A., Indiana University, 1958; Ph.D., 1964.

**David J. Hicks** (1986), associate professor emeritus of biology  
BA, Colgate University, 1974; MS, Cornell University, 1978; Ph.D., 1982.

**Robert G. Jones**, associate professor emeritus of music/woodwinds, director emeritus of  
orchestra  
B.S., Northern Arizona University, 1961; M.M., Wichita State University, 1963.

**Dorothy B. Keller**, professor emerita of sociology and social work  
B.A., Oberlin College, 1955; M.A., University of Michigan, 1968; M.S.W., The Ohio State  
University, 1977; M.A., 1977, Ph.D., 1985.

**Robert S. Keller**, professor emeritus of sociology and social work  
B.A., Manchester College, 1952; M.A., Haverford College, 1953; M. Soc. Serv., Bryn Mawr,  
1960; Ph.D., University of Michigan, 1971.

**Charles D. Klingler**, professor emeritus of English  
B.A., Manchester College, 1948; M.A.T., Indiana University, 1952; Ph.D., 1970.

**David P. Kreps**, professor emeritus of biology  
B.S., Manchester College, 1964; M.Sc., The Ohio State University, 1968; Ph.D., University of  
Health Sciences/Chicago Medical School, 1976.

**Jill S. Lichtsinn** (1986); librarian emeritus  
BS, Manchester College, 1979; MLS, Indiana University, 1991; MS, 2004.

**Wilson B. Lutz**, professor emeritus of chemistry  
B.A., Manchester College, 1950; Ph.D., The Ohio State University, 1955.

**Lynne F. Margolies** (1999), associate professor emerita of Spanish  
B.G.S., University of Kansas, 1982; M.A., 1984; Ph.D., 1992.

**Edward G. Miller**, professor emeritus of chemistry  
B.A., Manchester College, 1956; Ph.D., Cornell University, 1961.

**Franklin T. Olive** (1999), associate professor emeritus of accounting and business  
B.S., Frostburg State University, 1968; M.Ed., Bowie State College, 1973; B.S., University of  
Maryland, 1976; M.B.A., 1980; CPA, 1979.

**Philip Orpurt**, professor emeritus of biology  
B.A., Manchester College, 1948; M.S., University of Wisconsin, 1950; Ph.D., 1954.

**Robert B. Pettit** (1981), professor emeritus of sociology  
B.A., Baylor University, 1967; M.T.S., Harvard Divinity School, 1969; M. Phil., Columbia University, 1975; Ph.D., 1986.

**John H. Planer** (1969), professor emeritus of music  
B.A., Knox College, 1965; M.A., University of Michigan, 1966; Ph.D., 1970.

**Richard W. Robison**, professor emeritus of education  
B.A., LaVerne College, 1961; M.A.T., Michigan State University, 1968; Ph.D., 1974.

**Ingrid N. Rogers**, professor emerita of modern languages  
Staatsexamen, Philipps University, 1974; Ph.D., Philipps University, 1976; D.Min., Bethany Theological Seminary, 1988.

**Jo Ann Schall**, associate professor emerita of education, director emerita of teacher education  
B.S., Manchester College, 1959; M.A., Michigan State University, 1962.

**Charles M. Stanton**, associate professor emeritus of mathematics and computer science  
B.A., Wesleyan University, 1964; Ph.D., Stanford University, 1969.

**James T. Streator**, professor emeritus of chemistry  
B.S., University of Wisconsin, 1960; M.S., Purdue University, 1965; Ph.D., 1974.

**Scott K. Strode**, professor emeritus of communication studies, director emeritus of theatre  
B.A., University of Puget Sound, 1959; M.A., University of Washington, 1966; Ph.D., Indiana University, 1974.

**Jerry E. Sweeten** (2004), professor of biology  
BS, Manchester College, 1975; MA, Ball State University 1982; Ph.D., Purdue University, 1996.

**Janina P. Traxler** (1979), professor of French  
BA, Manchester College, 1973; MA, Indiana University, 1977; Ph.D., 1986.

**Jean Ann Tribolet**, registrar emerita, associate professor emerita of education and psychology  
B.S., Manchester College, 1956; M.A., University of Colorado, 1959; Ph.D., Purdue University, 1970.

**David A. Waas**, professor emeritus of history  
B.A., Manchester College, 1947; M.A., University of Illinois, 1949; Ph.D., 1958.

