

# Undergraduate Course Catalog

2022-2023



2020-2021



**Manchester**  
University

Our mission is central to all that we do at Manchester and shapes every part of your experience here. It begins with our commitment to respect one another and ends with a pledge to make the world a better place.

*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.*

We are here for you and will support you on your journey to a great career and prepare you to make a difference in your work, community and the world.

On your Manchester journey, you get to know people from many walks of life who become lifelong friends. You find people who teach you, encourage you, mentor you, and help you overcome the daily challenges of college life. You, in turn, share your knowledge and support with others along the way.

Manchester is a community grounded in mutual respect. You will grow as a person – stronger, more compassionate, more independent and more resilient. The world needs more people like that. The world needs you.

In this Undergraduate Course Catalog, you'll find:

- More about our mission and values
- What majors, minors, certificates and courses are available
- Graduation requirements
- A list of the faculty
- Information about the campus facilities
- Lots of “nuts and bolts” information about MU

If you have questions that are not answered in this catalog, please don't hesitate to ask. We encourage asking questions at Manchester because we want your journey to be smooth and successful.

Welcome to Manchester!

Dave McFadden  
President



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## 2022-2023 Undergraduate Academic Calendar

### **FALL SEMESTER - 2022**

August	17	New Faculty Orientation
	22-23	Faculty Workshop
	29	Classes begin
September	TBD	Camp Mack Day
October	14	End of first half of the semester
	17-18	Fall Break
	19	Beginning of second half of the semester
	22	Homecoming
November	23-25	Thanksgiving Break (dismiss 6 p.m. Nov. 22/resume 8 a.m. Nov. 28)
December	12	Reading Day (no classes, no exams)
	13-16	Final examinations

### **JANUARY SESSION - 2023**

January	3	Classes begin
	16	Martin Luther King Jr. Day (no classes)
	24	Session ends

### **SPRING SEMESTER - 2023**

January	30	Classes begin
February	15	Discussion Day
	17	End of first half of the semester
March	20-26	Spring Break (dismiss 6 p.m. March 17/resume 8 a.m. March 27)
	27	Beginning of second half of the semester
April	7	Good Friday Holiday (no classes)
May	15	Reading Day (no classes, no exams)
	16-19	Final examinations
	20	Commencement ceremonies

### **SUMMER SEMESTER - 2023**

May	30	Classes begin
July	4	Independence Day (no classes)

- 7      End of first half of the semester
- 10     Beginning of second half of the semester
- 18     Classes end

## 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 has been accredited by the Higher Learning Commission, 230 S. LaSalle, Ste. 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 graduate Athletic Training program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE) 6850 Austin Center Blvd., Suite 100, Austin, TX 78731-3101.

#### **Nursing Accreditation**

The baccalaureate degree in nursing has received initial accreditation from the Indiana State Board of Nursing, 402 W. Washington Street, Room W072, Indianapolis, Indiana 46204.

The baccalaureate degree program in nursing at Manchester University is pursuing initial accreditation by the Commission on Collegiate Nursing Education, 655 K Street NW, Suite 750, Washington, DC 20001, 202-887-6791. Applying for accreditation does not guarantee that accreditation will be granted.

### **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 Bachelor of Science in Nursing, the Master of Accountancy, 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. LARC 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)**

Select academic majors include a senior comprehensive evaluation (SCE) requirement. The comprehensive evaluation is a learning/assessment experience consistent with the learning goals of the major. Relevant departments 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 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.
4. Conferal of the second degree at a commencement other than the one in which the first degree is conferred.

### **Fields of Study/Program Areas**

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

### **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	

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

The Associate of Arts degree requires the satisfactory completion of:

1. A minimum of 54 semester hours of credit to include:

- a. LARC Program requirements for the Associates of Arts degree (see Academic Program: Liberal Arts Curriculum).
  - 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**

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.

### **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 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 students must 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 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.

**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 Away Programs**

Manchester University offers a variety of study away programs. Students of all majors may participate in off-campus study away programs, and courses are for academic credit.

Short-term programs include January Session travel 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 and domestic travel courses multiple years. 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 Away.

Semester and year programs are residency programs and are available through our partner programs, including Amizade Study Abroad, the Chicago Center for Urban Life and Culture, and Hokusei Gakuen University (HGU) in Sapporo, Japan.

Students planning to study abroad for a semester or year should meet with the Director of Study Away and begin planning early. The application process may take more than one year. Students must be familiar with major, minor and LARC graduation requirements. If the courses taken abroad do not meet these requirements, additional work may be necessary for graduation. Therefore, study away students must work closely with their academic major advisor and the director of study away 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.

## ACADEMIC PROGRAM: LIBERAL ARTS CURRICULUM

This innovative and interdisciplinary liberal arts curriculum (LARC) is a cohesive program that informs, inspires, and transforms Manchester students into persons of ability and conviction. By securing academic foundations, requiring interdisciplinary knowledge and skills, and delivering high-impact student experiences, the LARC program prepares students to live, work, and thrive in a complex world.

The curricular framework embodies both the mission and the values of Manchester University. Courses will embody the mission and values through specific course content, though not every course offered in a specific category is required to include the same values or engage the same portion of the mission statement.

The new liberal arts program is comprised of three main components, each made up of multiple categories. The total hours may vary from 38 to 45 credit hours depending on the courses used to fulfill the Quantitative Reasoning, Natural Science, Social Science and Creative Expression requirements.

<b><u>Liberal Arts Curriculum (LARC)</u></b>		
<b>Foundation</b>	<b>LARC Code</b>	<b>SH</b>
<b>First-Year Writing Seminar</b> FYWS 111 First Year Writing Seminar	LA-FWS	3
<b>First-Year Communication Seminar</b> COMM 110 Foundations of Human Communication	LA-FCS	3
<b>Quantitative Reasoning</b> MATH 115 Elem Probability & Statistics MATH 121 Calculus I MATH 125 Mathematical Modeling MATH 210 Statistical Analysis SOSW 324 Quantitative Research Methods	LA-FQR	3-4
<b>Cultural Understanding</b> ENG 216 Topics in Lit & Cultural Studies ENG 227 Twenty-First Century Literature ENG 242 African American Literature ENG 246 Comics, Graphic Novels, and Film ENG 261 Women in Literature HIST 237 Race & Ethnicity in US History HIST 254 Latin American History HIST 256 African American History HSPS 123 World History From 1500 IDIV 201 Introduction to Queer Studies MODL 111 Food Cultures MODL 112 Memory and Culture MUS 124 Popular Music & Culture PEAC 110 Introduction to Peace Studies PEAC 218 Mediating Conflict REL 244 The Religions of Abraham SOSW 228 Racial, Ethnic & Gender Inequality	LA-FCU	3
Sub-total Credit Hours		12-13

<b>Arts</b> ART 201 Art and Life ART 246 History of Modern & Contemporary Art ART 253 Women in the Arts ENG 115 Intro to Literature & Cultural Studies HUM 211 Explorations in the Arts	LA-EAR	3
<b>Humanities</b> REL 106 Becoming Who You Are REL 113 On Relating to Others: God & Strangers REL 121 Sacred Traditions PHIL 205 A Meaningful Life PHIL 206 The Human Person PHIL 221 Medical and Research Ethics	LA-EHU	3
<b>Natural Sciences</b> BIOL 104 The Science of Human Health CHEM 101 Chemical Science CHEM 136 Forensic Science ENVS 130 Introduction Environmental Studies NASC 210 Exploration of Natural Sciences Or two, beginning or intermediate (100- or 200-level) courses, each in a different discipline (e.g., BIOL, CHEM, ENVS, NASC, PHYS)	LA-ENS	3-6
<b>Social Sciences</b> PSYC 110 Introduction to Psychology SOSC 110 Civic Engagement	LA-ESS	3-4
Sub-total Credit Hours		12-16
<b>Transformation</b>	<b>LARC Code</b>	<b>SH</b>
<b>My Manchester Experience</b> EXP 101 My Manchester Experience	LA-TME	1
<b>My Personal Experience</b> EXP 102 My Personal Experience	LA-TPE	1
<b>My Academic Experience</b> EXP 201 My Academic Experience	LA-TAE	1
<b>My Professional Experience*</b> EXP 301 My Professional Experience	LA-TPR	1
<b>Global Perspectives*</b> ENG 238 World Literature ENG 250 Literary Passport HSPS 226 Imperialism & the Modern World HSPS 263 Making of India & Pakistan MODL 201 Communication and Culture MODL 202 Cultures and Controversies MODL 301 Oral Communication PEAC 320 Global Conflict Resolution PHIL 327 Indigenous Thinking REL 222 Religions of East Asia REL 223 Religions of India REL 247 Jesus in the Middle Eastern Perspective SOSW 313 Cultural Ecology	LA-TGP	3
<b>Big Issues - 2 courses*</b>	LA-TBI	6

INTD 324 Feminist Theory INTD 343 Philosophy of Mind INTD 350 Migrants and Refugees INTD 355 Critical Issues in Education INTD 3XX Trauma & Resilience INTD 425 Environmental Philosophy INTD 441 Globalization NURS 420 Community Engagement for Nurses		
<b>Creative Expression*</b> ART 131 Basic Design ART 210 Painting I ART 212 Torchworking Glass ART 213 Figure Drawing ART 221 Digital Photography ART 241 Ceramics ART 261 Graphic Design Concepts & Vectors ART 271 Three-Dimensional Construction ENG 201 Journalism I: Reporting ENG 317 Journalism II: Editing ENG 363 Topics in Creative Writing MUS 100 Beginning Piano MUS 101 Applied Piano (majors) MUS 102 Voice MUS 105 Organ MUS 107 Beginning Voice: Non-Majors MUS 126 Beat Making & Production MUS 128 Class Piano I: Non-Majors MUS 130 A Cappella Choir MUS 140B Symphony Orchestra Strings MUS 146 Symphonic Band MUS 200 Piano: Non-Majors MUS 201 Piano MUS 202 Voice MUS 205 Organ MUS 207 Voice: Non-Majors	LA-TCE	1-3
Sub-total Credit Hours		14-16
<b>Total Credit Hours</b>		<b>38-45</b>

The “\*” above indicates course categories not required for the Associate of Arts degree.

## **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 Liberal Arts Curriculum requirements are identified in the course descriptions by the following coding:

### Foundation:

First-Year Writing Seminar	LA-FWS
First-Year Communication Seminar	LA-FCS
Quantitative Reasoning	LA-FQR
Cultural Understanding	LA-FCU

### Exploration:

Art	LA-EAR
Humanities	LA-EHU
Natural Sciences	LA-ENS
Social Sciences	LA-ESS

### Transformation:

My Manchester Experience	LA-TME
My Personal Experience	LA-TPE
My Academic Experience	LA-TAE
My Professional Experience	LA-TPR
Global Perspectives	LA-TGP
Big Issues	LA-TBI
Creative Expression	LA-TCE

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.

## **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. 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.

### **Definition of a Semester Hour of Credit**

Manchester's guidelines for defining the approximate amount of work required for one semester hour of credit is as follows: For a course composed of classroom instruction, a semester hour of credit would normally involve 14 to 15 meeting times each semester with each lecture class meeting for 50 minutes. For one credit of a laboratory course the student should have three to four hours of laboratory instruction each week of the semester.

For each hour of classroom instruction the student is expected to do two hours of preparation. Therefore, a typical three semester hour credit course over a semester would include 43 to 44 hours of class meetings and 86 to 88 hours of student work out of the classroom.

### **First Year Writing Seminar (FYWS) Enrollment and Completion**

New first-year students matriculating in the fall semester must enroll in FYWS and Experience courses. Students are not permitted to switch sections once they arrive on campus. No transfer or dual credit courses will fulfill the LA-FWS requirement for new first-year students.

Transfer students or new first-year students matriculating in January Session or spring semester fulfill the FYWS requirement by completing another writing course at Manchester (with the approval of the Chair of English). A composition course taken at another institution will fulfill the FYWS requirement for transfer students.

Incoming Transfer students with 28 hours or more of college credit will be exempt from *My Manchester Experience* (LA-TME) and *My Personal Experience* (LA-TPE).

### **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 web form. 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**

- 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 will excuse students for university-sanctioned events and may excuse them for other 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. Only those sanctions published in the course syllabus are to be used by an instructor.

*For graduate and professional programs' class attendance policies, please see the handbooks for those programs.*

## **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 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 following 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.

## **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 Latin 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	
B	3.00	Good
B-	2.70	
C+	2.30	
C	2.00	Fair
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 the names of students who would benefit from additional support from academic advisors and the Success Center. Midterm grades are reported at Week 7. These grades are not a part of the student's official record and do not affect the cumulative GPA.

### **Transcript of Record**

Official Transcripts are available through the National Student Clearinghouse. Transcripts are released upon completion of the order form and receipt of consent. Electronic transcript requests are typically processed within a few hours. Processing for paper requests may take 5 business days and an additional 5-7 days for postal delivery. Official transcripts will not be released until all financial obligations to Manchester University have been met.

### **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 Liberal Arts Curriculum, 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 students 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 Undergraduate Curriculum 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 Integrity**

Academic integrity is the commitment of all members of the academic community to act with honesty and integrity in their work. This means students complete their own work, always give credit to the work of others, and refrain from doing work for other students.

## **Academic Dishonesty Policy**

It is the goal of the Office of Academic Affairs (OAA) to provide a policy that is understandable to both students and faculty members; OAA approaches violations of academic integrity as a learning opportunity, emphasizing the importance of accountability and growth for the student.

The Academic Dishonesty Policy applies in cases of plagiarism, cheating, and/or falsification/fabrication as defined below.

### **Plagiarism**

Plagiarism is the presentation of information (either written or oral) as one's own when it is borrowed or copied from another person or source.

Plagiarism includes the following:

- The author of the work is properly identified, but the student does not use quotation marks correctly; or, the material has been only slightly modified or rephrased rather than restated in the student's own words.
- Key ideas, words, or items of information that are not common knowledge are copied from another writer/speaker and are presented without proper identification of the source(s).
- The student uses the ideas of several other people/authors and presents those ideas as their own.
- The student uses an entire paper or speech written or delivered by someone else and presents it as their own.
- The student translates texts written in another language into English and presents them as their own.

### **Cheating**

Cheating consists of any use of notes, texts or other sources that gives a student an unfair advantage in completing a class assignment or an exam.

Cheating can include:

- Using notes on a quiz or an exam when this is not allowed
- Helping another student complete an assignment or exam when they are supposed to complete the work on their own
- Giving another student the answers on homework, quizzes or exams
- Submitting the same work (essay, speech, art piece, etc.) to fulfill assignments in more than one class. If a student wants to submit the same work for assignments in two different classes they must have 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).

### **Falsification/Fabrication**

Falsification or fabrication includes altering information or making up information and presenting it as fact in any academic assignment

It is important to note that plagiarism can be either intentional or unintentional; both kinds are violations of the academic integrity policy. For example, letting a friend look at a paper and not realizing that they copied it word-for-word is not an excuse, nor is not knowing how to cite something correctly.

Cultural differences are also important to recognize; in some cultures or countries it may be fine to take ideas or even entire passages of text from other authors without mentioning where the information was obtained. This differs greatly from the US (and several other countries) in which all words taken from another author as well as every idea taken from another author – even if the words are changed – must be accompanied by a formal citation or acknowledgment of the original author.

It is your responsibility as a student to ask your professors what exactly they mean by proper citation and/or to check with the Writing Center about what might be constituted plagiarism.

### *Academic Dishonesty Procedures*

In a case of academic dishonesty, the instructor completes an Academic Dishonesty Tracking form and submits documentation of the academic dishonesty to the Associate Dean of Academic Affairs. Before submitting the paperwork, the instructor contacts the student(s) documenting their concerns; they gather information from the students and share their plan of action with the students. The instructor then indicates on the paperwork if they desire a formal meeting with the student(s) and the Associate Dean of Academic Affairs or not.

Only the Associate Dean of Academic Affairs (not the professor) knows if this is the accused student's first offense. In cases of a student's first offense, when the case will not involve a formal meeting between the student(s), instructor, and Associate Dean, the associate dean will send a letter outlining the seriousness of academic dishonesty, the specific consequences/penalties assigned by the faculty member, and the consequences if a second offense occurs.

A formal meeting between the student, instructor, and Associate Dean of Academic Affairs occurs for all second (and subsequent) offenses and for any first offenses if requested by the instructor or the student(s).

At the meeting, the allegation and associated grade penalty are discussed, and the student can choose between the following:

- a. Admitting to the allegation and accepting the penalty
- b. Admitting to the allegation but disputing the penalty
- c. Denying the allegation

If the student chooses option (a), the materials are saved in a confidential file by the Associate Dean of Academic Affairs, and the matter is considered closed.

If the student chooses either option (b) or (c), they are referred to the Academic Integrity Panel (AIP), which will then meet with the student and determine whether a violation occurred and/or the associated penalty.

The AIP may also be convened at the discretion of the Associate Dean of Academic Affairs in the event of a particularly egregious offense or when additional sanctions may need to be discussed for a student with multiple offenses.

The AIP will consist of the associate dean and two faculty selected from six members appointed by FEC. 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.

In instances when the case involves confidential information of a medical nature, Title IX concerns, or issues related to disability accommodations, the AIP will not convene; instead, the case will be heard by the associate dean and appropriate representatives from Student Life.

Following the meeting 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 (e.g., suspension or expulsion).

### *Penalties*

The instructor has the discretion to impose specific penalties, including 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. Penalties for academic dishonesty should be clearly stated in the syllabus for each course.

### *Due Process and Appeals*

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

1. To be informed of the nature of the violation by the faculty member within two weeks of discovery of the incident of dishonesty or cheating.
2. To be accompanied to any meeting by a faculty or administrative staff member from the University campus community under special circumstances.
3. To request an appeal based only on due process or new, exculpatory evidence. Appeals must be submitted to the Office of Academic Affairs within 7 days of receipt of the letter from the associate dean documenting the allegation and/or sanctions. Appeals may be made only with the Vice President for Academic

Affairs (VPAA). The VPAA's decision is final and no further appeal procedure shall exist in the University.

### **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 of the involved instructor. Final course grade grievance must be brought before the department chair no later than March 1 for fall semester and January session grades, and October 1 for spring semester and summer session grades.
  - a. The chair will request a detailed written summary from each party.
  - b. The chair will inform their college dean and the associate dean of academic of affairs of the grievance.
  - c. The chair will meet with both parties together, listen to their concerns and attempt to resolve the grievance.
  - d. If an agreement is reached, the chair will inform the college dean and the associate dean of academic affairs of the result in writing. The written summaries will be forwarded to the Office of Academic Affairs (see a. above).

