Wisconsin’s Oldest College

In 1841, settlers living in the Wisconsin Territory community of Prairieville established the academy that five years later would become Carroll College. Soon after its founding, Carroll affiliated with the Presbyterian Church and adopted the motto, "Christo et Litteris," which means "for Christ and Learning." The University’s early patrons believed that higher education would serve as an instrument for civilizing the wilderness, spreading the Gospel and planting the roots of democracy deep in the prairie soil. They also sought to provide for the prosperity of their children and future generations. As Wisconsin’s oldest institution of higher learning, Carroll is known today as the "Pioneer College." Carroll became Carroll University in 2008.

Throughout its history, the hallmarks of the Carroll educational experience have been teaching excellence and individualized attention. These values find expression in The Mission Statement and The Four Pillars of a Carroll University Education.

Carroll University Mission Statement

"Carroll University provides a superior education, rooted in its Presbyterian and liberal arts heritage, and draws upon its Christian tradition to prepare all students for vocational success, lifelong learning and service in a diverse and global society."

The Four Pillars of a Carroll University Education

Today, the institution draws upon its rich liberal arts tradition to prepare students to achieve their full potential in our ever-changing society. The University’s educational philosophy is sustained by the four pillars of integrated knowledge, lifelong skills, gateway experiences and enduring values.

Integrated Knowledge is the very foundation of a quality liberal arts program. The Carroll curriculum emphasizes breadth and depth of learning. Our purpose is to encourage students to recognize the interrelationships among ideas. We believe that students with this understanding will continue to learn, grow and succeed long after they leave the campus.

Lifelong Skills help students prepare for life and work in a world of rapid and constant change. We believe that graduates will continue to evolve and contribute to their communities long after they earn their degrees. To that end, our mission is to help students learn to think critically and creatively, adapt to changing technologies, work efficiently and effectively, collaborate with others, and communicate clear, compelling ideas.

Enduring Values help students to consider always the impact of their actions on the world around them. We believe that effective leaders draw their inspiration from strong personal value systems. Our goal, therefore, is to offer students multiple opportunities to make decisions and then to reflect upon their consequences.

Gateway Experiences occur both upon entering and upon leaving Carroll University. We believe that our educational responsibility extends beyond the classroom into every aspect of our students’ lives. That is why we place a special emphasis on preparing incoming students for university life and on helping graduates make successful transitions into their first jobs, or graduate and professional schools.

The four pillars undergird all that we do at Carroll University. They are integral to our undergraduate curriculum and guide our post-baccalaureate and graduate programs. In other words, they provide the broad inspiration for the Carroll experience and the many relationships we nurture with other organizations and institutions.
Carroll University Contact Information

Carroll University
100 N. East Avenue
Waukesha, WI 53186

For general information, call 262.547.1211
To contact the Admission Office, call 262.524.7220 locally
or toll-free at 1.800.CARROLL (1.800.227.7655)
FAX: 262.524.7139

Carroll University Web site

Visits to Carroll University are encouraged. The Admission Office is open from 8 a.m. to 4:30 p.m., Monday through Friday. During the school year, the office is open from 9 a.m. to noon on Saturdays. Visits should be arranged in advance by calling or writing the admission office.

The offices of Admission, Part-Time Studies and Student Financial Services are located in Voorhees Hall, at the northwest corner of East and College Avenues.
Academic Programs

College of Humanities and Social Sciences
College of Natural Sciences, Health Sciences and Business
Alphabetical List of Majors/Minors
Special Academic Programs
Cross Cultural Experiences
### Department: English and Modern Languages

**Chairperson:** Deirdre Keenan  
**Room:** MacAllister 302  
**Email:** dkeenan@carrollu.edu  
**Telephone:** 262-524-7254  
**Fax:** 262-650-4837

### Programs

#### Undergraduate

- English
- Modern Languages and Literatures
- Professional Writing

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The English Program offers a major in English and a minor in English.

**English Major**

**Bachelor of Arts**

**English major goals:**

1. To provide students with a body of knowledge about literature that will allow them to recognize the interrelationship among ideas and provide them with the skills to be lifelong learners.
2. To teach students the critical reading, writing and thinking skills that enable them to develop a personal value system and that will inform their understanding of their impact on the world around them.

**Learning Outcomes for English**

Upon successful completion of major requirements students will be proficient in the following:

1. Develop strategies for originating and answering questions about literature.
2. Employ a variety of critical approaches to literature.
3. Use language specific to the discourses of poetry, drama and fiction.
4. Demonstrate their knowledge of literary canonicity as part of their preparation for citizenship in a diverse community.
5. Analyze and respond critically to literature using research and bibliographic materials appropriate to the discipline.

**Core Courses**

- I. British and American Literature Survey: Students must complete the following three survey courses.
  - ENG240: British Literature I - Medieval to 1700 (4 hours)
  - ENG241: British Literature II - 1700 to Contemporary (4 hours)
  - ENG242: American Literature: One Nation, Many Voices (4 hours)
- II. Diversity/World Literature: students must complete one of the following courses:
  - ENG162: Science Fiction and Gender (4 hours)
  - ENG164: American Indian Literature and Spirituality (4 hours)
  - ENG165: Writing the Body: Cultural Explorations of Race, Gender and Class (4 hours)
  - ENG210: African American Literature (4 hours)
  - ENG226: Africa: Literature and Culture of Its Many Nations (4 hours)
  - ENG255: Postcolonial Literature and Theory (4 hours)
- III. Visual Literacy
  - ENG214: Global Film Theory and Criticism (4 hours)
- IV. Great Figures: students must complete one of the following courses:
  - ENG300: Great Authors (4 hours)
  - ENG301: Chaucer (4 hours)
  - ENG303: Milton and Moral Choice - His Age and Ours (4 hours)
  - ENG304: Shakespeare: From Stage to Screen (4 hours)
- V. Upper Division Literature requirement: students must complete 3 additional literature courses at the upper-division level ("upper-division" is defined as any course numbered 300 and above).
- VI. Senior capstone experience: English 499, advanced literature seminar.

**Required Support Courses (Required for primary majors only)**

Students seeking education certification must take the following courses;
ENG219: Introduction to Linguistics (4 hours)
ENG240: British Literature I - Medieval to 1700 (4 hours)
OR-ENG304: Shakespeare: From Stage to Screen (4 hours)
ENG305: Advanced Exposition and the Rhetorical Tradition (4 hours)

English majors are required to complete a Modern Language through 202

This Modern Language requirement is in addition to the minimal Bachelor of Arts language requirement.

Bachelor of Arts Requirement

Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
  Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
  Fine Arts (F1, F2)
  Philosophy/Ethics/Religion (P1, P2)
  Natural Sciences (N1, N2)
  Social Sciences (S1, S2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)
  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

English Minor (24 credits)

Students must take six courses in English (excluding English 170 and English 140).
At least 8 credits must be at the 300-level in English and no more than 8 credits may be at the 100-level.

Note: Students seeking certification with an English minor must take the following:

- ENG164: American Indian Literature and Spirituality (4 hours)
  OR-ENG165: Writing the Body: Cultural Explorations of Race, Gender and Class (4 hours)
  OR-ENG210: African American Literature (4 hours)
  OR-ENG255: Postcolonial Literature and Theory (4 hours)
  ENG214: Global Film Theory and Criticism (4 hours)
  ENG219: Introduction to Linguistics (4 hours)
  ENG240: British Literature I - Medieval to 1700 (4 hours)
  OR-ENG304: Shakespeare: From Stage to Screen (4 hours)
  ENG242: American Literature: One Nation, Many Voices (4 hours)
  ENG305: Advanced Exposition and the Rhetorical Tradition (4 hours)

Major Courses
The list below displays all the courses offered by the major:

- ENG140: Introductory Language Skills for Liberal Arts (4 hours)
- ENG162: Science Fiction and Gender (4 hours)
- ENG164: American Indian Literature and Spirituality (4 hours)
- ENG165: Writing the Body: Cultural Explorations of Race, Gender and Class (4 hours)
- ENG170: Writing Seminar (4 hours)
- ENG170H: Writing Seminar (4 hours)
- ENG190: Intro to Creative Writing - Imagination and Rhetoric (4 hours)
- ENG206: Fiction Writing (4 hours)
- ENG207: Poetry Writing (4 hours)
- ENG208: Creative Nonfiction Writing - The Documentary Impulse (4 hours)
- ENG210: African American Literature (4 hours)
- ENG211: Intro Literary Study I - Poetry (4 hours)
- ENG212: Intro to Literary Study II - Short Fiction & Drama (4 hours)
- ENG214: Global Film Theory and Criticism (4 hours)
- ENG219: Introduction to Linguistics (4 hours)
- ENG226: Africa: Literature and Culture of Its Many Nations (4 hours)
- ENG420: British Literature I - Medieval to 1700 (4 hours)
- ENG421: British Literature II - 1700 to Contemporary (4 hours)
- ENG422: American Literature: One Nation, Many Voices (4 hours)
- ENG423: American Literature II - 1865 to Contemporary (4 hours)
- ENG255: Postcolonial Literature and Theory (4 hours)
- ENG255H: Postcolonial Literature and Theory (4 hours)
- ENG298: Independent Study in English (1 TO 4 hours)
- ENG299: Introduction to Medical Humanities (4 hours)
- ENG300: Great Authors (4 hours)
- ENG301: Chaucer (4 hours)
- ENG303: Milton and Moral Choice – His Age and Ours (4 hours)
- ENG304: Shakespeare: From Stage to Screen (4 hours)
- ENG305: Advanced Exposition and the Rhetorical Tradition (4 hours)
- ENG306: Advanced Fiction (4 hours)
- ENG307: Advanced Poetry (4 hours)
- ENG308: Advanced Creative Nonfiction (4 hours)
- ENG309: Romantic and Victorian Literature (4 hours)
- ENG312: Modernism (4 hours)
- ENG323: Early Modern British Literature (4 hours)
- ENG326: Age of Exuberance-Restoration and 18th Cent British Literature (4 hours)
- ENG380: Internship in English (2 TO 4 hours)
- ENG398: Independent Study in English (1 TO 4 hours)
- ENG480: Internship in English (4 hours)
- ENG497: Guided Senior Thesis (2 hours)
- ENG499: English Major Capstone-Advanced Literature Seminar (4 hours)

Modern Languages and Literatures

- Jessica Boll
  Assistant Professor of Spanish
- Elena M. DeCosta
  Associate Professor of Spanish
- Marie Fossier
  Instructor of French

The Modern Languages program offers a major in Spanish and minors in French, German, and Spanish.

- Spanish Major (38 credits)

  Within the framework of a liberal arts education, the Spanish major provides students with direct linguistic contact with a culture different from their own. A culture expresses itself primarily through its language and its literature, and to comprehend another’s, one must be able to communicate with the peoples of that culture.

  As a general rule, courses are conducted in the target language. All majors should spend a summer, semester or year abroad. Students may choose to study abroad during a summer, semester, or full academic year by applying to the Office of International Education. Recent graduates have studied in Costa Rica, Ecuador, Guatemala, Mexico, and Spain.

  Learning Outcomes for Spanish

  A student successfully completing a Spanish major at Carroll University:

  1. Attains advanced-level speaking, listening, writing, reading proficiency through the required courses taken in the Spanish program.
  2. Is able to communicate in written and spoken Spanish in a diversity of formal and informal situations with minimal linguistic errors.
  3. Understands Spanish speakers from a variety of backgrounds and locales in diverse situations, as well as written materials in Spanish in a variety of formats.
  4. Is knowledgeable regarding Hispanic culture, history, customs, major political and literary events and movements as well as contemporaneous social issues.
  5. Participates in a wide range of academic, cultural, social, or community- service activities concerning the rich Hispanic presence in our surrounding communities.
  6. Ideally, every student participates in study abroad experience, or when this is not feasible, participates in a department-approved immersion experience appropriate to an advanced level of proficiency in the target language.
  7. Develops a knowledge base and a high level of critical thinking skills in an interdisciplinary context of historical, literary, political, social, and cultural frameworks of Spanish-speaking societies.
  8. Applies the Spanish language to a diversity of professions and develops a vocabulary and discourse at an advanced level in at least one of the professions.

  Core Courses
SPA201: Intermediate Spanish I (4 hours)
SPA202: Intermediate Spanish II (4 hours)
SPA301: Conversation and Composition I (4 hours)
SPA302: Conversation & Composition II (4 hours)
SPA305: Spanish for the Professions (4 hours)
SPA307: Latin American Civilization (4 hours)
SPA308: Hispanic Civilization (4 hours)
SPA318: Topics in Hispanic Cultures, Literature, History, Politics (4 hours)
SPA401: Advanced Conversation (2 hours)

One elective course in Spanish (Usually satisfied with Spanish 480 or Spanish 498).

- Capstone Experience
  - SPA480: Internship/Capstone Internship in Spanish (2 TO 4 hours)
  - OR -SPA498: Indep Directed/Capstone Study (2 TO 4 hours)

- Required Support Courses (Required for primary majors only)
  - ENG255: Postcolonial Literature and Theory (4 hours)
  - HIS103: Roots of the Western World (4 hours)
  - OR -HIS104: Europe and the Modern World (4 hours)
  - OR -HIS112: Intro to Latin America History (4 hours)
  - REL106: Understanding Religion (4 hours)

NOTE: Successful completion of the Spanish major fulfills both the B.A. and department modern language requirements.

- Bachelor of Arts Requirement
  Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

- General Education Requirement
  For more information on General Education Requirement, click here.
  - Distribution Component
    For more information on the Distribution Component, click here.
    - GE1 and GE2 Courses
      Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
      Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
      Fine Arts (F1, F2)
      Philosophy/Ethics/Religion (P1, P2)
      Natural Sciences (N1, N2)
      Social Sciences (S1, S2)
  - Cross-Cultural Component
    The Cross-Cultural Component is a five-course series through which students explore the study of culture:
    Transfer students will register for CCS101 for one credit.
    - Cultural Seminar (CCS100)
      The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.
    - Writing Seminar (ENG 170)
      The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.
    - Cross-Cultural Development (CCD)
      The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.
    - Cross-Cultural Experience (CCE)
      The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)
      For more information and course listings, click here
    - Global Perspectives Colloquium (CCS400)
      In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.
  - Pre-Physical Therapy Degree Curriculum for Spanish Majors
The Carroll University Entry-level Physical Therapy Program consists of a six-year course of study, divided into pre-professional and professional phases.

During the pre-professional phase (freshman, sophomore and junior years), students pursue their undergraduate course work while fulfilling the requirements to enter the professional phase. Pre-physical therapy education at Carroll University is grounded in the humanities and the natural, behavioral and social sciences. A Spanish Major with a Bachelor of Arts degree provides students professional cross-cultural opportunities and enables students to complete the Physical Therapy Program in six years.

- **Spanish Minor (22 credits)**
  - **Core Courses**
    - SPA201: Intermediate Spanish I (4 hours)
    - SPA202: Intermediate Spanish II (4 hours)
    - SPA301: Conversation and Composition I (4 hours)
    - SPA302: Conversation & Composition II (4 hours)
    - SPA305: Spanish for the Professions (4 hours)
    - OR -SPA307: Latin American Civilization (4 hours)
    - OR -SPA308: Hispanic Civilization (4 hours)
    - OR -SPA325: Spanish for the Professions (4 hours)
    - SPA401: Advanced Conversation (2 hours)

The Education Department requires students seeking MC-EA (Middle Childhood through Early Adolescence) or EA-A (Early Adolescence through Adolescence) licensure in Spanish to complete Education 355, Special Methods in Teaching Modern Languages.

- **French Minor (20 credits)**
  - A student successfully completing a French minor at Carroll University:
    1. Attains intermediate/advanced to advanced-level speaking, listening, writing, reading proficiency.
    2. Is able to express her/himself in written and spoken French in most everyday situations with mistakes that do not hinder meaning.
    3. Understands French-speaking individuals in most everyday situations, as well as written materials in French covering topics in various genres.
    4. Is knowledgeable with regard to histories, cultures, customs, major political and literary events and movements, and contemporary society and issues in countries where French is the dominant language.
    5. Has participated throughout her/his studies in academic, cultural or social activities off-campus, in and beyond the Carroll University and Waukesha communities, ideally through study abroad or substantial immersion experience in the target language.
  - **Core Courses**
    - FRE201: Intermediate French I (4 hours)
    - FRE202: Intermediate French II (4 hours)
    - FRE301: Conversation & Composition (4 hours)
    - FRE307: French Civilization (4 hours)
    - FRE318: Topics in French and Francophone Literatures (4 hours)

  *The Paris NCEP may not be used to complete the minor.*

The Education department requires students seeking MC-EA (Middle Childhood through Early Adolescence) or EA-A (Early Adolescence through Adolescence) licensure in French to complete Education 355, Special Methods in Teaching Modern Languages.

- **German Minor (22 credits)**
  - A student successfully completing a German minor at Carroll University:
    1. Attains intermediate/advanced to advanced-level speaking, listening, writing, reading proficiency.
    2. Is able to express her/himself in written and spoken German in most everyday situations with mistakes that do not hinder meaning.
    3. Understands German-speaking individuals in most everyday situations, as well as written materials in German covering topics in various genres.
    4. Is knowledgeable with regard to histories, cultures, customs, major political and literary events and movements, and contemporary society and issues in countries where German is the dominant language.
    5. Has participated throughout her/his studies in academic, cultural or social activities off-campus, in and beyond the Carroll University and Waukesha communities, ideally through study abroad or substantial immersion experience in the target language.
  - **Core Courses**
    - GER201: Intermediate German I (4 hours)
    - GER202: Intermediate German II (4 hours)
    - GER301: Conversation & Composition (4 hours)
    - GER318: Topics in German Culture and Literature (4 hours)
    - GER401: Advanced Conversation (2 hours)

  *(Although not required, students are strongly encouraged to enroll in HIS 329, The German Experience.)*

**Note:** Students taking HIS 329 or POL 329, The German Experience, and/or NCEP 321, Contemporary Germany: Its Culture, Economy, and Politics, and planning to use those courses for credit toward their German language minor need to work with the course instructor in the semester before they plan to take the course to develop a plan for ways to adapt their coursework to incorporate and demonstrate appropriate use of the language.

The Education department requires students seeking MC-EA (Middle Childhood through Early Adolescence) or EA-A (Early Adolescence through Adolescence) licensure in German to complete Education 355, Special Methods in Teaching Modern Languages.

- **Notes on Modern Languages**
To begin in any course other than 101 in Modern Languages, students need to take the placement test in French, German, or Spanish prior to the start of the semester. Placement tests will also be administered during the first weeks of classes, and placement can be changed. Any student who needs the placement test at other times should contact the program faculty to arrange a time for administration of the test. Please consult program faculty for guidance in registering for the first language course. Either placement into a course numbered 301 or higher in any of the three languages, or completion of a 202 course will demonstrate competency in that language and will satisfy the language requirement for the Bachelor of Arts degree.

A student enrolled at Carroll in a degree program, who has completed work in French, German, or Spanish language courses in high school and then enrolls in the appropriate course at Carroll (as determined by the program) and completes that course with a grade of B or higher will receive credit toward graduation for the previously complete- ed work. This must be the student's first enrollment in an advanced university-level course. Special provisions are made for native and near-native speakers of French, German, and Spanish. (Please see page 19 of this catalog for an explanation of the method by which retroactive credits in any of the languages may be earned.)

Teaching majors and minors consist of the specific modern language courses listed below plus (1) an immersion experience, e.g., New Cultural Experiences Program [NCEP] or study abroad, (2) successful completion of a language competency exam in the semester prior to the semester of student teaching, and (3) the requirements in the Teacher Education Program.

The Education department requires students seeking MC-EA (Middle Childhood through Early Adolescence) or EA-A (Early Adolescence through Adolescence) licensure in French, German, or Spanish to complete Education 355, Special Methods in Teaching Modern Languages.

### Major Courses

The list below displays all the courses offered by the major:

- CHI101: Elementary Chinese I (4 hours)
- FRE101: Elementary French I (4 hours)
- FRE102: Elementary French II (4 hours)
- FRE201: Intermediate French I (4 hours)
- FRE202: Intermediate French II (4 hours)
- FRE298: Independent Studies in French (2 TO 4 hours)
- FRE301: Conversation & Composition (4 hours)
- FRE307: French Civilization (4 hours)
- FRE318: Topics in French and Francophone Literatures (4 hours)
- FRE398: Independent Studies in French (2 TO 4 hours)
- GER101: Elementary German I (4 hours)
- GER102: Elementary German II (4 hours)
- GER201: Intermediate German I (4 hours)
- GER202: Intermediate German II (4 hours)
- GER298: Independent Studies in German (2 TO 4 hours)
- GER301: Conversation & Composition (4 hours)
- GER318: Topics in German Culture and Literature (4 hours)
- GER398: Independent Studies in German (1 TO 4 hours)
- GER401: Advanced Conversation (2 hours)
- GER498: Independent Directed Study (2 TO 4 hours)
- SPA101: Elementary Spanish I (4 hours)
- SPA102: Elementary Spanish II (4 hours)
- SPA201: Intermediate Spanish I (4 hours)
- SPA202: Intermediate Spanish II (4 hours)
- SPA290: Spanish for Health and Human Services (2 hours)
- SPA298: Independent Studies in Spanish (4 hours)
- SPA301: Conversation and Composition I (4 hours)
- SPA302: Conversation & Composition II (4 hours)
- SPA305: Spanish for the Professions (4 hours)
- SPA307: Latin American Civilization (4 hours)
- SPA308: Hispanic Civilization (4 hours)
- SPA318: Topics in Hispanic Cultures, Literature, History, Politics (4 hours)
- SPA398: Independent Studies in Spanish (2 TO 4 hours)
- SPA401: Advanced Conversation (2 hours)
- SPA480: Internship/Capstone Internship in Spanish (2 TO 4 hours)
- SPA498: Indep Directed/Capstone Study (2 TO 4 hours)

### Professional Writing

**B.J. Best**  
Assistant Professor of English

**Timothy Galow**  
Assistant Professor of English

**Susan Nusser**  
Assistant Professor of English

The Professional Writing Program prepares writers to engage meaningfully with the world around them through the creation of powerful and persuasive texts. By integrating rhetorical theory, knowledge in a discipline, technological skills, and a thorough exploration of the writing process, the Program cultivates reflective thinkers who can communicate complex ideas in a variety of contexts. This preparation not only allows our graduates to succeed in a wide range of professions, but it also gives them the intellectual tools to be self-directed, creative individuals in a rapidly changing world.