**Albert A. Williams**, professor emeritus of biology  
B.S., Park College, 1967; M.S. Southern Illinois University at Carbondale, 1969; Ph.D., 1976.

**Bradley L. Yoder**, professor emeritus of sociology, social work and criminal justice  
B.A., Goshen College, 1963; M.A., Indiana University-Purdue University, 1965; Ph.D., The Ohio State University, 1979.



## **Cabinet, 2019-2020**

### President

**David F. McFadden** (1993), assistant professor of political science  
B.A., Manchester College, 1982; M.S., Claremont Graduate School, 1987; Ph.D., 1995.

### Vice President for Academic Affairs

**Raylene M. Rospond** (2014); professor of pharmacy practice  
B.S., Creighton University, 1984; PharmD, University of Tennessee, 1987.

### Vice President for Student Life

**Abby Van Vlerah** (2019)  
B.A., Saint Mary's College, 2004; M.A., University of Wyoming, 2006; Ph.D., Bowling Green State University, 2013.

### Vice President for Finance and Chief Business Officer

**Clair W. Knapp** (2016)  
B.S., St. Francis College, 1990; M.B.A., Indiana Wesleyan University, 2014.

### Vice President for Human Resources and Strategic Initiatives

**Whitney Jane C. Bandemer** (2011), associate professor of pharmaceutical sciences  
B.A., University of Virginia, 1999; J.D., University of Tennessee, 2003.

### Vice President for Health Science Initiatives

**Lea A. Johnson** (2018)  
B.S., Lewis University, 1972; M.S., Western Illinois University, 1973; M.S., Boston University, 1975; M.S.N., MGH Institute of Health Professions, 1997; Ed.D., University of Pennsylvania, 2007.

### Vice President for Advancement

**Melanie B. Harmon** (2011)  
B.A., Indiana University, 1991; M.A., 2010.

### Assistant Vice President for Enrollment and Marketing

**Adam R. Hohman** (2004)  
B.S., Manchester College, 2001.

### Assistant Vice President for Institutional Effectiveness

**Elizabeth J. Bushnell** (2004)  
B.A., McDaniel College, 1998; M.A., Bowie State University, 2002; Ph.D., Indiana State University, 2018.

### Executive Assistant to the President

**Julie J. Knuth** (2011)  
B.S., Manchester College, 2001

## Faculty 2019-2020

**Mark J. Angelos** (1992), professor of history, BA, University of Wisconsin-Milwaukee, 1981; MA, 1983; Ph.D., University of Illinois at Urbana-Champaign, 1992.

**Jeffrey A. Beer** (2006), program director of undergraduate athletic training, associate professor of exercise science and athletic training, chair of the department of exercise science and athletic training  
BS, Ball State University, 2000; MA, Kent State University, 2002.

**Suzanne Beyeler** (2016), assistant professor of biology and environmental studies, director of the environmental studies program  
BA, Goshen College, 1995; MA, Miami University 2000; Ph.D., University of Illinois at Urbana-Champaign, 2009.

**Timothy M. Brauch** (2009), associate professor of mathematics, chair of the department of mathematics and computer science  
BS, Centre College, 2002; MA, Wake Forest University, 2004; MA, University of Louisville, 2007; Ph.D., 2009.

**James P. Brumbaugh-Smith** (1992-95, 1997), associate professor of mathematics  
BS, Manchester College, 1984; MS, Clemson University, 1985; Ph.D., 2000.

**Mark A. Bryant** (1999), associate professor of chemistry  
BS, Indiana University, 1985; Ph.D., University of Arizona, 1991.

**Barb Burdge** (2003), professor of social work, director of social work program, chair of the department of sociology, social work, and criminal justice  
BA, Indiana University, Bloomington, 1994; MSW, Indiana University, Indianapolis, 1998; Ph.D., Indiana University, 2013.

**Michelle Calka** (2011), associate professor of communication studies  
BA, Juniata College, 2004; MA, Ball State University, 2006; Ph.D., Ohio University, 2012.

**Judd A. Case** (2007), professor of communication studies, chair of the department of communication studies  
BA, Brigham Young University, 2000; MA, 2002; Ph.D., University of Iowa, 2010.