Exception: If the involved instructor is the department chair, the dean of the college will hear the concerns and attempt to resolve the grievance. If the involved instructor is the college dean, the associate dean of academic affairs will take the lead in attempting to resolve the grievance.

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 (or its designated representative) 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.

Exception: If the involved instructor is a member of the Academic Standards Committee, the vice president for academic affairs will appoint a full-time faculty member from the same college to replace the involved instructor while the grievance is being reviewed, 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 Suspension**

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 suspension 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 suspended 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 suspended.

### **Suspension**

Semester hours attempted*	Minimum CPGA required
1-59.5	CGPA < 1.4
60 and up	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 Suspended Students**

Suspended students may attend 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 Suspension and Reinstatement**

Any student who has been suspended has the right to submit an appeal for reinstatement to the Academic Standards Committee. Suspended 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.

## **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.

### **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 for academic 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.

### **Population Health**

The population health major takes an interdisciplinary and multidisciplinary approach to understanding and sharing health information with different populations and demographics. Along with a foundation in the natural sciences, students learn the dynamic nature of culture, open and engage in dialogue, and understand and appreciate different perspectives on how health is viewed.

## **Art**

*Chair, J. Diesburg, E. Oke*

The Department of Art offerings include studio and lecture courses designed to develop artistic skills and an understanding of the fundamentals of aesthetics. 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 choose a concentration in community arts organization, pre-art therapy, or studio focus. Incoming student portfolio submission is appreciated, but not required.

### **Baccalaureate Degree**

#### **Bachelor of Arts**

Major in art, 39-40 hours.

Core, required for all majors; 12 hours: ART 131, 201, 213, 246.

Community arts organization concentration, 39 hours: core courses plus the following: 210, 261, 315; 18 hours of electives of art or interdepartmental courses with department approval.

Pre-art therapy concentration, 40 hours: core courses plus the following: PSYC 110, 224, 225, 366; 12 hours of electives from the following: ART 210, 212, 221, 225, 271, 310, 313, 380/480, 475.

Studio focus concentration, 39 hours: core courses plus the following: 14 hours of electives from departmental courses that reflect area of focus; 13 hours of electives of art or interdepartmental courses with department approval.

Major in visual arts education, 74.5 hours: ART 131, 201, 213, 246; 14 hours of approved courses from studio focus; EDUC 111, 112, 202, 204, 207, 223, 230, 246, 302, 304, 343, 402, 430, 440, 479; ENG/MODL 350; INTD 355.

Art Majors must complete a digital portfolio as well as a senior project based on their concentration.

Minor in art; 21 hours: ART 131, 201, 213, 246; nine hours of electives in art.

Major in digital media arts (graphic design) is an interdisciplinary major. See: digital media arts.

#### **Courses ART**

##### **121 HISTORY OF GRAPHIC DESIGN AND COMMERCIAL IMAGE-MAKING - 3 hours**

This course provides a broad introduction to the history of graphic design from the dawn of writing until today, including the development of handwriting, typefaces, and books; Arts & Crafts and the private press; posters, printing history, history of advertising; the Bauhaus; digital design and typography. In addition, this course examines the changes in styles and technology within the field and considers the relationships between the meaning/value of design and the cultural, political, and social contexts. C-4AR.

##### **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. LA-TCE.

**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. LA-EAR.

**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. LA-TCE.

**212 TORCHWORKING GLASS - 3 hours**

Students will learn the art of torchworking, melting and shaping rods of glass (also known as lampworking). The course begins with standard techniques and progresses to completing glass jewelry, marbles, and small sculptures. Lab fee required. Grading is P/NP. LA-TCE.

**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. LA-TCE.

**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. LA-TCE.

**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. Lab fee required. C-4AR.

**241 CERAMICS - 3 hours**

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

**246 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. LA-EAR.

**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. January. C-4AR.

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

This course offers an introduction to women's important and exciting participation and representation in the arts (visual art, music and literature) from a range of cultures and periods and in various media and forms. In addition to studying the creative works of women, our investigations will also address the ways gender identity is constructed in the arts, the conditions under which women have struggled and the ideologies and institutions that have and continue to shape women's relationships to the arts. C-4AR. LA-EAR.

**261 GRAPHIC DESIGN CONCEPTS AND VECTORS - 3 hours**

An introduction to the broad field of graphic design. This course will include visual problem-solving, logo development, and layouts using industry-standard software, such as Adobe products, and will culminate in client-based projects. No Prerequisite. Lab fee required. LA-TCE.

**263 GRAPHIC DESIGN LAYOUT AND TYPOGRAPHY - 3 hours**

With emphasis on typography, layout, and design for published media, students explore various methods, together with current software applications, investigating the relationship between text and image, as well as the impact of typography on design. Students will analyze a variety of published materials and complete a series of client-based graphic design projects. No Prerequisite. Lab fee required.

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

Problems in three-dimensional design, using paper, metal, wood, plaster and clay. Lab fee required. LA-TCE.

**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 paintings 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.

**325 ADVANCED FABRIC DECORATION STUDIO - 3 hours**

Students design a series of artworks using various surface design techniques. Emphasis is placed on organized process, implementation of the student-designed projects, and quality of the final works. Studio fee required. Prerequisite: ART 225.

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

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

**341 ADVANCED CERAMICS STUDIO - 3 hours**

Further exploration of Ceramics studio work. Emphasis placed on organized process, implementation of the student-designed projects, and quality of the final pieces. Prerequisite: ART 241.

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

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

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

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

**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. Fall, alternate years. C-3GC.

**415 ADVANCED CRAFT STUDIO - 3 hours**

Students design a series of artworks in various craft media. Emphasis is placed on organized process, implementation of the student-designed projects, and quality of the final works. Studio fee required. Prerequisite: ART 315.

**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**

*S. Beyeler, A. Costello-Harris, C. Gohn, J. Robison, 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**

#### **Bachelor of Science**

Major in biology; 47-49 hours: BIOL 106, 106L, 108, 108L, 229, 229L, 315, 315L, 395; either 243/243L or 245/245L; either 331/331L or 364/364L; either 475 or 496; one course selected from: BIOL 313/313L, 332, or 365; nine hours of electives in biology; 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.

Major in biology education; 87.5-89.5 hours: BIOL 104, 106, 106L, 108, 108L, 229, 229L, 260; one course with lab selected from: 243, 243L or 245, 245L; one course with lab selected from 315, 315L or 413, 413L; one course selected from: BIOL 313 and 313L, or 365; CHEM 105, 105L and 106, 106L; EDUC 111, 112, 202, 204, 207, 223, 230, 246, 302, 304, 343, 402, 430, 440, 475, and 477; ENG/MODL 350, INTD 355.

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

### **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.

#### **104 THE SCIENCE OF HUMAN HEALTH - 3 hours**

An introduction to the basic scientific principles related to the human body, with a focus on several physiological systems. The basic foundations of principles of physics and chemistry will be discussed specifically in how they help us understand the normal biological functions of these physiologies. In addition, pathologies of these systems will be discussed from a variety of

perspectives including current and proposed treatments. These will serve as the vehicle for considering how scientific methodology illuminates issues in both the personal and public arenas. Statistical analysis of effectiveness of treatments will also be included. C-4NB. LA-ENS.

### **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. Prerequisite: 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. Prerequisite: 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.

**219 MICROBIOLOGY FOR HEALTH SCIENCES - 3 hours**

Understanding the taxonomy, morphology, and physiology of microorganisms and the interaction between microorganisms and humans. Special emphasis on the causation and spread of diseases. Prerequisites: BIOL 106/106L and BIOL 108/108L; or BIOL 202/202L and BIOL 204/204L. Not to be counted in the completion of the major. Fall.

**219L MICROBIOLOGY FOR HEALTH SCIENCES LAB - 1 hour**

Laboratory experiences in growing, controlling, and identifying bacteria with mastery in microscopy and aseptic techniques. Prerequisite: Completion of or concurrent enrollment in BIOL 219. Fall.

**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. Prerequisite: 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. Prerequisite: 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. Prerequisite: 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. Prerequisite: Completion of or concurrent enrollment in BIOL 241. Fall, alternate years.

**243 BOTANY - 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 BOTANY LAB - 1 hour**

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

**245 PLANT SCIENCES - 3 hours**

The biology of plants and how plants interact with the environment. Particular emphasis on human uses including plant products, agronomy, forestry, and horticulture. Prerequisite(s): BIOL 106, 106L, 108, 108L.

**245L PLANT SCIENCES LAB - 1 hour**

Techniques in studying plants, their cultivation and use. Prerequisite: Completion of or concurrent enrollment in BIOL 245.

**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.

**260 GENETICS - 3 hours**

This course will explore the nature of genetic material, inheritance patterns, gene expression and regulation, and the methods and tools used in the field. Prerequisite: BIOL 106, 106L, 108, and 108L.

**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**

From the discovery of microbes to the current research driving the field forward, students will examine the role microbes play in shaping this planet. Identification of major microbial groups, understanding basic principles of microbiology and the relationship between microbes and the environment and their hosts will be explored. Prerequisite: BIOL 229 or BIOL 260.

**313L MICROBIOLOGY LAB - 1 hour**

Laboratory experiences in identification, classification, and isolation of bacteria and mold from known cultures and environmental unknowns. Students will evaluate the effectiveness of environmental conditions and chemical compounds on controlling microbial growth. Mastery will be achieved in aseptic techniques and microscopic examination. Prerequisites: BIOL 229/229L or Genetics 260, and completion of or concurrent enrollment in BIOL 313.

**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. Prerequisite: 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. Prerequisite: 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. Prerequisite: 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.

**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. Prerequisites: BIOL 106, 106L, 108, 108L, and completion of or concurrent enrollment in BIOL 364. 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. Prerequisite: 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 ESAT 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 - 1-3 hours**

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 and Physics 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, dentistry, optometry, pharmacy, and veterinary medicine, as well as graduate programs leading to master's or doctorate degrees in chemistry, biochemistry, molecular and cell biology, organismic biology and pharmacogenomics. Additional options include entry-level employment in the fields of biology, chemistry or biochemistry.

### **Baccalaureate Degree**

#### **Bachelor of Science**

Major in biology-chemistry, 58-62 hours: BIOL 106, 106L, 108, 108L, 229, 229L, 365 or 313/313L, 422, 422L; CHEM 111, 111L, 113, 113L, 235, 235L, 311, 311L, 312, 312L, 405, 405L or 406; either BIOL 202/202L or BIOL 364/364L; either BIOL 395 or CHEM 403; one year of physics selected from PHYS 111/L and 112/L, or PHYS 210/L and 220/L; two hours of experiential learning selected from BIOL 475, BIOL 496, CHEM 475, CHEM 496, NASC 310, NASC 375, PHYS 499.

Major in biology-chemistry education; 93-96 hours: BIOL 106, 106L, 108, 108L, 229, 229L, 313/313L or 365, 364, 364L, 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/L and 112/L, or PHYS 210/L and 220/L; EDUC 111, 212, 230, 246, 343, 353, 362, 410, 440, 475, and 477.

Course descriptions can be found on the biology, chemistry, education, natural sciences, 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 and Physics**

*Chair K. Watson, M. Bryant, G. Clark, K. Davis, J. Osborne, T. Salupo-Bryant*

The Department of Chemistry and Physics strives to equip students with the conceptual knowledge, laboratory proficiency, data analysis skills, critical thinking skills, and scientific communication skills that enable them to use chemistry and physics to enrich their workplaces and communities in principled, productive, and compassionate ways. Chemistry majors and minors build a strong foundation of conceptual knowledge through coursework in analytical chemistry, inorganic chemistry, organic chemistry, physical chemistry, and biochemistry. Laboratory courses and research experiences guide students to apply chemical and physical concepts and skills in authentic contexts that mimic aspects of a variety of graduate programs, as well as careers in industry, education, or the health professions.

### **Baccalaureate Degree**

Courses listed in parentheses are prerequisites.

#### **Bachelor of Science**

Major in chemistry, hours: CHEM 111, 111L, 113, 113L, 235, 235L, 311, 311L, 312, 312L, CHEM 341, 341L, 342, 342L, 403; (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, 412.

In addition to coursework, majors must complete a research experience prior to graduation. Approved research experiences include, but are not limited to, 2 semester hours of CHEM 496 (can be taken as 2 credits or in 2, 1-credit installments), and a summer research experience at Manchester University or at another institution. Students should consult with the department chair prior to a research experience to obtain approval for their research experience plans.

Major in chemistry education; 82 hours: CHEM 111, 111L, 113, 113L, 235, 235L, 311, 311L, 312, 312L, 341, 341L, 342, 342L; PHYS 210, 210L, 220, 220L; six hours selected from CHEM 405, 406, 425, 435, 412; two hours selected from CHEM 405L, 441L, 443L; EDUC 111, 112, 202, 204, 207, 223, 230, 246, 302, 304, 343, 402, 430, 440, 475, and 477; ENG/MODL 350, INTD 355.

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.

#### **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: Completion of or concurrent enrollment in MATH 105, or placement into a higher-level MATH 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. Prerequisite: Completion of MATH 105, or placement into a higher-level MATH course. 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, 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. C-4NC. LA-ENS.

**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, oils 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**

Foundations of quantum mechanics for describing atomic structure, molecular motion and chemical bonding, with specific applications to spectroscopy and chemical reactivity. Prerequisite(s): CHEM 113, MATH 122. 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 thermodynamics and statistical thermodynamics, with application to pure substances and mixtures. It also applies the principles of chemical kinetics and dynamic equilibrium theory to a variety of chemical applications, including electrochemistry and spectroscopy. Prerequisites: CHEM 113, MATH 122, PHYS 220. Spring.

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

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

**412 MEDICINAL CHEMISTRY – 3 hours**

A survey of medicinal chemistry topics, including drug discovery and development, intellectual property, metabolism, and drug-body interactions. Prerequisite: CHEM 312.

**403 CHEMICAL COMMUNICATIONS - 1 hour**

Capstone course for chemistry and related majors focusing on the critical analysis and communication of research findings. Students will perform a sustained analysis of the chemical literature, research methods, and research data, discussing and communicating their conclusions in written and oral format. Prerequisite(s): junior or senior standing.

**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**

Advanced organic chemistry from a perspective of either physical organic and mechanistic studies or synthetic organic methodologies. The use of chemical literature is used to develop an understanding of current methods and techniques for studying organic chemistry. Prerequisite: CHEM 312.

**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: completion of or current enrollment in CHEM 341.

**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.

**T15 MATH REVIEW FOR CHEMISTRY – 1 hour**

Students will review algebra topics alongside their chemistry class. Topics include evaluating expressions and formulas, graphing linear equations and functions, working with equations of lines, and evaluating exponents and roots. Study skills and tips to reduce math anxiety will be included. Students may not enroll in this course if they have credit for MATH 105 –Basic Algebra. Prerequisite: MATH 100 or placement. Corequisite: CHEM 105. P/NP.

**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. 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. Fall. C-4NP.

### **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. 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 chemistry, 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. Fall. C-4NP.

### **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 chemistry, 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. Spring. C-4NP.

### **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.

### **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.

**499 RESEARCH - 1-4 hours**

Independent research under the supervision of a faculty member or other designee.

Prerequisite: PHYS 220, MATH 122, and permission 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.

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

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

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 are required in each major area of study.

### **Baccalaureate Degrees**

#### **Bachelor of Science**

Core, 32 hours: ACCT 211, 212; BUS 108, 111, 209, 313, 474; ECON 221, 222; FIN 333; MATH 211.

Major in accounting, 55 total hours: core courses plus ACCT 311, 312, 321, 331, 409, 475; BUS 310.

Major in business management, 53 total hours: core courses plus BUS 231, 310, 340, 350, 435, 444, 448, 485.

Major in finance, 51 total hours: core courses plus ACCT 331; FIN 320, 335, 340, 455, 475, 485.

Major in marketing, 53 total hours: core courses plus ART 261; BUS 234, 301, 337, 461, 435, 445, 485.

Major in professional sales, 50 total hours: core courses plus BUS 234, 317, 322, 431, 435, 453; COMM 344.

Major in sport management, 53 hours: core courses plus BUS 117, 241, 363, 369, 425, 435; 3 hours from BUS 231 or BUS 234 and 3 hours from BUS 301, 350, 448, 453 or COMM 335.

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, 24 hours: ACCT 211; BUS 111, 234, 431, 448; IDIV 201; six hours of electives approved by the Johnston Chair.

Minor in professional sales, 18 hours: ACCT 211; BUS 111, 209, 234; two courses selected from BUS 317, 322, 431, 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.

**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.

**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.

**453 ACCOUNTING ETHICS - 3 hours**

Students examine various ethical theories and their application to ethical dilemmas within the accounting profession. In addition, students will develop strategies to address and resolve ethical dilemmas. Topics include actual ethical dilemmas and codes of ethics from accounting bodies such as the AICPA.

**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.

**209 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.

**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 - 3 hours**

Students examine the social issues and policies that shape the climate of the current sport industry. Topics include psychosocial factors that affect the industry, ethical dilemmas, decision making, policies in sport governing bodies, and the intersection between sport 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.

**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 ADVANCED PROFESSIONAL SALES - 3 hours**

Students explore sales technology and decision making systems that support achievement of sales objectives. Topics include customer relationship management systems (CRM), sales enablement and new technology, informational interviews, sales role plays, and social selling. Prerequisite: BUS 209.

**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 211.

**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.

### **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.

### **431 SALES AND ENTREPRENEURSHIP - 3 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 209.

### **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.

**444 OPERATIONS MANAGEMENT - 3 hours**

Students examine the processes by which land, labor and capital are transformed into goods and services. Topics include forecasting, inventory management, quality management, location planning and waiting lines. Prerequisites: BUS 111; MATH 211.

**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

**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.

**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 209.

**461 MARKETING RESEARCH - 3 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 211.

**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.

**T33 SOCIAL MEDIA MARKETING - 3 hours**

Students explore the use of social media channels for marketing purposes. Topics include strategic social media planning, hub-and-spoke design, goal conversion tactics, effective e-mail campaigns, and evaluation of media analytics to drive strategic decision making. Students

create their own social media campaign including a fully functional website, social media acquisition channels, and an e-mail retention program. At the end of the course, students keep all of the assets they created.

## 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.

## 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.

### **320 ENTERPRISE RISK MANAGEMENT - 3 hours**

Students explore the benefits of using enterprise risk management to address strategic, operational, environmental, social, financial, reputational, regulatory, data security and financial reporting risks and opportunities. Topics include risk identification, risk measurement, risk culture, risk appetite statements, risk response strategies and monitoring risk.