### Professional Writing Major (34 credits)

The professional writing major requires students to complete a second major or minor along with their writing coursework. Accordingly, students can receive either a Bachelor of Arts or a Bachelor of Sciences degree in professional writing, depending on their chosen major or minor.

The goals of the Professional Writing Program are:

1. To provide students with a grounding in the principles of rhetoric and their application, so that graduates will be able to understand the social dynamics of the communication process and create effective arguments in a wide range of real-world contexts.
2. To teach students the critical thinking and writing skills that will help them to develop their own ideas and values.
3. To develop students’ knowledge base in their chosen fields, and to help them extend that knowledge through independent
research.
4. To acquaint students with a variety of professional writing contexts and prepare them to succeed in diverse occupations.

Learning Outcomes for Professional Writing

Students graduating with a degree in professional writing will be able to:

1. Demonstrate their ability to synthesize and organize ideas.
2. Communicate effectively in different contexts using suitable grammar, syntax, and vocabulary.
3. Demonstrate their knowledge of a writing process that includes reading, research, drafting, editing, and revising, and be able to analyze that process in their own writing and the writing of others.
4. Convey their ideas appropriately in a professional context.
5. Demonstrate their mastery of content knowledge, research methods, and documentation procedures in a subject other than writing by completing a major or minor in that area.

- Core Courses
  - COM150: Research Methodology (4 hours)
  - COM227: Technical Writing in Organizations (4 hours)
  - ENG305: Advanced Exposition and the Rhetorical Tradition (4 hours)
  - GRC106: Intro-Communication Technology (2 hours)
  - WR1120: Introduction to Professional Writing (4 hours)
  - WRI496: Writing Major Capstone (4 hours)

Students majoring in Communications and Professional Writing must substitute either ART258 or ENG208 for COM150

- Required Support Courses
  - I All Professional Writing Majors:
    a. A minor of 20 or more credits which does not use any duplicate classes to fulfill WRI major requirements
    OR
    b. A second major that does not use any duplicate classes to fulfill WRI major requirements

- Bachelor of Arts Track
  - Required Support Courses (Bachelor of Arts Track)
    Completion of a Modern Language through 202. 
    
    This Modern Language requirement is in addition to the minimal Bachelor of Arts language requirement.
  - In addition, choose three of the following, two of which must be 200-level or higher.
    - ART258: Visual Communication (4 hours)
    - COM137: Newswriting and Reporting (4 hours)
    - COM237: Advanced Newswriting and Reporting (4 hours)
    - COM275: Feature Writing (4 hours)
    - COM317: Communication Criticism (4 hours)
    - COM350: Communication Law (4 hours)
    - ENG190: Intro to Creative Writing - Imagination and Rhetoric (4 hours)
    - ENG206: Fiction Writing (4 hours)
    - ENG207: Poetry Writing (4 hours)
    - ENG208: Creative Nonfiction Writing - The Documentary Impulse (4 hours)
    - ENG306: Advanced Fiction (4 hours)
    - ENG307: Advanced Poetry (4 hours)
    - ENG308: Advanced Creative Nonfiction (4 hours)
    - PPE101: Introduction to Philosophy, Politics, and Economics (4 hours)
    - WRI391: Topics in Professional Writing (4 hours)

Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

- General Education Requirement
  For more information on General Education Requirement, click here.

  - Distribution Component
    For more information on the Distribution Component, click here.

    - GE1 and GE2 Courses
      Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
      Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

      Fine Arts (F1, F2)
      Philosophy/Ethics/Religion (P1, P2)
      Natural Sciences (N1, N2)
      Social Sciences (S1, S2)

    - Cross-Cultural Component
The Cross-Cultural Component is a five-course series through which students explore the study of culture:

- **Transfer students will register for CCS101 for one credit.**

  - **Cultural Seminar (CCS100)**
    
    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

  - **Writing Seminar (ENG 170)**
    
    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

  - **Cross-Cultural Development (CCD)**
    
    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

  - **Cross-Cultural Experience (CCE)**
    
    The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

    For more information and course listings, [click here](link).

  - **Global Perspectives Colloquium (CCS400)**
    
    In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- **Bachelor of Science Track**

  - ACC324: Advanced Business Law (4 hours)
  - ART258: Visual Communication (4 hours)
  - BIO324: Bioethics (4 hours)
  - BUS290: Principles of Business Law (4 hours)
  - BUS301: Principles of Marketing (4 hours)
  - COM290: Intro to Health Communication (4 hours)
  - COM317: Communication Criticism (4 hours)
  - COM350: Communication Law (4 hours)
  - ECO105: History of Economic Thought (4 hours)
  - PHI207: History and Philosophy of Science (4 hours)
  - PPE101: Introduction to Philosophy, Politics, and Economics (4 hours)
  - SOC110: Cultural Anthropology (4 hours)
  - WRI391: Topics in Professional Writing (4 hours)

- **Bachelor of Science Requirement**

  The requirements for a Bachelor of Science degree are:

  - CMP112 and either CMP113 or CMP114 or
  - MAT140 or higher and CSC110 or higher;

  **NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.

  FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

- **General Education Requirement**

  For more information on General Education Requirement, [click here](link).

  - **Distribution Component**

    For more information on the Distribution Component, [click here](link).

    - GE1 and GE2 Courses
      
      Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

      Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

      - Fine Arts (F1, F2)
      - Philosophy/Ethics/Religion (P1, P2)
      - Natural Sciences (N1, N2)
      - Social Sciences (S1, S2)

  - **Cross-Cultural Component**

    The Cross-Cultural Component is a five-course series through which students explore the study of culture:

    Transfer students will register for CCS101 for one credit.

    - **Cultural Seminar (CCS100)**

      The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

    - **Writing Seminar (ENG 170)**
The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

  For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Professional Writing Minor (22 credits)
  - Required Courses
    - COM150: Research Methodology (4 hours)
    - COM227: Technical Writing in Organizations (4 hours)
    - ENG305: Advanced Exposition and the Rhetorical Tradition (4 hours)
    - GRC106: Intro-Communication Technology (2 hours)
    - WRI120: Introduction to Professional Writing (4 hours)
  
    In addition, students must complete one of the following:
    - BIO324: Bioethics (4 hours)
    - BUS290: Principles of Business Law (4 hours)
    - COM237: Advanced Newswriting and Reporting (4 hours)
    - COM275: Feature Writing (4 hours)
    - COM290: Intro to Health Communication (4 hours)
    - COM317: Communication Criticism (4 hours)
    - COM350: Communication Law (4 hours)
    - ENG206: Fiction Writing (4 hours)
    - ENG207: Poetry Writing (4 hours)
    - ENG208: Creative Nonfiction Writing - The Documentary Impulse (4 hours)
    - ENG306: Advanced Fiction (4 hours)
    - ENG307: Advanced Poetry (4 hours)
    - ENG308: Advanced Creative Nonfiction (4 hours)
    - PHI207: History and Philosophy of Science (4 hours)
    - WRI391: Topics in Professional Writing (4 hours)

  - Major Courses
    - The list below displays all the courses offered by the major:
      - WRI120: Introduction to Professional Writing (4 hours)
      - WRI380: Internship in Writing (4 hours)
      - WRI391: Topics in Professional Writing (4 hours)
      - WRI496: Writing Major Capstone (4 hours)
Department: History, Political Science and Religious Studies

Chairperson: Kimberly Redding
Room: MacAllister 214  Email: redding@carrollu.edu
Telephone: 262-650-4894  Fax: 262-650-4837

Programs

Undergraduate
- European Studies
- Global Studies
- History
- Philosophy, Political Science and Economics
- Political Science
- Religious Studies
- Medieval and Renaissance Studies Minor
- Philosophy Minor (20 credits)
European Studies

Kimberly A. Redding  Department Chair and Associate Professor
Scott Hendrix  Assistant Professor of History
Lynne Bernier  Associate Professor of Political Science
Kelly O'Reilly  Assistant Professor of Political Science

The European Studies program offers a major and a minor. Both are ideal for students who plan to study abroad and want to develop functional fluency in a European language. European Studies complements studies in fields such as Business, History, Organizational Leadership, Political Science, and Professional Writing.

European Studies Major (36 credits)
The European Studies major is an interdisciplinary major that helps students develop both a broad understanding of European culture and indepth knowledge of a particular country/region through diverse coursework, study abroad and language study. The program's contemporary focus makes it an ideal second major or minor for students in fields such as Business, History, Organizational Leadership, Political Science and Professional Writing.

Learning Outcomes for European Studies
Upon completion of the European studies major, students will demonstrate the ability to:

1. Explain the recentness of European identity (and the historical developments preceding it).
2. Interact proficiently with a specific European culture (perform day to day tasks, conduct research in field of capstone, participate in informal discussion of current events and culture).
3. Appreciate the arts as expressions of cultural identity and context.
4. Demonstrate functional proficiency in English and one other European language.
5. Articulate how the past informs contemporary intercultural relationships and conflicts.
6. Engage in informed dialogue about political and social issues confronting European societies.

Core Courses

I. Breadth Component
   - HIS103: Roots of the Western World (4 hours)
   - HIS104: Europe and the Modern World (4 hours)
   - POL201: Politics of the Worlds Nations (4 hours)

II. Depth Component
   - One of the following:
     - EUS391: Topics in European Studies (4 hours)
     - HIS227: Tudor-Stuart England (4 hours)
     - HIS254: Topics in Medieval European History (4 hours)
     - HIS328: The Modern British Experience (4 hours)
     - HIS329: The German Experience (4 hours)
     - POL301: Politics of Developed Nations (4 hours)

III. Cultural Component
   - Three of the following: with no more than one from each group counting toward the major:
     - A. NCEP in Europe
       - NCEP in Europe (or comparable independent study with approval of the European Studies Program coordinator)
     - B. Music
       - MUS156: Listening to Classical Music (4 hours)
       - MUS157: Beethoven (4 hours)
       - MUS231H: Fin de Siecle - Birth of the Modern Age in Paris and Vienna (4 hours)
     - C. English
       - ENG301: Chaucer (4 hours)
       - ENG309: Romantic and Victorian Literature (4 hours)
       - ENG312: Modernism (4 hours)
       - ENG323: Renaissance English Literature (4 hours)
ENG326: Age of Exuberance-Restoration and 18th Cent British Literature (4 hours)

Restoration and Eighteenth Century British Literature; or relevant study abroad course

D. Art
- ART104: Renaissance to Early Modernism - Art History Survey (4 hours)
- ART300: Early Modernism to Present - Art History Survey (4 hours)

Art History Survey or relevant study abroad course

E. Theatre
- THE215: European Theatre History and Literature to 1800 (4 hours)

Or relevant study abroad course.

IV. Study Abroad (1 semester)

NOTE: Three of the required courses will be taken during the semester abroad.

V. European Studies Program 400, Senior Capstone

Required Support Courses

I. Three of the following:

- ECO124: Principles of Economics I - Microeconomics (4 hours)
- ECO225: Principles of Economics II - Macroeconomics (4 hours)
- PHI207: History and Philosophy of Science (4 hours)
- PHI320: Ancient and Mediaeval Philosophy (4 hours)
- PHI321: Modern and Contemporary Philosophy (4 hours)
- POL255: Contemporary Global Politics (4 hours)

II. Minor in a European language other than English or demonstrated functional proficiency

Demonstrated proficiency means:

- A grade of C or better in a 300-level course.
- A letter of support from a foreign language instructor at a recognized educational institution.
- B2 level competency on TELC (The European Language Certificate) as established by CERF (Common European Framework of References for Languages: Learning, Teaching, Assessment).
- Level II UNICert competency.
- Equivalent score on a language placement exam (often associated with study abroad programs)

Bachelor of Arts Requirement

Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

GE1 and GE2 Courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

Fine Arts (F1, F2)

Philosophy/Ethics/Religion (P1, P2)

Natural Sciences (N1, N2)

Social Sciences (S1, S2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

Cultural Seminar (CCS100)

The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

Writing Seminar (ENG 170)

The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

Cross-Cultural Development (CCD)

The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as
preparation for the Cross-Cultural Experience.

- **Cross-Cultural Experience (CCE)**

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

*For more information and course listings, [click here]*

- **Global Perspectives Colloquium (CCS400)**

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- **European Studies Minor (24 credits)**
  - **I. Foundational Level**
    
    European Studies Program 200, Workshop i European Studies (1 credit each of 4 semesters).
    
    - HIS103: Roots of the Western World (4 hours)
    - HIS104: Europe and the Modern World (4 hours)
    - POL201: Politics of the Worlds Nations (4 hours)
  
  - **II. Advanced Level**
    
    Two 200 or 300-level courses from among those listed under II and III (Depth and Cultural components) in the European Studies Major.
    
    Students are advised to select either a political or a cultural focus, and choose advanced courses appropriately.
    
    - **III. NCEP In Europe or equivalent educational experience**

- **Major Courses**

The list below displays all the courses offered by the major:

- EUS391: Topics in European Studies (4 hours)
- EUS400: European Studies Capstone (4 hours)

- **Global Studies**

The Global Studies Program offers a major and a minor in global studies and in political science.

- **Global Studies Major (44 credits)**

Global studies is an interdisciplinary major that gives students a global perspective on political and economic problems, preparing them for careers in government, business and the nonprofit sector. Students are encouraged to become fluent in a modern foreign language, and the faculty works to arrange for students to spend a semester or year of study abroad.

**Learning Outcomes for Global Studies**

Upon completing the global studies major students should:

1. View global challenges from a perspective that integrates political, historical, economic, cultural and normative perspectives.
2. Be able to articulate the primary theoretical frameworks used to understand the global arena.
3. Understand the role of important state and non-state actors (international and non-governmental groups and organizations) in the global arena.
4. Demonstrate strong communications skills (reading, writing and listening) as well as analytical and critical skills that enable them to dissect and solve complex problems effectively.
5. Demonstrate the capacity to conduct independent research (identify and develop a research question, design research strategies based on the application of quantitative and/or qualitative methodologies, access and interpret information from print and electronic sources, write and present a critical and analytical argument).

- **Core Courses**

  - POL103: Politics of the World's Nations (4 hours)
  - POL155: Contemporary Global Politics (4 hours)
  - POL200: Social Science Inquiry (4 hours)
  - POL276: Democracy, Globalization, and International Governance (4 hours)
  - POL301: Politics of Developed Nations (4 hours)
  - POL303: Politics of Developing Nations (4 hours)
  - POL399: Capstone in Political Science and Global Studies (4 hours)
  - Four of the following:
    - ECO225: Principles of Economics II - Macroeconomics (4 hours)
    - ENV160: World Regional Geography (4 hours)
    - HIS112: Intro to Latin America History (4 hours)
    - HIS210: Hlst-American Foreign Relations (4 hours)
    - HIS224H: The World Since 1945 (4 hours)
    - POL291: Topics in Politics (2 TO 4 hours)
    - OR - POL391: Topics in Politics (4 hours)
    - POL329: The German Experience (4 hours)
    - POL382: Internship in Global Studies (4 hours)

- **Bachelor of Arts Requirement**

Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

**NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.**

**FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.**
General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

GE1 and GE2 Courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

Fine Arts (F1, F2)

Humanities (F1, F2)

Philosophy/Ethics/Religion (P1, P2)

Natural Sciences (N1, N2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

Cultural Seminar (CCS100)

The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

Writing Seminar (ENG 170)

The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

Cross-Cultural Development (CCD)

The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

Cross-Cultural Experience (CCE)

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Global Studies Minor (20 credits)

The minor has two tracks: Political Science and Business. A student interested in international business is able to pursue both an emphasis in Business and a Global Studies minor with an emphasis in international business. Regardless of track/emphasis, all students are required to take the core courses.

Core Courses

- POL103: Politics of the World's Nations (4 hours)
- POL155: Contemporary Global Politics (4 hours)
- POL276: Democracy, Globalization, and International Governance (4 hours)

Political Science Track

- POL301: Politics of Developed Nations (4 hours)
- POL303: Politics of Developing Nations (4 hours)

Business Track

- BUS361: International Business (4 hours)
- ECO363: International Economics (4 hours)

History

Fred Beutttler Assistant Professor of History
Charles A. Byler Professor of History
Selina Gao Assistant Professor of History
Scott Hendrix Assistant Professor of History
Abigail M. Markwyn Associate Professor of History
Kimberly A. Redding Department Chair and Associate Professor of History

The History Program offers a major in history and a minor in history.

History Major (36 credits)
Bachelor of Arts
The nine-course history major serves students who not only seek an education in the liberal arts, but who also realize the value of history for understanding themselves and their world. Because the study of history enhances analytical, communicative and critical thinking skills, and because our courses often encourage an interdisciplinary approach, a history major prepares students for careers in research, public service, education and/or the private sector, while also offering a strong foundation for advanced study.

Learning Outcomes for History

Upon successful completion of major requirements students will be able to:

1. Employ tools of historical analysis such as cause and effect, sequence and change over time to explain past experiences and developments.
2. Define a historical question and use appropriate methodologies to develop and evaluate possible answers.
3. Find evidence and evaluate primary and secondary sources to form sustainable conclusions in a well-argued paper.
4. Articulate and/or resolve conflicting interpretations and explain the changing nature of historical inquiry.
5. Communicate original, convincing ideas in well-organized oral and written formats.
6. Identify and explain central themes and problems of the Western World.
7. Identify and explain central themes and problems of a non-western culture.

Core Courses

I. Three courses, with one course in each area, from the following:
   - A
     - HIS103: Roots of the Western World (4 hours)
     - HIS104: Europe and the Modern World (4 hours)
   - B
     - HIS105: America to 1877 (4 hours)
     - HIS106: America since 1877 (4 hours)
   - C
     - HIS107: Understanding the Premodern World (4 hours)
     - HIS108: Understanding Our Contemporary World (4 hours)
     - HIS110: History of Modern China (4 hours)
     - HIS112: Intro to Latin America History (4 hours)

II. History 200, Workshop for Historians
   - HIS200: Workshop for Historians (4 hours)

III. Two courses at the 200 level from the following:
   - HIS203: The American Civil War (4 hours)
   - HIS210: Hist-American Foreign Relations (4 hours)
   - HIS213: Women in American History (4 hours)
   - HIS224H: The World Since 1945 (4 hours)
   - HIS254: Topics in Medieval European History (4 hours)
   - HIS291: Topics in History (2 TO 4 hours)

Other pre-approved courses

IV. Two courses at the 300 level from the following:
   - HIS301: The Forging of a Nation - The Colonial and Revolutionary Experience in North America (4 hours)
   - HIS305: Recent America (4 hours)
   - HIS328: The Modern British Experience (4 hours)
   - HIS329: The German Experience (4 hours)
   - HIS391: Topics in History (4 hours)

Other pre-approved courses

All 300-level classes are conceived as research courses in which the major focus will be on research methodology and utilization of primary sources to produce a work of serious scholarship.

V. History 499, Capstone: Senior Seminar for Historians

Note: HIS 499 requires students to submit a portfolio of written work. History majors should keep copies of papers and projects from their other classes for this purpose.

Required Support Courses (Required for primary majors only)

Completion of a Modern Language through 202.

Teacher Certification

The department recommends that students majoring in history who seek certification to teach at the early adolescence through adolescence (formerly 6 - 12) level complete the requirements for the Broad Field Social Studies license. Please contact a history faculty member regarding these requirements.

The State of Wisconsin requires content area examinations (Praxis II) in order to receive certification to teach at the early adolescence through adolescence level and to adequately demonstrate competence. For this reason, students seeking to teach history at this level are urged to take History 103, 104, 105, 106 and 108.

Bachelor of Arts Requirement

Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE “REQUIRED SUPPORT COURSES” WITHIN EACH MAJOR.

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.
GE1 and GE2 Courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

Students must take one GE2 course. The GE2 course chosen must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

- Fine Arts (F1, F2)
- Philosophy/Ethics/Religion (P1, P2)
- Natural Sciences (N1, N2)
- Social Sciences (S1, S2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)
  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

History Minor (24 credits)

I. Three courses, with one course in each area, from the following:

A
- HIS103: Roots of the Western World (4 hours)
- HIS104: Europe and the Modern World (4 hours)

B
- HIS105: America to 1877 (4 hours)
- HIS106: America since 1877 (4 hours)

C
- HIS107: Understanding the Premodern World (4 hours)
- HIS108: Understanding Our Contemporary World (4 hours)
- HIS110: History of Modern China (4 hours)
- HIS112: Intro to Latin America History (4 hours)

II. Three additional courses;

Three additional courses at the 200- and 300-course levels. One of those three courses must be a 300-level research course and not all of them may be taken in United States History.

Major Courses

The list below displays all the courses offered by the major:

- HIS103: Roots of the Western World (4 hours)
- HIS104: Europe and the Modern World (4 hours)
- HIS105: America to 1877 (4 hours)
- HIS106: America since 1877 (4 hours)
- HIS106H: America Since 1877 (4 hours)
- HIS107: Understanding the Premodern World (4 hours)
- HIS108: Understanding Our Contemporary World (4 hours)
- HIS110: History of Modern China (4 hours)
- HIS112: Intro to Latin America History (4 hours)
- HIS200: Workshop for Historians (4 hours)
- HIS203: The American Civil War (4 hours)
- HIS210: Hist-American Foreign Relations (4 hours)
- HIS213: Women in American History (4 hours)
- HIS215: American Encounters: Natives, Africans, and Europeans in the Americans, 1350-1750 (4 hours)
- HIS216: Philosophy and History of Science (4 hours)
- HIS224H: The World Since 1945 (4 hours)
- HIS225H: Medieval Europe, China, and the Islamic Crescent (4 hours)
- HIS227: Tudor-Stuart England (4 hours)
The Philosophy, Political Science and Economics Program offers a major.