**Gregory W. Clark** (1992), professor of physics, chair of the department of physics  
BA, Indiana University, South Bend, 1985; MS, Indiana University, Bloomington, 1987; Ph.D., 1992.

**Aron K. Costello-Harris** (2010), associate professor of biology, chair of the department of biology  
BS, Indiana University of Pennsylvania, 2002; MS, 2005; Ph.D., Miami University, 2010.

**Marcie L. Coulter-Kern** (2000), professor of psychology, chair of the department of psychology  
BS, Evangel College, 1982; MA, University of Nebraska, 1986; MA, University of Notre Dame, 1998; Ph.D., 2000.

**Russell G. Coulter-Kern** (2000), professor of psychology  
BA, Evangel College, 1982; MA, University of Nebraska, 1986; Ph.D., University of Notre Dame, 1993.

**Kathryn S. Eisenbise Crell** (2009), associate professor of religion  
BA, Earlham College, 2001; M.A.Th., Bethany Theological Seminary, 2004; Ph.D., Graduate Theological Union, 2009.

**Alicia L. Dailey** (2017), assistant professor of social work  
BA, DePauw University, 1979; MA, International School of Theology, 1985; MDV, The Southern Baptist Theological Seminary, 1995; MS, University of Louisville, 2008; Ph.D., University of Louisville, 2015.

**Lucas Dargo** (2018), assistant professor of exercise science and athletic training  
BAT, Ball State University, 2013; MS, Ohio University, 2014; DAT, Indiana State University, 2018.

**Kathryn L. Davis** (2010), associate professor of chemistry, chair of the department of chemistry  
BA, Hope College, 2005; BS, 2005; Ph.D., University of Pittsburgh, 2010.

**Scott DeVries** (2016), professor of Spanish, chair of the department of modern languages  
BA, Wheaton College, 1995; MA, Rutgers University, 2004; Ph.D., 2004.

**Jeffrey M. Diesburg** (2011), associate professor of art  
BA, Iowa State University, 2003; MFA, Savannah College of Art and Design, 2006

**Beth Driscoll** (2016), assistant professor of marketing and management  
BS, Ball State University, 1989; MBA, Indiana University at Kokomo, 1997.

**Kim A. Duchane** (1992), professor of exercise science and athletic training  
BS, Northern Michigan University, 1978; MA, Sam Houston State University, 1987; Ph.D., Texas Woman's University, 1996.

**Stacy L. Erickson-Pesetski** (2007), professor of English, associate dean of academic affairs  
AB, Ripon College, 2000; Ph.D., University of Iowa, 2007.

**Angela S. Fisher** (2019), instruction and access services librarian  
BA, Indiana University, 1995; JD, 1998; MLS, 2017.

**Erin R. Foreman** (2006), head athletic trainer, associate professor of exercise science and athletic training  
BS, Ball State University, 2004; MS, West Virginia University, 2006.

**J. Jared Friesen** (2016), assistant professor of sociology  
BA, Huntington University, 1998; MA, Ball State University, 2002.

**Uma Ganesan** (2015), assistant professor of history  
Ph.D., University of Cincinnati, 2011.

**Beate C. Gilliar** (1993), professor of English  
BA, University of Arizona, 1984; MA, 1986; MA, 1988; Ph.D., 1993.

**Cassandra R. Gohn** (2017), assistant professor of biology  
BS, Saint Mary's College, 2012; Ph.D., IU School of Medicine, 2017.

**Katharine L. Gray Brown** (2007), professor of philosophy and peace studies, director of the peace studies program  
BA, Manchester College, 1991; MA, University of Notre Dame, 1992; MA, University of Minnesota, 1994; Ph.D., 2000.

**Darla V. Haines** (1998), co-director of the library; technical services and systems librarian  
BA, Grove City College, 1989; MA, Kent State University, 1993; MLS, 1997.

**Pamela Haynes** (2016), assistant professor of music  
BM, DePauw University, 1994; MM, Ohio University, 1996; DMA, University of Kansas, 2000.

**Ryan A. Hedstrom** (2008), associate professor of sport management  
BS, Manchester College, 2000; M.Ed., Boston University, 2001; Ph.D., Michigan State University, 2006.

**Wendy E. Hoffman** (2014), associate professor of marketing and management  
BS, St. Joseph's University, 1979; MBA, Drexel University, 1984; Ed.D., University of Georgia, 2011

**Carl P. (Scott) Humphries** (2008), assistant professor of music  
BM, James Madison University, 1989; MA, Virginia Tech, 1996.