### **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 M. Calka, J. Case, S. Kaufman, T. McKenna-Buchanan, J. Mertens*

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 or minor in public relations or health communication.

### **Baccalaureate Degrees**

#### **Bachelor of Science**

Major in communication studies; 39 hours: COMM 130, 210, 230, 256, 260, 314, 324, 370; one of the following: COMM 235, 241, 335, 341, 344; 12 hours of electives chosen in consultation with advisor and approved by department chair.

#### **Bachelor of Arts**

Major in digital media arts; 39 hours: ART 131, 221, 261, and 263; COMM 130, 230, 232, 235, 240, 256, 432; 6 hours of electives from ART 121, 213, CPTR 117, COMM 234, 260, 314, 336, ENG 363.

Minor in communication studies; 21 hours: COMM 130, 230, 256, 324; nine hours of electives selected in consultation with advisor and with approval of the department.

Minor in digital media arts; 21 hours: ART 261, COMM 130, 230, 232, 240; 6 hours of electives from ART 213, 221, ART 263, CPTR 117, COMM 234, 235, 336, and 432.

Minor in health communication; 18 hours: COMM 220, 241, 256, 327; two of the following: COMM 344, 370, SOWK 360.

Minor in public relations; 21 hours: COMM 234, 260, 314, 335, 341; 6 hours of electives from BUS 234\*, BUS 369, COMM 221.

\*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. Fall. Spring. C-1O. LA-FCS.

#### **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 DIGITAL STORYTELLING I - 3 hours**

Introduces students to digital storytelling. Students tell stories across a website using text, audio, video, photos, and graphics. Topics such as interactivity, convergence, virtual reality, and fan cultures are emphasized.

**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 literary 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 misvaluation 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.

**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 DIGITAL STORYTELLING II - 3 hours**

Digital Storytelling II is the capstone course in digital media. Students use cameras, microphones, and editing software to create, edit, and distribute documentary films. Students form production teams, plan projects, and gather and edit footage. Activities include advanced instruction on equipment usage, video composition, and distribution. Prerequisites: COMM 232.

**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.

**Henney Department of Education**  
*Chair S. Stetzel, H. Schilling, M. Potts, Z. West*

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, and education.

Manchester University is accredited by the Department of Education, Division of Professional Standards, the Council for the Accreditation of Educator Preparation (CAEP) and the Higher Learning Commission.

**Baccalaureate Degree**

**Bachelor of Science**

Major in educational studies major, 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, 341, 343, 354

Major in elementary education early and middle childhood generalist with an emphasis in mild intervention or English learners.

Required courses for all elementary education majors: EDUC 111, 112, 202, 204, 207, 223, 230, 246, 302, 304, 341, 354, 401, 402, 403, 405, 430, 474; ENG/MODL 350; HIST 216, 218; INTD 355; MATH 108, 208; NASC 210.

English learners concentration: EDUC 471, ENG 310 or 311; ENG/MODL 354; one Spanish course at 300 or 400 level.

Mild intervention concentration: EDUC 263, 315, 478.

All grade teaching majors: music (choral or instrumental), visual arts.

Secondary teaching majors: biology, biology-chemistry, chemistry, English/language arts, history, human performance education. An option of mild intervention, or English learners may be added to any secondary teaching major.

All teacher certification and licensure requirements are listed in *Teacher Education Student Handbook* issued by the Department of Education, located on departmental website.

### **Elementary Education Methods Block**

The elementary education methods block includes EDUC 401, 403, 405, 430. Prerequisites: EDUC 230, 340.

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

The following courses are included in the professional semester; EDUC 474; EDUC 471 or 478. The student teaching experience will be a full semester.

### **All Grade and Secondary Education Methods**

All grade and secondary education method includes EDUC 440, a course taught in Fort Wayne during the January session. Prerequisites: EDUC 230, 353.

### **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 capstone project for all students seeking licensing through Manchester University consists of the following components: successful completion of the edTPA Impact on Student Learning project which consists of the development and teaching of a series of lessons in a student teaching placement, video recordings and analysis, the written representation of the research and data analysis and the written defense of the project. Additional information regarding the SCE can be found in the *Teacher Education Student 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 2.75 grade point average in each teaching field in which the candidate wishes to be licensed.
4. A C or higher in all education courses.
5. Conduct approval from the Student Experience Office.
6. Completion of the baccalaureate degree and an approved Manchester University teacher licensing program.
7. Submit SAT or ACT score prior to admission to the program.
8. Successful completion of the Indiana Developmental/Pedagogy exam as well as the appropriate Indiana Content Area Assessments in areas of licensure.
9. Minimum of proficient rating on each professional disposition from faculty members of the unit and/or clinical faculty.
10. A current CPR/Heimlich certification (no older than one year) must be on file with Education Department. Evidence of current suicide prevention training.

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 EDUCATIONAL SYSTEMS - 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. A field trip and attendance at a school board meeting are required. Fall. Spring. LA-ESS.

#### **112 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. Field experience is required.

#### **PROFESSIONAL LEARNING COMMUNITIES - .5 hour**

Professional Learning Communities (PLCs) provide undergraduate education majors with a common collaboration time to investigate current social justice education issues. The experience introduces and provides opportunities to practice the principles of Progressive Education. Faculty instructors and mentors introduce and provide opportunities for cohorts of students to read, discuss, collaborate, and investigate topics relevant to their professional development. Topics will change based on the interest of students, faculty, and mentors.

#### **120 PROFESSIONAL LEARNING COMMUNITIES - .5 hour**

#### **202 PROFESSIONAL LEARNING COMMUNITIES I - .5 hour**

#### **204 PROFESSIONAL LEARNING COMMUNITIES II - .5 hour**

#### **302 PROFESSIONAL LEARNING COMMUNITIES III - .5 hour**

#### **304 PROFESSIONAL LEARNING COMMUNITIES IV - .5 hour**

#### **402 PROFESSIONAL LEARNING COMMUNITIES V - .5 hour**

**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.

**207 INTEGRATING TECHNOLOGY INTO THE CLASSROOM - 3 hours**

This course addresses the fundamental tenets of integrating technology in the k-12 classroom. Topics will include what is technology integration, pros and cons of screen time in school, integration models, learning management systems, ISTE standards for educators, and incorporating technology in effective instructional practice. A special emphasis will be given to designing high quality e-Learning curriculum. Through a variety of learning experiences, candidates will collaborate with peers and develop understanding of best practices in technology integration as well as best practices in instructional methods.

**215 ISSUES IN INFANCY AND EARLY DEVELOPMENT - 3 hours**

This course investigates the key issues that impact young children and their healthy development. Strategies that support young children's self-care, regulation, nutrition, and safety are explored. A focus is placed on the importance of brain development, as well as, consistent and culturally responsive interactions between early childhood teachers and their students.

**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 AND ADOLESCENT DEVELOPMENT (W) - 3 hours**

A study of the physiological, intellectual, sociological and psychological factors influencing the child from the time of conception through adolescence. 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. Field experience is required. Required for sophomores seeking entry into the Teacher Education Program. Teaching majors must earn a C or higher to meet the teaching program expectations. Prerequisite: EDUC 111.

**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. Field experience is required. Teaching majors must earn a C or higher to meet the teaching program expectations. 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.

**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.

**341 EMERGENT LITERACY – 3 hours**

Supporting the development of strong readers relies on a strong foundation in phonemic awareness, phonics, and fluency. This course introduces teaching candidates to scientifically based reading research (SBRR) important in emergent literacy skills such as basic concepts of print and the alphabetic principle, phonics including the importance of decoding and automaticity, and reading fluency involving explicit instruction and the importance of accountability when promoting silent reading fluency. Emphasis will be on authentic learning experiences and diversity in children's literature. Teaching majors must earn a C or higher to meet the teaching program expectations. Prerequisite: EDUC 230.

**343 DISCIPLINARY LITERACY(W) - 3 hours**

All teachers, regardless of their discipline, must support the development of readers and writers. This course is intended for secondary education and P-12 education majors with an emphasis on engaging students in authentic texts, including primary sources and publications in the discipline, as well as scientifically based reading research (SBRR) strategies. Students enrolled in the course will demonstrate performance of literacy standards through planning developmentally appropriate reading and writing instruction for their disciplines. Prerequisite: EDUC 230.

**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.

**354 DEVELOPING READING COMPREHENSION - 3 hours**

As young readers develop fluency, they rely on strong vocabulary and comprehension skills to interact with a variety of fiction and non-fiction; with practice, they also develop as writers. This course introduces teaching candidates to scientifically based reading research (SBRR) that forms the foundation of skills such as basic concepts of print and the alphabetic principle,

phonics including the importance of decoding and automaticity, and reading fluency involving explicit instruction and the importance of accountability when promoting silent reading fluency. Emphasis will be on authentic learning experiences and diversity in children's literature. Teaching majors must earn a C or higher to meet the teaching program expectations. Prerequisite(s): EDUC 230, 341.

### **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. Prerequisite: EDUC 230. Concurrent enrollment in EDUC 340.

### **401 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. Prerequisites: EDUC 341, 354. Fall.

### **403 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.

### **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.

### **430 CULTURALLY RESPONSIVE CLASSROOMS – 3 hours**

Considering the development of the whole human being, this course examines the importance of developing a caring and respectful community of learners in which everyone feels safe, respected, empowered, and valued. Teaching candidates will examine inclusive, culturally-sustaining, trauma-informed practices which supports the needs of all students, and, in turn, establish an equitable way of managing the classroom. Taken prior to the student teaching semester, EDUC 4xx supports preservice teachers in creating a framework of successful classroom practices and pedagogy which recognizes, nurtures, and supports the infinite worth of every individual within the learning community. This course will cover topics such as Restorative Justice, trauma-sensitive classroom practices, classroom environment, development of a plan to manage a classroom, communication skills needed for working with parents, students, and colleagues. Teaching majors must earn a C or higher to meet the

teaching program expectations. Prerequisite(s): admission to the program, junior or senior standing.

**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. Prerequisites: EDUC 212, 305, 344, 346, and concurrent enrollment in one of the following courses: EDUC 473, 474, 475, 477 or 479.

**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, 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 or 360; MODL 354. Fee required. Spring.

**477 JR HIGH/MIDDLE SCHOOL STUDENT TEACHING - 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 or 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 or 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.

## **English**

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

The English major is offered with a concentration in literature and cultural studies, professional and creative writing, or journalism. 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—and demonstrates storytelling—is an essential component of all concentrations. Students who concentrate in literature and cultural studies acquire understanding and appreciation of various literary forms, of specific literary works and of the development of literature within their cultural contexts. Students who choose to concentrate in professional and creative 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 journalism take courses in reporting, writing, storytelling in both literature and digital media, graphic design, and photography. They also work for the *Oak Leaves*, MU's award-winning newspaper, and complete an internship with a professional news organization.

Some first-year students will be assigned to ENG 103 based on standardized test scores and high school preparation.

### **Baccalaureate Degree**

Major in English, 40-43 hours.

#### **Bachelor of Arts**

Literature and cultural studies concentration, 42 hours: ENG 115, 216, 311, 321, 332, 333, 335, 340, 344, 366, 485; nine hours of electives selected from English courses (200 level and above).

#### **Bachelor of Science**

Professional and creative writing concentration, 43 hours: ENG 115, 201, 317, 321, 358, 363, 365, 366, 477, 485; 310 or 311; 332 or 333; 340 or 344; six hours of electives selected from ENG 216, 227, 238, 242, 246, 250, 254, 261, 335, 346, 348, 350, 380.

Journalism concentration, 40-41 hours: ENG 115, 201, 310, 317, 346, 348, 356, 363, 377; ART 221, 261, 263; COMM 130 or 232; one course selected from COMM 234, 314, or 432.

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

Major in English/language arts 5-12 education, 83 hours: EDUC 111, EDUC 112, 202, 204, 207, 223, 230, 246, 302, 304, 343, 402, 430, 440, 475, 477; ENG 115, 201, 317, 321, 332, 333, 340, 344, 365, 366, 485; 310 or 311; one course from ENG 216, 227, 238, 242, 246, 250, 261; ENG/MODL 350; COMM 130; INTD 355.

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 221, 261, or 263; one course selected from COMM 234, 314, or 432.

## Courses ENG

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

Complements the First Year Writing Seminar 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. Students receiving a grade below C- will be required to enroll in ENG 103 the following spring.

### **115 INTRODUCTION TO LITERATURE AND CULTURAL 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, Spring. LA-EAR.

### **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. LA-TCE.

### **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. Spring. C-4LT.

### **216 TOPICS IN LITERATURE AND CULTURAL STUDIES - 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. Fall, January, Spring. C-4LT. LA-FCU.

### **227 TWENTY-FIRST CENTURY LITERATURE - 3 hours**

September 11, 2001, inaugurated a new literary era known as post-9/11 literature. This temporal framework features works that explore the swift cultural, social, and technical transformations from the beginning of the twenty-first century to most current literary expression. This course explores both traditional literature, such as prose, drama, and poetry at this unique juncture as well as new literacy forms, such as blog posts, fan fictions, YouTube videos, and podcasts. Prospective authors include Chimamanda Adichie, Alison Bechdel, John Boyne, Octavia Butler, Rachel Cusk, Moshin Hamid, Kazuo Ishiguro, Valerie Luiselli, James McBride, Celeste Ng, Marjane Satrapi, and emerging voices. Spring, even years. C-4LT. LA-FCU.

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

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

**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. Fall, January, Spring. C-4LT. LA-FCU.

**246 COMIC STUDIES, GRAPHIC NOVELS, AND FILM ADAPTATIONS: THE VISUAL CULTURE OF LITERATURE - 3 hours**

Examines the broader cultural reach of literature within a variety of media: comics, graphic novels, and film adaptation. Explores theories of authorship, reception, and intertextuality across the "visual" representation of literature in popular culture. Representative approaches and works could include Myth and Marvel; *Ghostworld*: Graphic Novel to Film; *Sherlock Holmes* to BBC *Sherlock*. Fall, Spring. C-4LT. LA-FCU.

**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. Fall, January, Spring. C-3GC. LA-TGP.

**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.

**261 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. Spring, even years. C-3RC. LA-FCU.

**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. Spring, odd years. C-4LT.

**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 and ethics. Students use computers in writing and red pencils/computers in copy editing. Spring. LA-TCE.

**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: FYWS 111 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 through Reconstruction and the Gilded Age to the World War I era. Readings will include selections from the picaresque, naturalist and realist traditions as well as writings on Native American, African American, and early feminist identities. Prospective authors include Alcott, Melville, Twain, Whitman, Dickinson, James, Šá, Chesnutt, Du Bois, Washington, Chopin, Gilman and Wharton. Spring, even years.

**335 MODERN AND POSTMODERN LITERATURE - 3 hours**

The study of English-speaking writers from 1900 onward. The course follows the development of modernism, with its search for meaning in a chaotic world, and postmodernism, with its disruption of meaning through intertextuality, metafiction, parody, and humor. Authors may include Waugh, Forster, Woolf, Fitzgerald, Hurston, Hemingway, Kerouac, Wallace, Murakami, Morrison, Smith, and Vonnegut. Fall, odd years.

**340 BRITISH LITERATURE I: THE MIDDLE AGES TO THE ENLIGHTENMENT - 3 hours**

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

**344 BRITISH LITERATURE II: 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.

**346 SPORTS NARRATIVES: LITERARY AND CINEMATIC - 3 hours**

This course explores the rich tradition of fiction and artistic nonfiction in book-length sport narratives and film. It will engage the relationship between sports and society from a literary and a cultural perspective, including portrayals of race, gender, and class. Selected texts may include works such as David Remnick's *King of the World* (Muhammad Ali), Darcy Frey's *The Last Shot* (Coney Island basketball), Buzz Bissinger's *Friday Night Lights*, George Plimpton's *Paper Lion*, and Murray Sperber's *Shake Down the Thunder* (Notre Dame Football) and films such as *Hoop Dreams*; *Rudy*; *I, Tonya*; and the *30 for 30* series. Spring, odd years.

**348: MAGAZINE WRITING AND LITERARY JOURNALISM - 3 hours**

Using literary approaches that develop the journalist's understanding of "who," "what," "when," "where," "why," and "how," magazine writing and literary journalism offer a deeper, more sustained look at individuals and events. Readings will include selections from magazines such as the *New Yorker*, the *Atlantic*, and *Harper's*; authors of book-length studies may include Truman Capote, Susan Orlean, Tom Wolfe, and Barbara Ehrenreich. Fall, even 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. Fall, January, Spring.

**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.

**356 OAK LEAVES PUBLICATION - 1 hour**

Practical experience in working with the editorial staff of the *Oak Leaves* student publication. May be repeated for two semesters. Prerequisites: ENG 201, 317. Grading is P/NP. Fall, Spring.

**358 SPECTRUM PUBLICATION - 1 hour**

Practical experience in working with the editorial staff of the *Spectrum* arts and literary magazine student publication. May be repeated for two semesters. Prerequisite: One creative writing course or permission of the instructor. Grading is P/NP. Fall, Spring.

**363 TOPICS IN CREATIVE WRITING - 3 hours**

An introduction to the writing of short stories, memoir, poetry, and plays in a workshop environment. Works by professional writers, as well as those by students, are analyzed and discussed in class. Genres will vary and will be designated by subtitles, such as Prose and Memoir or Poetry and Drama. May be taken twice, under different subtitles. Fall. LA-TCE.

**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 THEORY - 3 hours**

Critical writing from the fifth century BC 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.

**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**

#### **Bachelor of Science**

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; ENVS 403; DATA 210; POSC 225; one course selected from: POSC 222, SOC 222.

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; DATA 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.

#### **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. LA-ENS.

#### **ENVS T11 HUMAN ENVIRONMENTAL HEALTH – 3 hours**

This course will examine how environmental contaminants, both natural and synthetic, can affect human health and development. In addition to looking at the fundamental science behind the adverse effects, we will examine the ethical, political, and sociological background of environmental health. LA-ENS.

**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 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 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 T23 TERATOLOGY: STUDY OF BIRTH DEFECTS - 3 hours**

An introduction to the basic scientific principles of developmental biology within the context of the study of birth defects caused by exposure to microbes, medication, and common chemicals. Special emphasis will be placed upon the environmental and socioeconomic factors that contribute to teratogen exposure. Prerequisites: BIOL-106, BIOL-108.

**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. Spring. C-5CC. LA-TBI.

**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**

*Chair J. Beer, S. Clark, K. Matutes*

The goal of the department is to develop knowledgeable and skillful leaders and practitioners in various fields of exercise science. Students will be cognizant of scientific principles underlying movement patterns and analyses, as well as physiological, psychological and sociological perspectives of sport, fitness and strength and conditioning participation and management.