**Philosophy, Political Science and Economics Major (52 credits)**

**Core Courses**

1. All Philosophy, Political Science and Economics majors must take:
   - A. PPE101: Introduction to Philosophy, Politics, and Economics (4 hours)
   - B. Philosophy
     - PHI101: Introduction to Philosophy (4 hours)
     - PHI201: Ancient and Medieval Philosophy (4 hours)
     - OR - PHI221: Modern and Contemporary Philosophy (4 hours)
   - One additional Philosophy course at any level (Pre-law students are encouraged to take Philosophy 105, Logic).

2. Political Science
   - POL141: Intro to American Politics (4 hours)
   - OR - POL201: Politics of the Worlds Nations (4 hours)
   - POL275: Political Theory (4 hours)
   - POL301: Politics of Developed Nations (4 hours)
   - OR - HIGHER: Other higher level course of the same subject

3. Economics
   - ECO105: History of Economic Thought (4 hours)
   - ECO24: Principles of Economics I - Microeconomics (4 hours)
   - OR - ECO225: Principles of Economics II - Macroeconomics (4 hours)
   - ECO306: Microeconomic Theory (4 hours)
   - OR - HIGHER: Other higher level course of the same subject

4. Capstone
   - PPE499: Capstone in Philosophy, Politics, and Economics (4 hours)
II
All PPE majors will select a concentration in either Philosophy, Political Science, or Economics. Majors must complete two additional courses in either Philosophy, Political Science, or Economics. At least one of these courses must be at the 300 level.

Bachelor of Arts Requirement
Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

General Education Requirement
For more information on General Education Requirement, click here.

Distribution Component
For more information on the Distribution Component, click here.

GE1 and GE2 Courses
Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

Fine Arts (F1, F2)
Humanities (F1, F2)
Philosophy/Ethics/Religion (P1, P2)
Natural Sciences (N1, N2)

Cross-Cultural Component
The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

Cultural Seminar (CCS100)
The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

Writing Seminar (ENG 170)
The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

Cross-Cultural Development (CCD)
The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

Cross-Cultural Experience (CCE)
The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here.

Global Perspectives Colloquium (CCS400)
In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Major Courses
The list below displays all the courses offered by the major:

PHI101: Introduction to Philosophy (4 hours)
PHI105: Introduction to Logic (4 hours)
PHI206: Ethics (4 hours)
PHI206H: Ethics (4 hours)
PHI207: History and Philosophy of Science (4 hours)
PHI298: Independent Study in Philosophy (1 TO 4 hours)
PHI308: Philosophy of Religion (4 hours)
PHI320: Ancient and Mediaeval Philosophy (4 hours)
PHI321: Modern and Contemporary Philosophy (4 hours)
PHI398: Independent Study in Philosophy (1 TO 4 hours)
PPE101: Introduction to Philosophy, Politics, and Economics (4 hours)
PPE499: Capstone in Philosophy, Politics, and Economics (4 hours)

Political Science

Lynne L. Bernier  Associate Professor of Political Science
Lilly Goren  Professor of Political Science
Kelly O'Reilly  Assistant Professor of Political Science
The Political Science Program offers a major and a minor in global studies and in political science.

- **Political Science Major (44 credits)**

  The major in political science prepares students for a lifetime of informed and active citizenship while teaching the skills necessary to succeed in our knowledge-based, globalized economy.

  **Learning Outcomes for Political Science**

  Political Science majors at Carroll University will develop a general knowledge of the following:

  1. Major institutions (e.g., legislatures, executives, judiciaries, bureaucracies) and processes (e.g., voting, policy-making) of American governments and of diverse national political systems.
  2. The main theories used to understand the global arena as well as the impact of globalization on global and national politics.
  3. The structure and functions of political theorizing as well as an overview of its history.
  4. Important processes and agencies within public organizations and the ethical dimensions of public service.
  5. Students develop strong communication skills (reading, writing, listening) as well as analytical and critical skills, which enable them to dissect and solve complex problems effectively.
  6. Students develop the capacity to conduct independent research (identify and develop a research question, design research strategies based on the application of quantitative and/or qualitative methodologies, access and interpret information from print and electronic sources, write and present a critical and analytical argument).
  7. Students are strongly encouraged to develop an understanding of the world of work by completing an internship or by participating in an off-campus program that involves contact with governments or non-governmental organizations engaged in the public policy process.

- **Core Courses**
  - POL103: Politics of the World's Nations (4 hours)
  - POL141: Intro to American Politics (4 hours)
  - POL155: Contemporary Global Politics (4 hours)
  - POL200: Social Science Inquiry (4 hours)
  - POL275: Political Theory (4 hours)
  - At least one of the following:
    - POL332: Public Policy (4 hours)
    - POL335: Public Administration (4 hours)
    - POL336: The American Presidency (4 hours)
    - POL344: Constitutional Law and Politics (4 hours)
  - At least one of the following:
    - POL301: Politics of Developed Nations (4 hours)
    - POL303: Politics of Developing Nations (4 hours)
    - POL399: Capstone in Political Science and Global Studies (4 hours)
  - Plus three additional Politics courses

- **Bachelor of Arts Requirement**

  Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

  **NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

- **General Education Requirement**

  For more information on General Education Requirement, click here.

- **Distribution Component**

  For more information on the Distribution Component, click here.

  - GE1 and GE2 Courses
    - Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
    - Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
    - Fine Arts (F1, F2)
    - Humanities (F1, F2)
    - Philosophy/Ethics/Religion (P1, P2)
    - Natural Sciences (N1, N2)

  - Cross-Cultural Component

    The Cross-Cultural Component is a five-course series through which students explore the study of culture:

    Transfer students will register for CCS101 for one credit.

    - Cultural Seminar (CCS100)
      - The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.
    - Writing Seminar (ENG 170)
      - The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.
Cross-Cultural Development (CCD)

The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

Cross-Cultural Experience (CCE)

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Political Science Minor (20 credits)

Three additional Politics courses

- POL103: Politics of the World’s Nations (4 hours)
- POL141: Intro to American Politics (4 hours)
- Plus three additional Politics courses

Major Courses

The list below displays all the courses offered by the major:

- POL103: Politics of the World’s Nations (4 hours)
- POL141: Intro to American Politics (4 hours)
- POL155: Contemporary Global Politics (4 hours)
- POL200: Social Science Inquiry (4 hours)
- POL269: The American Congress (4 hours)
- POL275: Political Theory (4 hours)
- POL276: Democracy, Globalization, and International Governance (4 hours)
- POL280: Politics and Culture (4 hours)
- POL285: International Conflict and Security (4 hours)
- POL291: Topics in Politics (2 TO 4 hours)
- POL298: Independent Study in Politics (1 TO 4 hours)
- POL301: Politics of Developed Nations (4 hours)
- POL303: Politics of Developing Nations (4 hours)
- POL321: International Law (4 hours)
- POL329: The German Experience (4 hours)
- POL332: Public Policy (4 hours)
- POL335: Public Administration (4 hours)
- POL336: The American Presidency (4 hours)
- POL344: Constitutional Law and Politics (4 hours)
- POL381: Internship in Politics (4 TO 12 hours)
- POL382: Internship in Global Studies (4 hours)
- POL391: Topics in Politics (4 hours)
- POL398: Independent Study in Politics (1 TO 4 hours)
- POL399: Capstone in Political Science and Global Studies (4 hours)

Religious Studies

- Pascale Engelmajer, Assistant Professor of Religious Studies
- Jeff Fisher, Assistant Professor of Religious Studies
- James Grimshaw, Associate Professor of Religious Studies

The Religious Studies Program offers a major and a minor in religious studies.

Religious Studies Major (36 credits)

The religious studies major is designed to provide students with depth and breadth in the study of religion as universal to human experience, fundamental to human efforts to find meaning in the universe, and central to cultures around the world, past and present. As an inherently interdisciplinary field, the study of religion incorporates a wide variety of approaches, including historical, psychological, sociological, anthropological, literary, and philosophical. In addition to being provided opportunities to reflect extensively on the big questions of human existence, students majoring in religious studies become familiar with many religious traditions, and are equipped with multiple ways of thinking about the nature of religion, its role in society, and its place in the lives of individuals. Religious studies majors may go on to careers in counseling, journalism, ministry, social work, or any number of other professions requiring strong critical thinking skills, good writing ability, and careful reading. Graduate school in a variety of fields is possible, and religious studies majors historically score very well on the LSAT for law school admission. As a minor, Religious Studies can very effectively supplement a number of majors, including, for example, literature, history, writing, psychology, or Philosophy, Political Science and Economics. Likewise, the philosophy minor not only provides a strong grounding in reasoning skills, but also background in the variety of ways human beings think about, and have thought in the past about, what matters and why.

Learning Outcomes for Religious Studies

Upon successful completion of major requirements students should be able to:

1. Articulate how religion has the power to shape individual lives and social values.
2. Critically read, evaluate, and write on the foundational texts and the significant ideas, concepts, and questions in the study of religion.
4. Show a basic understanding of a breadth of religious traditions including Judaism, Islam, Buddhism, Hinduism and Native American traditions.
5. Use library research tools specific to religious studies, and religious studies methodologies to construct papers, essays and class presentations.
6. Use these perspectives and skills to become a responsible citizen in a religiously plural world.
7. Identify, analyze, and compare understandings of the meaning of life, the human condition, and the nature of the good life in several religious traditions.

- Core Courses
  - A. Two introductory courses (100 level)
    - REL106: Understanding Religion (4 hours)
    - REL102: Introduction to the Hebrew Bible (4 hours)
    - OR - REL103: Intro to the New Testament (4 hours)
  - B. Six intermediate courses (200 and 300 level); at least two must be from 300 level:
    - Two in Christian Tradition
      - Choose one from:
        - REL230: Foundations of Christianity (4 hours)
        - REL231: Christianity in the Modern World (4 hours)
      - Choose one from:
        - REL201: Jesus of Nazareth (4 hours)
        - REL202: Religious Traditions in America (4 hours)
        - REL210: Suffering and Hope (4 hours)
        - REL291: Topics in Religious Studies (4 hours)
        - OR - REL391: Topics in Religious Studies (4 hours)
        - REL310: Powers, Politics, and Pluralism in Biblical Interpretation (4 hours)
    - Two in Religious Traditions
      - REL215: Women in Religion (4 hours)
      - REL306: Asian Religions (4 hours)
      - REL316: Judaism, Christianity, and Islam (4 hours)
    - Two electives
      - REL200: Religions of the Contemporary World (4 hours)
      - OR - HIGHER: Other higher level course of the same subject
      - PHI206: Ethics (4 hours)
      - PHI308: Philosophy of Religion (4 hours)
  - C. One advanced course (400 level)
    - REL499: Capstone: Senior Seminar (4 hours)

- Bachelor of Arts Requirement
  Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

**NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

- General Education Requirement
  For more information on General Education Requirement, click here.

- Distribution Component
  For more information on the Distribution Component, click here.

  - GE1 and GE2 Courses
    Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
    Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
    - Fine Arts (F1, F2)
    - Humanities (H1, H2)
    - Natural Sciences (N1, N2)
    - Social Sciences (S1, S2)

- Cross-Cultural Component
  The Cross-Cultural Component is a five-course series through which students explore the study of culture:
  Transfer students will register for CCS101 for one credit.

  - Cultural Seminar (CCS100)
    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.
  - Writing Seminar (ENG 170)
    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.
  - Cross-Cultural Development (CCD)
    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as
preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Religious Studies Minor (20 credits)
  - Two introductory courses (100 level)
    - REL102: Introduction to the Hebrew Bible (4 hours)
    - OR REL103: Introduction to the New Testament (4 hours)
    - REL106: Understanding Religion (4 hours)
  - One course in Christian Tradition
    - REL201: Jesus of Nazareth (4 hours)
    - REL202: Religious Traditions in America (4 hours)
    - REL210: Suffering and Hope (4 hours)
    - REL230: Foundations of Christianity (4 hours)
    - REL231: Christianity in the Modern World (4 hours)
    - REL291: Topics in Religious Studies (4 hours)
    - OR REL391: Topics in Religious Studies (4 hours)
  - One in Religious Traditions
    - REL215: Women in Religion (4 hours)
    - REL306: Asian Religions (4 hours)
    - REL316: Judaism, Christianity, and Islam (4 hours)
  - One elective in Religion or Philosophy, 300 or above

- Major Courses

The list below displays all the courses offered by the major:

- REL102: Introduction to the Hebrew Bible (4 hours)
- REL103: Introduction to the New Testament (4 hours)
- REL106: Understanding Religion (4 hours)
- REL200: Religions of the Contemporary World (4 hours)
- REL201: Jesus of Nazareth (4 hours)
- REL202: Religious Traditions in America (4 hours)
- REL210: Suffering and Hope (4 hours)
- REL215: Women in Religion (4 hours)
- REL230: Foundations of Christianity (4 hours)
- REL231: Christianity in the Modern World (4 hours)
- REL291: Topics in Religious Studies (4 hours)
- REL298: Independent Study in Religious Studies (1 TO 4 hours)
- REL306: Asian Religions (4 hours)
- REL308: Philosophy of Religion (4 hours)
- REL310: Powers, Politics, and Pluralism in Biblical Interpretation (4 hours)
- REL316: Judaism, Christianity, and Islam (4 hours)
- REL362: New Testament Greek Tutorial (2 hours)
- REL364: Hebrew Tutorial (2 hours)
- REL380: Internship in Religious Studies (1 TO 4 hours)
- REL391: Topics in Religious Studies (4 hours)
- REL398: Independent Study in Religious Studies (1 TO 4 hours)
- REL480: Internship in Religious Studies (1 TO 4 hours)
- REL499: Capstone: Senior Seminar (4 hours)

- Medieval and Renaissance Studies Minor

The Medieval and Renaissance eras were periods of great change in European society. Many of the components of our modern world developed during these periods, from ideas such as the contract theory of government to institutions such as the Catholic Church, Parliament, and universities. This interdisciplinary minor integrates approaches from various areas of scholarship within the humanities, such as history, philosophy, English, and religious studies, to allow students to develop a holistic understanding of Medieval and Renaissance Europe.

Program Administration

Students minoring in Medieval and Renaissance Studies should meet with an advisor who teaches courses within the minor, in order to assure that requirements are met.

Mission and Program Goals

Students will gain a broad understanding of the Medieval and Renaissance eras in European history, while learning the approach that scholars in the field take to understanding these eras.

Program Learning Outcomes

1. Develop an understanding of the history and culture of Medieval and Renaissance Europe.
2. Employ tools from a variety of disciplines to identify, explore, and explain socio-cultural problems during the period.
3. Understand the reception and impact of ideas from classical antiquity on medieval and Renaissance cultures.

- Required Courses
The student in the Medieval and Renaissance Studies minor will be required to take five (5) courses, drawn from the following lists. Students must take at least one (1) class from each of the three areas of concentration (Literature, History, Religion and Philosophy):

- **Literature**
  - ENG240: British Literature I - Medieval to 1700 (4 hours)
  - ENG301: Chaucer (4 hours)
  - ENG305: Advanced Exposition and the Rhetorical Tradition (4 hours)
  - ENG323: Early Modern British Literature (4 hours)

- **History**
  - HIS225H: Medieval Europe, China, and the Islamic Crescent (4 hours)
  - HIS254: Topics in Medieval European History (4 hours)
  - HIS316: Renaissance and Reformation Europe (4 hours)

- **Religion and Philosophy**
  - PHI320: Ancient and Mediaeval Philosophy (4 hours)

**Philosophy Minor (20 credits)**

<table>
<thead>
<tr>
<th>Kevin Guilfoy</th>
<th>Associate Professor of Philosophy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Rondolino</td>
<td>Assistant Professor of Philosophy</td>
</tr>
</tbody>
</table>

- **Core Courses**
  - PHI101: Introduction to Philosophy (4 hours)
  - PHI105: Introduction to Logic (4 hours)
  - PHI206: Ethics (4 hours)
  - Two additional philosophy courses; at least one must be at the 300 level
Department: Visual and Performing Arts

Chairperson: Philip Krejcarek
Room: Humphrey Art Center 115
Email: pkrejc@carrollu.edu
Telephone: 262-524-7194
Fax: 262-574-2629

Programs

Undergraduate

Art and Photography
Graphic Communication
Music and Music Education
Theatre Arts
The art major offers several directions for the student who has an interest and talent in the visual expressive arts. Individualized advising helps the student choose a major with one of the following two emphases:

1. Fine arts which prepares students for careers in gallery/museum or arts administration, or for graduate work in studio art, commercial art, art therapy, or art history.
2. Art education which prepares students for K-12 teaching certification.

All majors are encouraged to attend art exhibition openings and/or workshops and field trips sponsored or approved by the art faculty. All majors are required to create a sophomore portfolio and have a senior show and portfolio to be approved by the art faculty.

Learning Outcomes for Art

Upon graduation, the art student will be able to demonstrate:
1. Mastery of skills in his/her chosen area of emphasis.
2. Familiarity with the history of art and the ability to discuss it within the context of their work.
3. Ability to write articulately about art.
4. Ability to present self and work professionally.
5. Ability to develop a cohesive body of work.

Core Courses (28 credits)
- ART103: Prehistoric to Renaissance- Art History Survey (4 hours)
- ART104: Renaissance to Early Modernism- Art History Survey (4 hours)
- ART106: Drawing and Composition (4 hours)
- ART107: Beginning Design 2D and 3D (4 hours)
- ART206: Intermediate and Life Drawing (4 hours)
- ART300: Early Modernism to Present- Art History Survey (4 hours)
- ART490: Capstone in Art (4 hours)

Fine Arts Emphasis (28 credits)
- Core Courses, plus
  - ART201: Painting I (4 hours)
  - ART209: Photography I (4 hours)
  - ART230: Printmaking I (4 hours)
  - ART220: Sculpture I (4 hours)
  - ART225: Ceramics I (4 hours)
  - ART235: Art Metals (4 hours)
  - ART306: Advanced and Life Drawing (4 hours)
- Core Courses, plus
  - Two additional courses in the same area at an advanced level:
    - Example: Art 320, Sculpture II and Art 340, Advanced Media Studies

Fine Arts students interested in gallery/museum, art therapy, arts administration or commercial art should plan to take an internship in the field. Those interested in graduate work in studio art or art history should work to fit in extra studio or art history courses, respectively, as time allows.

In addition, students interested in commercial art should consider adding a Graphic Design Minor, and students interested in art therapy should consider adding a Psychology Minor.

**Required Support Courses** Students are encouraged to select from the following courses: Business 101, Introduction to Business, BUS 200, Personal Finance and BUS 204, Start-ups and New Venture Planning

- Bachelor of Arts Requirement

Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.
NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

- General Education Requirement

For more information on General Education Requirement, click here.

- Distribution Component

For more information on the Distribution Component, click here.

  - GE1 and GE2 Courses

  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study. Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

  Humanities (H1, H2)

  Philosophy/Ethics/Religion (P1, P2)

  Natural Sciences (N1, N2)

  Social Sciences (S1, S2)

- Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

  - Cultural Seminar (CCS100)

    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

  - Writing Seminar (ENG 170)

    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

  - Cross-Cultural Development (CCD)

    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

  - Cross-Cultural Experience (CCE)

    The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

    For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)

  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Art Education Emphasis (37 credits)

  - Core Course, plus

    ART201: Painting I (4 hours)

    ART209: Photography I (4 hours)

    ART211: Gallery/Museum Experience (1 TO 2 hours)

    ART220: Sculpture I (4 hours)

    ART223: Creative Arts for Children (2 hours)

    ART225: Ceramics I (4 hours)

    ART230: Printmaking I (4 hours)

    ART235: Art Metals (4 hours)

    ART353: Methods of Teaching Secondary Art (2 hours)

    ART258: Visual Communication (4 hours)

    One 4-credit elective course in art.

- Required Support Courses

  ENV120: Conservation and Environmental Improvement (4 hours)

  GRC106: Intro-Communication Technology (2 hours)

*Student preparing for teaching must meet state licensing requirements through enrollment in the Teacher Education Program.

- Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

  CMP112 and either CMP113 or CMP114 or

  MAT140 or higher and CSC110 or higher;

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR
General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

GE1 and GE2 Courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

Humanities (H1, H2)

Philosophy/Ethics/Religion (P1, P2)

Natural Sciences (N1, N2)

Social Sciences (S1, S2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

Cultural Seminar (CCS100)

The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

Writing Seminar (ENG 170)

The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

Cross-Cultural Development (CCD)

The Cross-Cultural Development course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

Cross-Cultural Experience (CCE)

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Book Art Major (58 credits)

The book art major is designed for students interested in preparing for careers in book publishing, as well as students interested in creating books as an art form.

Students are required to attend Florence University of the Arts or another international university pre-approved by the Art Program in order to take 12 additional credits in Book Publishing and/or Book Making. This study abroad experience generally takes place during a student's junior year. Students may elect to enroll for a summer, a semester, or an entire year. Those students attending Florence University of the Arts for a full year can earn a Certificate in Publishing from FUA.

All book art majors are encouraged to attend art exhibition openings and/or workshops and field trips sponsored or approved by the art faculty. All majors are required to create a sophomore portfolio and have a senior show and portfolio to be approved by the art faculty.