**Katharine N. Ings** (1999), professor of English, chair of the department of English, director of the gender studies program  
BA, University of Ottawa, 1989; MA, Indiana University, 1992; Ph.D., 2000.

**Rebecca E. Johnson** (2012), co-director of the library; virtual instruction and emerging technologies librarian  
BS, Anderson University, 2008; MLS, Indiana University, 2010.

**Sun J. Kang** (2015), assistant professor of sport management  
BA, University of California, Davis; MS, Barry University; MBA, Barry University; Ph.D., University of Louisville, 2015.

**Kelsey-Jo Kessie** (2018), assistant professor of psychology  
BA, Hope College, 2011; MA, University of Delaware, 2014; Ph.D., Bowling Green State University, 2017.

**Susan J. Klein** (1998), professor of chemistry  
BA, Franklin and Marshall College, 1989; Ph.D., University of Wisconsin-Madison, 1994.

**Cheryl L. Krueckeberg** (2004), associate professor of social work, director of the gerontology program  
BA, Purdue University, 1976; M.Div., McCormick Theological Seminary, Chicago, 1980; MSW, Loyola University of Chicago, 1992.

**Kurt L. Kurtzhals** (2015), assistant professor of education  
BA, Purdue University, 1996; MA, Boston University, 2003.

**Mary P. Lahman** (1996), professor of communication studies  
BA, Manchester College, 1983; MA, Miami University, 1984; Ph.D., Indiana University, 1994.

**Justin M. Lasser** (2011), associate professor of religion  
BA, Gordon College, 2004; MA, Union Theological Seminary, 2006; M.Phil., 2008; Ph.D., 2011.

**Young S. Lee** (1998), professor of mathematics and computer science  
Ph.D., University of Idaho, 1989; MS, University of Wisconsin-Madison, 1998; Ph.D., 1998.

**Jennifer L. Lutz** (1999), professor of accounting  
BA, Illinois Wesleyan University, 1991; MAS., University of Illinois at Urbana-Champaign, 1996;  
CMA, 2001.

**Debra J. Lynn** (1998), professor of music  
BS, William Jewell College, 1990; MA, Truman State University, 1993; DA, Ball State University, 1999.

**Sreenath Majumder** (2009), Howard and Myra Brembeck associate professor of economics  
B.Sc., University of Calcutta, 1999; M.Sc., 2001, MA, University of Houston, 2006; Ph.D., 2009.

**Peter Martini** (2018), assistant professor of criminology and sociology  
BA, Michigan State University, 2006; BA, Saginaw Valley State University, 2009; MA, University of Nevada, 2011; Ph.D., University of Nevada, 2017.

**Seth Mayer** (2016), assistant professor of philosophy  
BA, University of Chicago, 2008; Ph.D., Northwestern University, 2015.

**David McGrady** (2016), assistant professor of accounting and finance  
BA, Franklin College, 1978; MBA, University of Texas at Arlington, 1979.

**Timothy P. McKenna-Buchanan** (2014), assistant professor of communication studies  
BS, Wayne State College, 2008; MS, Illinois State University, 2010; Ph.D., Ohio University, 2014.

**Joe R. Messer** (2008), Mark E. Johnston associate professor of entrepreneurial studies  
BS, Purdue University, 1982; MS, 1993.

**Robin R. Mitchell** (2013), assistant professor of computer science  
BS, Purdue University, 1989; MA, 2010.

**Gabriela Morales** (2017), assistant professor of communication studies  
BA, University of Texas at El Paso, 2009; MA, 2012; Ph.D., University of New Mexico, 2017.

**Steve S. Naragon** (1991), professor of philosophy, chair of the department of philosophy and religious studies  
BA, Manchester University, 1982; Ph.D., University of Notre Dame, 1987.

**Ejenobo R. Oke** (2006), associate professor of art, chair of the department of art  
BA, Manchester College, 1997; MFA., Norfolk State University/Old Dominion University, 2001.

**Benson C. Onyeji** (1991), professor of political science, chair of the department of history and political science

BA, University of District of Columbia, 1979; MA, American University, 1980; MA, University of Denver, 1982; Ph.D., 1990.