The department goal is focused on clinical and hands on experiences as well as practical learning. These are key learning components in the fields of athletic training, physical therapy, occupational therapy, nutrition/dietetics as well as strength and conditioning/human performance. More information can be found on the Exercise Science website.

The majors in the exercise science department prepare students for professions and programs in exercise sciences (e.g., biomechanics, athletic training, exercise physiology, occupational therapy, and physical therapy). It is an appropriate preparation for graduate school and credentials positions in strength and conditioning as well as fitness and wellness.

Coaching minor — 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.

Orthopedic Studies – Prepares students for entry into various levels of orthopedic professions. Students will be supported with information in exercise science, health communication and business.

Medical Health Education and Sales – Medical Health Education and Sales minor will focus students on the understanding of professional health education, communication and possible sales.

## **EXERCISE SCIENCE**

### **Baccalaureate Degrees**

#### **Bachelor of Science**

Major in clinical and rehabilitation sciences, 55 hours: BIOL 202/202L, 204/204L, CHEM 105/105L and 106/106L or CHEM 111/111L and 113/113L; DATA 210; EXSC 101, 106, 255, 325/325L, 355, 410, 476; NUTR 210; 12 hours of electives approved by advisor.

Major in human performance, 47 hours: BIOL 202/202L, 204/204L; EXSC 101, 205, 206, 209, 243, 250, 260, 276, 325/325L, 339, 345, 410, 476; NUTR 210 4 hours of electives approved by advisor.

Major in human performance education, 90.5 hours: BIOL 202, 202L, 204, 204L; EDUC 111, 112, 202, 204, 207, 223, 230, 246, 302, 304, 343, 402, 430, 440, 475, and 477; ENG/MODL 350; EXSC 101, 205, 206, 243, 250, 260, 325, 325L, 339, 345, 410; INTD 355; 4 hours of directed electives (in consultation with advisor and department chair).

Human performance education majors will need to complete the education exams to continue on the track for teaching in physical education. Details are published in the ESAT Student Handbook on the department website.

Coaching minor – 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.

Minor in coaching, 27 hours: ESAT 115, 209, 243, 410; NUTR 210; 2-6 hours from EXSC 145, 264, 276, 339, 345; 3 hours from NUTR 102, 230, 250, 320.

Orthopedic studies – Prepares students for entry into various levels of orthopedic professions. Students will be supported with information in exercise science, health communication and business.

Minor in orthopedic studies, 24 hours: BUS 111; COMM 220; ESAT 106, 115, 255, 264, 345, 355, 476.

Medical health education and sales – medical health education and sales minor will focus students on the understanding of professional health education, communication and possible sales

Minor in medical health education and sales, 21 hours: BUS 111, 209, 231; COMM 220, 327; ESAT 106, 264, 476.

## Courses EXSC

### **101 INTRODUCTION TO REHABILITATION SCIENCES – 3 hours**

Exploration of various rehabilitation professions within the United States health care system, including educational requirements, professional expectations, practice sites, professional ethics, rehabilitation philosophies and inter-professional education (IPE). Rehabilitation professions career planning with review of current employment opportunities and workforce trends. Introduction to linguistic and cultural diversity and the influence of socio-cultural factors on the role of health care professionals.

### **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 (Online)**

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 TEAM PERFORMANCE TRAINING - 3 hours**

Students will develop skills in coordinating, organizing and leading group strength and conditioning performance training. Focus on training progressions, sport specificity, leadership and good communication. Students will analyze skills and selecting appropriate testing for specific team sports and training. Concurrent enrollment in ESAT 250.

**206 INDIVIDUAL AND DUAL PERFORMANCE TRAINING - 3 hours**

Students will develop skills in coordinating, organizing and leading individual or dual strength and conditioning performance training. Focus on training progressions, sport specificity, leadership and good communication. Students will focus one on one training with athletes and clients to analyze skills and selecting appropriate testing. 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 - 3 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.

**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.

**250 PERFORMANCE LABORATORY 1 - 1 hour**

An introductory to practical performance training experience in strength and conditioning as well as teaching. Students will have the opportunity to organize, coordinate and perform group strength and conditioning performance training. Concurrent enrollment in ESAT 205.

**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 PERFORMANCE LABORATORY 2 - 1 hour**

The second practical experience in performance training and teaching. Students will have the opportunity to organize, coordinate and perform strength and conditioning performance training with one on one or dual clients. 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 - 3 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.

**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.

**313 INTERNATIONAL SPORTS MEDICINE - 3 hours**

This international study abroad course travels to different countries each academic year and offers fantastic opportunities for students to visit and study alternate models of sports medicine and healthcare. Countries chosen are based on specific regions which 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 the countries traveled. This course will take students inside the International Model of Health Care and Sports Medicine where they will receive firsthand experience and knowledge at various facilities, clubs, universities and sporting events. The course is designed as an off-campus travel course conducted outside the United States and may be repeated no more than one time to different locations. C-3GC

**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.

**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.

**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.

**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.

**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.

**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.

**EXERCISE SCIENCE****Baccalaureate Degrees****Bachelor of Science**

Major in nutrition sciences, 53 hours: BIOL 101, 204; CHEM 105/105L, 106/106L, EXSC 106, 476; MATH 115; NUTR 101, 102, 103, 210, 211, 220/220L, 320, 330, 340; 6 hours of electives from 230, 240, 250.

Minor in nutrition sciences, 24 hours; EXSC 106, 476; NUTR 101, 102, 210, 211, 220/220L, 320; 3 hours of electives from 230, 240, 250.

## Courses NUTR

### **101 NUTRITION SCREENING LAB – 1 hour**

This lab taught independently from a lecture will cover privacy laws, liability concerns and appropriate clinician demeanor. Students will be introduced to the clinical setting and gain real life experience meeting with clients and taking anthropomorphic measurements. Students will practice using a variety of assessment tools used in clinical settings and the fitness industry.

### **102 NUTRITION COMMUNICATION – 3 hours**

An introduction for professionals who may communicate with individual clients and the public about nutrition topics. This course will introduce the principles of behavior change and motivational interviewing. The limitations of professional scopes of practice will be defined and appropriate public domain resourcing will be taught. Additionally, students will learn techniques of science communication to lay audiences, explore nutrition in social media and news outlets and learn to critically evaluate nutrition in the news.

### **103 GLOBAL FOOD AND NUTRITION – 3 hours**

An exploration of diverse food cultures and nutrition among communities locally and globally. Students will experience hands on cooking and tasting of foods from various regions. Additionally, students will learn about food insecurity, justice and systems that influence and are influenced by climate change.

### **210 INTRODUCTION TO HUMAN NUTRITION – 3 hours**

An introduction to human nutrition and metabolism. This course will equip students to understand how nutrients are absorbed and transported throughout the body to support optimal health throughout the life cycle. Course topics will introduce weight control, performance nutrition, eating disorders, and common issues in nutrition, the professional role of dietitians and scope of practice boundaries.

### **211 HUMAN LIFE CYCLE NUTRITION - 3 hours**

An introduction to human life cycle nutrition. This course will equip students to understand how nutrients support optimal health throughout the life cycle. Course topics will discuss optimal dietary patterns/nutrient intakes for both fetus/infant and mother during pregnancy and lactation, childhood, adolescence, adult phases, and successful aging based on appropriate nutrition. Course content will focus heavily on disease prevention through optimal nutrition.

### **220 FOOD SCIENCE – 3 hours**

This course teaches the science of the best cooking methods to preserve nutrition, optimize health and flavor. Course material offers foundational lifestyle health practices that support personal wellbeing. Food safety regulations and government regulatory agencies will be introduced. Hazardous analysis critical control points will be taught and upon course completion, students will be prepared to sit for ServeSafe certification exam required for employment in the food industry and RDN's. Corequisite: NUTR 220L.

**220L FOOD SCIENCE LAB – 1 hour**

This course offers hands on applied experiences of the best cooking methods to preserve nutrients and optimize health. Students will cook and taste foods prepared during lab. Application of food safety and government regulations will be demonstrated and experienced. Corequisite: NUTR 200.

**230 SPORTS NUTRITION – 3 hours**

An introduction to feeding athletes to optimize physical performance, support long term sport participation while promoting lifelong health habits with an emphasis on a whole food diet. Students will learn specific nutrient requirements for athletes, and nutrient intake strategies before, during and after training and competition as athletes must consider when they eat in relation to athletic events, duration of events, as well as the manner in which food is delivered. Students will learn how nutrition professionals must plan for athlete-specific eating requirements. Supplements, ergogenic aids and avoiding banned substances will be discussed. Students will apply lecture material to case studies athletes throughout the semester.

**240 CARDIOVASCULAR & WELLNESS NUTRITION - 3 hours**

An introduction to various diets that support cardiovascular health and wellness, while examining systemic challenges to healthy eating practices. This course emphasizes developing personal lifelong healthy eating habits. Students will learn eating strategies that suit their lifestyle, budget, and personal taste preferences with an emphasis on a whole food diet. Students will apply lecture material to a personalized plan or a case study throughout the semester.

**250 WEIGHT MANAGEMENT – 3 hours**

An introduction to weight management. Students will learn lifestyle and eating strategies that support a healthy weight. Social context for weight management and diverse cultural influences that contribute to weight gain will be examined. Students will apply lecture material to a case study or create a personal weight management plan throughout the semester.

**320 MEAL PREP & DIET PLANNING – 3 hours**

Students will apply nutrition guidelines to plan healthy, well-balanced meals based on personal requirements and for healthy populations using public domain resources equipping students of various disciplines to guide others. Course material will focus on ingredient and nutrient diversity, and meal planning on a limited budget with minimal equipment. Students will learn eating strategies for lifelong wellness. Topics will include eating for heart health, fueling athletes, weight management and sustainable eating. Students will cook and taste foods prepared during some lectures that will occur in the nutrition and food science lab. Food safety will be a focus throughout.

**330 MICRONUTRIENTS AND METABOLISM – 3 hours**

This course delves into micronutrient consumption, digestion, absorption, distribution, and cellular metabolism in humans. Students will gain an in-depth understanding of the role of micronutrients in body function in health and disease. Course will include micronutrient rich diets and applying knowledge to personal lifestyle health practices. Emphasis will be placed on whole food nutrition and will also examine micronutrient supplement safety.

**340 MACRONUTRIENTS AND METABOLISM (W) - 3 hours**

This course delves into macronutrient consumption, digestion, absorption, distribution, and cellular metabolism in humans. Students will gain an in-depth understanding of the role of

macronutrients in body function in health and disease. Course will include differentially balanced macronutrient diets and applying knowledge to personal lifestyle health practices.

## **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, 18-19 hours: GNST 125 or 201; INTD 324; 12 hours of electives from the following courses (from three different disciplines) or others approved by the Gender Studies Council.

### **Specialized Gender Studies Courses**

#### **ART 253 WOMEN IN THE ARTS - 3 hours**

This course offers an introduction to women's important and exciting participation and representation in the arts (visual art, music and literature) from a range of cultures and periods and in various media and forms. In addition to studying the creative works of women, our investigations will also address the ways gender identity is constructed in the arts, the conditions under which women have struggled and the ideologies and institutions that have and continue to shape women's relationships to the arts. C-4AR. LA-EAR.

#### **ENG 261 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. LA-FCU. Spring, even years.

#### **FYWS LGBTQ+ IDENTITIES AND INCLUSION - 4 hours**

Our society sends mixed messages of acceptance and rejection to lesbian, gay, bisexual and transgender (LGBTQ+) 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. LGBTQ+ celebrities are more visible than ever, yet some youth still commit suicide due to anti-gay bullying. What is life really like for LGBTQ+ 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 LGBTQ+ 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. LA-FCU.

#### **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. LA-FCU.

**HIST 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.

**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. Prerequisite: 104 or 105 or 121 or 123.

**HIST 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 123.

**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. LA-TBI. Spring.

**INTD 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.

**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 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. LA-FCU.

**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*

Across the globe, the number of people reaching older ages is noticeably increasing. Some have called it the “age wave,” and noted that these dramatic changes affect most aspects of human life – in both our families and our communities. As citizens, workers, and family members, we must know how to meet the multiple needs of older adults – both frail and thriving ones.

The World Health Organization speaks of “active aging,” which involves tending to the health, participation and security for elders, which are all necessary for enhancing life as people age. Ageism often keeps elders from meaningful participation in intergenerational efforts to improve the human condition. How do we bring compassion to care for those needing care – and to encouraging the potential of most elders to contribute in meaningful ways? We are just beginning to understand the significant opportunities in the later years for living with wellness and purpose.

The gerontology program at Manchester University helps students explore the physical, psychological, social, financial, environmental and spiritual aspects of aging. Learning opportunities include: classroom activities, field trips, service learning, interviewing elders, career-related research, and 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 students go on to work in social work, psychology, business and marketing, retirement planning and investment, fitness and health care, law, politics, transportation, housing, media, education and life-long learning, arts, leisure and other occupations.

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, 343, FIN 340\*; INTD 405; NPM 201; POSC 225\*; PSYC 250\*, 360\*, SOC/SOWK 222\*, 223\*; SOWK 110, 275, selected in consultation with advisor and approval of gerontology program director.

\*Prerequisite required

## **History and Political Science**

*Chair U. Ganesan, D. McFadden, M. Staudenmaier, G. Tafoya*

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**

### **Baccalaureate Degree**

#### **Bachelor of Arts**

Major in history, 36 hours: HIST 104 or 121; HIST 105 or 123; HIST 113, 114, 226, 237, 344; 15 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).

Major in history education; 69.5 hours: EDUC 111, 112, 202, 204, 207, 223, 230, 246, 302, 304, 343, 402, 430, 440, 475, and 477; ENG/MODL 350; INTD 355; HIST 104 or 121; HIST 105 or 123; HIST 113, 114, 226, 237, 344; fifteen hours of electives from the list of approved HIST courses nine hours of electives at the 200-level or above and from at least: American history (3 hours), European history (3 hours), and Asia/World history (3 hours).

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

Minor in history, 24 hours: HIST 113 or 114; HIST 104 or 121; HIST 105 or 123; HIST 226 or 237; 12 hours of electives at the 200 level or above. Must include at least 3 hours of 300 level or above.

### **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. LA-FCU.

**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. LA-FCU.

**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. LA-TGP.

**216 US HISTORY FOR ELEMENTARY EDUCATORS - 3 hours**

This course provides a concise yet comprehensive overview of the long trajectory of United States history, from the pre-1492 era to the 21st century. The course will be structured in both chronological and thematic fashion, covering major events as well as core themes, including race, gender, class, migration, religion, and violence, that have profoundly influenced the past and present of the United States. Through a variety of learning experiences, students will develop their understanding of the best contemporary understandings of US history, with an eye to developing age appropriate units and lessons they can teach to their own students.

**218 WORLD HISTORY FOR ELEMENTARY EDUCATORS - 3 hours**

This course provides a concise yet comprehensive overview of the long trajectory of World history, from c. 4000 BCE to the 21st century. Using both a chronological and thematic framework, it examines the major events, ideas, issues, trends, and processes that have defined and shaped the human past. Through a variety of learning experiences, students will develop their understanding of the best contemporary understandings of and approaches to the study of World history, with an eye to developing age appropriate units and lessons they can teach to their own students.

**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. LA-TGP.

**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. LA-FCU.

### **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. Secondarily, 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. LA-TGP.

### **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. Secondarily, 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. January. C-3GC.

**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. LA-FCU.

**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. LA-FCU.

**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. LA-TGP.

**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.

**317 BRITISH EMPIRE AND THE MAKING OF THE MODERN WORLD – 3 hours**

As one of the largest empires in history, the British Empire has had a profound impact on the "making of the modern world". This course examines the history of the British Empire from the mid-eighteenth century to the period of decolonization after World War II through not only the traditional lens of politics and war but also through the lens of race, class, gender, ethnicity etc. and with a focus on British colonialism in Asia and Africa. As such, it also studies the rise of anti-colonial nationalism in the colonies and the impact of Empire on the making of not only the modern world but also on Britain itself. LA-TGP.

**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 US THOUGHT 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 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 123.

**460 RECENT US HISTORY - 3 hours**

This course examines the social, political, economic, and intellectual forces that have shaped United States thoughts and policy since 1960.

**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**

#### **Bachelor of Science**

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: HIST 226, PEACE 110, POSC 131, 140; one course selected from: INTD 345, INTD 425, INTD 427, INTD 441; one course selected from: PEAC 330, POSC 360, POSC 365, POSC 367; one course selected from: COMM 256, HIST 210, HIST 246, HIST 263, POSC 236, POSC 237, SOC 311; one course selected from: ART 348, REL 222, REL 223.

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. Fall. C-4HP.

#### **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. Spring. C-4HP.

**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.

#### **211 EXPLORATIONS IN THE ARTS - 3 hours**

Offers an interdisciplinary study of selected cultural moments and movements in the arts. Students will explore the creative and cultural intersection of at least two disciplines (art, literature, and music). Students will learn how these arts shape culture and how culture shapes these arts. Topics will vary according to instructor and may include The Harlem Renaissance, Surrealism, or Outsider/Indie Artists. C-4AR, LA-EAR.

## **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. LA-TBI.

### **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.

### **343 PHILOSOPHY OF MIND - 3 hours**

What is consciousness? How does it arise? What is the relationship between the mind and the brain? Are we free? Do we have an enduring identify? This course will cover the major topics found in the historical and contemporary debates about the nature of the mind and its relation to the world. Possible topics include reductionism, behavioralism, eliminative materialism, dualism, functionalism, consciousness, qualia, intentionality, and zombies. C-5CC, LA-TBI.

### **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.

### **350 MIGRANTS AND REFUGEES- 3 hours**

The growing movement of peoples across national boundaries in search of employment, better wages, and higher standards of living, and away from persecution and violence has transformed the international community. In this course, you will attempt to answer several questions that focus on the understanding of why, how, who, what, and where of migration. What is difference between a refugee, internally displaced person, stateless person, and an asylum seeker? Why is there an increase in movement across borders in the past decades? How does migration influence the political, economic, and social environment of the sending and receiving state? Why are some persons welcomed and others rejected? What are the security concerns (trafficking, conflict, and terrorism) and issues engendered by international migration? What role do international organizations play in influencing state behavior towards migrants? The readings, presentations, and interactive activities will examine these questions and more regarding the challenges of migration flows. C-5CC. LA-TBI.