Learning Outcomes for Book Art

Upon graduation, the book art student will be able to:

1. Summarize key innovations in the history of book making and publishing and their importance in social and cultural changes.
2. Demonstrate the ways in which contemporary trends in book making and publishing are utilized, and apply this to his/her own work.
3. Utilize his/her understanding of the history of book making and publishing, as well as their knowledge of current trends, to examine the book publishing market and to formulate specific employment-related goals.
4. Speak effectively and articulately about the field of book art.
5. Write effectively and persuasively and edit critically to accepted publication standards.
6. Utilize skills in photography and design in the creation of books, and demonstrate skills in layout and pre-press used in publication or book creation.
7. Interact and communicate effectively in an international setting.
8. Think, work and move across cultural boundaries.

Core Courses

ART209: Photography I (4 hours)
ART212: Introduction to Book Art (4 hours)
ART250: Electronic Imaging (4 hours)
ART258: Visual Communication (4 hours)
ART340: Advanced Media Studies (4 hours)
ART480: Internship in Art (1 TO 4 hours)
ART490: Capstone in Art (4 hours)
FAR230: Book History (4 hours)
GRC106: Intro-Communication Technology (2 hours)
GRC200: Color and Typography (4 hours)
GRC230: Digital Photography (4 hours)
Two of the following courses:
  - ENG206: Fiction Writing (4 hours)
  - ENG207: Poetry Writing (4 hours)
  - ENG208: Creative Nonfiction Writing - The Documentary Impulse (4 hours)
  - ENG305: Advanced Exposition and the Rhetorical Tradition (4 hours)

Required Support Courses

Students will be to also be required to take 12 additional credits in the Book Publishing program at the Florence University of the Arts (FUA). The courses should be selected from the following FUA courses:

CERTIFICATE IN PUBLISHING - Florence University of the Arts

<table>
<thead>
<tr>
<th>Semester 1 - Fall</th>
<th>Credits</th>
<th>Semester 2 - Spring</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Italian Language - Beginning</td>
<td>3</td>
<td>Italian Language - Intermediate</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Digital Photography</td>
<td>3</td>
<td>Intermediate Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Publishing and Editing</td>
<td>3</td>
<td>Professional Book Production</td>
<td>3</td>
</tr>
<tr>
<td>Creative Writing</td>
<td>3</td>
<td>Public Relations, Communications &amp; Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Computer Graphics</td>
<td>3</td>
<td>Lifestyle Magazine Project II</td>
<td>6</td>
</tr>
<tr>
<td>Lifestyle Magazine Project</td>
<td>6</td>
<td>Special Project in Book Publishing</td>
<td>9</td>
</tr>
</tbody>
</table>

NOTE: Italian is required each semester at FUA. These credits may not be included in the 12 credits abroad for the major.

Bachelor of Arts Requirement

Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

GE1 and GE2 Courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

  - Humanities (H1, H2)
  - Philosophy/Ethics/Religion (P1, P2)
  - Natural Sciences (N1, N2)
  - Social Sciences (S1, S2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

  - Cultural Seminar (CCS100)
    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.
  - Writing Seminar (ENG 170)
    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.
  - Cross-Cultural Development (CCD)
    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.
  - Cross-Cultural Experience (CCE)
The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Photography Major (56 credits)

Students seeking an in-depth study of photography as a fine art may choose the photography major.

All majors are encouraged to attend art exhibition openings and/or workshops and field trips sponsored or approved by the Department of Visual and Performing Arts. All majors are required to create a sophomore portfolio and have a senior show and portfolio to be approved by the art faculty.

Learning Outcomes for Photography

Upon graduation, the photography student will be able to demonstrate:

1. Proficiency in the use of a variety of cameras, including digital and video.
2. Mastery in the creation and analysis of photographic images.
3. Mastery in the development of film and printing and in the presentation of the final image.
5. Proficiency in the use of software to edit and manipulate images.
6. Ability to write articulately about art.
7. Ability to develop a cohesive body of work

- Core Courses
  - ART103: Prehistoric to Renaissance- Art History Survey (4 hours)
  - ART104: Renaissance to Early Modernism- Art History Survey (4 hours)
  - ART106: Drawing and Composition (4 hours)
  - ART107: Beginning Design 2D and 3D (4 hours)
  - ART209: Photography I (4 hours)
  - ART215: History of Photography (4 hours)
  - ART250: Electronic Imaging (4 hours)
  - ART258: Visual Communication (4 hours)
  - ART300: Early Modernism to Present-Art History Survey (4 hours)
  - ART309: Photography II - Fine Art (4 hours)
  - ART310: Photography II - Commercial (4 hours)
  - ART312: Video Art (4 hours)
  - ART340: Advanced Media Studies (4 hours)
  - ART480: Internship in Art (1 TO 4 hours)
  - ART490: Capstone in Art (4 hours)

- Required Support Courses
  - GRC106: Intro-Communication Technology (2 hours)
  - GRC320: Intro to Multimedia Production (4 hours)

In addition, students are encouraged to select from the following courses:

- BUS101: Introduction to Business (4 hours)
- BUS200: Personal Financial Management (4 hours)
- BUS204: Start-Ups and New Venture Planning (4 hours)
- COM203: Advertising (4 hours)
- COM246: Video Production (4 hours)
- COM254: Photojournalism (4 hours)
- FAR221: Legal Issues in the Fine Arts (4 hours)

- Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

**NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR**

- General Education Requirement

For more information on General Education Requirement, click here.

- Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

- Humanities (H1, H2)
- Philosophy/Ethics/Religion (P1, P2)
Natural Sciences (N1, N2)
Social Sciences (S1, S2)

Cross-Cultural Component
The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

Cultural Seminar (CCS100)
The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

Writing Seminar (ENG 170)
The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

Cross-Cultural Development (CCD)
The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

Cross-Cultural Experience (CCE)
The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

Global Perspectives Colloquium (CCS400)
In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Art Minor (24 credits)
Three 4-credit elective courses in art as well as the following:

- ART103: Prehistoric to Renaissance- Art History Survey (4 hours)
- OR -ART104: Renaissance to Early Modernism- Art History Survey (4 hours)
- ART106: Drawing and Composition (4 hours)
- ART107: Beginning Design 2D and 3D (4 hours)

Fine Arts Administration Minor (26 credits)
The fine arts program is the home of interdisciplinary courses and a minor that bring together the disciplines of Art, Music and Theatre. These courses and programs reflect the fact that the boundaries between the traditional fine arts disciplines have become blurred, and careers in the fine arts often draw upon an array of skills and a wider knowledge base than one might acquire in a single discipline. The Fine Arts Administration minor is designed for students with a major in Art, Photography, Theatre or Music, although it may have a broader appeal and is open to any student who is interested.

Program goals
- To provide students with an understanding of the requirements and responsibilities of arts administrators/managers and allow them to explore the range of opportunities available to graduates with arts management skills
- To provide students with the knowledge and skills they need to identify and take advantage of the opportunities available in the field
- To help students make connections to arts organizations and venues in the community, and to help students find high caliber internships that offer work experience in the field

Learning Outcomes for Fine Arts Administration

Upon completion of the minor, students will be able to:

1. Demonstrate knowledge and understanding of arts organizations and venues, how they are managed, and their relevance within the larger community.
2. Demonstrate awareness of the role and responsibilities of the manager within arts organizations and/or venues and within the larger cultural and social context.
3. Explain and respond to the challenges faced by arts managers and arts organizations in the areas of organization, promotion, funding and legal issues

Courses required for the minor

- ACC105: Introduction to Acct Basics (2 hours)
- BUS101: Introduction to Business (4 hours)
- BUS301: Principles of Marketing (4 hours)
- FAR120: Introduction to Fine Arts Administration (4 hours)
- FAR221: Legal Issues in the Fine Arts (4 hours)

One of the following:

- ART103: Prehistoric to Renaissance- Art History Survey (4 hours)
- OR -ART104: Renaissance to Early Modernism- Art History Survey (4 hours)
- OR -ART300: Early Modernism to Present-Art History Survey (4 hours)
- THE215: European Theatre History and Literature to 1800 (4 hours)
- OR -THE216: Global Theatre History and Literature since 1800 (4 hours)
- MUS156: Listening to Classical Music (4 hours)
  OR - MUS312: Music History II - The Classic and Romantic Periods (4 hours)
- One of the following:
  - BUS204: Start-Ups and New Venture Planning (4 hours)
  - BUS320: Promotion Management (4 hours)
  - COM208: Introduction to Public Relations (4 hours)
- Photography Minor (24 credits)
  - ART106: Drawing and Composition (4 hours)
    OR - ART107: Beginning Design 2D and 3D (4 hours)
  - ART209: Photography I (4 hours)
  - ART215: History of Photography (4 hours)
  - ART250: Electronic Imaging (4 hours)
  - ART309: Photography II - Fine Art (4 hours)
    OR - ART310: Photography II - Commercial (4 hours)
  - ART340: Advanced Media Studies (4 hours)

Major Courses

The list below displays all the courses offered by the major:

- ART103: Prehistoric to Renaissance - Art History Survey (4 hours)
- ART104: Renaissance to Early Modernism - Art History Survey (4 hours)
- ART106: Drawing and Composition (4 hours)
- ART107: Beginning Design 2D and 3D (4 hours)
- ART201: Painting I (4 hours)
- ART206: Intermediate and Life Drawing (4 hours)
- ART209: Photography I (4 hours)
- ART211: Gallery/Museum Experience (1 TO 2 hours)
- ART212: Introduction to Book Art (4 hours)
- ART215: History of Photography (4 hours)
- ART220: Sculpture I (4 hours)
- ART223: Creative Arts for Children (2 hours)
- ART225: Ceramics I (4 hours)
- ART230: Printmaking I (4 hours)
- ART235: Art Metals (4 hours)
- ART250: Electronic Imaging (4 hours)
- ART258: Visual Communication (4 hours)
- ART291: Special Topics in Art (2 TO 4 hours)
- ART298: Independent Study (1 TO 4 hours)
- ART300: Early Modernism to Present - Art History Survey (4 hours)
- ART301: Painting II (4 hours)
- ART306: Advanced and Life Drawing (4 hours)
- ART309: Photography II - Fine Art (4 hours)
- ART310: Photography II - Commercial (4 hours)
- ART312: Video Art (4 hours)
- ART313: Travel Journals - Italy (4 hours)
- ART320: Sculpture II (4 hours)
- ART325: Ceramics II (4 hours)
- ART330: Printmaking II (4 hours)
- ART340: Advanced Media Studies (4 hours)
- ART353: Methods of Teaching Secondary Art (2 hours)
- ART391: Special Topics in Art (4 hours)
- ART398: Independent Study in Art (1 TO 4 hours)
- ART401: Painting III (4 hours)
- ART405: Introduction to World Dance (4 hours)
- ART410: Painting III (4 hours)
- ART410: Introduction to Fine Arts Administration (4 hours)
- ART421: Legal Issues in the Fine Arts (4 hours)
- FAR230: Book History (4 hours)

Graphic Communication

Daniel M. Becker  
Coordinator/Assistant Professor
Michael Mortensen  
Lecturer in Graphic Communications
Julie VonDerVellen  
Lecturer in Graphic Communications

Preparing Professionals One Student at a Time

Graphic Communication at Carroll University is an interdisciplinary major from the graphic communication, art, business, communication, computer science, and English programs. This major is offered in conjunction with a required 120-hour internship and a capstone experience in which students independently create a real world project. The two minors offered within Graphic Communication are aimed toward students who plan to major in other academic programs and acknowledge the integrated usefulness of Graphic Communication within their major area of study.

Learning Outcomes for Graphic Communication

Upon graduation, the graphic communication student will be able to:

1. Measurably demonstrate and apply a high competency working knowledge of various digital software applications and hardware components.
2. Measurably demonstrate and apply industry-standard graphic design principles as they pertain to various digital media vehicles.
3. Apply learning outcome skill sets to produce digital media projects for the purpose of communication on behalf of client/audience objectives.
4. Create communication-based creative solutions to effectively broadcast specific messages that utilize typography, color, digital
Students wishing to excel in this area may consider a second major or minor in business or computer science.

- The web design emphasis is for students who particularly wish to develop projects for placement on the World Wide Web.
- The print management emphasis is based upon both the actual operation of print presses as well as design/management/business concepts.
- The digital video production emphasis is for students who wish to pursue employment within the video, film or television work environments. At the completion of the program, students will be proficient at video editing, audio editing, lighting, animation, green screen, storyboards, talent assessment, and marketing. Students must create and showcase a film reel portfolio of their work during their senior year.
- The design management emphasis is for students who wish to evolve their graphic communication skills into management positions or start their own company. Students wishing to excel in this area may consider a second major or minor in business.
- The graphics emphasis is for students who wish to enter the print industry and is a collaborative program with Waukesha County Technical College. The print management emphasis is based upon both the actual operation of print presses as well as design/management/business concepts.
- The web design emphasis is for students who particularly wish to develop projects for placement on the World Wide Web.

The graphic communication program has numerous offerings which teach students the use of various tools needed in graphic communication in the 21st century. The art, business, computer science and communication programs use these tools to develop students' talents and the business program's courses cover the use of graphic communication in the world of organizations. Each course within the curriculum uses the technology of the 21st century to achieve its objectives.

There are five emphases within graphic communication:

- The graphic design emphasis is for students interested in using their artistic bridging technology and graphic communication skills across a variety of media (print, web, new media, etc.). They may work as graphic artists, as web page designers or as desktop publishing professionals. Students may also consider a second major or a minor in computer science.
- The design management emphasis is for students who wish to evolve their graphic communication skills into management positions or start their own company. Students wishing to excel in this area may consider a second major or minor in business.
- The digital video production emphasis is for students who wish to pursue employment within the video, film or television work environments. At the completion of the program, students will be proficient at video editing, audio editing, lighting, animation, green screen, storyboards, talent assessment, and marketing. Students must create and showcase a film reel portfolio of their work during their senior year.
- The print management emphasis is for students wishing to enter the print industry and is a collaborative program with Waukesha County Technical College. The print management emphasis is based upon both the actual operation of print presses as well as design/management/business concepts.
- The web design emphasis is for students who particularly wish to develop projects for placement on the World Wide Web.

Students wishing to excel in this area may consider a second major or minor in business or computer science.

### Graphic Communication Major

- **Graphic Communication Emphasis (76 credits)**
  - GRC101: Web and Digital Tools for the 21st Century Learner (2 hours)
  - GRC106: Intro-Communication Technology (2 hours)
  - GRC150: Digital Toolbox - Photoshop/ Illustrator 1 (4 hours)
  - GRC200: Color and Typography (4 hours)
  - GRC210: History of Graphic Design (2 hours)
  - GRC230: Digital Photography (4 hours)
  - GRC290: Digital Toolbox - Photoshop/ Illustrator 2 (4 hours)
  - GRC295: 3-D Digital Design (4 hours)
  - GRC320: Intro to Multimedia Production (4 hours)
  - GRC330: Digital Video I (4 hours)
  - GRC340: Digital Video II (4 hours)
  - GRC360: Digital Flash Gaming (4 hours)
  - GRC450: Capstone-Projects for Graphic Communication Majors (4 hours)
  - GRC480: Internship-Graphic Communication (1 TO 12 hours)

- **Required Support Courses**
  - ACC105: Introduction to Acct Basics (2 hours)
  - ART106: Drawing and Composition (4 hours)
  - ART107: Beginning Design 2D and 3D (4 hours)
  - ART206: Intermediate and Life Drawing (4 hours)
  - BUS101: Introduction to Business (4 hours)
  - BUS301: Principles of Marketing (4 hours)

- **Bachelor of Science Requirement**

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or MAT140 or higher and CSC110 or higher;

**NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR**

### General Education Requirement

For more information on General Education Requirement, [click here](#).

- **Distribution Component**

For more information on the Distribution Component, [click here](#).

- **GE1 and GE2 Courses**

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study. Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

**Humanities (H1, H2)**

**Philosophy/Ethics/Religion (P1, P2)**
Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)
  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Design Management Emphasis (72 credits)

- GRC101: Web and Digital Tools for the 21st Century Learner (2 hours)
- GRC106: Intro-Communication Technology (2 hours)
- GRC150: Digital Toolbox - Photoshop/ Illustrator 1 (4 hours)
- GRC200: Color and Typography (4 hours)
- GRC320: Intro to Multimedia Production (4 hours)
- GRC450: Capstone-Projects for Graphic Communication Majors (4 hours)
- GRC480: Internship-Graphic Communication (1 TO 12 hours)

Required Support Courses

- ACC105: Introduction to Acct Basics (2 hours)
- ART106: Drawing and Composition (4 hours)
- ART107: Beginning Design 2D and 3D (4 hours)
- ART206: Intermediate and Life Drawing (4 hours)
- BUS101: Introduction to Business (4 hours)
- BUS301: Principles of Marketing (4 hours)
- BUS302: Principles of Management (4 hours)
- BUS320: Promotion Management (4 hours)
- COM203: Advertising (4 hours)
- COM227: Technical Writing in Organizations (4 hours)
- CSC107: Problem Solving Using Information Technology (2 hours)
- CMP112: Computational Thinking I (4 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.
FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Requirement, click here.

- GE1 and GE2 Courses
  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
  Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
  Fine Arts (F1, F2)
  Humanities (F1, F2)
  Philosophy/Ethics/Religion (P1, P2)
  Natural Sciences (N1, N2)
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The Cross-Cultural Component is a five-course series through which students explore the study of culture:

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  - **Writing Seminar (ENG 170)**
    
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  - **Cross-Cultural Development (CCD)**
    
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    For more information and course listings, click here

  - **Global Perspectives Colloquium (CCS400)**
    
    In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- **Digital Video Production Emphasis (70 credits)**
  
  - GRC150: Digital Toolbox - Photoshop/ Illustrator 1 (4 hours)
  - GRC290: Digital Toolbox - Photoshop/ Illustrator 2 (4 hours)
  - GRC295: 3-D Digital Design (4 hours)
  - GRC320: Intro to Multimedia Production (4 hours)
  - GRC330: Digital Video I (4 hours)
  - GRC340: Digital Video II (4 hours)
  - GRC350: Digital Video III (4 hours)
  - GRC355: Digital Video IV (4 hours)
  - GRC450: Capstone-Projects for Graphic Communication Majors (4 hours)
  - GRC480: Internship-Graphic Communication (1 TO 12 hours)

- **Required Support Courses**
  
  - ACC105: Introduction to Acct Basics (2 hours)
  - ART209: Photography I (4 hours)
  - COM217: Film Critique/Film Review & Analysis (4 hours)
  - ENG206: Fiction Writing (4 hours)

- **Bachelor of Science Requirement**

  The requirements for a Bachelor of Science degree are:

  - CMP112 and either CMP113 or CMP114 or
  - MAT140 or higher and CSC110 or higher;

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- **General Education Requirement**

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- **Distribution Component**

  For more information on the Distribution Component, click here.

  - **GE1 and GE2 Courses**
    
    Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
    Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
    
    - Fine Arts (F1, F2)
    - Humanities (F1, F2)
    - Philosophy/Ethics/Religion (P1, P2)
    - Natural Sciences (N1, N2)

  - **Cross-Cultural Component**
    
    The Cross-Cultural Component is a five-course series through which students explore the study of culture:

    - Transfer students will register for CCS101 for one credit.
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The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- **Writing Seminar (ENG 170)**
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- **Cross-Cultural Development (CCD)**
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- **Cross-Cultural Experience (CCE)**
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

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- **Global Perspectives Colloquium (CCS400)**
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- **Print Management Emphasis (65 credits)**
  - GRC110: Print Media/Digital Publishing I (3 hours)
  - GRC120: Print Media II (3 hours)
  - GRC121: Digital Illustration (3 hours)
  - GRC122: Post Press/Distribution (3 hours)
  - GRC130: Print Media III (3 hours)
  - GRC135: Digital Workflows (3 hours)
  - GRC140: Print Materials and Estimating (3 hours)
  - GRC141: Production Coordination/Customer Service (3 hours)
  - GRC142: Color Management (3 hours)
  - GRC450: Capstone-Projects for Graphic Communication Majors (4 hours)
  - GRC480: Internship-Graphic Communication (1 TO 12 hours)

  **Required Support Courses**
  - ACC205: Financial Accounting (4 hours)
  - BUS101: Introduction to Business (4 hours)
  - BUS301: Principles of Marketing (4 hours)
  - BUS302: Principles of Management (4 hours)
  - BUS305: Principles of Operations Management (4 hours)
  - CSC107: Problem Solving Using Information Technology (2 hours)
  - CSC109: Technological Productivity (2 hours)
  - CMP112: Computational Thinking I (4 hours)

  **Bachelor of Science Requirement**
  The requirements for a Bachelor of Science degree are:
  - CMP112 and either CMP113 or CMP114 or
  - MAT140 or higher and CSC110 or higher;

  **NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.
  FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

- **General Education Requirement**
  For more information on General Education Requirement, click here.

  **Distribution Component**
  For more information on the Distribution Component, click here.

  - **GE1 and GE2 Courses**
    Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
    Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
    - Fine Arts (F1, F2)
    - Humanities (F1, F2)
    - Philosophy/Ethics/Religion (P1, P2)
    - Natural Sciences (N1, N2)

  **Cross-Cultural Component**
  The Cross-Cultural Component is a five-course series through which students explore the study of culture:
  Transfer students will register for CCS101 for one credit.