**Jeffrey P. Osborne** (2004), professor of chemistry, director of the biology-chemistry program

BA, Goshen College, 1992; Ph.D., University of Illinois, 1999.

**Mistie Potts** (2018), assistant professor of education

BS, Indiana University, 2000; MA Ball State University, 2003.

**Bradán D. Pyrah** (1995), associate professor of accounting

BS, Brigham Young University, 1982; M.Acc., 1986; JD, J. Reuben Clark Law School, 1986; CPA, 1985.

**Timothy M. Reed** (2008), associate professor of music, chair of the department of music

BS, LaGrange College, 1999; MM, Illinois State University, 2004; Ph.D., University of Florida, 2008.

**Andrew F. Rich** (1992), Isaac and Etta H. Oppenheim professor of mathematics

BA, Bethel College, Kan., 1977; MS, University of Chicago, 1978; Ph.D., 1989.

**Jennifer Robison** (2018), assistant professor of Biology

BA, Dickinson College, 2003; MS University of Delaware, 2006.

**Michael C. Rotter** (2019), visiting assistant professor of biology

BS, Northern Michigan University, 2008; MS, 2014; Ph.D. Northern Arizona University, 2019.

**Eva G. Sagan** (2011), instructor of mathematics

BA, Beloit College, 1993; MBA, University of Illinois, 1995; M.Math., University of Georgia, 1997.

**Terese A. Salupo-Bryant** (1999), associate professor of chemistry

BS, University of Dayton, 1986; Ph.D., The Ohio State University, 1993.

**Heather A. Schilling** (2003), professor of education, chair of the department of education, director of teacher education

BA, Manchester College, 1990; M.Ed., Indiana University, 1998; Ed.D., Ball State University, 2011.

**Kristen H. Short** (2011), associate professor of biology

BS, Miami University, 2004; MS, University of Cincinnati, 2010; Ph.D., 2010.

**Jennifer K. Simmers** (2008), associate professor of accounting

B., Manchester College, 1994; MBA, Indiana University, 1999.

**Elton Skendaj** (2017), Gladdys E. Muir associate professor of peace studies

BA, American University in Bulgaria, 2000; MA, University of Notre Dame, 2001; MA, Cornell University, 2008; Ph.D., 2011.

**Tara Smithson** (2018), assistant professor of French  
BA, University of North Carolina, 2001; MAT, University of North Carolina, 2003; MA, Louisiana State University, 2012; Ph.D., Louisiana State University, 2016.

**Stacy S. Stetzel** (2006), associate professor of education  
BS, University of Saint Francis, 1998; M.Ed., Indiana Wesleyan University, 2003; Ph.D., Indiana State University, 2015.

**Michael Staudenmaier** (2018), assistant professor of history  
BA, Carleton College, 1995; MA, University of Illinois, 2013; Ph.D., University of Illinois, 2016.

**Shane L. Thomson** (2014), visiting assistant professor of English  
BA, Brigham Young University, 1995; MA, California State University, 2001; Ph.D., Ball State University, 2013.

**Heather C. Twomey** (2000), associate professor of accounting  
BA, Manchester College, 1996; M.Acct., 1997.

**Christer G. Watson** (2004), professor of physics, BA, Grinnell College, 1998; Ph.D., University of Wisconsin, 2004.

**Jonathan P. Watson** (1998), associate professor of English  
BA, Vanderbilt University, 1985; MA, Lehigh University, 1990; Ph.D., Indiana University, 1998.

**Kyle D. Watson** (2019), assistant professor of Chemistry  
BA, Manchester College, 2011; Ph.D., University of Notre Dame, 2015.

**Jack W. Wiley** (2014), professor of psychology  
BS, DePauw University, 1974; Ph.D., University of Tennessee, 1978.

**C. Arturo Yañez** (2008), associate professor of Spanish  
BA, University of Los Andes, 1980; M.Ed., University of Toronto, 1985; Ph.D., University of Iowa, 1999.

## **Administrative Staff 2018-2019**

**Samantha A. Alley** (2018), director of student involvement and leadership development  
BS, Manchester College, 2011.

**Elena Bohlander** (2015), director of grants  
BA, Manchester University, 2014

**R. Michael Case** (2001), assistant vice president, chief technology officer  
BS, Milligan College, 1992; MBA, University of Saint Francis, 1997.