### **355 CRITICAL ISSUES IN EDUCATION – 3 hours**

Critical Issues in Education asks students to explore historical, current, and potential equity issues and dilemmas facing American school systems, the communities in which they reside, and the very structure of the institution of public schools. Through a study of critical issues in conjunction with personal values and dispositions, students will consider their roles, responsibilities, and influences as educational professionals and/or community members. A historical context for the roles of schools including the laws and constructs that influence institutional practices will provide a foundation for exploring multiple perspectives to ensure the academic success of all P-12 students, especially those with identified exceptionalities, those with linguistic, and those with culturally diverse backgrounds. Specific attention will be given to critical race theory, emotional and social well-being of students, financial inequities based on race and socio-economic status, and other educational challenges facing Americans. Teaching majors must earn a C or higher to meet the teaching program expectations.

Prerequisite: junior or senior standing. LA-TBI.

### **3XX TRAUMA & RESILIENCE – 3 hours**

This course focuses on how trauma, as an experience, affects individuals across the lifespan in the areas of emotion, behavior, cognition, and physical health. In this course students, will read stories of individuals who have experienced trauma and how current structures (i.e. education, work, government) support and constrain individuals with trauma. Students will engage in meaningful discussions about the impact trauma has on the brain and develop strategies for how to promote resilience-focused practices in their future career. Whether students are entering education, human and social services, health sciences, or any field, they will learn to be an advocate for trauma-informed practices. LA-TBI.

*Course number assignment pending.*

### **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.

### **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.

#### **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. LA-TBI.

#### **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.

#### **T37 HEALTH, ILLNESS, AND SOCIETY - 3 hours**

An examination of health, illness, disease and medical care from a biopsychosocial 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. Prerequisite: Junior or Senior standing. C-5CC.

#### **T38 WELLNESS PRACTICES FROM EAST AND WEST - 3 hours**

How elusive is serenity in the press of modern life? In both East and West, contemplative practices have evolved over centuries to calm the mind; strengthen, stretch, and relax the body; and open the spirit to healing. These practices are becoming more accessible for the average person. The course explores a few ancient practices, with primary emphasis on mindfulness, gentle yoga, breath awareness, and Christian Centering Prayer. Recent discoveries in

neuroscience will also be explored, especially as they do or do not give some credence to these ancient practices. The intention of this course is invite us into lifestyles of peace, personal wellness, and wise service – and give us tools to do that. Prerequisite: Junior or Senior standing. C-5CC.

**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**

### **EXP 101 MY MANCHESTER EXPERIENCE – 1 hour**

Students will locate resources to be successful in college and specifically at Manchester University. Students will also increase financial awareness, increase civic engagement, learn what makes Manchester University unique, and increase cultural awareness and critical engagement through the Values, Ideas and the Arts (VIA) series. C-1FS, LA-TME

### **EXP 102 MY PERSONAL EXPERIENCE – 1 hour**

Students will practice healthy habits of self-care. Students will also increase financial awareness, increase civic engagement, learn what makes Manchester University unique, and reflect on diverse philosophical, economic, scientific, and artistic principles through participation in the Values, Ideas and the Arts (VIA) series. LA-TPE

### **EXP 201 MY ACADEMIC EXPERIENCE – 1 hour**

Students will discern their purpose and vocation. Students will also increase financial awareness, increase civic engagement, learn what makes Manchester University unique, and deepen interdisciplinary connections among academic fields through the Values, Ideas and the Arts (VIA) series. LA-TAE

### **EXP 301 MY PROFESSIONAL EXPERIENCE – 1 hour**

Students will begin the transition to life after Manchester University. Students will also increase financial awareness, increase civic engagement, learn what makes Manchester University unique, and cultivate a professional identity informed by one's academic, ethical, creative, and personal commitments through the Values, Ideas and the Arts (VIA) series. LA-TPR

### **FYWS 111 FIRST YEAR WRITING SEMINAR – 3 hours**

This class introduces students to college-level writing through a disciplinary or interdisciplinary topic. Students will improve their critical thinking skills by examining a topic through multiple perspectives. This course will build community and aid students in their transition to college. C-1FS. LA-FWS.

## **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 research, 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 PROJECT - 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.

**T10 COVID-19: THE GLOBAL PANDEMIC - 1 hour**

The COVID-19 pandemic has impacted our health, social, political and economic contexts in profound ways. We are now often meeting through video-conference, as our lives have been upended through social isolation. Millions of people have already lost their jobs in the US, and the impact of the coronavirus is felt by everyone, and especially by the most vulnerable around us. This course takes an interdisciplinary approach, utilizing expertise from faculty across the University to understand the impact of COVID-19. Prerequisite: none

**T12 GRE PREPARATION – 0.5 hours**

The COVID-19 pandemic has impacted our health, social, political and economic contexts in profound ways. We are now often meeting through video-conference, as our lives have been upended through social isolation. Millions of people have already lost their jobs in the US, and the impact of the coronavirus is felt by everyone, and especially by the most vulnerable around us. This course takes an interdisciplinary approach, utilizing expertise from faculty across the University to understand the impact of COVID-19. Prerequisite: none

**T34 IRELAND AND SCOTLAND: SERVICE ACROSS BORDERS – 3 hours**

This service-focused course will explore the needs of underserved populations within our local community as well as in Scotland and the Republic of Ireland. Students will engage in hands-on projects in all three countries while reflecting on similarities and differences in how the needs of underserved populations (e.g., homeless and impoverished persons) are or are not being met. Students will learn about cultural diversity and analyze the similarities in the cultures and customs of each country. Faculty will facilitate a service-learning experience for students that promotes critical thinking and cultural appreciation.

## **International Studies**

*Director G. Tafoya*

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: HIST 226, PEACE 110, POSC 131, 140; one course selected from: INTD 345, INTD 425, INTD 427, INTD 441; one course selected from: PEAC 330, POSC 360, POSC 365, POSC 367; one course selected from: COMM 256, HIST 210, HIST 246, HIST 263, POSC 236, POSC 237, SOC 311; one course selected from: ART 348, REL 222, REL 223.

## **Library**

*Director D. Haines*

## **Courses LIB**

### **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 offers majors in applied mathematics, data science, and software engineering. These programs seek to graduate students who can: appropriately analyze a wide variety of mathematical and computational problems, understand and apply relevant theory and technology to solve real-world problems, develop and implement insightful and effective solutions, and effectively communicate both abstract ideas and concrete information.

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.

### **DATA SCIENCE**

Data science is the science of acquisition, management, visualization, and analysis of data. Students learn to interpret and communicate results of their analysis and to implement systems performing these tasks. It is an interdisciplinary field of scientific methods, processes, and systems extracting knowledge from data, using techniques from fields within mathematics, statistics, information science, computer science, and software engineering. It has broad applicability to the natural and social sciences, health care, business, finance, and commerce.

#### **Baccalaureate Degree**

Courses listed in parentheses are prerequisites.

#### **Bachelor of Science**

Major in data science, 53-55 hours: CPTR 111, 113, 430; DATA 110; DATA 210 or PSYC 241; DATA 227, 231, 242, 331, 431; 3 hours of DATA 475 or DATA 499; MATH 125, 130, 315; six or more hours chosen from (ACCT 211; BUS 108, 111) BUS 310, (BUS 111, 234) 322, (BUS 111, 234) 444, (BUS 111) 461; CPTR 310, 340, 424; DATA 275, 385; ENVS 215; IDIV 205; MATH 233, 330; POSC 325; (PSYC 110) PSYC 341.

Minor in data science, 23-27 hours: CPTR 105 or 111; DATA 110, 242; DATA 210 or PSYC 241; DATA 231 or BUS 108 and DATA 227; Six or more hours from the following: BUS 310, 322, 420, 447; CPTR 310, 424, 430; DATA 331; ENVS 215; IDIV 205; MATH 233, 315, 330; POSC 325; PSYC 341.

#### **Courses DATA**

##### **110 INTRODUCTION TO DATA SCIENCE - 4 hours**

A high-level introduction to the entire range of data science processes. Students will engage in the full data workflow utilizing collaborative projects. Topics include: formulating a data-driven problem, acquiring and organizing meaningful data, visualization of data, model-building, simulation, and communication of results. The Python programming language will be introduced and used throughout the course. Prerequisite: MATH 105 or higher math placement.

##### **210 and 210L STATISTICAL ANALYSIS AND LAB - 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 in DATA 210L. Students are expected to be proficient in using computer applications and the campus network. Prerequisite: MATH 105 or placement, and concurrent enrollment in DATA 210L. Fall. January. Spring. C-1Q. LA-FQR.

### **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: DATA 210 or PSYC 241.

### **231 DATABASE PROGRAMMING AND DESIGN - 4 hours**

This course introduces the fundamental topics in database programming and design as well as development of database-backed applications. Topics include the relational model, SQL, dependencies, normalization, XML, JDBC, JSON and Web programming. Prerequisites: CPTR 113 or DATA 110; MATH 130. Fall, even 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: One of DATA 210, MATH 115, or PSYC 241. Spring.

### **275 PRACTICUM IN DATA SCIENCE - 1 to 3 hours**

An applied experience allowing students to observe the practice of data science and work under the supervision of a data science professional. Students utilize concepts and techniques learned in the classroom, as well as tools and processes specific to the host organization. Student participates in activities that are typical of the profession but do not demand a high level of professional judgment. A presentation to one or more department faculty will complete the course. May be repeated for up to 6 hours of credit. Prerequisites: CPTR 111; DATA 110, 210, and permission of the department chair.

### **331 DATA ACQUISITION AND MANAGEMENT - 3 hours**

An in-depth treatment of methods for acquiring data from a variety of digital sources, ranging from unstructured datasets to those with well-defined schema. Includes use of general data-scraping techniques along with web-based APIs. Issues relate to managing and utilizing streaming data will also be explored, as well as paradigms for managing large-scale and distributed databases. Throughout the course, students will gain understanding of how to transform, organize and store data to be amenable for formal analysis. Prerequisite: DATA 231.

### **350 TOPICS IN DATA SCIENCE - 3-4 hours**

This course will be offered based on interest of students, faculty and industry partners in a specific area of data science. Typically, the course will cover current trends in data science (such as new tools, techniques or methodologies) and draw upon expertise of practitioners who are active in the field. May be repeated once on a different topic. Prerequisite(s): varies depending on topic.

**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.

**431 THE DATA PROFESSIONAL - 1 hour**

This course focuses on preparing students to become data science professionals. Students will discuss and present on professional issues such as data privacy and transparency. Students will hone their skills in communicating quantitative information in written, spoken and visual forms, focusing on a presentation's goals and target audience. It is intended students take this course immediately prior to, or concurrently with, their senior internship or research project.

Prerequisite(s): DATA 242, 331 or CPTR 430; Junior or Senior standing.

**475 INTERNSHIP IN DATA SCIENCE (W) - 1-3 hours**

Students work in business, government or other organizations applying data science skills to address organizational problems and create business solutions. Students are supervised by a professional having significant experience in their field as well as by a faculty member. A written report and oral presentation describing the overall project and the contribution made by the student will complete the course. May be repeated for up to 6 hours of credit.

Prerequisite(s): DATA 431 (may be taken concurrently) and approval of the department chair.

**499 SENIOR PROJECT IN DATA SCIENCE (W) - 1-3 hours**

An applied analytics project, or an in-depth research project into some area of data science, directed by a faculty advisor. A written report and oral presentation describing the overall project, analyses performed and conclusions reached complete the course. May be repeated for up to 6 hours of credit. Prerequisite(s): DATA 431 (may be taken concurrently) and approval of the department chair.

**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, business and industry, and prepare for graduate studies in mathematics or related disciplines.

**Baccalaureate Degree**

Courses listed in parentheses are prerequisites.

**Bachelor of Science**

Major in applied mathematics, 44-46 hours: CPTC 105 or 111; DATA 210; MATH 121, 122, 130, 233, 245, 251, 315, 330; 3 hours of MATH 475 or 499; six or more hours of approved electives chosen from: (CHEM 113) CHEM 341; (CPTC 113) CPTC 310, (DATA 231) 430; DATA 242; MATH 231, 340, 380/480, 385/485.

Major in applied mathematics education, 89.5-90.5 hours: EDUC 111, 112, 202, 204, 207, 223, 230, 246, 302, 304, 343, 402, 430, 440, 475, and 477; ENG/MODL 350; INTD 355; CPTR 105 or 111; DATA 210; MATH 121, 122, 130, 233, 245, 251, 315, 330; six hours of approved electives selected from: (CPTR 113) 310, (DATA 231) 430; DATA 242, MATH 231, 340, 380/480, 385/485, 440.

Minor in mathematics, 22 hours: MATH 121, 130; twelve or more hours chosen from (CHEM 113) CHEM 341; (CPTR 113) CPTR 310; DATA 210 or PSYC 241; MATH 122, 231, 233, 242, 245, 251, 330, 340, 380/480, 385/485.

## 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. 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.

### **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 may not be taken by students who have previous credit for (or are concurrently enrolled in) DATA 210  
Prerequisite: MATH 105 or placement. Fall. January. Spring. C-1Q. LA-FQR.

### **116 ALGEBRA REVIEW FOR STATISTICS – 1 hour**

Students will review algebra topics alongside their statistics class. Topics include evaluating expressions and formulas, graphing linear equations and functions, working with equations of lines, and evaluating exponents and roots. Study skills and tips to reduce math anxiety will be included. Students may not enroll in this course if they have credit for MATH 105 – Basic Algebra. Grading is P/NP.

### **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. Fall. Spring. C-1Q. LA-FQR.

### **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. Spring.

### **125 MATHEMATICAL MODELING - 4 hours**

A course emphasizing real-world applications, model building and problem solving. Students will study and apply derivatives, integrals, vectors, and matrices. Emphasis will be placed on interpreting growth of functions, optimization, model sensitivity, systems of equations, and applications of matrices. Prerequisite: MATH 120. C-1Q. LA-FQR.

### **130 DISCRETE MATHEMATICS - 4 hours**

An introduction to discrete methods used in mathematics, data science and computer science. Topics covered are: logic, reasoning and proof, relations, sets, combinatorics, arbitrary number bases, number theory, algorithms, recursion, induction, and graph theory. Prerequisite: MATH 120. Spring.

### **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. Prerequisites: MATH 108; MATH 115, DATA 210 or PSYC 241.

### **211 QUANTITATIVE SKILLS FOR BUSINESS – 3 hours**

A foundational course in quantitative skills for business. This course covers topics including algebra, ratios, rates, percentages, descriptive statistics, hypothesis testing, modeling, correlation and probability. Emphasis will be on understanding data to make decisions and the ways by which businesspeople communicate with numbers. Applications will be to business and finance using concrete, real-world projects. The course will include multiple projects using computer software (spreadsheets and data analysis software). Prerequisite: Math placement Level 3 or MATH 105. LA-ENS.

### **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. Prerequisites: 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.

**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.

**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. 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.

**315 PROBABILITY AND SIMULATION - 3 hours**

Study of discrete and continuous probability distributions commonly used in applied mathematics and statistics, including concepts of joint, conditional and marginal distributions. Using these building blocks, computer simulations will be developed applicable to business and the natural, social and health sciences. Statistical techniques and tools required to interpret simulation results will be covered as well as use of re-sampling in statistical inference. Prerequisite(s): DATA 210 or PSYC 241, and either CPTR 105 or CPTR 111.

**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 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 (W) - 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. Prerequisites: MATH 122, 130; 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. Graduates will be prepared for successful careers in software development in a wide variety of businesses and industries and will be equipped to pursue a variety of graduate programs in computing.

### **Baccalaureate Degree**

Courses listed in parentheses are prerequisites.

### **Bachelor of Science**

Major in software engineering, 49-51 hours: CPTR 111, 113, 231, 310, 340, 342, 420, 422; DATA 231; IDIV 205; MATH 125, 130; three hours of CPTR 477 or 499; six or more hours chosen from: CPTR 308, 410, 424, 430; MATH 315.

Minor in computer science, 24-26 hours: CPTR 111, 113; MATH 130; One of MATH 121, 125, or 251; three courses from the following: CPTR 231, 308, 310, 410, 424, 430; DATA 231; MATH 233, 315.

Minor in systems analysis, 27-29 hours: CPTR 111, 113, 340, 342 or 422; BUS 111; IDIV 205; one course selected from BUS 108; DATA 231; 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 is on problem solving. Students will learn and apply the methods of computational thinking. They will learn how to decompose a problem into a computational solution that can be written as a computer program using if-statements, loops, classes and methods. Fall.

#### **113 FOUNDATIONS OF COMPUTER SCIENCE II - 3 hours**

A continuation of Foundations of Computer Science I, the emphasis will be on extending and formalizing student knowledge of problem solving. Students will also be exposed to object-oriented design topics such as: information hiding, reusability coupling, cohesion, polymorphism and inheritance. 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.

**231 OBJECT-ORIENTED PROGRAMMING - 3 hours**

This course will extend and formalize student knowledge of Object-Oriented Programming and Object-Oriented Design. Students will learn and practice polymorphism, the Unified Modeling Language (UML) and common design patterns. Emphasis will be to learn how to utilize Object-Oriented principles well. Prerequisite: CPTR 113.

**308 COMPUTER ARCHITECTURE - 3 hours**

An introduction to the organization of computers. Topics include Turing Machines, information representation, assembly language programming, registers and Central Processing Units (CPU). These topics will be examined for their impact on software development. Prerequisite(s): CPTR 113; MATH 130.

**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: DATA 231. Spring even years.

**430 MACHINE LEARNING - 3 hours**

Study of advanced machine learning techniques such as support vector machines, linear discriminate analysis, and cluster analysis. In-depth treatment of ensemble techniques and model validation. Application of artificial intelligence paradigms such as Bayesian networks, neural networks, and evolutionary algorithms. Development of systems that update their own knowledge base, independently make modeling decisions, and produce actionable recommendations. Application to such areas as risk assessment, fraud detection, visual recognition, and natural language processing. Prerequisites: DATA 231, 242 or MATH 315.

**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 C. Gohn*

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**

#### **Bachelor of Science**

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; DATA 210 or MATH 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 experience before graduating.

## **Modern Languages**

*Chair B. Gilliar, 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 minor 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.

### **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.

## **SPANISH**

### **Baccalaureate Degree**

#### **Bachelor of Arts**

Major in Spanish, 36 hours: SPAN 201, 202, 301, 302, 321, 385 or 485; two classes from the following: SPAN 330, 340, 403, 411; 3 elective hours from the following: SPAN 230, 231, 325, 333, 380, 480 or MODL 241; 9 study abroad hours.