  - **Cultural Seminar (CCS100)**
    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.
The Writing Seminar (ENG 170)

The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

Cross-Cultural Development (CCD)

The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

Cross-Cultural Experience (CCE)

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Web Design Emphasis (64 credits)

- GRC106: Intro-Communication Technology (2 hours)
- GRC150: Digital Toolbox - Photoshop/ Illustrator I (4 hours)
- GRC200: Color and Typography (4 hours)
- GRC320: Intro to Multimedia Production (4 hours)
- GRC330: Digital Video I (4 hours)
- OR -GRC295: 3-D Digital Design (4 hours)
- GRC360: Digital Flash Gaming (4 hours)
- GRC450: Capstone-Projects for Graphic Communication Majors (4 hours)
- GRC480: Internship-Graphic Communication (1 TO 12 hours)

Required Support Courses

- ART106: Drawing and Composition (4 hours)
- ART107: Beginning Design 2D and 3D (4 hours)
- COM370: Communication Technology and Society (4 hours)
- CSC109: Technological Productivity (2 hours)
- CSC110: Problem Solving through Programming (4 hours)
- CSC220: Information Systems (4 hours)
- CSC319: World Wide Web Programming (4 hours)
- CSC351: Database Design and Implementation (4 hours)
- CMP112: Computational Thinking I (4 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
  
  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
  
  Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

  Fine Arts (F1, F2)
  Humanities (F1, F2)
  Philosophy/Ethics/Religion (P1, P2)
  Natural Sciences (N1, N2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)

  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)

  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.
Cross-Cultural Development (CCD)

The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

Cross-Cultural Experience (CCE)

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Graphic Design Minor (20 credits)

- GRC106: Intro-Communication Technology (2 hours)
- GRC150: Digital Toolbox - Photoshop/ Illustrator 1 (4 hours)
- GRC200: Color and Typography (4 hours)
- GRC210: History of Graphic Design (2 hours)
- GRC230: Digital Photography (4 hours)
- OR -GRC330: Digital Video I (4 hours)
- GRC320: Intro to Multimedia Production (4 hours)

Web Design Minor (20 credits)

- CSC109: Technological Productivity (2 hours)
- GRC106: Intro-Communication Technology (2 hours)
- GRC150: Digital Toolbox - Photoshop/ Illustrator 1 (4 hours)
- GRC200: Color and Typography (4 hours)
- GRC320: Intro to Multimedia Production (4 hours)
- GRC360: Digital Flash Gaming (4 hours)

Major Courses

The list below displays all the courses offered by the major:

- GRC101: Web and Digital Tools for the 21st Century Learner (2 hours)
- GRC106: Intro-Communication Technology (2 hours)
- GRC110: Print Media/Digital Publishing I (3 hours)
- GRC120: Print Media II (3 hours)
- GRC121: Digital Illustration (3 hours)
- GRC122: Post Press/Distribution (3 hours)
- GRC130: Print Media III (3 hours)
- GRC135: Digital Workflows (3 hours)
- GRC140: Print Materials and Estimating (3 hours)
- GRC141: Production Coordination/Customer Service (3 hours)
- GRC142: Color Management (3 hours)
- GRC150: Digital Toolbox - Photoshop/ Illustrator 1 (4 hours)
- GRC200: Color and Typography (4 hours)
- GRC210: History of Graphic Design (2 hours)
- GRC230: Digital Photography (4 hours)
- GRC290: Digital Toolbox - Photoshop/ Illustrator 2 (4 hours)
- GRC295: 3-D Digital Design (4 hours)
- GRC320: Intro to Multimedia Production (4 hours)
- GRC330: Digital Video I (4 hours)
- GRC340: Digital Video II (4 hours)
- GRC350: Digital Video III (4 hours)
- GRC355: Digital Video IV (4 hours)
- GRC360: Digital Flash Gaming (4 hours)
- GRC391: Special Studies/Topics (1 TO 4 hours)
- GRC450: Capstone-Projects for Graphic Communication Majors (4 hours)
- GRC480: Internship-Graphic Communication (1 TO 12 hours)
- GRC491: Special Studies/Topics (1 TO 4 hours)

Music and Music Education

Larry D. Harper  Professor of Music
Seth Houston  Visiting Lecturer in Music
Joel Matthys  Visiting Lecturer in Music

The Music Program offers majors in music and music education, as well as a minor in music.

Music Major

The music major offers both liberal arts and professional degrees as a preparation for a variety of careers, including music performance, music education, and music business. For the performance emphasis, two one-hour recitals are required in successive years, usually during the junior and senior year. The liberal arts emphasis requires a half-hour recital in the final semester of study. A proficiency in piano must be passed by students with the performance emphasis or bachelor of music education degree. This competency should be completed by the end of the sophomore year. Acceptance into the performance emphasis requires a special audition. Performance juries are required of all music majors and minors each semester.
Students planning to major in music are required to satisfactorily complete an audition for the music faculty, usually in the month of February preceding the freshman year.

Transfer students must take a music theory placement examination before registering for music courses.

Performing organizations are open to all students by audition. Qualified students may also receive ensemble credit by performing in the Waukesha Symphony, the Waukesha Choral Union, or the Waukesha Area Symphonic Band.

### Learning Outcomes for Music

Students studying music will:

1. Be prepared to effectively contribute to the professional work of a musician in education, performance, and music business.
2. Understand and articulate the historical perspective of musical expression and the theoretical base upon which this expression rests.
3. Articulate and execute the skills, both as an individual and as part of an ensemble, necessary for achieving an aesthetic experience in music.

#### Music Major - Performance Emphasis

**Core Courses**
- MUS110: Music Fundamentals and Technology (3 hours)
- MUS111: Music Theory I (3 hours)
- MUS112: Music Theory II (3 hours)
- MUS113: Aural Skills I (1 hours)
- MUS114: Aural Skills II (1 hours)
- MUS213: Aural Skills III (1 hours)
- MUS214: Aural Skills IV (1 hours)
- MUS211: Music Theory III (3 hours)
- MUS212: Form and Analysis (3 hours)
- MUS303: Conducting I (2 hours)
- MUS307: Practical Keyboard Harmony (1 hours)
- MUS311: Music History I - Early Music through the Baroque Period (4 hours)
- MUS312: Music History II - The Classic and Romantic Periods (4 hours)
- MUS313: Music History III - The 20th Century (2 hours)

In addition to the course below:
Eight semesters in a major ensemble
(Wind Symphony, Concert Choir, or Women's Ensemble)
(Piano performance majors may elect Music 190 as a major ensemble.)
Music 366, Voice Pedagogy or two credits of Instrumental Techniques (Music 251, 252, 253, 254, 255, 256)
Music 430, Vocal Literature

**Applied Music**
- Major instrument (fifteen credits, including Music 497, Capstone: Music Performance Emphasis)
- Minor instrument (4 credits)
- Music 470 and 471, Junior and Senior Recital

The following diction classes for the vocal performance major only:
Music 323 (English, German) Music 324 (French, Italian)

#### Bachelor of Arts Requirement

Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

**NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE “REQUIRED SUPPORT COURSES” WITHIN EACH MAJOR.

#### General Education Requirement

For more information on General Education Requirement, click here.

#### Distribution Component

For more information on the Distribution Component, click here.

- **GE1 and GE2 Courses**
  - Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
  - Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
  
  **Humanities (H1, H2)**
  **Philosophy/Ethics/Religion (P1, P2)**
  **Natural Sciences (N1, N2)**
  **Social Sciences (S1, S2)**

#### Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- **Cultural Seminar (CCS100)**
The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- **Writing Seminar (ENG 170)**
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- **Cross-Cultural Development (CCD)**
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- **Cross-Cultural Experience (CCE)**
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- **Global Perspectives Colloquium (CCS400)**
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

### Music Major - Liberal Arts Emphasis

**Core Courses**
- MUS110: Music Fundamentals and Technology (3 hours)
- MUS111: Music Theory I (3 hours)
- MUS112: Music Theory II (3 hours)
- MUS113: Aural Skills I (1 hour)
- MUS114: Aural Skills II (1 hour)
- MUS213: Aural Skills III (1 hour)
- MUS211: Music Theory III (3 hours)
- MUS303: Conducting I (2 hours)
- MUS304: Conducting II - Choral (2 hours)
  **OR** MUS305: Conducting II - Instrumental (2 hours)
- MUS311: Music History I - Early Music through the Baroque Period (4 hours)
- MUS312: Music History II - The Classic and Romantic Periods (4 hours)
- MUS313: Music History III - The 20th Century (2 hours)
- MUS471: Senior Recital (1 hours)
- MUS499: Capstone - Liberal Arts Emphasis (2 hours)

**Applied Music**
Nine credits including Music 499, Capstone: Liberal Arts Emphasis, in final semester

**Ensemble** (eight semesters in Music 185, 187 or 188)

**One credit of elective to be chosen from the following:**
- MUS105: Class Piano I (1 hour)
- MUS106: Class Piano II (1 hour)
- MUS107: Class Piano III (1 hour)
- MUS212: Form and Analysis (3 hours)
- MUS214: Aural Skills IV (1 hour)
- MUS323: Diction - German and English (1 hours)
- MUS324: Diction - French and Italian (1 hours)
- MUS353: Choral Methods and Literature (4 hours)
- MUS355: Instrumental Methods (4 hours)
- MUS357: Choral Literature & Performance Practice (2 hours)
- MUS358: Wind Literature and Performance Practice (2 hours)
- MUS430: Vocal Literature (2 hours)

**Bachelor of Arts Requirement**
Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

**General Education Requirement**
For more information on General Education Requirement, click here.

**Distribution Component**
For more information on the Distribution Component, click here.

- **GE1 and GE2 Courses**
  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
  Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

  Humanities (H1, H2)
  Philosophy/Ethics/Religion (P1, P2)
Natural Sciences (N1, N2)
Social Sciences (S1, S2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)
  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Music Major - Business Emphasis

- Core Courses
  MUS110: Music Fundamentals and Technology (3 hours)
  MUS111: Music Theory I (3 hours)
  MUS112: Music Theory II (3 hours)
  MUS113: Aural Skills I (1 hours)
  MUS114: Aural Skills II (1 hours)
  MUS120: Introduction to the Music Industry (4 hours)
  MUS151: History of Jazz (4 hours)
  MUS156: Listening to Classical Music (4 hours)
  OR  -MUS312: Music History II - The Classic and Romantic Periods (4 hours)
  MUS158: Rock Music - Roots and History (4 hours)
  MUS480: Capstone - Music Business (3 TO 4 hours)

Applied Music: seven semesters (at least one credit per semester on your major instrument/voice)

Ensemble: seven credits, one each semester

Two credits of music electives, excluding ensembles and applied lessons

- Required Support Courses
  ACC205: Financial Accounting (4 hours)
  BUS101: Introduction to Business (4 hours)
  BUS301: Principles of Marketing (4 hours)
  BUS302: Principles of Management (4 hours)
  FAR221: Legal Issues in the Fine Arts (4 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
  MAT140 or higher and CSC110 or higher;

Note: Each Major May Have Specific Course Sequencing Requirements. For Specific Requirements, See "Required Support Courses" Within Each Major

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
  Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
  Humanities (H1, H2)
Philosophy/Ethics/Religion (P1, P2)
Natural Sciences (N1, N2)
Social Sciences (S1, S2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

- Cultural Seminar (CCS100)
The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.
- Writing Seminar (ENG 170)
The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.
- Cross-Cultural Development (CCD)
The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.
- Cross-Cultural Experience (CCE)
The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Bachelor of Music Education

The bachelor of music education prepares students to a high level within the discipline of music, including performance, theory and history, and, at the same time, prepares future teachers for careers of distinction and leadership. The central philosophy of the degree is that music teachers can be most effective only by first becoming accomplished musicians themselves, capable of performing, conducting and analyzing at a sophisticated level.

Two half-hour recitals are required in successive years, usually during the junior and senior year. A voice competency is required of all instrumental music education majors. A proficiency in piano must be passed by all bachelor of music education majors. This competency should be completed by the end of the sophomore year.

Students planning to major in music are required to satisfactorily complete an audition for the music faculty, usually in the month of February preceding the freshman year.

Transfer students must take a music theory placement examination before registering for music courses.

Performing organizations are open to all students by audition. Qualified students may also receive ensemble credit by performing in the Waukesha Symphony, the Waukesha Choral Union, or the Waukesha Area Symphonic Band.

Students in the BME degree program must meet all requirements of the secondary education minor including the required core (except EDU 100, EDU 209, EDU 265, EDU 353 and EDU 304), including the required core, all General Education courses required by the Education Department, and state licensing requirements of the Teacher Education Program (TEP).

- Core Courses
- Applied Lessons (13 credits)
- Ensemble (7 semesters required)

  - MUS105: Class Piano I (1 hours)
  - MUS106: Class Piano II (1 hours)
  - MUS107: Class Piano III (1 hours)
  - MUS108: Class Piano IV (1 hours)
  - MUS110: Music Fundamentals and Technology (3 hours)
  - MUS111: Music Theory I (3 hours)
  - MUS112: Music Theory II (3 hours)
  - MUS113: Aural Skills I (1 hours)
  - MUS114: Aural Skills II (1 hours)
  - MUS213: Aural Skills III (1 hours)
  - MUS214: Aural Skills IV (1 hours)
  - MUS140: Foundations of Music Education (2 hours)
  - MUS141: Workshop - Intro to Education
  - MUS211: Music Theory III (3 hours)
  - MUS212: Form and Analysis (3 hours)
  - MUS241: Workshop - Education in a Multicultural Context
  - MUS303: Conducting I (2 hours)
  - MUS307: Practical Keyboard Harmony (1 hours)
  - MUS311: Music History I - Early Music through the Baroque Period (4 hours)
  - MUS312: Music History II - The Classic and Romantic Periods (4 hours)
  - MUS313: Music History III - The 20th Century (2 hours)
  - MUS470: Junior Recital (1 hours)
• MUS471: Senior Recital (1 hours)

• Required Support Courses
  • EDU203: Educational Psychology (4 hours)
  • EDU210: Field Experience in Educ I (1 hours)
  • EDU261: Educ of the Exceptional Child (4 hours)
  • EDU301: Democracy, Schools, and Society (4 hours)
  • EDU306: Literacy in Middle/Secondary School Content Areas (2 TO 3 hours)
  • EDU311: Field Experience in Education II (1 hours)
  • EDU409: Secondary and K-12 Student Teaching (6 hours)
  • EDU410: Secondary and K-12 Student Teaching (6 hours)

• Bachelor of Music Education (BME)

  B.M.E. students will meet the Bachelor of Arts requirements (B.M.E. students, as teachers, need the language experience to support their humanities education).

  Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

  **NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

• General Education Requirement

  For more information on General Education Requirement, click here.

• Distribution Component

  For more information on the Distribution Component, click here.

  • GE1 and GE2 Courses

    Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

    Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

    Humanities (H1, H2)

    Philosophy/Ethics/Religion (P1, P2)

    Natural Sciences (N1, N2)

    Social Sciences (S1, S2)

• Cross-Cultural Component

  The Cross-Cultural Component is a five-course series through which students explore the study of culture:

  Transfer students will register for CCS101 for one credit.

  • Cultural Seminar (CCS100)

    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

  • Writing Seminar (ENG 170)

    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

  • Cross-Cultural Development (CCD)

    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

  • Cross-Cultural Experience (CCE)

    The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

    For more information and course listings, click here

  • Global Perspectives Colloquium (CCS400)

    In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

• Instrumental Emphasis

  • Core Courses, and Required Support Courses plus

    • MUS117: Class Voice (1 hours)
    • MUS251: String Methods (1 hours)
    • MUS252: Percussion Methods (1 hours)
    • MUS253: Woodwind Methods I (1 hours)
    • MUS254: Woodwind Methods II (1 hours)
    • MUS255: Brass Methods I (1 hours)
    • MUS256: Brass Methods II (1 hours)
    • MUS305: Conducting II - Instrumental (2 hours)
MUS355: Instrumental Methods (4 hours)
MUS358: Wind Literature and Performance Practice (2 hours)

Choral Emphasis

Core Courses and Required Support Courses plus

Secondary Applied Instrument (3 credits)

MUS304: Conducting II - Choral (2 hours)
MUS323: Diction - German and English (1 hours)
MUS324: Diction - French and Italian (1 hours)
MUS353: Choral Methods and Literature (4 hours)
MUS357: Choral Literature & Performance Practice (2 hours)
MUS366: Voice Pedagogy (2 hours)

General Emphasis

Core Courses, plus

Secondary Applied Instrument (3 credits)

MUS304: Conducting II - Choral (2 hours)
OR - MUS305: Conducting II - Instrumental (2 hours)
MUS354: General Music in the Schools (2 hours)
MUS359: Orff/Kodaly Methods (4 hours)

Music Minor (24-28 credits)

Core Courses

MUS111: Music Theory I (3 hours)
MUS112: Music Theory II (3 hours)
MUS113: Aural Skills I (1 hours)
MUS114: Aural Skills II (1 hours)
MUS156: Listening to Classical Music (4 hours)

Applied Music (four credits)
Enssemble: four semesters (at least one credit per semester).
Four additional elective credits from the 200-400 level.

Major Courses

The list below displays all the courses offered by the major:

MUS105: Class Piano I (1 hours)
MUS106: Class Piano II (1 hours)
MUS107: Class Piano III (1 hours)
MUS108: Class Piano IV (1 hours)
MUS110: Music Fundamentals and Technology (3 hours)
MUS351: History of Jazz (4 hours)
MUS157: Beethoven (4 hours)
MUS158: Rock Music - Roots and History (4 hours)
MUS161: Violin (1 TO 2 hours)
MUS162: Viola (1 TO 2 hours)
MUS163: Cello (1 TO 2 hours)
MUS164: Bass (1 TO 2 hours)
MUS165: Guitar (1 TO 2 hours)
MUS166: Harp (1 TO 2 hours)
MUS167: Piano (1 TO 2 hours)
MUS168: Organ (1 TO 2 hours)
MUS169: Voice (1 TO 2 hours)
MUS170: Flute (1 TO 2 hours)
MUS171: Oboe (1 TO 2 hours)
MUS172: Clarinet (1 TO 2 hours)
MUS173: Bassoon (1 TO 2 hours)
MUS174: Saxophone (1 TO 2 hours)
MUS175: Horn (1 TO 2 hours)
MUS176: Trumpet (1 TO 2 hours)
MUS177: Trombone (1 TO 2 hours)
MUS178: Tuba (1 TO 2 hours)
MUS179: Percussion (1 TO 2 hours)
MUS185: Concert Choir (1 hours)
MUS186: Vocal Collective (1 hours)
MUS187: Women's Ensemble (1 hours)
MUS188: Wind Symphony (1 hours)
MUS189: Jazz Ensemble (1 hours)
MUS190: Chamber Music (1 hours)
MUS192: The Carroll Chorale (1 hours)
MUS193: Choral Union (1 hours)
MUS194: Waukesha Area Symphonic Band (1 hours)
MUS211: Music Theory III (3 hours)
MUS212: Form and Analysis (3 hours)
MUS213: Musicianship III (1 hours)
MUS214: Musicianship IV (1 hours)
MUS231H: Fin de Siecle - Birth of the Modern Age in Paris and Vienna (4 hours)
MUS241: Workshop - Education in a Multicultural Context
MUS251: String Methods (1 hours)
MUS252: Percussion Methods (1 hours)
MUS253: Woodwind Methods I (1 hours)
MUS254: Woodwind Methods II (1 hours)
MUS255: Brass Methods I (1 hours)
MUS256: Brass Methods II (1 hours)
MUS291: Topics in Music (2 TO 4 hours)
MUS298: Independent Study in Music (1 TO 4 hours)
MUS303: Conducting I (2 hours)
MUS304: Conducting II - Choral (2 hours)
MUS305: Conducting II - Instrumental (2 hours)
MUS307: Practical Keyboard Harmony (1 hours)
MUS311: Music History I - Early Music through the Baroque Period (4 hours)
MUS312: Music History II - The Classic and Romantic Periods (4 hours)
MUS313: Music History III - The 20th Century (2 hours)
MUS323: Diction - German and English (1 hours)
MUS324: Diction - French and Italian (1 hours)
MUS350: Materials/Techniques Elem Music (2 hours)
MUS353: Choral Methods and Literature (4 hours)
MUS354: General Music in the Schools (2 hours)
MUS355: Instrumental Methods (4 hours)
MUS357: Choral Literature & Performance Practice (2 hours)
MUS358: Wind Literature and Performance Practice (2 hours)
MUS359: Orff/Kodaly Methods (4 hours)
MUS366: Voice Pedagogy (2 hours)
MUS391: Topics in Music (2 TO 4 hours)
MUS398: Independent Study in Music (1 TO 4 hours)
MUS430: Vocal Literature (2 hours)
MUS470: Junior Recital (1 hours)
MUS471: Senior Recital (1 hours)
MUS480: Capstone - Music Business (3 TO 4 hours)
MUS497: Capstone - Music Performance Emphasis (2 hours)
MUS499: Capstone - Liberal Arts Emphasis (2 hours)

Theatre Arts

Jennifer Dobby  Lecturer in Theatre Arts
Tracie Duncan  Scene Shop Manager
Cecelia Mason Kuenn  Costume Shop Manager
James Zager  Associate Professor in Theatre Arts

The Theatre Arts Program offers a major and a minor in Theatre Arts.

Theatre Arts Major (48 credits)
The theatre arts major is intended to prepare students for continued engagement in the theatre arts, theatre education, or graduate studies. Through traditional classroom work, participation in fully produced mainstage productions, a multifaceted student theatre season, and in-depth community partnerships, we strive to train the artist of today for the theatre of tomorrow.

Learning Outcomes for Theatre Arts

Upon successful completion of major requirements students will be able to demonstrate:

1. An understanding of theatre history and literature in a global context.
2. The skills necessary to take part in the collaborative theatre process.
3. A deep appreciation of theatre as a vital art form serving a diverse community.

Core Courses
- THE100: Theatre Participation (1 hours)
- THE101: Introduction to Theatre Arts (4 hours)
- THE101I: Performance Field Trips
- THE102: Oral Interpretation & Presentation
- THE120: Theatre Crew (2 hours)
- THE121: Theatre Crew (2 hours)
- THE200: Theatre Workshops (1 TO 2 hours)
- THE215: European Theatre History and Literature to 1800 (4 hours)
- THE216: Global Theatre History and Literature since 1800 (4 hours)
- THE301: Contemporary Acting Styles (4 hours)
- THE302: Period Acting Styles (4 hours)
- THE305: Principles of Technical Theatre (4 hours)
- THE306: Principles of Theatre Design (4 hours)
- THE307: Directing for the Stage (4 hours)
- THE308: Writing for the Stage (4 hours)
- THE380: Internship in Theatre Arts (1 TO 4 hours)
- THE480: Internship in Theatre Arts (1 TO 4 hours)
- THE390: Theatre Projects (1 TO 4 hours)
- THE490: Theatre Projects (1 TO 4 hours)
Capstone Courses
- THE460: Applied Theatre - Capstone Experience (2 hours)
- THE461: Applied Theatre - Capstone Experience (2 hours)

NOTE: Students applying the Theatre Arts Major to licensing in Theatre Education must complete a Secondary Education Minor.