**Brandi C. Chauncey** (2009), director of admissions  
BS, Manchester College, 2001; MS, St. Ambrose University, 2006.

**Daniel R. Chudzynski** (1998), director of marketing

**Michael G. Dixon** (2011), director of intercultural services, chief diversity officer  
BS, North Carolina State University, 2004; M.Ed., Grand Valley State University, 2007.

**Richard B. Espeset** (1994), director of athletics, head baseball coach  
BA, Gustavus Adolphus College, 1992; MS, Western Illinois University, 1993.

**Allison Goetcheus** (2017), director of the Civic Engagement  
BS, Saint Joseph's College, 2007

**Derrick P. Golden** (2007), director of event technology  
Diploma, SAE Institute of Technology - Nashville

**W. Shannon Griffith** (2004), director of development  
BGS, Ball State University, 1991; MA, Ball State University, 1997.

**Audrey Hampshire** (2017), Registrar  
BS, Manchester College, 2007; MS, Trine University, 2015.

**Mark W. Huntington** (1984), dean for natural and health sciences, professor of exercise science and athletic training, program director for graduate athletic training education  
BS, Manchester College, 1976; MS, Boston University, 1979; PED, Indiana University, 1994.

**Leticia N. Kalita** (2008), director of career and professional development  
BS, Manchester University, 2008; M.S.Ed., University of Wisconsin-La Crosse, 2014.

**Janeen W. Kooi** (2006), director of The Manchester Fund and donor relations  
BS, Saint Joseph's College, 1982; MFA, Eastern Illinois University, 1984.

**Amanda Kreps** (2012), director of development  
BS, Manchester College, 1996; MSW, Western Michigan University, 2000.

**Melinda S. Lantz** (2008), director of strategic communications  
BS, Manchester College, 1981.



**Melanie Ebig Lawson** (2016), director of residential life  
BS, Eastern Michigan University, 1999; MA, 2003.

**Justin Lunsford** (2019), Instructional Design Specialist  
BS, Purdue University, 1997; M.Ed, Olivet Nazarene University, 2002, MS, Purdue University, 2015

**Randall D. Metzger** (2008), director of business application services  
BS, Ball State University, 1981; M.Ed., University of Phoenix, 2001.

**Pieter Y. Naragon** (2011), director of physical plant  
AA, American Intercontinental University, 2009; BIT, 2010.

**Timothy A. Ogden** (1990-96, 1997), dean of the college of business, professor of business  
BA, Manchester College, 1987; MBA, Claremont Graduate School, 1989; JD, Indiana University, 1996.

**Anna C. Richison** (2014), director of health services  
LPN, Ivy Tech, 1995; RN, University of St. Francis, 1997.

**Thelma S. Rohrer** (1996), dean of the college of arts and humanities, assistant professor of art, director of the office of study abroad and off-campus academic programs  
BA, Manchester College, 1984; MA, Michigan State University, 1989.

**Scott M. Secrist** (2018), director of First Year Experience and Transitions  
BS, Purdue University, 2008; M.Ed., Loyola University Chicago, 2013.

**Cindy L. Seitz** (2005), director of financial services - treasury management  
BS, Gannon University, 1980; CPA.

**Sherri L. Shockey** (1988-97, 2007), director of student financial services  
BA, Huntington College, 2000; MBA, University of Saint Francis, 2004.

**Travis W. Steele** (2011), director of IT operations  
BA, Indiana University, 2010.

**Laura A. Turner-Reed** (2017), director of academic support and writing center coordinator  
BA, Auburn University, 1997; MA, University of North Texas, 2002.

**Mathew W. Unger** (2006), director of performing arts technologies  
BS, Manchester College, 2006.

**Leonard A. Williams Jr.** (1982), dean of the college of education and social sciences, professor of political science  
BA, Southern Illinois University, 1974; MA, 1976; Ph.D., The Ohio State University, 1981.

**Alexis D. Young** (2005), senior director of auxiliary services  
BS, Ball State University, 2005.

**Johanna G. Young** (2007), director of advancement services  
BS, Ball State University, 1995.

**Mara L. Youngbauer** (2017), director of academic advising and student success  
BA, University of Wisconsin-Milwaukee, 2000; MA, Mount Mary College, 2009.