Minor in Spanish, 24 hours: SPAN 201, 202, 301, 302, 321; 9 elective hours from the following: SPAN 230, 231, 325, 330, 333, 340, 403, 411.

Minor in TESOL (Teaching English to Speakers of Other Languages), 24 hours: ENG 310, 311; ENG/MODL 350, 352, 354; one course from the following: COMM 256, ENG 238, 310, 311, MODL 241, 411 or SOC 228; two courses from the following: EDUC 111, 216, 223, 230 or 246; one course from the following: SPAN 201 or 202.

### **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.

**111L FOOD CULTURES LAB - 0 hours**

Laboratory to accompany SPAN 111.

**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.

**112L MEMORY AND CULTURE LAB - 0 hours**

Laboratory to accompany SPAN 112.

**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.

**201L COMMUNICATION AND CULTURE LAB - 0 hours**

Laboratory to accompany SPAN 201.

**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.

**202L CULTURES AND CONTROVERSIES LAB - 0 hours**

Laboratory to accompany SPAN 202.

**203 PROFESSIONAL SPANISH - 3 hours**

A study of the Spanish language as it is used in both personal and professional contexts. Course aims to facilitate acquisition of more sophisticated vocabulary related to the professional world, increased grammatical accuracy, sentence- to paragraph-level discourse, and a deeper understanding of Spanish-speaking cultures particularly in the areas of health care, criminal justice, business, education, and other professional contexts. C-3GC.

**203L MEDIA AND CULTURE LAB- 0 hours**

Laboratory to accompany SPAN 203.

**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. Credit for this course will apply toward the Spanish major or minor. C-3GC. January. Summer.

**275 SPANISH PRACTICUM - 3 hours**

The Spanish practicum offers students an opportunity to implement their knowledge and facility in professional medical, educational, or business Spanish through real-world experience. Students will practice Spanish while interacting with patients, clients, students, managers, and / or employers in clinical, internship, or observational settings in predominantly Spanish-speaking contexts. Each practicum is developed in order to meet the individual student's needs and desired outcomes or goals.

**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.

**301L ORAL COMMUNICATION LAB - 0 hours**

Laboratory to accompany SPAN 301.

**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. C-3GC.

**302L IDEAS AND CULTURE LAB - 0 hours**

Laboratory to accompany SPAN 302.

**310 BUSINESS SPANISH - 3 hours**

This advanced course introduces the student to essential business terminology and language situations in common business contexts. Course reinforces strategies for understanding, interpreting, responding to new information and the importance of cultural awareness in doing business in Spanish either in Spain, Latin America, or the United States.

**312 SPANISH FOR THE HEALTH PROFESSIONS - 3 hours**

Intensive conversation course exposing students interested in healthcare and related professions to essential vocabulary for encounters with Spanish-speaking patients / clients. Course material focuses on practical vocabulary, idiomatic expressions, and cultural patterns of Spanish-speaking patients with little or no proficiency in English. Particular emphasis is placed on proficiency in conversational settings to ask patients about pain, symptoms, feelings, medical histories, and insurance. Important vocabulary includes lessons on body parts, diets, and medical care and treatment.

**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 APPLIED SPANISH - 3 hours**

An intensive Spanish language course that prepares students to identify and discuss global issues in areas such as business and medical ethics, healthcare, economics, negotiation, finance, education, energy, politics, criminal justice, and/or other current topics that are vital for intercultural competence in professional settings. Content and themes are tailored according to enrolled students' career objectives and include specialized, individualized vocabulary according to students' vocational interests.

**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.

**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. 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.

**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.

**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.

**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/ADEAN 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 P. Haynes, C. Humphries, D. Lynn, T. Reed*

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.

#### **Bachelor of Arts**

Major in music, 44-56 hours.

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.

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.

Vocal performance concentration, 51-53 hours: MUS 109, 113, 121, 125 (MUS 106), 148, 201, 212, 213, 225, 226, 242, 248, 254, 332, 341, 347, 370, 432, 472; MUS 131 or 133; six hours of applied lessons; four hours of ensembles; seven hours of approved electives.

Instrumental performance concentration, 48-50 hours: MUS 109, 110, 113, 121, 125, 148, 201, 212, 213, 225, 226, 242, 248, 332, 341, 347, 370, 432, 472; six hours of applied lessons; four hours of ensembles; seven hours of approved electives; 1 hour of small/chamber ensembles.

Major in instrumental music education, 91 hours: EDUC: 111, 212, 230, 343, 362, 410, 479; MUS 109, 110, 113, 119, 125, 148, 201, 212, 213, 225, 226, 227, 231, 232, 244, 248, 262, 310, 313, 331, 341, 343, 344, 346, 362, 370; seven semesters of an instrumental ensemble and two semesters in a vocal ensemble (at least four semesters must be in the major ensemble of their concentration - concert band for wind and percussionists, orchestra for string players); six hours of applied instrument lessons.

Major in choral music education, 89 hours: EDUC: 111, 212, 230, 343, 362, 410, 479; MUS 109, 110, 113, 119, 125, 148, 161, 163, 201, 212, 213, 225, 226, 231, 232, 242, 248, 254, 267, 268, 310, 341, 343, 355, 362, 370; seven semesters of a choral ensemble and two semesters in an

instrumental ensemble; at least four semesters also must be in a cappella choir; six hours of applied instrument lessons.

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.

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.

### **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.

### **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.

### **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. January, odd years. C-4AR.

**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.

**124 POPULAR MUSIC AND CULTURE - 3 hours**

In this course, students will explore the interactive relationship between popular music and culture with emphasis on multiple cultural perspectives both within and outside of the United States as well as multiple time periods. Using the frame of popular music, students will increase overall cultural competency and build understanding of different cultures, fostering an ability to relate effectively across cultural differences. Along the way, students will engage with a wide range of popular music styles (and cultures in which they are situated) including jazz, rock n' roll, American hip-hop, Bollywood music, Luk Thung, K-pop, Palestinian and Israeli hip-hop, Nashville country music and others. C-4AR. LA-FCU.

**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.

**126 BEAT MAKING AND PRODUCTION - 1 hour**

In this course, students will learn foundations of beat making and loop-based music production and create original works. This course will emphasize creative expression in popular music styles including hip-hop, R&B, pop and electronic dance music. This course is designed to be appropriate for beginners as well as experienced musicians. Prior musical experience is not required for this course. Students will create music within loop-based and Digital Audio Workstation software environments. Foundational audio recording techniques will also be introduced. LA-TCE.

**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.

**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: MUS 125 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. Prerequisites: MUS 121 and 125. Fall, odd years.

**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. Spring even years. C-4AR.

**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. LA-TCE.

**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. LA-TCE.

**200 PIANO: NON-MAJORS - 1 hour**

For non-majors who have at least moderate ability in piano. 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. May be repeated. Prerequisite: MUS 100. LA-TCE.

**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. LA-TCE.

**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. LA-TCE.

**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. LA-TCE.

**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. LA-TCE.

**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. LA-TCE.

**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. LA-TCE.

**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. LA-TCE.

**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. LA-TCE.

**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****112 MARCHING BAND - 2 hours**

This course is designed to give students the opportunity to participate in a university marching band. Students will prepare athletic band repertoire to perform at home football games and other campus events including marching field show performances. Open to any instrumentalist who meets the audition standard. In order to march, students must participate in band camp (prior to start of semester). May be taken for credit up to four times. Prerequisite: approval of instructor (by audition)

**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. LA-TCE.

**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. LA-TCE.

**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. LA-TCE.

**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. Spring. C-4AR.

**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.

## **NASC Natural Sciences 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.

#### **210 EXPLORATION OF NATURAL SCIENCE - 3 hours**

This course will use an integrated approach to explore topics in the fields of biology, geoscience, chemistry and physics. Students will engage critical thinking skills in a project-based learning environment to develop a broad base of scientific literacy, collaborating to apply their knowledge to solve authentic, real-world problems. Students will discover how living things interact with each other and their environment to obtain energy and building blocks for growth, classify features of the earth and the processes that shape its landscapes, and describe how motion, energy and forces affect the way things work. LA-ENS

#### **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.

**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.

**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 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.

**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.

**475 INTERNSHIP IN HEALTH SCIENCES – 3 hours**

Students with junior or senior status function as applied professionals in a setting related to health science in order to understand the real-world application of health science concepts and to develop critical thinking, technical skills, and professionalism. Students are supervised by both a professional with significant experience in such applications and 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.

**380 and 480 SPECIAL PROBLEMS**

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.

**T23 ETHNOZOOLOGY - 3 hours**

Exploration of past and present relationships between human societies and animals. Consideration to include the use of animals and their byproducts for food, medicine, drugs, and additional goods and services. Contemporary problems in conservation, sustainability, and human and animal rights may also be explored. C-3RC, LA-FCU.

## **Nursing**

*Director, B. Schultz, K. Edwards, D. Lewandowski, N. Schroeder*

The mission of the Nursing Program is to prepare future nurses to respect the infinite worth of every individual, and to practice nursing by drawing on their faith to lead principled, productive, and compassionate lives that inspire them to be servant leaders within the nursing profession.

### **Baccalaureate Degree**

#### **Bachelor of Science in Nursing**

Major in nursing, 95 hours: BIOL 202/L, 204/L, 219/L; CHEM 105/L; MATH 115; NURS 110, 205, 210, 2XX, 220, 305, 310, 315, 320, 325, 330, 405, 410, 415, 420, 425, 430, 435, 440; PSYC 110, 224.

Major in nursing (second degree BSN), 68 hours: NURS 110, 210, 2XX, 220, 305, 310, 315, 320, 325, 330, 405, 410, 415, 420, 425, 430, 435, 440.

### **Courses NURS**

#### **110 HIST & TRENDS IN PROF NURSING - 2 hours**

Entry-level course that introduces students to professional nursing concepts and exemplars within the professional nursing role including member of profession, provider of patient-centered care, safety advocate and healthcare team member. Content includes clinical judgment, communication, ethical/legal issues, evidenced-based practice, health promotion, health information technology, patient-centered care, patient education, professionalism, safety, and teamwork/collaboration. Emphasizes role development of the professional nurse including self-care behaviors, incivility, burnout, and substance abuse.

#### **205 NUTRITION FOR NURSING - 3 hours**

This entry-level course introduces the student to the role of the nurse in promoting and supporting nutritional health with an emphasis on the role nutrition plays in health promotion and prevention of illness, recovery from acute illness and/or management of chronic illness. Students will explore how culture, ethnicity, socio-economic status, nutritional trends and controversies, and integrative therapies influence the nutritional health of the client. Students will develop a robust understanding of the chemical and biochemical foundations of nutrition and metabolism, focusing on patients with altered nutritional needs. Students will learn to access evidence to support healthy nutritional choices that reduce risk factors for disease and/or illness across the lifespan. Enrollment is restricted to nursing majors.

#### **210 PATHOPHYSIOLOGY FOR NURSING - 3 hours**

This course focuses on common disease conditions affecting human beings across the lifespan. Interplay of environmental, biological, behavioral, and pharmacological determinants to the disease process are examined. Emphasis is on homeostasis of body systems resulting in optimal health. Enrollment is restricted to nursing majors. Prerequisite(s): BIOL 202, 202L, 204, 204L, 219, and NURS 110.

#### **2XX HEALTH ASSESSMENT FOR NURSING - 4 hours**

Evidence-based components of a routine well adult health assessment utilizing various methods are demonstrated and practiced to perform a complete history and physical examination. Distinguishing normal from abnormal conditions is emphasized. Cultural considerations, therapeutic communication, and promotion of a healthy lifestyle are emphasized. Enrollment is restricted to nursing majors. Prerequisite(s): NURS 110.

*Course number assignment pending.*

**220 FUNDAMENTALS OF NURSING - 5 hours**

Fundamental nursing concepts, skills, and techniques of safe nursing practice. Application of concepts, including the nursing process, will be applied to nursing care for the beginning nurse clinician. Emphasis on evidence-based practice, development of nursing judgment (clinical reasoning), documentation, standard precautions, concept mapping, patient education, health adaptation, and therapeutic communication. Basic drug therapy concepts are introduced. Enrollment is restricted to nursing majors. Prerequisite(s): NURS 110.

**305 PHARMACOLOGY FOR NURSING - 3 hours**

This course examines the pharmacological principles of pharmacodynamics, pharmacokinetics, drug interactions, common side effects, and misuse of medications. Pharmacotherapeutic agents that are used in the treatment of illness and the promotion, maintenance and restoration of wellness in diverse individuals across the lifespan will be discussed. Emphasis is on concepts of safe administration and monitoring the effects of pharmacotherapeutic agents. Enrollment is restricted to nursing majors. Prerequisite(s): NURS 210.

**310 NURSING CARE OF SPECIAL POPULATIONS - 3 hours**

This course is designed to assist in broadening student understanding and perspective of health and illness among culturally diverse populations, to include gender studies. Appraises knowledge, attitudes, and skills that foster competent, sensitive, holistic care for diverse individuals, groups and communities. Prerequisite(s): NURS 320, 330.

**315 NURSING CARE OF FAMILY - 5 hours**

Acquisition and application of knowledge in maternal and pediatric specialties. The health responses of the family unit are emphasized as essential to the promotion and maintenance of the health of mother and child. Students utilize the nursing process and evidence-based practice to provide optimal care for newborns, children and the developing family. Students care for patients in a variety of settings. Restricted to nursing majors. Prerequisite(s): NURS 305, 320, 330.

**320 ADULT HEALTH I - 6 hours**

Application of concepts related to the care of the adult in the acute care setting with commonly occurring medical-surgical problems. Emphasis of this course is on the use of the nursing process and application of core nursing competencies in providing and coordinating safe, quality and patient-centered care. Prerequisite(s): NURS 110, 205, 210, 2XX, 220.

**325 ADULT HEALTH II - 6 hours**

Expands on concepts from previous coursework. Uses the nursing process, clinical judgement and leadership principles to care for adult patients experiencing complex medical-surgical conditions along the health-illness continuum. Incorporates evidence-based practice, professional standards, quality improvement, and legal and ethical responsibilities of the professional nurse caring for high acuity patients. Application of knowledge and skill competencies occur in a variety of clinical settings. Enrollment restricted to nursing majors. Prerequisite(s): NURS 305, 320, 330.

**330 MENTAL HEALTH & WELLNESS - 4 hours**

Develop knowledge of psychiatric/mental health issues, including psychosocial concepts; cultural, ethical, and legal influences; and wellness of individuals and family groups. Application of the nursing process with emphasis on critical thinking, therapeutic nursing interventions, and effective communication and interpersonal skills as they relate to persons with psychiatric

mental health conditions. Opportunities in select care environments to gain skill and refine therapeutic communication techniques with patients and family members promoting therapeutic interpersonal relationships. Prerequisite(s): NURS 210, 2XX, 220.

#### **405 RESEARCH FOR EVIDENCE-BASED PRACTICE - 3 hours**

Students will development an understanding of the research process and scholarship for evidence-based practice. A spirit of inquiry will be fostered through interpretation, analysis, and critique of research literature. Students will engage in the exploration of current evidence-based practice and application of scientific methodologies related to specific challenges in healthcare. Translation of information presented through scientific literature to current practitioners and patients. Ethical considerations and methods of protection of human subjects will be discussed. Prerequisite(s): PSYC 110

#### **410 NURSING IN THE COMMUNITY - 4 hours**

Applies theoretical and empirical knowledge in using the nursing process in urban and rural community settings to promote, maintain and restore health. Emphasis on health education, health promotion, and illness prevention as strategies for meeting the health needs of population aggregates. Integrates trans-cultural nursing concepts, rural and home health care delivery. Diverse roles of the community and public health nurse are examined, and a community assessment is completed using research and data processing skills. Enrollment is restricted to nursing majors. Prerequisite(s): NURS 210, 2XX, 220.

#### **415 NURSING LEADERSHIP & MANAGEMENT - 3 hours**

Current theories of nursing management, leadership and change are examined and related to nursing practice. Emphasis on critical thinking, team building, communication, priority setting, collaborative decision-making, and advocacy. Discussion of legal and ethical responsibilities in health care. Enrollment is restricted to nursing majors. Prerequisite(s): NURS 325, 330.

#### **420 COMM ENGAGEMENT FOR NURSES - 3 hours**

This service-learning focused course gives students the opportunity to grow academically, professionally, personally and civically through participation in a service-learning experience. Students meet identified needs within the community by applying knowledge from previous coursework. Students complete service hours during the course, meeting and addressing the needs within the community. Students develop presentations and engage in written reflection regarding their experiences.

#### **425 NURSING CARE OF THE AGING POPULATION - 3 hours**

This course focuses on aspects of the normal aging process and common alterations in the health of the older adult. The challenges in the urban versus rural setting will be explored. There will be an emphasis on evidence-based practice that supports quality of life with a focus on aging well. The nursing process as well as Quality and Safety Education for Nurses (QSEN) principles will provide direction to promote, restore, and maintain the health of the older adult patient. This course explores the concept of aging across cultures, within the United States, and globally. Enrollment is restricted to nursing majors. Prerequisite(s): NURS 325.

#### **430 NURSING CARE OF CRITICALLY ILL - 4 hours**

Comprehensive essential knowledge and skills to perform effectively and efficiently in the critical care discipline, so as to ensure the delivery of safe, holistic and quality care to patients. Students gain clinical competence by assimilating foundational nursing knowledge with core critical care concepts. The focus is on providing safe, competent care of critically ill patients and their families. Prerequisite(s): NURS 305, 310, 325.

**435 TRANSITION TO NURSING PRACTICE - 3 hours**

Integration of baccalaureate learning outcomes to prepare the graduate for professional nursing practice. Preparation for taking the NCLEX. Synthesis of content from previous courses.

Delivery of evidence-based direct care, utilizing clinical reasoning skills within mentored clinical experiences. Use of technology to deliver safe nursing care. Prerequisite(s): NURS 430.

**440 PREPARATION FOR PROFESSIONAL NURSING - 3 hours**

This course will prepare students for entry into professional practice through the review of concepts required for licensure examination and strategies for identification of, applying for, and interviewing for nursing positions and graduate education. Preparation for the National Council Licensure Examination for Registered Nurses (NCLEX-RN) will be a major focus. Enrollment is restricted to nursing majors. Prerequisite: NURS 325. Corequisite: NURS 430.

## **Peace Studies**

*Director K. Gray Brown, A. Gurung*

Peace Studies graduate persons with a critical understanding of the causes and consequences of violence and injustice, equipped with both theoretical and practical knowledge of nonviolent ways of resolving conflict and promoting justice. Peace studies prepares our graduates to be capable, confident, and courageous in the work of building a peaceful and just world.