Bachelor of Arts Requirement
Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

General Education Requirement
For more information on General Education Requirement, click here.

Distribution Component
For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
  Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
  - Humanities (H1, H2)
  - Philosophy/Ethics/Religion (P1, P2)
  - Natural Sciences (N1, N2)
  - Social Sciences (S1, S2)

Cross-Cultural Component
The Cross-Cultural Component is a five-course series through which students explore the study of culture:

- Cultural Seminar (CCS100)
  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

  For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Theatre Arts Minor (20 credits)

Core Courses
- THE100: Theatre Participation (1 hours)
- THE101: Introduction to Theatre Arts (4 hours)
- THE102: Oral Interpretation & Presentation
- THE120: Theatre Crew (2 hours)
- THE121: Theatre Crew (2 hours)
- THE200: Theatre Workshops (1 TO 2 hours)

In addition, Theatre Arts Minor students are required to take one Advanced Theatre Course.

Major Courses
The list below displays all the courses offered by the major:
- THE100: Theatre Participation (1 hours)
- THE101: Introduction to Theatre Arts (4 hours)
- THE101L: Performance Field Trips
- THE102: Oral Interpretation and Presentation (4 hours)
- THE120: Theatre Crew (2 hours)
- THE121: Theatre Crew (2 hours)
- THE200: Theatre Workshops (1 TO 2 hours)
- THE215: European Theatre History and Literature to 1800 (4 hours)
- THE216: Global Theatre History and Literature since 1800 (4 hours)
- THE291: Special Studies/Topics in Theatre (1 TO 4 hours)
- THE296: Special Studies/Research in Theatre (1 TO 4 hours)
- THE298: Independent Study in Theatre (1 TO 4 hours)
- THE300: Theatre Practicum (1 hours)
- THE301: Contemporary Acting Styles (4 hours)
- THE302: Period Acting Styles (4 hours)
- THE305: Principles of Production Management (4 hours)
- THE306: Principles of Theatre Design (4 hours)
- THE307: Directing for the Stage (4 hours)
- THE308: Writing for the Stage (4 hours)
- THE380: Internship in Theatre Arts (1 TO 4 hours)
- THE390: Theatre Projects (1 TO 4 hours)
- THE391: Special Studies/Topics in Theatre (1 TO 4 hours)
- THE396: Special Studies/Research in Theatre (1 TO 4 hours)
- THE398: Independent Study in Theatre (1 TO 4 hours)
- THE460: Applied Theatre - Capstone Experience (2 hours)
- THE461: Applied Theatre - Capstone Experience (2 hours)
- THE480: Internship in Theatre Arts (1 TO 4 hours)
- THE490: Theatre Projects (1 TO 4 hours)
Department: Education

Chairperson: Kimberly White
Room: Barstow 203B
Email: whitek@carrollu.edu
Telephone: 262-650-4920
Fax: 262-524-7571

Programs

Undergraduate

Education
Program: Undergraduate
College of Humanities and Social Sciences
Department: Education

Rose Ann Donovan
Assistant Professor
Donnie R. Hale
Assistant Professor
Kimberly K. Hofkamp
Assistant Professor, Director of Clinical Experience
Kathrine A. Kramer
Assistant Professor, Coordinator of Learning Communities
Kerry Kretchmar
Assistant Professor
Robert Pickett
Assistant Professor
Elise Riepenhoff
Assistant Professor, Director of National Writing Project at Carroll University
Wilma J. Robinson
Associate Professor
Rachel Stickles
Assistant Professor
Bruce L. Strom
Associate Professor
Edie M. White
Assistant Professor
Kimberly White
Assistant Professor, Chair of Department of Education, Director of Graduate Education Program

Undergraduate Program in Education

Mission Statement: The Teacher Education Program at Carroll University prepares reflective, culturally sensitive teachers who are capable of creating and implementing an interdisciplinary, intercultural curriculum. The intellectual foundation of the program is embedded in constructivist practice. The Wisconsin Department of Public Instruction (DPI) approves the Teacher Education Program at Carroll.

The Department of Education believes that the combination of a strong liberal arts background with the scholarly application of theory, methods, and skills related to learning is integral to the program. We foster in students a commitment to the idea that all children can learn. Students are expected to demonstrate the following guiding principles as learning outcomes throughout their coursework and clinical experiences:

- Constructivism; Cultural Sensitivity; Curricular Integration; Multiculturalism; and Reflection
- Knowledge of subjects they are teaching
- Knowledge of how children grow
- Understanding that children learn differently
- Knowledge of how to teach
- Ability to effectively manage a classroom
- Effective verbal and nonverbal communication techniques
- Ability to plan different kinds of lessons
- Knowledge of formal and informal assessment strategies
- Ability to self-evaluate
- Fostering relationships with school colleagues, parents, and community agencies

Because the DPI may revise its requirements for teacher licensing at any time, the Teacher Education Programs are subject to change. Students must maintain contact with their education adviser to learn about changes related to licensure requirements.

Admission and Retention

Admission and Retention in the Teacher Education Program (TEP)

The Wisconsin Department of Public Instruction requires all teacher education students in the state of Wisconsin to meet certain standards to be admitted and retained in a TEP and to be admitted to a student teaching semester. Admission to the Carroll University TEP requires formal application by all students seeking licensure. Full-time Carroll undergraduate students should apply in the spring of their sophomore year. All other students should apply as soon as they have completed 40 credits,
Program Admission

To be eligible for program admission, students need to have completed at least 40 undergraduate credits with a minimum grade point average of 2.50. Students will need 150 documented clock hours of work with children as well as a grade of C or better in all education major and minor courses, English 170, and CCS 100 or COM 101 or equivalent. Students also need to have completed the Pre-Professional Skills Tests (PPST) in mathematics, reading, and writing with passing scores in all three areas. Students submit their Phase I portfolio to provide initial evidence of their development as a teacher and learner. Students are admitted to the TEP before enrolling in upper-level education courses beyond Education 301. Students who leave the University for one year or more are required to reapply for admission to the TEP. The criteria for readmission will be those in effect at the time of readmission. Application deadlines are September 25 or January 25 each year. A small percentage of students may be admitted to the program or to the student teaching semester on exception if they meet all other criteria and meet either the GPA or Praxis I requirement.

Students who have already completed a bachelor’s degree and who are attending Carroll only for teacher certification may obtain a waiver from the PPST, provided their cumulative undergraduate grade point average is 2.75 or above. The course requirements for Wisconsin teaching licensure are the same, but transfer and prior course work are evaluated and considered in the overall plan for certification. All students are required to successfully complete the PRAXIS II Content Exam for their certification area(s) prior to application to student teach. Students completing majors or minors for licensure in Modern Languages must successfully complete the ACTFL Language Exam prior to application to student teach.

Students not admitted to the Teacher Education Program on their first attempt are eligible to reapply. If students are denied on their second application, however, they may not reapply to the Teacher Education Program. Students who are unsuccessful in admission to the TEP have access to alternative career counseling through their education advisors and Career Services.

Program Guidelines

Students who plan to enter and complete the TEP are expected to demonstrate appropriate ethical and professional behavior throughout their university years, and particularly during their course work, fieldwork, and other professional experiences in education. A pattern of ethical lapses may affect admission to or retention in the TEP in respective stages. In their Phase I portfolios, submitted upon application to enter the TEP, students are asked to demonstrate evidence of their existing commitments to the field of education.

This is accomplished, in part, by documenting high school and/or university experiences with children prior to entering the TEP. One hundred fifty clock hours of involvement are required. Experiences may include teaching, coaching, tutoring, or other forms of educational service to children or to schools. Volunteer and service work that is done to benefit children is also considered evidence of existing commitment. The TEP Handbook contains further information on this requirement and its documentation.

All students are expected to:

- Engage in formal or informal experiences, service work with children or in schools prior to applying to the TEP.
- Present all required program application materials by established deadlines.
- Submit satisfactory Phase I, II and III portfolios, each with a maximum of one revision.
- Pass each segment of the PPST on either the first or the second attempt. (Subsequent attempts are at the student’s option.)
- Complete EDU 210 or 215, 311 or 315, and/or 312 with an overall maximum of one unsatisfactory experience.
- Undergo a background and criminal history check in EDU 100 and once each academic year in which the student is enrolled in an education clinical course.
- Demonstrate punctuality, dependability, and professional courtesy in the completion of courses and course assignments, and in all field placements.

(Note: Students should be aware that deadlines for field experience forms and TB test results occur the semester prior to placement/enrollment: Fall enrollment – May 15, Winter Session Enrollment – November 15, Spring Enrollment – December 15, Summer I Enrollment – March 30)
- Follow university rules pertaining to social conduct, classroom conduct, and academic integrity.
- Maintain ethical, professional, and respectful behavior in all contacts with school children, school personnel, university peers and faculty, and professional colleagues.

Students who are denied admission to, or continuation in, any part of the TEP have the right of appeal, using the grade appeal procedure contained in the Student Handbook. Students who reapply to the program have the right to appeal at an education faculty meeting to request readmission, if they so request. All students who are unsuccessful in the TEP have access to alternative career counseling through their education advisors or through Career Services, or both.

Program Retention

The TEP requires that students demonstrate knowledge, skills and dispositions toward teaching. All Elementary Education major and Secondary Education minor course work must be completed with a grade of C or better. In addition to a minimum overall GPA of 2.50, students must demonstrate professional behavior throughout their university years. Reference to these criteria can be found in the Teacher Education Handbook. The Education Department reserves the right to counsel students out of the program when appropriate.

Student Teaching Admission
Undergraduate

Student Teaching Admission

Admission to the student teaching semester requires a grade of C or better in all Education major and minor courses and a minimum overall GPA of 2.75 or a combined 2.75 in the major and the DPI-Approved Teaching Minor. All students are required to successfully complete the PRAXIS II Content Exam for their certification area(s), and students with Modern Language majors or minors must complete the ACTFL Language Exam prior to application to student teach. All Elementary Education majors seeking licensure are required to successfully complete the Foundations of Reading Test. Students applying for student teaching must submit their Phase II portfolio. The education program may admit a small percentage of students to student teaching on exception if they meet all other criteria and they meet either the GPA or the Praxis I requirement. Application deadlines are August 25 or January 25 each year. Those students who are not accepted into student teaching have the option to complete a degree in Elementary Educational Studies. No teaching license is granted with this major.

One semester in the senior year must be reserved solely for student teaching. All required coursework for the major and minor must be completed prior to student teaching. No other courses may be taken during any part of the student teaching semester. The Education Placement Coordinator arranges student teaching assignments in schools within approximately a 30 mile radius of the campus. Students must provide their own transportation to the placement site(s).

The student teaching semester is a full-time, semester-length experience, which follows the semester calendar used by the school in which the student is placed. School calendars are frequently very different from the university calendar. Fall student teachers may begin as early as mid-August, and finish their placement in late January. These students will receive their degrees when student teaching is completed and participate in the commencement ceremony in May following the student teaching semester. Seniors who student teach in the spring may participate in the commencement ceremony in May and receive their diplomas when student teaching is completed. Students who complete their student teaching during the spring semester are required to teach into June to be recommended for a Wisconsin teaching license.

Due to the complexities of both university and state requirements, students need to meet with an education adviser very early in their university programs in order to develop a workable program plan of coursework. Carroll University TEPs may be completed in four years only with very careful and early planning. Winter and/or summer attendance may be necessary. Because education students engage in significant amounts of fieldwork in conjunction with the coursework in education, the planning process is also extremely important to permit scheduling of fieldwork. Students need to maintain continual contact with an education adviser in order to update their plans and to ensure that any changes in the DPI requirements are incorporated into the student’s program.

To obtain a Wisconsin teaching license, students must meet all applicable DPI requirements, including any new requirements, which may be introduced by the DPI while the student is enrolled in a Carroll University program. Any substitutions of courses or variations in a student’s program must be approved by the Registrar and by the Department Chair to assure eligibility for a teaching license. Students must complete all TEP requirements and all university degree requirements to receive any teaching license.

Students may complete coursework leading to a Carroll University degree and to a Wisconsin license in any of the following areas:

- Various Licenses

  **License including Early Childhood through Middle Childhood levels**  
  *(approximate ages - birth through 11)*

  Students major in Elementary Education and minor in Early Childhood Education (see below). This minor, combined with successful completion of placements in both early childhood and elementary settings, permits students to earn a license to teach in pre-kindergarten through sixth grades.

  **License including Middle Childhood through Early Adolescence level**  
  *(approximate ages - 6 through 12 or 13)*

  Students major in Elementary Education and extend their license to include the middle-school level. This extension requires completion of a DPI-Approved Teaching Minor in French, German, health, language arts, mathematics, science, social studies, or Spanish. In addition to the PRAXIS II Middle School Content Knowledge Exam, students seeking certification in Health Education must successfully complete the Praxis II Content test in Health. Those completing minors in International Language must successfully complete the ACTFL Language Exam. The extended license also requires completion of EDU 304, Secondary School Methods, and successful placements in both elementary and middle school settings during the student teaching semester.

  **License in Early Adolescence through Adolescence level**  
  *(approximate ages - 10 through 21)*

  Students who wish to earn a license in early adolescence through adolescence complete the minor in Secondary Education and an approved major in another Carroll University program. They are placed at both middle and high school sites during their student teaching semester. Currently, approved majors for secondary licensure are available in biology, chemistry, English, environmental science, and mathematics. Students majoring in a science area are encouraged to complete the additional course-work required to earn the Broad Field Science license. There are also approved majors in history, politics, psychology, and sociology, and students earning majors in these areas are urged to complete the additional coursework required to earn the Broad Field Social Studies license, which will significantly improve their hiring potential upon graduation. See your Education adviser for additional information regarding the Broad Field Science and Broad Field Social Studies licenses.

The Early Adolescence through Adolescence level license allows students to teach secondary school subjects in their approved major after successful completion of student teaching. Students may extend the subject areas they are licensed to teach by completing one or more DPI-Approved secondary education teaching minors. (See available DPI Minors - Secondary). Those in Broad Field Areas may also complete approved concentration areas. In addition, students seeking additional licenses will need to successfully complete the PRAXIS II Content Knowledge or ACTFL Language Exam in the teaching area prior to application to student teach.
License in Art, Music, Theatre Arts, Spanish, or Physical and Health Education
(early childhood through adolescence level - a wide range of all ages in public schools)

Licensure in any of these areas require completion of the Secondary Education minor and an approved major in Spanish, art, music, theatre arts, or physical and health education. Successfully completed placements in both elementary and secondary school settings are required during the student teaching semester.

Additional License in Adaptive Education

Students who wish to earn an additional license in adaptive education complete the initial requirements in their major/minor certification areas and the DPI-Approved minor in Adaptive Education. This additional license better prepares the student to meet the diverse needs of all students within the general education classroom. Careful planning allows this licensure to be completed within four years. Summer and/or winter attendance may be necessary.

Elementary Education Major

- Courses in the Major
  - EDU100: Introduction to Education (2 hours)
  - EDU203: Educational Psychology (4 hours)
  - EDU209: Education in a Intercultural Context (4 hours)
  - EDU210: Field Experience in Educ I (1 hours)
  - OR -EDU215: Intercultural Immersion Field Experience I (2 hours)
  - EDU261: Educ of the Exceptional Child (4 hours)
  - EDU301: Democracy, Schools, and Society (4 hours)
  - EDU304: Methods in Middle/Secondary Schools (4 hours)
  - EDU311: Field Experience in Education II (1 hours)
  - OR -EDU315: Intercultural Immersion Field Experience II (2 hours)
  - EDU321: Social Studies in the Elementary /Middle School (3 hours)
  - EDU323: Literacy 1: Early Childhood - Middle Childhood (4 hours)
  - EDU324: Literacy II: Middle Childhood - Early Adolescence (4 hours)
  - EDU326: Mathematics in the Elementary/ Middle School (3 hours)
  - EDU327: Science Methods in the Elementary/Middle School (3 hours)
  - EDU419: Early Childhood/Elementary Student Teaching (6 hours)
  - EDU420: Early Childhood/Elementary Student Teaching (6 hours)

- Required Support Courses
  - ART223: Creative Arts for Children (2 hours)
  - MUS350: Materials/Techniques Elem Music (2 hours)
  - PED328: Elem Phy Ed Activities and Health Education (3 hours)

- Required Core and General Education Program Area Courses
  * Students should consult with their Education advisor to select courses that meet the GE1 and GE 2 course sequence requirements, the Cross-Cultural Development course and Cross-Cultural Experience.
  - ENG170: Writing Seminar (4 hours)
  - MAT104: Foundations of Elementary Mathematics I (4 hours)
  - MAT201: Foundations of Elementary Mathematics II (4 hours)
  - ENV120: Conservation and Environmental Improvement (4 hours)

Students must also take:
One laboratory course in Biology, Chemistry, Environmental Science or Physics (N1, elective or meeting N2 requirement)
One English Literature course (P1)
History 105, America to 1877* (H1)
History 106, America Since 1877* (H1)
* Students should meet with their Education advisor to discuss completion of the Wisconsin State/Local Government competency.

- One course meeting a general education distribution requirement or an elective course must meet Non-Western course content from one of the Carroll University courses below.

A Non-Western NCEP course approved by the education program.

Coursework transferred from other institutions will be subject to review by the Department of Education.

- ART103: Prehistoric to Renaissance- Art History Survey (4 hours)
- ENG164: American Indian Literature and Spirituality (4 hours)
- ENG165: Writing the Body: Cultural Explorations of Race, Gender and Class (4 hours)
- ENG226: Africa: Literature and Culture of Its Many Nations (4 hours)
- ENG255: Postcolonial Literature and Theory (4 hours)
- ENV138: Cultural Geography (4 hours)
- ENV160: World Regional Geography (4 hours)
- HIS108: Understanding Our Contemporary World (4 hours)
- HIS110: History of Modern China (4 hours)
- POL103: Politics of the World's Nations (4 hours)
- REL106: Understanding Religion (4 hours)
- REL200: Religions of the Contemporary World (4 hours)
- REL306: Asian Religions (4 hours)
- SOC110: Cultural Anthropology (4 hours)

Bachelor of Science for Elementary Education

The requirements for the Bachelor of Science Degree in Elementary Education are:

CMP112, MAT104 and MAT201
General Education Requirement
For more information on General Education Requirement, click here.

Distribution Component
For more information on the Distribution Component, click here.

GE1 and GE2 Courses
Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study. Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

Fine Arts (F1, F2)
Humanities (F1, F2)
Philosophy/Ethics/Religion (P1, P2)
Natural Sciences (N1, N2)

Cross-Cultural Component
The Cross-Cultural Component is a five-course series through which students explore the study of culture:
Transfer students will register for CCS101 for one credit.

Cultural Seminar (CCS100)
The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

Writing Seminar (ENG 170)
The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

Cross-Cultural Development (CCD)
The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

Cross-Cultural Experience (CCE)
The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)
For more information and course listings, click here

Global Perspectives Colloquium (CCS400)
In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Special and Elementary Education Dual Certification

Special and Elementary Education Dual Certification
The Teacher Education Program offers Elementary and Special Education with two certification tracks: 1) Special Education/Early Childhood (EC-MC), and 2) Special Education/Elementary Education (MC-EA). The program focuses on research-based models, including effective strategies and interventions to meet the academic, social and emotional needs of all students.