## Clinical Affiliations

Clinical Site	Preceptor
Bishop Dwenger High School	Tony Gambill
	Kelly Grayson
Canterbury High School	Shari Casaburo
Carroll High School	Steve Lubbehusen
	Jordan Redding
	Michaela Hoffman
Central Noble High School	Cody Conrad
Garrett High School	Trisch Schenkel
Homestead High School	Matt Campbell
	Kenra Messer
Huntington North High School	Sarah Allison
	Ryan Geraghty
Huntington University	Chris Burton
	Beth Herrell
	Quinn Wiley
Manchester University	Kevin Gullion
	Joshua Slayton
	R.J. Wilson
Manchester Jr./Sr. High School	Kevin Watson
Norwell High School	Gavin Thiele
	Emily Hopkins
Ortho Northeast (ONE)	Krista Bennett
Peyton's Northern	Missy Gumbert
Purdue Fort Wayne	Nick Antonelli
	Emily Giorgi
	Bradyle Kovert

	Maddie Pellekon
University of Saint Francis	Drew Hollman
	John Patton
	Julie Reinking
	Zachary Ruble

**Orthopedics Northeast**

**Fort Wayne, Indiana**

Jeffrey Hartzell, M.D.

Joe Mattox, M.D

**Manchester Family Chiropractic**

**North Manchester, IN**

Joel Harman

**Manchester Family Dentistry**

**North Manchester, Ind.**

Dan Meyers

**Midwest Eye Consultants**

**North Manchester, Ind.**

Nathan Trump, D.O.

## APPENDIX

### STATISTICAL INFORMATION FALL SEMESTER 2018

#### Enrollment By Classification and Load

##### FULL TIME

Classification	Men	Women	Total
High School	0	0	0
First Years (0-27.75 hrs.)	226	218	444
Sophomores (28-59.75 hrs.)	143	133	276
Juniors (60-91.75 hrs.)	135	92	227
Seniors (92 hrs. and up)	119	108	227
Special	0	1	1
Post-Grad degree	0	0	0
Post-Grad non-degree	0	0	0
Master of Athletic Training	3	1	4
MS Pharmacogenomics	0	0	0
Pharmacy	160	120	280
Total Full Time	786	673	1459

## **Demographic Information**

### **DEMOGRAPHIC INFORMATION**

**North Manchester campus**

**FALL SEMESTER 2018**

#### **Undergraduate Degree-seeking Students**

##### **State Distribution**

Arizona - 0  
California - 1  
Colorado - 1  
Florida - 18  
Georgia - 10  
Illinois - 17  
Indiana - 305  
Kentucky - 1  
Louisiana - 2  
Maryland - 2  
Michigan - 11  
Nevada - 1  
New Mexico – 1  
North Carolina - 3  
Ohio - 13  
Oregon - 1  
Pennsylvania - 2  
Texas – 7  
Utah - 1  
Wisconsin - 1

## **Religious Affiliation**

Anglican - 3  
Apostolic - 2  
Assembly of God - 6  
Baptist - 68  
Buddhist - 5  
Church of the Brethren - 35  
Church of Christ - 53  
Church of God - 21  
Congregational Christian - 4  
Disciples of Christ - 19  
Episcopal - 3  
Evangelical - 4  
Free Methodist - 7  
Friends - 1  
Grace Brethren - 2  
Hindu - 4  
Jehovah's Witness - 2  
Lutheran - 44  
Mennonite - 2  
Missionary – 4  
Mormon CJC Latter Day Saints - 3  
Muslim - 7  
Nazarene - 10  
Nondenominational - 90  
Orthodox - 21  
Pentecostal - 6  
Presbyterian - 15  
Reformed Church of America - 1  
Roman Catholic – 167  
Scientology – 4  
Sikh - 2  
United Brethren - 3  
United Church of Christ - 4  
United Methodist - 58  
Wesleyan - 2  
Other - 84  
No religious affiliation - 144  
Unknown - 269

## **Country Distribution**

Albania - 1

Antigua & Barbuda – 1

Argentina – 1

Ethiopia - 19

Ghana - 2

Haiti - 2

India - 1

Iraq - 3

Israel – 1

Japan - 1

Kenya - 1

Korea, South – 2

Liberia – 2

Mexico - 1

Nepal – 3

Nicaragua – 1

Nigeria – 2

Peru – 1

Russia – 1

Uganda - 2