### **Baccalaureate Degree**

#### **Bachelor of Arts**

Major in peace studies, 39 hours: core courses (24 hours): INTD 425; PEAC 110, 218, 235, 320, 330; PHIL 444; REL 205; plus one course from: SPAN 201, 202 or REL 222, 223, 325, 435; plus 12 hours of PEAC electives or approved by the Peace Studies Council.

#### **Bachelor of Science**

Major in peace studies, 39-40 hours: core courses (24 hours): INTD 425; PEAC 110, 218, 235, 320, 330; PHIL 444; REL 205; plus one course from DATA 210 or PSYC 241 or SOC 324; plus 12 hours of PEAC electives or approved by the Peace Studies Council.

All majors must successfully complete the senior comprehensive evaluation. Details are available from the Peace Studies director.

Minor in peace studies, 18 hours: PEAC 110; 15 hours of electives approved by the Peace Studies Council.

### **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. LA-FCU.

#### **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 - 2-3 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 MEDIATING CONFLICT - 3 hours**

Study and practice of the psychological and sociological components and technical skills inherent to mediating interpersonal and intergroup conflict. LA-FCU.

**235 NONVIOLENT SOCIAL CHANGE - 3 hours**

This course focuses on the moral legitimacy and strategy of nonviolent movements. We examine the spectrum of methods that can be categorized as nonviolent responses to injustice.

**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 GLOBAL CONFLICT RESOLUTION - 3 hours**

An advanced study of how to deal constructively with global, international and intergroup conflict. C-3GC. LA-TGP.

**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 K. Gray Brown, K. Eisenbise Crell, J. Lasser*

### **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**

#### **Bachelor of Arts**

Major in philosophy and religious studies (30 hours), PHIL 205, 206; REL 106, 121, 435; INTD 425; four courses selected from departmental offerings.

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. Fall. Spring. C-4PH.

#### **205 A MEANINGFUL LIFE - 3 hours**

What do we live for? What gives us purpose and meaning? Who decides – and how – which lives are most meaningful (or most important)? How are our own answers to these questions culturally conditioned? This course seeks to address these questions by examining a variety of philosophical, religious, and cultural traditions. Students will explore the writings of historical and contemporary figures who puzzle over the meaningful life and will draw on these ideas to articulate their own answers to these big questions of meaning and purpose. C-4PH. LA-EHU.

#### **206 THE HUMAN PERSON - 3 hours**

What is a human being? What does it mean to exist? What is our relationship to others, to ourselves, to God? What is this being that can conceive of and long for eternity, while being bound within the limits of temporality and space? This course will explore topics like the relationship between faith and reason, mortality, the afterlife, a sense of self, the sources and limits of knowledge, the pursuit of goodness, truth, beauty and meaning. C-4PH. LA-EHU.

#### **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. Fall. Spring. C-4PH.

#### **219 BUSINESS ETHICS - 3 hours**

A study of ethical principles and theories in the context of business and the economy. C-4PH.

#### **221 MEDICAL AND RESEARCH ETHICS - 3 hours**

This course is an overview of the development and practice of medical ethics. We will cover scandals of the past century as well as the foundational ethical principles those scandals led to that now govern the discipline. This course will cover the major philosophical and religious ethical systems, medical and research issues like different models of the doctor/patient relationship, including from paternalism to informed consent, the tensions between doing pure science and serving one's patients, from double-blind trials to compassionate use of experimental medicine, and the tensions between values of autonomy, medical expertise, and religious and cultural sensitivity, among others. C-4PH. LA-EHU.

**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.

**327 INDIGENOUS THINKING - 3 hours**

This course explores philosophical themes of metaphysics, epistemology, and value theory from the perspectives of Indigenous American and other tribal traditions. Students will consider the approach that Native peoples have taken to questions of reality, knowledge, ethics, and justice. LA-TGP.

**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

nonsense, 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.

#### **Bachelor of Arts**

Major in religious studies, 27 hours: REL 106, 121, 244, 325, 435; four courses selected from departmental offerings.

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

Minor in religious studies, 21 hours: twenty-one hours from religious studies 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. Fall. C-4RL.

**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. Spring. C-4RL.

**106 BECOMING WHO YOU ARE - 3 hours**

"Who are you?"--"What are you?"--"Who will you become?"--"Who are you for others?" This Humanities Exploration course is a response to these profound philosophical, spiritual, and ethical questions. Students will explore psychological case studies and learn to identify the various ways we situate ourselves relative to what other people desire. The course also pursues these questions through a study of the life and teachings of Jesus of Nazareth and his earliest scribal imitators. It introduces an ancient writing practice that invited imitators of Jesus to write as if they were one of his peers. Students will develop this narrative practice as they write, articulate, and explore who they really are. C-4RL. LA-EHU.

**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.

**113 ON RELATING TO OTHERS: GOD & STRANGERS - 3 hours**

This course explores the many ways that others captivate and confront us with alluring gazes, conflicting desires, and ambiguous demands. It probes the way these mysteries provoke questions of personal identity and meaning. It examines the way people seek to find meaning through a relationship with others. It analyzes some of our most pressing ethical and spiritual questions: "What do you want from me?"; "How can I be desirable for you?"--and in our most lonely moments: "Can you live without me?" Students will explore these confrontations with others through the Scriptural inheritances of Judaism, Christianity, and Islam and the critical intuitions bestowed by Western philosophy. C-4RL. LA-EHU.

**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. Fall. Spring. C-4RL.

**121 SACRED TRADITIONS - 3 hours**

This course will introduce the philosophy and the academic study of religion by observing the broad range of ways human beings experience and think about the sacred. We will examine the historical origins, philosophical traditions, and contemporary trends of the major religious traditions, noting their fundamental doctrines and beliefs as well as their rituals and practices. C-4RL. LA-EHU.

**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**

This course introduces the religious traditions of East Asia, most notably Buddhism, Confucianism, Daoism, and Shinto. We will pay attention to the development and change within these traditions as they have interacted with and reacted to specific local contexts as well as the forces of globalization. C-3GC. LA-TGP.

**223 RELIGIONS OF INDIA - 3 hours**

Religion permeates almost all areas of life in India. The subcontinent is the birthplace of four major religious traditions and home to practitioners of almost all the world's religions. This course will introduce the ancient roots and contemporary forms of the religions and philosophies native to India; the major traditions, such as Islam, that have been transplanted there; and the ways these religions and philosophies have influenced cultures around the world. C-3GC. LA-TGP.

**228 THE BRETHREN 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.

**244 THE RELIGIONS OF ABRAHAM - 3 hours**

This course introduces students to the practices, beliefs, and histories of Judaism, Christianity, and Islam. It focuses particularly on the moments when the boundaries defining these religious traditions were permeable. It explores instances where Jews and Christians were not separate religions. It also recovers an era when Christians and Muslims prayed together without distinction. It then traces the ways these religious brothers became others. Students will learn how to articulate the beliefs and practices of one religion through the language of another religious tradition. They will apply this skill to contemporary interreligious dialogue. C-4RL. LA-FCU.

**247 JESUS IN MIDDLE EASTERN PERSPECTIVE - 3 hours**

The life and teachings of Jesus when viewed from the vantage of ancient and contemporary Middle Eastern and Mediterranean cultural perspectives exhibit a remarkable contrast to North American values. Students will learn about Middle Eastern and Mediterranean cultural values through the study of the life of Jesus of Nazareth and the subsequent reflections on his significance in Byzantium, Arabia, and Persia. Students will compare the reciprocal values of peasant culture with the market-oriented assumptions of contemporary North American political economy. They will also query the presuppositions operating in the honor and shame conventions that permeate ancient and contemporary Middle Eastern society. This course invites participants to listen to Jesus' parables and teachings anew with the fresh perspective of ancient society and Muslim majority East Mediterranean nations. LA-TGP.

**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.

**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.

**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.

**Population Health**

*Dir. J. Osborne*

The population health major takes an interdisciplinary and multidisciplinary approach to understanding and sharing health information with different populations and demographics. Along with a foundation in the natural sciences, students learn the dynamic nature of culture, open and engage in dialogue, and understand and appreciate different perspectives on how health is viewed.

**Baccalaureate Degree****Bachelor of Arts**

Major in population health, 44 hours: BIOL 108/108L or BIO 204/204L; COMM 220, 241, 327, 370; DATA 210 or PSYC 241; NASC 315; PEAC 218 or 320; SOC/SOWK 220; one course selected from: NASC 310, 375, 475; one course selected from: POSC 225, SOC 350; SOWK 350; nine hours selected from: COMM 130, 234, 344; ESAT 262, 264; ENVS 215; PEAC 112; PHIL 335.

## **Psychology**

*Chair M. Coulter-Kern, R. Coulter-Kern, K. Kessie, M. McCoy*

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, developmental 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**

#### **Bachelor of Science**

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; 47-48 hours: PSYC 110, 201, 224, 225, 227, 235, 241, 250, 341, 360, 444; one course must be selected from PSYC 346, 347, or 349.

Major in psychology, industrial organization concentration; 46-48 hours; PSYC 110, 201, 224, 225, 227, PSYC 235 or 250; PSYC 241, 341, 345, PSYC 376 or BUS 340; PSYC 444. One course selected from: PSYC 346, 347, or 349.

Major in psychology & religious culture; 56-58 hours; PSYC 110, 224, 235, 241, 341, 366, 444; REL 106, 113, 121, 223; one course selected from: PSYC 346, 347, or 349; two courses from: PEAC 320, PSYC 201, PSYC 307, REL 205, or REL 325; one course from: REL 222 or 247; one course from: INTD 343, PHIL 201, or PHIL 221.

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

Students majoring in both Cognitive Neuroscience Psychology and Industrial Organizational Psychology must have at least 9 distinctive hours between the two majors in order to graduate with both. Part of the resolution for this is to take two courses from PSYC 346, 347, and 349.

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. Fall, Spring. C-4HY. LA-ESS.

**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 201L is required. C-3RC.

**201L SOCIAL PSYCHOLOGY LAB - 1 hour**

Students will participate in applied and field-based research. When PSYC 201 is offered on campus, concurrent enrollment in PSYC 201L 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(s): PSYC 110, MATH 105 or placement. Spring. C-1Q. LA-FQR.

**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.

### **305 EVOLUTIONARY PSYCHOLOGY - 4 hours**

A study of human nature based on understanding the evolved, psychological adaptations that allowed our ancestors to survive and reproduce. This course will include developing an understanding for the process of evolution by natural selection and thinking about human behavior as a consequence of that process. This course involves thinking about human nature from a biological perspective and culture as an expression of human nature. 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.

### **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 DATA 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. 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. 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. 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. January. C-3GC.

**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. Prerequisites: 12 semester hours in psychology.

**366 COUNSELING THEORY AND PRACTICE - 4 hours**

A survey of the major counseling theories. Laboratory projects include practical experiences. Prerequisites: PSYC 110, 224, 225. Spring.

**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. Prerequisites: PSYC 110, 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. Prerequisite: 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.

#### **110 CIVIC ENGAGEMENT - 3 hours**

Civic engagement is central to the mission of the College of Education and Social Sciences. Students will experience civic engagement through the lens of multiple disciplines within the social sciences. By focusing on a relevant social issue and engaging in inquiry-based and experiential learning, students will apply critical thinking skills to knowledgeably interact in civic discourse. LA-ESS.

## **Sociology, Social Work, and Criminology**

*Chair B. Burdge, J. Cheek, A. Dailey, J. Friesen, C. Krueckeberg*

### **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, gerontology, criminology, or public policy.

#### **Baccalaureate Degree**

##### **Bachelor of Science**

Major in sociology, cultural competency concentration (39 hours): SOC 101, 222, 240, 275, 322, 324, 440; one from POSC 121, 122, 140, 233; 9 hours from COMM 256; INTD 441, 450; PEAC 250, 385; PSYC 352; SOC 210, 220, 311, 313, 210, 355; 6 additional hours approved by the dept.

Major in sociology, social inequality concentration (39 hours): SOC 101, 222, 240, 275, 322, 324, 440; one from POSC 121, 122, 140, 233; 9 hours from COMM 327; EDUC 216; GNST 125, 201; HIST 327; INTD 324; PEAC 112; SOC 228, 328, 345, 355, 351; SOWK 350; 6 additional hours approved by the dept.

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).

Minor in diversity and inclusion, 24 hours: GNST 125 or 201; HIST 237; SOC 210, 345; SOC/SOWK 228; 9 hours from COMM 256; EDUC 216; ENG 242; HIST 226, 256; INTD 324; PEAC 110, 112; PHIL 327; PSYC 352; SOC 311, 313; SOC/SOWK 220; SPAN 200 level or above, or others approved by the department.

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

#### **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. Fall. Spring. C-4HS. LA-ESS.

##### **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. LA-ESS.

**210 URBAN-RURAL DYNAMICS - 3 hours**

This course is designed to introduce students to both urban and rural studies. The history of cities, contemporary urban problems, political economy, and urban ecology are important components of this class. At the same time, rural sociology examines the unique role rural areas and people play in the larger society and world. This course considers rural-urban migration patterns, rural culture, rural occupations and employment, resource use and environmental problems, vulnerable and exploited populations, community change, the unique consequences of globalization, and policy issues. These topics are examined through the dominant theories in the field. Prerequisite: SOC 101. LA-FCU.

**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. Fall. C-3RC.

**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. Fall.

**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. Fall. January. Spring. C-3RC. LA-FCU.

**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.

**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.

### **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 major or minor. 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.

Prerequisite: PSYC 110, or SOC/SOWK 102, or SOC 101. Fall.

### **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. LA-TGP.

### **313 CULTURAL ECOLOGY - 3 hours**

This course explores theoretical and methodological issues in the study of human culture and social activity in relation to ecological systems and the environment. Through both classic studies as well as contemporary research, emphasis is placed on the various dimensions of social organization and activity and on the role of cultural, religious, and political institutions in shaping ecological relationships as well as economic behavior. This course also examines the human-nature interactions and conceptions of nature found in various cultures that are a result of methods of survival and making a living. January, even years. C-3GC. LA-TGP.

### **322 QUALITATIVE RESEARCH METHODS - 3 hours**

This course is designed to give students a strong foundation in qualitative methodology in the social sciences. Topics included for discussion and application will include: types of qualitative methods, when to use qualitative methods, reflexivity, approaching field sites ethically, and analysis of qualitative data. Students will utilize qualitative data analysis software (e.g., NVivo) to solve problems and interpret results both individually and in groups. Prerequisites: SOC 101; SOC/SOWK 222. Spring, even years.

### **324 QUANTITATIVE RESEARCH METHODS - 3 hours**

This course is designed to give students a strong foundation in quantitative methodology in the social and allied health sciences. Topics included for discussion and application will include: descriptive measures, probability related to null hypothesis testing, single sample tests, two-sample tests, analysis of variance, and regression analysis. Students will utilize statistical software (e.g., SPSS) to solve problems and interpret results both individually and in groups. Prerequisite: MATH 105 or higher math placement. Spring, even years. C-1Q. LA-FQR.

### **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.

**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.

**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.

**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.

**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.

**355 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 or permission of instructor; junior standing or above. LA-TBI.

**351 COMMUNITY AND ENVIRONMENTAL SOCIOLOGY - 3 hours**

A study of the ways in which humans interact with the environment. Topics include analysis of social, cultural, political, and economic structures to understand how environmental problems arise, the kinds of people (class, race, gender, etc.) that bear the heaviest burden of environmental degradation, and appropriate human responses to environmental issues. Special attention will be given to the idea that environmental problems are human problems: human created and human resolved. Prerequisite: SOC 101 or ENVS 130 or consent of the instructor. Spring, even years. LA-TBI.

**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.

**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.

**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: FYWS or ENG 111; SOC 101, 222, 240. Spring.

**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, economic, and environmental 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 228.
- 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**

#### **Bachelor of Science**

Major in social work, 58 hours: BIOL 102 or 204; PEAC 112; PSYC 110; 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.

Minor in Human Services, 21-22 hours: SOC 101; SOWK 110 or 228; SOWK 274, 275; 6-7 hours of electives chosen from CRIM 244, 310, 340; PEAC 112; SOC 335; SOC/SOWK 102, 220, 355; SOWK 334, 366, or others approved by the director of the Social Work Program.

The human services minor will be useful to any student interested in a career helping people and communities meet their basic human needs, but it does not lead to professional social work licensure or advanced standing in master's degree programs in social work. Students pursuing those goals should consider the social work major.

### **Courses SOWK**

#### **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. LA-ESS.

#### **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. LA-ESS.

**220 SOCIAL GERONTOLOGY**

See [SOC 220](#). C-3RC.

**222 SOCIAL RESEARCH METHODS**

See [SOC 222](#).

**228 RACIAL, ETHNIC, AND GENDER INEQUALITY**

See [SOC 228](#).

**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. Includes extended field trip to study racism and urban social work. Fees required. Prerequisites: BIOL 102 or 204; PEAC 112; POSC 121, 122, 140, OR 233; PSYC 110; SOC 101. Spring.

**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.

**355 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 or permission of instructor; junior standing or above. LA-TBI.

**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. Prerequisites: SOC 101 or SOWK 110; PEAC 112; POSC 121, 122, 140 OR 233. Spring.

**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. Fall. January. Spring.

**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. Prerequisites: Admission to the Social Work program and the senior social work practice block. Fall.

**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. Prerequisites: SOC 101; SOWK 110; PEAC 112; POSC 121, 122, 140 OR 233. Fall.

**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 off-campus retreat.

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. 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.

## **CRIMINOLOGY**

The criminology program provides students with an interdisciplinary 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, criminology, 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**

#### **Bachelor of Science**

Major in criminology, 49-51 hours: CRIM 110, 210, 244, 440; PSYC 110; SOC 101, 240, 322, 324; SOC/SOWK 222, 228; one course selected from: CRIM 275 or CRIM 496; 12-14 hours of electives selected from: CRIM 310, 340; ENG 338; PEAC 112, 218; PSYC 201, 225; SOC 305; SOC/SOWK 102, 220, 355; SOWK 110, 366 ; or others approved by the department.

Minor in criminology, 21-23 hours: CRIM 110, 210, 244; SOC 101; SOC/SOWK 228; 6-8 hours of electives selected from: CRIM 275, 310, 340; ENG 338; PEAC 112, 218; PHIL 215, 230; PSYC 201, 225; SOC 305, 345; SOC/SOWK 102, 220, 355; SOWK 110, 366; or others approved by the department.

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

Major in criminology, 27 hours: CRIM 244, 340; SOC 101, 345; SOC/SOWK 228; SOWK 110, 233, 274, 275.