Elementary Education Major – Special Education Emphasis – Dual Certification in Elementary Regular Education (#777) and Early Childhood Special Education (#809) and Dual Certification in Elementary Regular Education (#777) and Cross-Categorical Special Education (#801)

Core Courses in Elementary Education Major
- EDU100: Introduction to Education (2 hours)
- EDU203: Educational Psychology (4 hours)
- EDU209: Education in a Intercultural Context (4 hours)
- EDU210: Field Experience in Educ I (1 hours)
- EDU261: Educ of the Exceptional Child (4 hours)
- EDU301: Democracy, Schools, and Society (4 hours)

Emphasis in Dual Certification: Elementary Regular Education and Early Childhood Special Education (EC-MC)
- EDU248: Early Childhood Education: Home, School, and Community Relationships (4 hours)
- EDU249: Development, Observation, and Assessment of Young Children with Exceptional Needs (4 hours)
- EDU250: Collaboration and Inclusion (4 hours)
- EDU312: Field Experience-Adaptive Educ (1 hours)
- EDU321: Social Studies in the Elementary /Middle School (3 hours)
- EDU323: Literacy 1: Early Childhood - Middle Childhood (4 hours)
- EDU324: Literacy II: Middle Childhood - Early Adolescence (4 hours)
- EDU326: Mathematics in the Elementary/ Middle School (3 hours)
- EDU327: Science Methods in the Elementary/Middle School (3 hours)
- EDU332: Instructional Strategies for an Inclusive Classroom (4 hours)
- EDU334: Language Development and Disorders of the Exceptional Child (4 hours)
- EDU341: Integrated Curriculum in Early Childhood I - Physical and Logico-Mathematical Knowledge (4 hours)
- EDU347: Seminar in Contemporary Issues in Elementary Childhood Education (4 hours)
EDU349: Curriculum Development in Special Education/Special Education Methods (4 hours)
EDU419: Early Childhood/Elementary Student Teaching (6 hours)
EDU423: Special Education Student Teaching (6 hours)

Emphasis in Dual Certification: Elementary Regular Education and Cross-Categorical Special Education (MC-EA)

EDU304: Methods in Middle/Secondary Schools (4 hours)
EDU312: Field Experience-Adaptive Educ (1 hours)
EDU321: Social Studies in the Elementary/Middle School (3 hours)
EDU323: Literacy 1: Early Childhood - Middle Childhood (4 hours)
EDU324: Literacy II: Middle Childhood - Early Adolescence (4 hours)
EDU326: Mathematics in the Elementary/Middle School (3 hours)
EDU327: Science Methods in the Elementary/Middle School (3 hours)
EDU330: Introduction to Diagnostic Assessment of Students with Exceptional Needs (4 hours)
EDU332: Instructional Strategies for an Inclusive Classroom (4 hours)
EDU334: Language Development and Disorders of the Exceptional Child (4 hours)
EDU336: Collaborating with Families of Students with Disabilities (3 hours)
EDU338: Career Development and Vocational Education for Students with Exceptional Needs (3 hours)
EDU370: Special Education Curriculum Methods I: Literacy & Social Studies: MC-EA (4 hours)
EDU371: Special Education Curriculum Methods II: Mathematics & Science: MC-EA (4 hours)
EDU419: Early Childhood/Elementary Student Teaching (6 hours)
EDU423: Special Education Student Teaching (6 hours)

Required Support Courses

ART223: Creative Arts for Children (2 hours)
MUS350: Materials/Techniques Elem Music (2 hours)
PED328: Elem Phy Ed Activities and Health Education (3 hours)
MAT104: Foundations of Elementary Mathematics I (4 hours)
MAT201: Foundations of Elementary Mathematics II (4 hours)
ENV120: Conservation and Environmental Improvement (4 hours) AND -ENV120L: Conservation and Environmental Improvement Laboratory
ENG164: American Indian Literature and Spirituality (4 hours) OR -ENG255: Postcolonial Literature and Theory (4 hours)
HIS105: America to 1877 (4 hours) OR -HIS106: America since 1877 (4 hours)

Biological or Physical Lab Science 4 credits
Fine Arts Elective (F1) 4 credits
GE2 for 4 credits

One course meeting a general education distribution requirement or an elective course must meet Non-Western course content from one of the Carroll University courses below.

A Non-Western NCEP course approved by the education program.

Coursework transferred from other institutions will be subject to review by the Department of Education.

ART103: Prehistoric to Renaissance- Art History Survey (4 hours)
ENG164: American Indian Literature and Spirituality (4 hours)
ENG165: Writing the Body: Cultural Explorations of Race, Gender and Class (4 hours)
ENG226: Africa: Literature and Culture of Its Many Nations (4 hours)
ENG255: Postcolonial Literature and Theory (4 hours)
ENV138: Cultural Geography (4 hours)
ENV160: World Regional Geography (4 hours)
HIS108: Understanding Our Contemporary World (4 hours)
HIS110: History of Modern China (4 hours)
POL103: Politics of the World's Nations (4 hours)
REL106: Understanding Religion (4 hours)
REL200: Religions of the Contemporary World (4 hours)
REL306: Asian Religions (4 hours)
SOC110: Cultural Anthropology (4 hours)

Elementary Educational Studies Major

Students in this major complete all Education Foundation coursework. (EDU 100, EDU 203, EDU 209, EDU 210, EDU210/215, EDU 261, EDU 301)

Additional requirements for Elementary Educational Studies include:

- EDU 248 or EDU 304,
- EDU 391,
- EDU 400, Principles, Theory and Practice in Elementary Educational Studies,
- Education elective (consider 32 Education credits must be completed)

The Elementary Educational Studies major culminates with a self-selected experience involving a research-based project connecting the Education Program’s Guiding Principles with experiences in an education-related field.

EDU100: Introduction to Education (2 hours)
EDU203: Educational Psychology (4 hours)
EDU209: Education in a Intercultural Context (4 hours)
EDU210: Field Experience in Educ I (1 hours) OR -EDU215: Intercultural Immersion Field Experience I (2 hours)
EDU261: Educ of the Exceptional Child (4 hours)
EDU301: Democracy, Schools, and Society (4 hours)
EDU448: Early Childhood Education: Home, School, and Community Relationships (4 hours) OR -EDU304: Methods in Middle/Secondary Schools (4 hours)
EDU311: Field Experience in Education II (1 hours) OR -EDU315: Intercultural Immersion Field Experience II (2 hours)
OR -EDU391: Special Topics in Education (1 TO 4 hours)
  • EDU400: Capstone in Elementary Educational Studies (4 hours)

DPI-Approved Teaching Minors - Elementary

A student majoring in Elementary Education must complete one of the elementary minors listed below.

Caution: The course requirements in most elementary DPI-Approved teaching minors are different from those listed in the catalog for Carroll University minors in the same areas. Therefore, students are strongly advised to obtain information on course requirements in DPI minors from www.carrollu.edu/programs/education or the Education Office.

The DPI teaching minors certify the Elementary Education Major to teach either at the early childhood through middle childhood level (ages birth through 11) or at the middle childhood through early adolescence level (ages 6 through 12 or 13):

Early Childhood Education Teaching license includes: early childhood through middle childhood level

The following minors license students to teach at the middle childhood through early adolescence level (the student teaching semester must include placement at both the elementary and middle school levels to complete eligibility for the license):

Language Arts
Mathematics
Science
Social Studies

The following licenses require successful completion of the ACTFL Language Exam in addition to the PRAXIS II Middle School Content Knowledge Exam.

French
German
Spanish

Students completing a minor in Health Education must successfully complete the Praxis II Content Exam in Health along with the PRAXIS II Test in Middle School Content Knowledge.

Adaptive Education Minor

The Adaptive Education Minor prepares a student for an additional license to meet the diverse needs of all students within the general education classroom.

This minor is in addition to the first license and at this time does not require an additional PRAXIS II Content Knowledge Exam.

Courses in the Minor

  • EDU261: Educ of the Exceptional Child (4 hours)
  • EDU330: Introduction to Diagnostic Assessment of Students with Exceptional Needs (4 hours)
  • EDU332: Instructional Strategies for an Inclusive Classroom (4 hours)
  • EDU334: Language Development and Disorders of the Exceptional Child (4 hours)
  • EDU336: Collaborating with Families of Students with Disabilities (3 hours)
  • EDU338: Career Development and Vocational Education for Students with Exceptional Needs (3 hours)

Early Childhood Education Minor

Students who complete coursework for the Elementary Education Major elect the Early Childhood Education Minor to be licensed to teach pre-kindergarten through grade 6 (early childhood through middle childhood level).

Courses in the Minor

  • EDU246: Development, Observation and Assessment in Early Childhood (4 hours)
  • EDU248: Early Childhood Education: Home, School, and Community Relationships (4 hours)
  • EDU341: Integrated Curriculum in Early Childhood I - Physical and Logico-Mathematical Knowledge (4 hours)
  • EDU342: Integrated Curriculum in Early Childhood II: Social & Socially Constructed Knowledge (4 hours)
  • EDU347: Seminar in Contemporary Issues in Early Childhood Education (4 hours)

Secondary Education Minor

Students complete the Secondary Education Minor and one of the approved majors listed for licensure in the early adolescence through adolescence level. This qualifies the student to teach school subjects related to their major in grades 6 to 12 (early adolescence through adolescence level-approximate ages of 10 through 21). Students who complete the Secondary Education Minor with an approved major in art, music, physical and health education, theatre arts, or Spanish and who have placements in both elementary and secondary school settings during the student teaching semester are eligible for licensure in their subject area in pre-kindergarten through grade 12 (early childhood through adolescence level - a wide range of all ages in public schools).

Courses in the Minor

  • EDU100: Introduction to Education (2 hours)
  • EDU203: Educational Psychology (4 hours)
  • EDU209: Education in a Intercultural Context (4 hours)
  • EDU210: Field Experience in Educ I (1 hours)
  • EDU215: Intercultural Immersion Field Experience I (2 hours)
  • EDU261: Educ of the Exceptional Child (4 hours)
  • EDU301: Democracy, Schools, and Society (4 hours)
  • EDU304: Methods in Middle/Secondary Schools (4 hours)
  • EDU306: Literacy in Middle/Secondary School Content Areas (2 TO 3 hours)
  • EDU311: Field Experience in Education II (1 hours)
  • EDU315: Intercultural Immersion Field Experience II (2 hours)
  • EDU353: Special Methods in Teaching Secondary School Subjects (2 hours)
  • EDU355: Special Methods in Teaching Elementary and Secondary Subjects - Modern Languages (3 hours)
  • EDU409: Secondary and K-12 Student Teaching (6 hours)
  • EDU410: Secondary and K-12 Student Teaching (6 hours)

Required Core and General Distribution Program Area Courses
Students should consult with their Education advisor to select courses that meet the GE1 and GE 2 course sequence requirements, the Cross-Cultural Development course and Cross-Cultural Experience. Distribution courses are determined by the student’s major area; however, additional courses in Distribution Areas may need to be completed to fulfill DPI requirements.

- ENG170: Writing Seminar (4 hours)
- HIS105: America to 1877 (4 hours)
  OR - HIS106: America since 1877 (4 hours)

In addition:
One physical lab science course (Chemistry, Environmental Science or Physics) from and one laboratory course in Biology (meeting N1, N2 or elective)

Students planning to teach in a science or social science subject must take Environmental Science 120, Conservation and Environmental Improvement (N1), and one lab course in Biology, Chemistry, Environmental Science or Physics

One English Literature course (P1)

Any Art or Music course or THE 101 (F1)

- One course meeting a general education distribution requirement or an elective course must be a Non-Western course from:

  Coursework transferred from other institutions will be subject to review by the Department of Education.

  - ART103: Prehistoric to Renaissance- Art History Survey (4 hours)
  - ENGL142: American Indian Literature and Spirituality (4 hours)
  - ENGL155: Writing the Body: Cultural Explorations of Race, Gender and Class (4 hours)
  - ENGL226: Africa: Literature and Culture of Its Many Nations (4 hours)
  - ENGL255: Postcolonial Literature and Theory (4 hours)
  - ENVL138: Cultural Geography (4 hours)
  - ENVL160: World Regional Geography (4 hours)
  - HIS108: Understanding Our Contemporary World (4 hours)
  - HIS110: History of Modern China (4 hours)
  - POL103: Politics of the World's Nations (4 hours)
  - REL106: Understanding Religion (4 hours)
  - REL200: Religions of the Contemporary World (4 hours)
  - REL306: Asian Religions (4 hours)
  - SOC110: Cultural Anthropology (4 hours)

DPI-Approved Teaching Minors - Secondary

Students can increase the number of subject areas in which they are licensed and enhance their employment prospects by completing either an additional DPI-approved secondary minor or a set of approved courses, which lead to a DPI Broad Field License. Broad Field licensure is available in either social studies or science. The course requirements for broad field licensure are available from the Education office.

Caution: Since many secondary DPI-approved teaching minors must be matched with particular Carroll University majors, students should also contact the Education faculty for advice regarding selection of teaching minors and course requirements. Students majoring or minoring in any natural science subject, which they intend to teach, must take ENV 120. Students seeking licensure in a minor must also successfully complete the PRAXIS II Content Knowledge Exam or ACTFL Language Test for that area prior to application to student teach.

DPI-approved secondary minors may be chosen from those listed below:

<table>
<thead>
<tr>
<th>Biology</th>
<th>Health Education¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry</td>
<td>History</td>
</tr>
<tr>
<td>Communication (Speech Education)</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Earth and Space Science</td>
<td>Physics</td>
</tr>
<tr>
<td>English</td>
<td>Politics</td>
</tr>
<tr>
<td>Environmental Studies</td>
<td>Psychology</td>
</tr>
<tr>
<td>French</td>
<td>Sociology</td>
</tr>
<tr>
<td>Geography</td>
<td>Spanish</td>
</tr>
<tr>
<td>German</td>
<td>Theatre Arts</td>
</tr>
</tbody>
</table>

¹ The courses required in these DPI-approved teaching minors are not listed in this catalog. See the Education office for current lists of course requirements

Any education course taken more than seven years prior to enrollment at Carroll University will be subject to the approval of the department chair.

Major Courses

The list below displays all the courses offered by the major:

- EDU100: Introduction to Education (2 hours)
- EDU203: Educational Psychology (4 hours)
- EDU209: Education in a Intercultural Context (4 hours)
- EDU210: Field Experience in Educ I (1 hours)
- EDU215: Intercultural Immersion Field Experience I (2 hours)
- EDU246: Development, Observation and Assessment in Early Childhood (4 hours)
- EDU248: Early Childhood Education: Home, School, and Community Relationships (4 hours)
- EDU249: Development, Observation, and Assessment of Young Children with Exceptional Needs (4 hours)
- EDU250: Collaboration and Inclusion (4 hours)
- EDU261: Educ of the Exceptional Child (4 hours)
- EDU301: Democracy, Schools, and Society (4 hours)
- EDU304: Methods in Middle/Secondary Schools (4 hours)
- EDU306: Literacy in Middle/Secondary School Content Areas (2 TO 3 hours)
<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>EDU311</td>
<td>Field Experience in Education II (1 hours)</td>
</tr>
<tr>
<td>EDU312</td>
<td>Field Experience-Adaptive Educ (1 hours)</td>
</tr>
<tr>
<td>EDU315</td>
<td>Intercultural Immersion Field Experience II (2 hours)</td>
</tr>
<tr>
<td>EDU321</td>
<td>Social Studies in the Elementary/Middle School (3 hours)</td>
</tr>
<tr>
<td>EDU323</td>
<td>Literacy I: Early Childhood - Middle Childhood (4 hours)</td>
</tr>
<tr>
<td>EDU324</td>
<td>Literacy II: Middle Childhood - Early Adolescence (4 hours)</td>
</tr>
<tr>
<td>EDU326</td>
<td>Mathematics in the Elementary/Middle School (3 hours)</td>
</tr>
<tr>
<td>EDU327</td>
<td>Science Methods in the Elementary/Middle School (3 hours)</td>
</tr>
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<td>EDU330</td>
<td>Introduction to Diagnostic Assessment of Students with Exceptional Needs (4 hours)</td>
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<td>EDU347</td>
<td>Seminar in Contemporary Issues in Early Childhood Education (4 hours)</td>
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<tr>
<td>EDU349</td>
<td>Curriculum Development in Special Education/Special Education Methods (4 hours)</td>
</tr>
<tr>
<td>EDU353</td>
<td>Special Methods in Teaching Secondary School Subjects (2 hours)</td>
</tr>
<tr>
<td>EDU355</td>
<td>Special Methods in Teaching Elementary and Secondary Subjects - Modern Languages (3 hours)</td>
</tr>
<tr>
<td>EDU370</td>
<td>Special Education Curriculum Methods I: Literacy &amp; Social Studies: MC-EA (4 hours)</td>
</tr>
<tr>
<td>EDU371</td>
<td>Special Education Curriculum Methods II: Mathematics &amp; Science: MC-EA (4 hours)</td>
</tr>
<tr>
<td>EDU391</td>
<td>Special Topics in Education (1 TO 4 hours)</td>
</tr>
<tr>
<td>EDU398</td>
<td>Independent Study in Education (1 TO 4 hours)</td>
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<tr>
<td>EDU419</td>
<td>Early Childhood/Elementary Student Teaching (6 hours)</td>
</tr>
<tr>
<td>EDU420</td>
<td>Early Childhood/Elementary Student Teaching (6 hours)</td>
</tr>
<tr>
<td>EDU422</td>
<td>Special Student Teaching Practicum (1 TO 5 hours)</td>
</tr>
<tr>
<td>EDU423</td>
<td>Special Education Student Teaching (6 hours)</td>
</tr>
</tbody>
</table>

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Department: Communication and Sociology
Chairperson: Barbara King
Room: Betty Lou Tikalsky House 201
Email: bking@carrollu.edu
Telephone: 262-524-7134
Fax: 262-574-2608

Programs

Communication
Sociology

Undergraduate
Communication
Sociology and Criminal Justice
Communication and Sociology

Undergraduate

Program: Undergraduate
College of Humanities and Social Sciences
Department: Communication and Sociology

Communication

Jon Gordon  Senior Lecturer in Communication
Rebecca S. Imes  Associate Professor of Communication
Barbara L. King  Chair and Associate Professor of Communication
Keith J. Zukas  Assistant Professor of Communication

The Communication program offers a major in communication, as well as minors in liberal arts communication and secondary education speech communication. The goal of the program is to develop graduates who possess communication competence, in both theory and practice.

Communication Major

The communication major prepares students for careers in journalism, public relations, advertising, teaching, management, human resources and for advanced education in graduate school. The curriculum follows a sequence for student development. As freshmen, students learn the principles of, and have experiences in, various contexts of communication. They also become familiar with the methods of communication research (100-level courses). As sophomores, students become acquainted with specialized subject matters and hone skills in research, writing and critical thinking (200-level courses). As juniors, students engage in deeper exploration of theoretical and ethical perspectives (300-level courses). As seniors, students participate in advanced research and work-oriented experiences.

Learning Outcomes for Communication

Upon successful completion of major requirements, students are expected to demonstrate:

1. An understanding of the theories and principles of human communication that will facilitate their professional and personal effectiveness.
2. Skill in responsible and sensitive communication with diverse others.
3. The ability to conduct systematic inquiry skillfully.
4. The ability to develop and convey oral and written messages effectively.

Suggested Tracks in the Communication Major

Journalism: COM 137, COM 237, COM 250, COM 254, COM 275, COM 278, COM 350
Public Relations: COM 137, COM 203, COM 208, COM 227, COM 317, COM 350
Relational: COM 200, COM 202, COM 230, COM 250, COM 290, COM 319

Communication Major

Core Courses

- COM101: Principles of Communication (4 hours)
- COM150: Research Methodology (4 hours)
- COM207: Intercultural Communication (4 hours)
- COM499: Senior Capstone Seminar (4 hours)

Communication Major (B.A.)

Core courses plus four additional 4-credit 100- or 200-level courses in Communication
Three 4-credit 300-level courses in Communication (one of which may be COM 380, Internship)
Completion of a Modern Language through 202
Bachelor of Arts Requirement

Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

Fine Arts (F1, F2)  
Humanities (F1, F2)  
Philosophy/Ethics/Religion (P1, P2)  
Natural Sciences (N1, N2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- **Cultural Seminar (CCS100)**
  - The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- **Writing Seminar (ENG 170)**
  - The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- **Cross-Cultural Development (CCD)**
  - The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- **Cross-Cultural Experience (CCE)**
  - The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

  For more information and course listings, click here

- **Global Perspectives Colloquium (CCS400)**
  - In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Communication Major (B.S.)

- Core courses plus four additional 4-credit 100- or 200-level courses in Communication
- Three 4-credit 300-level courses in Communication (one of which may be COM 380, Internship)
- CMP112: Computational Thinking I (4 hours)
- CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)
- GRC106: Intro-Communication Technology (2 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

**NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
  - Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
  - Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

  Fine Arts (F1, F2)  
  Humanities (F1, F2)  
  Philosophy/Ethics/Religion (P1, P2)  
  Natural Sciences (N1, N2)  

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)
The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- **Writing Seminar (ENG 170)**
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- **Cross-Cultural Development (CCD)**
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- **Cross-Cultural Experience (CCE)**
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- **Global Perspectives Colloquium (CCS400)**
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- **Liberal Arts Communication Minor**
  - COM101: Principles of Communication (4 hours)
  - One of the following:
    - COM317: Communication Criticism (4 hours)
    - COM319: Communication Theory (4 hours)
    - COM350: Communication Law (4 hours)
    - COM370: Communication Technology and Society (4 hours)
  - Three elective four-credit courses in Communication.

- **Secondary Education Speech Communication Minor**
  One elective four-credit course in communication.
  - COM101: Principles of Communication (4 hours)
  - COM111: Debate and Forensic Activities (1 hours)
  - COM200: Interpersonal Communication (4 hours)
  - OR -COM202: Small Group Communication (4 hours)
  - COM250: Society and Mass Media (4 hours)
  - COM317: Communication Criticism (4 hours)
  - COM319: Communication Theory (4 hours)

- **Major Courses**
  The list below displays all the courses offered by the major:
  - COM101: Principles of Communication (4 hours)
  - COM111: Debate and Forensic Activities (1 hours)
  - COM137: Introduction to Newswriting and Reporting (4 hours)
  - COM150: Research Methodology (4 hours)
  - COM200: Interpersonal Communication (4 hours)
  - COM202: Small Group Communication (4 hours)
  - COM203: Advertising (4 hours)
  - COM207: Intercultural Communication (4 hours)
  - COM208: Introduction to Public Relations (4 hours)
  - COM227: Technical Writing in Organizations (4 hours)
  - COM230: Organizational Communication (4 hours)
  - COM237: Advanced Newswriting and Reporting (4 hours)
  - COM241: Communication and Conflict (4 hours)
  - COM246: Video Production (4 hours)
  - COM250: Society and Mass Media (4 hours)
  - COM254: Photojournalism (4 hours)
  - COM275: Feature Writing (4 hours)
  - COM278: Broadcast News Reporting (4 hours)
  - COM290: Intro to Health Communication (4 hours)
  - COM290H: Intro to Health Communication (4 hours)
  - COM291: Topics in Communication (1 TO 4 hours)
  - COM296: Research in Communication (1 TO 4 hours)
  - COM298: Indep Study in Communication (1 TO 4 hours)
  - COM317: Communication Criticism (4 hours)
  - COM319: Communication Theory (4 hours)
  - COM350: Communication Law (4 hours)
  - COM370: Communication Technology and Society (4 hours)
  - COM380: Internship in Communication (1 TO 4 hours)
  - COM383: Prior Work Experience in Comm (1 TO 4 hours)
  - COM391: Topics in Communication (4 hours)
  - COM396: Research in Communication (1 TO 4 hours)
  - COM398: Indep Study in Communication (1 TO 4 hours)
  - COM480: Internship in Communication (1 TO 4 hours)
  - COM483: Prior Work Experience in Comm (1 TO 4 hours)
  - COM499: Senior Capstone Seminar (4 hours)

- **Sociology and Criminal Justice**

Richard H. Coon  Associate Professor of Sociology
Jennifer L. Huck  Assistant Professor of Sociology and Criminal Justice  
Camie Morris  Lecturer of Sociology and Criminal Justice

The Sociology Program offers majors in criminal justice and sociology, as well as minors in criminal justice and sociology.