## **Courses CRIM**

### **110 INTRODUCTION TO CRIMINAL JUSTICE - 3 hours**

An introductory course designed to provide students with an understanding of crime, law, and the criminal justice system in the United States. This course explores the underlying justifications for, and latent effects of, the criminal justice system. Topics include factors driving

the actions of structural elements of the system (e.g., policing, course, corrections) as well as individual actors within the system (e.g., judges, jurors, prosecutors). Spring. LA-ESS.

### **210 CORRECTIONS AND POLICING - 3 hours**

An in-depth examination of the institutions of policing and corrections within the United States. An emphasis will be placed on the social, political, legal, and technological forces that shape how we police society and how we treat individuals who are found guilty of criminal acts. Spring.

### **244 CRIMINAL BEHAVIOR - 3 hours**

The study of theories pertaining to criminal behavior and delinquency in both adult and juvenile populations. Biological, psychological, and sociological theories explaining criminal behavior will be explored and criminogenic factors across the life course will be discussed. Prerequisites: CRIM 110; SOC 101. Fall.

### **275 PRACTICUM IN CRIMINOLOGY - 1-3 hours**

Observation and participation in any of a wide range of human experiences and social systems in the criminal justice system. May be repeated for a total of six credit hours, three credit hours of which may be used to meet requirements in the criminology major. Prerequisites: CRIM 110; PSYC 110; SOC 101; SOC/SOWK 222; and consent of instructor. Fall. January. Spring.

### **310 VICTIMOLOGY - 3 hours**

A review of historic and current theories of criminal victimization and human rights violations. Topics include: an examination between victim and offender, societal treatment of victims and victimization, biological and psychological facets and trauma and recovery, and elements of restorative justice and the role of the victim in that process. Prerequisites: CRIM 110; PSYC 110; SOC/SOWK 222. Fall.

### **340 ADOLESCENCE AND JUVENILE JUSTICE - 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 course decisions. Elements of current U.S. youth justice systems and examination of policy and program alternatives for intervention. Prerequisites: CRIM 110; SOC 101. Spring of odd years.

### **440 SENIOR SEMINAR (W) - 3 hours**

A capstone course for criminology majors integrating diverse elements of their coursework in theoretical and methodological domains. Students will demonstrate the breadth and depth of understanding in criminology as an interdisciplinary social science. Prerequisites: FYWS or ENG 111; CRIM 110; SOC 101, 222, 322, 324; and junior or senior standing. Spring.

### **496 DIRECTED RESEARCH - 1-3 hours**

Supervised research on a topic of the individual student's choosing. This course may be taken for up to six credits. Prerequisites: CRIM 110; PSYC 110; SOC 101; SOC/SOWK 222; consent of instructor.

## 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 Bumgerdner 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 cycler. 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 a high school equivalency exam (GED, HiSET or TASC).
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; economics).
5. Personal reference information 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 through a combination of AP/dual credit and individualized academic advising. In addition to the first-year admissions requirements, applicants to the Fast Forward programs are required to:

1. Select a specific major.
2. 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 \$100 enrollment deposit is expected of all admitted students to confirm their intention to enroll. This fee is refundable through May 1 for the fall semester.
3. Course selection and registration for new fall students will begin in the spring and is completed in coordination with the summer orientation experience (Black & Gold Day).

4. Residential life information is sent to all enrolled students. Students complete a Housing Agreement to live in University facilities or a Request to Live Off Campus form to commute from home.
5. All full-time and part-time students are required to complete a health record form that requires personal history, a complete immunization record and an emergency record card. The completed Health Record forms 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 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 through the credit evaluation process. Grades, however, are not transferable. Credits accepted will be applied toward LARC and major requirements as appropriate and verified by the 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 registrar's office 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**

### **Manchester University Academy (high school student enrollment)**

High school students with strong academic backgrounds may be admitted to take Manchester University courses for credit on campus or virtually through the Manchester University Academy Program. Interested students must submit the Manchester University Academy Application to the Admissions Office. 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 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 or +150 meal plan.
- Sophomores may choose the Haist Unlimited +25, +150 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 103.
- **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 online 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 2.85% 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 [Spartan Payment Plans](#)

#### **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, spring and/or summer 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

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, or PLUS.) 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.

Current charges can be found online at <https://www.manchester.edu/about-manchester/office-directory/student-financial-services/tuition-and-fees---all-programs>

## **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 meet satisfactory academic progress (SAP) 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**

One Honors Scholarship is awarded and covers tuition, room and meal plan and fees. Recipients must apply for admission by Nov. 27 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.

## **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.

**Director's Award** 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.

**Other Scholarships** (first-time and transferring U.S. domestic students)

**Multicultural Excellence in Leadership** One MCEL Scholarship is awarded and covers tuition, room and meal plan and fees. Recipients must apply via the MCEL application process and have a 3.5 cumulative high school GPA to qualify.

**Esports Scholarships** A limited number of Esports scholarships are available and require ongoing participation in the Esports program. These awards are determined by the Esports Director/coaching staff.

## **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.

## **Grants (\*Requires FAFSA)**

### **Manchester Grant\***

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 Grant**

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 <https://scholartrack.che.in.gov>.

### **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 [www.studentaid.gov](http://www.studentaid.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 of 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.

## **Manchester University Gilbert College of Business Prior Learning Assessment (PLA) Policy**

Prior learning is a term educators use to describe learning that occurs outside a traditional academic environment. Learning may result, for example, from work experience, community and volunteer service, workshop participation, and employment-related training programs. Learning can be demonstrated in a variety of ways including examinations, workforce training documentation, certifications, and portfolios.

This Prior Learning Assessment Policy is limited to the College of Business. Potential credit is available for BUS 209 Introduction to Sales (3 semester hours) and BUS 435 Internship (1-12 semester hours). The maximum number of hours for which a student may receive PLA credit is 15. Letter grades are not awarded for prior learning; credit that is granted under this policy will appear as "P" on the student's transcript.

Students may obtain university credit by presenting their experiential learning for evaluation in a learning portfolio. A learning portfolio is a collection of materials designed to verify learning and may include, for example, documents, work samples, descriptions of responsibilities, work product, journals, performance evaluations, evidence of self-directed learning, training activities, texts completed, and student-developed narrative.

Students interested in receiving credit for prior learning will develop the learning portfolio under the guidance of a College faculty member who will work closely with the student to provide detailed expectations regarding the content of the portfolio, as well as a timeline for completion.

Students must complete the portfolio at least one semester prior to the anticipated graduation date, and the student may include both courses, if they choose, in a single portfolio. A one-time fee of \$50 will be assessed for the portfolio review. A team of at least two faculty members from the College of Business will review each portfolio using a standard rubric to evaluate whether the student has demonstrated that the course learning objectives have been satisfied. The student will receive an evaluation of the portfolio and a decision regarding the number of semester hours awarded within four weeks of its 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.

## **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.

## **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 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.

### **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.

### **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. Giving leadership to the hall staff is the assistant 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 upper-class 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. Rooms are furnished with beds, dressers, desks, and chairs. 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 upper-class students.

### **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, 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 with a registered nurse. Care is given for minor illnesses and injuries, including COVID-19 testing.

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; recommended: COVID-19, influenza). 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: [The Source](#)

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.

### **Business Office**

The Business Office provides a variety of services to the University community, including check cashing (with ID), 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, email [StudentEmployment@manchester.edu](mailto:StudentEmployment@manchester.edu) or visit Spartan Jobs/Handshake to view available positions.

Information about off-campus employment is available at the Office of Career and Professional Development.

### **Campus Store**

The Campus Store is located in the lower level of the Jo Young Switzer Center. We have clothing, school supplies, MU spirit gear, giftware, snacks and beverages. Hours of operation are Monday – Friday 9 am to 5 pm, please check website for Saturday hours. We also have an online store at <https://campusstore.manchester.edu/?ql> **Ordering for course materials is online only** at <https://manchester.ecampus.com/>. Students will find new, used, rentals, access codes and e-books. Shipping is **FREE** to the Campus Store.

### **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.

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 students' assigned residence hall, to the 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 works with students throughout the entire financial aid and billing process at Manchester University. Our work with students begins with assistance for FAFSA filing and providing a detailed financial aid award. We then produce an accurate billing statement and discuss payment options for students and families. SFS provides comprehensive assistance to our students to provide them accurate and useful tools and services.

Student Financial Services is open Monday-Friday from 8:00 am-5:00 pm and is located in Chinworth, suite 103. We accept cash, check or money order payments in office.

## **PEOPLE OF MANCHESTER UNIVERSITY**

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## Cabinet, 2022-2023

### 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

**Celia Cook-Huffman** (2020)  
B.A., Manchester College, 1986; M.A. University of Notre Dame, 1988; Ph.D., Syracuse University, 1993.

### Vice President for Advancement

**Melanie B. Harmon** (2011)  
B.A., Indiana University, 1991; M.A., 2010.

### Vice President for Enrollment and Marketing

**Ryon Kaopuiki** (2020)  
B.S., Western Oregon University, 1997.

### 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.

### Dean of Health Sciences and Pharmacy

**W. Tommy Smith** (2015)  
Pharm.D., Saint Louis College of Pharmacy, 1994; J.D., Saint Louis University School of Law, 2005.

### Vice President for Student Life

**Abby Van Vlerah** (2019)  
BA, Saint Mary's College, 2004; M.A., University of Wyoming, 2006; Ph.D., Bowling Green State University, 2013.

### Executive Assistant to the President

**Julie J. Knuth** (2011)  
BS, Manchester College, 2001.

## Faculty, 2022-2023

**Jeffrey A. Beer** (2006), professor of exercise science, chair of the department of exercise science  
BS, Ball State University, 2000; MA, Kent State University, 2002; Ph.D., Indiana University 2018.

**Suzanne C. Beyeler** (2016), associate professor of biology and environmental studies, chair of the department of biology, 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), Isaac and Etta H. Oppenheim 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 J. Burdge** (2003), professor of social work, director of social work program, chair of the department of sociology, social work and criminology  
BA, Indiana University, Bloomington, 1994; MSW, Indiana University, Indianapolis, 1998; Ph.D., Indiana University, 2013.

**Michelle Calka** (2011), associate professor of communication studies, chair of the department of communication studies  
BA, Juniata College, 2004; MA, Ball State University, 2006; Ph.D., Ohio University, 2012.

**Judd A. Case** (2007), dean of arts and sciences, professor of communication studies  
BA, Brigham Young University, 2000; MA, 2002; Ph.D., University of Iowa, 2010.

**Jennifer A. Cheek** (2021) assistant professor of criminology and sociology  
BA, Southeastern Louisiana University, 2004; MS, 2008; Ph.D., Mississippi State University, 2022.

**Gregory W. Clark** (1992), professor of physics  
BA, Indiana University, South Bend, 1985; MS, Indiana University, Bloomington, 1987; Ph.D., 1992.

**Seth A. Clark**, (2022), assistant professor of exercise science  
BA, Ohio Wesleyan University, 2018; Masters of Allied Health, Otterbein University, 2020.

**Aron K. Costello-Harris** (2010), associate professor 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), professor of religious studies  
BA, Earlham College, 2001; MA, 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 D. Dargo** (2018), assistant professor of athletic training, director of master of athletic training program  
BAT, Ball State University, 2013; MS, Ohio University, 2014; DAT, Indiana State University, 2018.

**Kathryn L. Davis** (2010), professor of chemistry  
BA, Hope College, 2005; BS, 2005; Ph.D., University of Pittsburgh, 2010.

**Jeffrey M. Diesburg** (2011), associate professor of art, chair of the department of art  
BA, Iowa State University, 2003; MFA, Savannah College of Art and Design, 2006.

**Beth A. Driscoll** (2016), associate professor of marketing and management  
BS, Ball State University, 1989; MBA, Indiana University at Kokomo, 1997.

**Edwards, Katherine M.**, (2021) instructor of nursing  
AS, Purdue University, 2007; BS, Kaplan University Online, 2011; MS, Western Governors University, 2019.

**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.

**J. Jared Friesen** (2016), assistant professor of sociology  
BA, Huntington University, 1998; MA, Ball State University, 2002; Ph.D., University of Kentucky, 2018.

**Uma Ganesan** (2015), associate professor of history, chair of the department of history and political science  
MA, University of Cincinnati, 2006; Ph.D., University of Cincinnati, 2011.

**Beate C. Gilliar** (1993), professor of English, chair of the departments of English and modern languages  
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, chair of the department of philosophy and religious studies  
BA, Manchester College, 1991; MA, University of Notre Dame, 1992; MA, University of Minnesota, 1994; Ph.D., 2000.

**Anuj Gurung** (2022), Gladys E. Muir assistant professor of peace studies  
BA, Hiram College, 2008; MA, Georgetown University, 2011; Ph.D., Kent State University, 2019.

**Darla V. Haines** (1998), director of the library; technical services and systems librarian  
BA, Grove City College, 1989; MA, Kent State University, 1993; MLS, 1997.

**Pamela S. Haynes** (2016), associate professor of music, chair of the department of music BM, DePauw University, 1994; MM, Ohio University, 1996; DMA, University of Kansas, 2000.

**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), associate professor of music  
BM, James Madison University, 1989; MA, Virginia Tech, 1996; D.M.A., Boston University, 2018.

**Katharine N. Ings** (1999), professor of English, director of the gender studies program  
BA, University of Ottawa, 1989; MA, Indiana University, 1992; Ph.D., 2000.

**Sun J. Kang** (2015), associate professor of sport management  
BA, University of California, Davis; MS, Barry University; MBA, Barry University; Ph.D., University of Louisville, 2015.

**Sara V. Kaufman** (2022), visiting assistant professor of communication studies  
BA, San Francisco State University, 2005; MS, Portland State University, 2011; Ph.D., Purdue University, 2022.

**Kelsey-Jo Kessie** (2018), assistant professor of psychology  
BA, Hope College, 2011; MA, University of Delaware, 2014; Ph.D., Bowling Green State University, 2017.

**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.

**Justin M. Lasser** (2011), associate professor of religious studies  
BA, Gordon College, 2004; MA, Union Theological Seminary, 2006; M.Phil., 2008; Ph.D., 2011.

**Young S. Lee** (1998), professor of mathematics  
Ph.D., University of Idaho, 1989; MS, University of Wisconsin-Madison, 1998; Ph.D., 1998.

**Devon A. Lewandowski** (2021), assistant professor of nursing  
BS, Saint Francis College, 1997; MS, University of Saint Francis, 2005; DNP, Samford University, 2014.

**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.

**Katherine A. Matutes** (2021), assistant professor of nutrition and exercise science  
BA, Trinity University, 1987; PhD, Purdue University, 2005.

**Mark G. McCoy** (2020), assistant professor of psychology  
BS, Oakland University, 2009; MA Oakland University, 2014; Ph.D., Bowling Green State University, 2020.

**David McGrady** (2016), associate professor of accounting and finance  
BA, Franklin College, 1978; MBA, University of Texas at Arlington, 1979.

**Timothy P. McKenna-Buchanan** (2014), associate professor of communication studies  
BS, Wayne State College, 2008; MS, Illinois State University, 2010; Ph.D., Ohio University, 2014.

**Jacob H. Mertens** (2022), assistant professor of communications studies  
BA, University of North Carolina Wilmington, 2012; MA, University of Wisconsin-Madison, 2016.

**Joe R. Messer** (2008), Mark E. Johnston 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.

**Timothy A. Ogden** (1990-96, 1997), professor of business  
BA, Manchester College, 1987; MBA, Claremont Graduate School, 1989; JD, Indiana University, 1996.

**Ejenobo R. Oke** (2006), associate professor of art  
BA, Manchester College, 1997; MFA., Norfolk State University/Old Dominion University, 2001.

**Jeffrey P. Osborne** (2004), professor of chemistry, director of the biology-chemistry program  
BA, Goshen College, 1992; Ph.D., University of Illinois, 1999.

**Mistie L. Potts** (2018), assistant professor of education  
BS, Indiana University, 2000; MA Ball State University, 2003.

**Timothy M. Reed** (2008), professor of music  
BS, LaGrange College, 1999; MM, Illinois State University, 2004; Ph.D., University of Florida, 2008.

**Jennifer D. Robison** (2018), assistant professor of biology  
BA, Dickinson College, 2003; MS University of Delaware, 2006; Ph.D., Indiana University-Purdue University Indianapolis, 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, director of teacher education  
BA, Manchester College, 1990; M.Ed., Indiana University, 1998; Ed.D., Ball State University, 2011.

**Nancy R. Schroeder** (2019), associate professor of nursing  
BA, Ohio Northern University, 2006; MS, Cleveland State University, 2011; DNP, University of Cincinnati, 2016.

**Beth E. Schultz** (2018), nursing program director  
AND, Gulf Coast State College, 1990; BSN, University of North Florida, 1998; M.S.N.,  
Jacksonville University, 2004; DNP, Union University, 2014.

**Kristen H. Short** (2011), associate professor of biology  
BS, Miami University, 2004; MS, University of Cincinnati, 2010; Ph.D., 2010.

**Jennifer K. Simmers** (2008), professor of accounting  
B.S, Manchester College, 1994; MBA, Indiana University, 1999.

**Stacy S. Stetzel** (2006), associate professor of education, chair of the department 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.

**Gabriela R. Tafoya** (2021), assistant professor of political science  
BA, State University of New York, 2010; MA, Columbia University, 2011; MA, University of  
Connecticut, 2014; PhD, 2019.

**Heather C. Twomey** (2000), dean of the college of business, Howard and Myra Brembeck  
professor of business  
BA, Manchester College, 1996; M.Acct., 1997.

**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, chair of the department of chemistry  
and physics  
BA, Manchester College, 2011; Ph.D., University of Notre Dame, 2015.

**Zachary R. West** (2022), assistant professor of education  
BS, Heidelberg University, 2011; MEd, Northcentral University, 2013; Ph.D., Northcentral  
University, 2019.

**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.

## **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**

**Mark J. Angelos** (1992), professor emeritus of history, BA, University of Wisconsin-Milwaukee, 1981; MA, 1983; Ph.D., University of Illinois at Urbana-Champaign, 1992.

**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.

**Kim A. Duchane** (1992), professor emeritus of exercise science and athletic training  
BS, Northern Michigan University, 1978; MA, Sam Houston State University, 1987; Ph.D., Texas Woman's University, 1996.

**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.

**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.

**Mark W. Huntington** (1984), professor emeritus of exercise science and athletic training  
BS, Manchester College, 1976; MS, Boston University, 1979; PED, Indiana University, 1994.

**Robert C. 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  
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