- **Criminal Justice Major**

**Bachelor of Science**

The criminal justice major is designed to meet the needs of students considering a career in the criminal justice system, including law enforcement, law and the courts and corrections. The major has an interdisciplinary liberal arts focus, emphasizing social science knowledge as well as basic communication and intellectual skills. We offer courses that help students understand the structure and philosophy of the American criminal justice system including the dimensions and causes of crime and delinquency, theories of crime prevention and control, the history, nature and theories of law enforcement, the basis and operation of criminal courts, and the philosophies and practices of various correctional institutions and programs, including corrections in the community.

The criminal justice major has two tracks within it. The internship track requires students to have earned no grades in the major less than C, to have an overall grade point average in courses taken in the major of 2.6, and to complete the courses in the internship track listed below. The classroom track requires students to have a 2.25 grade point average in courses taken in the major and to complete the courses in the classroom track listed below.

**Learning Outcomes for Criminal Justice**

Students successfully completing the major are expected to:

1. Demonstrate an understanding of the structure, philosophy and administration of the criminal justice system and its components of law enforcement, courts, and corrections.
2. Describe and apply criminological theory to understand why individuals engage in crime, how criminals are created, and how policies connect to theoretical underpinnings.
3. Utilize and evaluate appropriate research and analytical methods in criminal justice.
4. Demonstrate the ability to develop and convey oral and written messages effectively in a professional manner.

- **Internship Track Core Courses**
  - SOC102: Sociology of Social Problems (4 hours)
  - SOC103: Introduction to Criminal Justice (4 hours)
  - SOC211: Juvenile Delinquency (4 hours)
  - SOC212: Criminology (4 hours)
  - SOC230: Fundamentals of Interviewing (4 hours)
  - SOC304: Introduction to Criminal Law (4 hours)
  - SOC307: Corrections in American Society (4 hours)
  - SOC311: Methods of Social Research (4 hours)
  - SOC481: Capstone - Internship in Criminal Justice (4 hours)

- Two elective courses from the following:
  - COM241: Communication and Conflict (4 hours)
  - COM350: Communication Law (4 hours)
  - PSY201: Abnormal Psychology (4 hours)
  - OR-PSY221: Life-Span Psychology (4 hours)
  - SOC213: Minority Group Studies (4 hours)
  - SOC220: Police in Society (4 hours)
  - SOC303: Criminal Procedure, Evidence and Investigation (4 hours)

- **Required Support Courses (Required for primary majors only)**
  - 4 credits of computer science including:
    - CSC107: Problem Solving Using Information Technology (2 hours)
    - POL141: Intro to American Politics (4 hours)

- **Bachelor of Science Requirement**

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

**NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

- **General Education Requirement**

For more information on General Education Requirement, click here.

- **Distribution Component**

For more information on the Distribution Component, click here.

- **GE1 and GE2 Courses**

  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study. Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

  - Fine Arts (F1, F2)
  - Humanities (F1, F2)
  - Philosophy/Ethics/Religion (P1, P2)
Natural Sciences (N1, N2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)
  
  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)
  
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)
  
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

  For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
  
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Classroom Track Core Courses

- SOC102: Sociology of Social Problems (4 hours)
- SOC103: Introduction to Criminal Justice (4 hours)
- SOC211: Juvenile Delinquency (4 hours)
  
  OR - SOC212: Criminology (4 hours)
- SOC230: Fundamentals of Interviewing (4 hours)
- SOC304: Introduction to Criminal Law (4 hours)
  
  OR - SOC307: Corrections in American Society (4 hours)
- SOC311: Methods of Social Research (4 hours)

Four elective courses from the following:

- COM241: Communication and Conflict (4 hours)
- COM350: Communication Law (4 hours)
- HIS305: Recent America (4 hours)
- PSY201: Abnormal Psychology (4 hours)
  
  OR - PSY221: Life-Span Psychology (4 hours)
- SOC211: Juvenile Delinquency (4 hours)
  
  OR - SOC212: Criminology (4 hours)
- SOC213: Minority Group Studies (4 hours)
- SOC220: Police in Society (4 hours)
- SOC301: Social Change and the Future of Society (4 hours)
- SOC303: Criminal Procedure, Evidence and Investigation (4 hours)
- SOC304: Introduction to Criminal Law (4 hours)
  
  OR - SOC307: Corrections in American Society (4 hours)

Required Support Courses (Required for primary majors only)

4 credits of computer science including:

- CSC107: Problem Solving Using Information Technology (2 hours)
- POL141: Intro to American Politics (4 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.

FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
  
  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
  
  Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

  Fine Arts (F1, F2)
Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

- **Cultural Seminar (CCS100)**
  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- **Writing Seminar (ENG 170)**
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- **Cross-Cultural Development (CCD)**
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- **Cross-Cultural Experience (CCE)**
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Criminal Justice Minor

- **Core Courses**
  - SOC103: Introduction to Criminal Justice (4 hours)
  - SOC211: Juvenile Delinquency (4 hours)
    OR SOC212: Criminology (4 hours)
  - Three elective courses from among the following:
    - SOC211: Juvenile Delinquency (4 hours)
    OR SOC212: Criminology (4 hours)
    - SOC213: Minority Group Studies (4 hours)
    - SOC220: Police in Society (4 hours)
    - SOC303: Criminal Procedure, Evidence and Investigation (4 hours)
    - SOC304: Introduction to Criminal Law (4 hours)
    - SOC307: Corrections in American Society (4 hours)

Sociology Major

Bachelor of Science

The mission of the Sociology major is to prepare students to use sociological theory, methods and empirical evidence to critically examine the social world. Students will develop a sociological perspective grounded in social justice and sustainability. Primary to the mission of the major is the cultivation of a well-rounded understanding of the discipline of sociology that contributes to informed citizenship, lifelong learning, and an understanding of a diverse and changing social world.

There are two separate emphases in the Sociology program:

1. “Sociology of the Social World” (SSW) Emphasis **MAJOR** (10 courses—40 credit hours);
   the 4 core courses plus 6 elective courses in Sociology.

   “Sociology of the Social World” Emphasis **MINOR** (5 courses—20 credit hours);
   SOC 101, SOC 308 or 311 plus 3 elective courses in Sociology.

2. “Sociology Of Sustainability” (SOS) Emphasis **MAJOR** (14 courses—56 credit hours);
   the 4 core courses plus the 7 required courses in SOS and 3 courses within a career pathway.

   “Sociology Of Sustainability” Emphasis **MINOR** (6 courses—24 credit hours); see list of 6 required courses below.

Learning Outcomes for Sociology

Both emphases share these, and upon successful completion of major requirements students will be able to:

1. Demonstrate an awareness of the scope and diversity of societal/cultural elements addressed by the field of sociology.
2. Use and apply sociological concepts, research methods and theoretical perspectives to make sense of their world.
3. Use the sociological imagination to recognize and describe how institutional patterns and social structural forces shape many aspects of individual life.

There are additional Learning Outcomes for the SOS emphasis, and upon successful completion of the Sociology of Sustainability emphasis students are expected to be able to:
1. Explain the scale and variety of major systems interconnections among people, planet, purposes and progress; and how social justice, ecological stewardship, and equitable prosperity relate to those systems as well as to Carroll’s four pillars.

2. Demonstrate how to use and apply SOS concepts through community engagement and collaboration, organizational leadership and responsibility, and/or environmental advocacy and well-being.

3. Integrate development for careers or graduate studies in sustainability with personal lifestyle and financial planning.

   - **Core Courses**
     - SOC101: Introduction to Sociology (4 hours)
     - SOC308: Sociological Theory (4 hours)
     - SOC311: Methods of Social Research (4 hours)
     - SOC399: Capstone in Sociology (4 hours)

   - **Required Support Courses (Required for primary majors only)**
     - 4 credits of computer science including Computer Science 107
       - CSC107: Problem Solving Using Information Technology (2 hours)
       - COM207: Intercultural Communication (4 hours)
       - OR - ENG255: Postcolonial Literature and Theory (4 hours)
       - OR - PHI207: History and Philosophy of Science (4 hours)

   - **Required Courses for the Sociology of Sustainability Emphasis**
     - In addition to the Core Courses, these 7 courses are required for the SOS emphasis:
       - ENV120: Conservation and Environmental Improvement (4 hours)
       - ENV222: Environmental Sustainability (4 hours)
       - SOC102: Sociology of Social Problems (4 hours)
       - SOC202: Society and Ecology (4 hours)
         - AND - SOC202L: Society and Ecology Laboratory
       - SOC301: Social Change and the Future of Society (4 hours)
       - SOC302: Complex Organizations and Work Life (4 hours)
       - SOC390: Sustainability Field Project (2 to 4 credits hours)

   - **Elective Courses for the "Sociology Of Sustainability" Emphasis:**
     - An additional 3 elective courses from among the following are chosen with student advisor to round out student’s “triple bottom line”, or completion of one RECOMMENDED career pathway.

     - At least one of the courses must be from Environmental Science or Organizational Leadership:
       - SOC 103, 211, 212, or 213; or COM 207 or 241; or UWM-UN (adds 2 credits as it=6 credit double course); or ENV 201, 252, 277, 292, 349 or 375; or LEA 190, 302, 375 or 390; or BUS 250 or 260.

     - **Recommended for SOCIAL JUSTICE career pathway**
       - SOC103: Introduction to Criminal Justice (4 hours)
       - OR - SOC212: Criminology (4 hours)
       - SOC211: Juvenile Delinquency (4 hours)
       - OR - SOC213: Minority Group Studies (4 hours)
       - ENV292: Environmental Ethics (4 hours)
       - OR - LEA375: Nonprofit Leadership (4 hours)

     - **Recommended for ECOLOGICAL STEWARDSHIP career pathway**
       - ENV201: Problem Solving in Environmental Systems (4 hours)
       - COM241: Communication and Conflict (4 hours)
       - OR - COM207: Intercultural Communication (4 hours)
       - LEA190: Leadership and Personal Effectiveness (4 hours)
       - OR - LEA302: Leadership-Theory and Practice (4 hours)

     - **Recommended for EQUITABLE PROSPERITY career pathway**
       - BUS250: Culture and Diversity in Organizations (4 hours)
       - OR - BUS260: Ethics in Business, Govt, and Society (4 hours)
       - ENV349: Environmental Planning and Policy (4 hours)
       - OR - ENV252: Contemporary Issues in Geog and the Environment (2 hours)
       - LEA390: Contemporary Issues and Perspectives in Leadership (4 hours)

   - **Bachelor of Science Requirement**
     - The requirements for a Bachelor of Science degree are:
       - CMP112 and either CMP113 or CMP114 or MAT140 or higher and CSC110 or higher;

     - **NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR**

   - **General Education Requirement**
     - For more information on General Education Requirement, click here.

   - **Distribution Component**
     - For more information on the Distribution Component, click here.

     - **GE1 and GE2 Courses**
       - Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
       - Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

     - **Fine Arts (F1, F2)**
Humanities (F1, F2)
Philosophy/Ethics/Religion (P1, P2)
Natural Sciences (N1, N2)

**Cross-Cultural Component**

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

- **Cultural Seminar (CCS100)**
  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- **Writing Seminar (ENG 170)**
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- **Cross-Cultural Development (CCD)**
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies the Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- **Cross-Cultural Experience (CCE)**
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

*For more information and course listings, click here*

- **Global Perspectives Colloquium (CCS400)**
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

**Sociology Minors**

- **Sociology of the Social World Emphasis Minor (5 courses - 20 credit hours)**
  Students will choose from the courses below plus 3 elective courses in Sociology to equal 20 credits.
  - SOC101: Introduction to Sociology (4 hours)
  - SOC308: Sociological Theory (4 hours)
  - OR-SOC311: Methods of Social Research (4 hours)
  - Sociology of Sustainability Emphasis Minor (6 courses - 24 credit hours)
  - SOC101: Introduction to Sociology (4 hours)
  - SOC308: Sociological Theory (4 hours)
  - OR-SOC311: Methods of Social Research (4 hours)
  - ENV120: Conservation and Environmental Improvement (4 hours)
  - AND-ENV120L: Conservation and Environmental Improvement Laboratory
  - ENV222: Environmental Sustainability (4 hours)
  - SOC202: Society and Ecology (4 hours)
  - AND-SOC202L: Society and Ecology Laboratory
  - SOC302: Complex Organizations and Work Life (4 hours)

**Major Courses**

The list below displays all the courses offered by the major:

- SOC101: Introduction to Sociology (4 hours)
- SOC102: Sociology of Social Problems (4 hours)
- SOC102H: Sociology of Social Problems (4 hours)
- SOC103: Introduction to Criminal Justice (4 hours)
- SOC110: Cultural Anthropology (4 hours)
- SOC202: Society and Ecology (4 hours)
- SOC202L: Society and Ecology Laboratory
- SOC211: Juvenile Delinquency (4 hours)
- SOC212: Criminology (4 hours)
- SOC213: Minority Group Studies (4 hours)
- SOC217: Social Psychology (4 hours)
- SOC220: Police in Society (4 hours)
- SOC230: Fundamentals of Interviewing (4 hours)
- SOC291: Special Topics in Sociology or Criminal Justice (4 hours)
- SOC296: Reading and Research in Sociology (1 TO 3 hours)
- SOC298: Independent Study in Sociology (4 hours)
- SOC301: Social Change and the Future of Society (4 hours)
- SOC302: Complex Organizations and Work Life (4 hours)
- SOC303: Criminal Procedure, Evidence and Investigation (4 hours)
- SOC304: Introduction to Criminal Law (4 hours)
- SOC305: Marriage & Family-Contmp Society (4 hours)
- SOC307: Corrections in American Society (4 hours)
- SOC308: Sociological Theory (4 hours)
- SOC311: Methods of Social Research (4 hours)
- SOC318: Sociology of Sex Roles (4 hours)
SOC380: Internship in Applied Sociology (4 hours)
SOC390: Sustainability Field Project (2 to 4 credits hours)
SOC391: Special Topics in Sociology (4 hours)
SOC396: Reading and Research in Sociology (1 TO 3 hours)
SOC398: Independent Study in Sociology (4 hours)
SOC399: Capstone in Sociology (4 hours)
SOC481: Capstone - Internship in Criminal Justice (4 hours)
College of Natural Sciences, Health Sciences and Business

Dean/Director: Jane Hopp  
Room: Research and Development House, Room 102

Telephone: 262-524-7294  
Email: jhopp@carrollu.edu

Fax: 262-524-7112 attn: Jan Dargatz

Departments

- Business, Accounting, and Economics
- Computational and Physical Sciences
- Health and Medicine
- Human Movement Sciences
- Life Sciences
- Nursing

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Department: Business, Accounting, and Economics

Chairperson: Gregory Kuhlemeyer
Room: Voorhees 306
Email: gkuhleme@carrollu.edu
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Programs

Undergraduate
- Accounting
- Business Administration
- Economics
- Organizational Leadership

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Preparing Accounting Professionals for Global Challenges

The Accounting Program provides superior educational opportunities that increase students’ professional effectiveness and career success in complex business environments.

Learning Outcomes for Accounting

Graduates of the Accounting Program are able to:

1. Define and describe accounting-related terminology and concepts.
2. Solve complex accounting problems using appropriate tools and techniques.
3. Formulate accounting policies and strategies and evaluate their effectiveness.
4. Integrate global considerations in accounting decisions.
5. Demonstrate multiple effective communication skills.
6. Work effectively in team environments.
7. Demonstrate appropriate habits, behaviors and attitudes in professional situations.

Carroll University offers three tracks in accounting for students interested in preparing for a position of leadership and responsibility in accounting in the public, private or governmental sectors of our economy.

Track #1 is designed for students wishing to complete an accounting major that will enable them, upon graduation, to obtain a position in a corporate or not-for-profit organization.

Track #2 is designed for students interested in obtaining a Certified Public Accountant (CPA) designation. Students wishing to meet the requirements to “sit” for the CPA exam can do so in four years by following a specified curriculum. This curriculum requires completion of 150 credit hours. With careful planning additional competencies can be gained that will allow the student to consider other certifications (described below). Students should carefully coordinate with their academic advisor if they wish to complete this track in four years.

With careful planning, the requirements for either TRACK #1 OR TRACK #2 can be completed within a four-year period (not the traditional five-year period).

Track #3 BS/MBA/CPA

Accounting Major, Bachelor of Science

NOTE: Transfer students must complete a minimum of 20 credits of accounting at Carroll University.

Accounting Major, Bachelor of Science

NOTE: Transfer students must complete a minimum of 20 credits of accounting at Carroll University.

Core Requirements - Accounting Requirements (50 Credits)

- ACC205: Financial Accounting (4 hours)
- ACC207: Intermediate Accounting I (4 hours)
  AND - ACC208: Intermediate Accounting II (4 hours)
- ACC305: Advanced Accounting I (4 hours)
  AND - ACC306: Advanced Accounting II (4 hours)
- ACC310: Advanced Cost Accounting and Budgeting (4 hours)
- ACC324: Advanced Business Law (4 hours)
- ACC375: Pre-internship Seminar-Capstone Course (2 hours)
- ACC405: Tax Accounting I (4 hours)
  AND - ACC406: Tax Accounting II (4 hours)
- ACC407: Auditing - Capstone Course (4 hours)
- ACC414: Accounting Theory - Capstone Crs (4 hours)
- ACC480: Internship in Accounting - Capstone Course (1 TO 12 hours)

1: For ACC 324: If not completed within the past five years, no credit will be granted. The student has the option of retaking the course for credit or taking an examination for credit to show mastery of the current subject matter.
2: For ACC 405 and ACC 406: If not completed within the past two years, no credit will be granted. The student has the option of retaking the course for credit or taking an examination for credit to show mastery of the current subject matter.

- **Required Support Courses (54 credits)**
  - BUS101: Introduction to Business (4 hours)
  - BUS290: Principles of Business Law (4 hours)
  - BUS301: Principles of Marketing (4 hours)
  - BUS302: Principles of Management (4 hours)
  - BUS304: Principles of Finance (4 hours)
  - BUS305: Principles of Operations Management (4 hours)
  - CSC109: Technological Productivity (2 hours)
  - CSC211: Database Web Creation and Networks (4 hours)
  - CSC220: Information Systems (4 hours)
  - ECO124: Principles of Economics I - Microeconomics (4 hours)
  - ECO225: Principles of Economics II - Macroeconomics (4 hours)
  - CMP112: Computational Thinking I (4 hours)
  - CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)
  - MAT140: Calculus and Its Applications (4 hours)

- **Bachelor of Science Requirement**
  The requirements for a Bachelor of Science degree are:
  - CMP112 and either CMP113 or CMP114 or
  - MAT140 or higher and CSC110 or higher;

**NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

- **General Education Requirement**
  For more information on General Education Requirement, click here.

- **Distribution Component**
  For more information on the Distribution Component, click here.

  - GE1 and GE2 Courses
    Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major
    area of study.
    Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level
    (e.g. PSY101 (S1) and PSY 221 (S2)).
    - Fine Arts (F1, F2)
    - Humanities (F1, F2)
    - Philosophy/Ethics/Religion (P1, P2)
    - Natural Sciences (N1, N2)

- **Cross-Cultural Component**
  The Cross-Cultural Component is a five-course series through which students explore the study of culture:
  Transfer students will register for CCS101 for one credit.

  - Cultural Seminar (CCS100)
    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of
    one's own culture and a different culture. This course develops oral communication skills through critical reading
    and discussion.
  - Writing Seminar (ENG 170)
    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops
    foundational writing skills.
  - Cross-Cultural Development (CCD)
    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a
    Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes
    as preparation for the Cross-Cultural Experience.
  - Cross-Cultural Experience (CCE)
    The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an
    off-campus setting, students apply knowledge learned in the previous three courses through interactions with
    cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

  For more information and course listings, click here

  - Global Perspectives Colloquium (CCS400)
    In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in
    critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while
    also refining their writing skills.

- **Accounting Minor (20 credits)**
  - ACC205: Financial Accounting (4 hours)
  - ACC207: Intermediate Accounting I (4 hours)
  AND - ACC208: Intermediate Accounting II (4 hours)
  - Two of the following:
    - ACC206: Managerial Accounting (4 hours)
ACC305: Advanced Accounting I (4 hours)  
ACC310: Advanced Cost Accounting and Budgeting (4 hours)  
ACC324: Advanced Business Law (4 hours)  
ACC405: Tax Accounting I (4 hours)  
ACC406: Tax Accounting II (4 hours)

For ACC 405 and ACC 406: If not completed within the past two years, no credit will be granted. The student has the option of retaking the course for credit or taking an examination for credit to show mastery of the current subject matter.

Accounting Tracks  
Additional Certifications for Accountants

Major Courses

The list below displays all the courses offered by the major:

ACC100: Personal Finance (2 hours)  
ACC105: Introduction to Acct Basics (2 hours)  
ACC205: Financial Accounting (4 hours)  
ACC206: Managerial Accounting (4 hours)  
ACC207: Intermediate Accounting I (4 hours)  
ACC208: Intermediate Accounting II (4 hours)  
ACC305: Advanced Accounting I (4 hours)  
ACC306: Advanced Accounting II (4 hours)  
ACC310: Advanced Cost Accounting and Budgeting (4 hours)  
ACC324: Advanced Business Law (4 hours)  
ACC375: Pre-internship Seminar-Capstone Course (2 hours)  
ACC405: Tax Accounting I (4 hours)  
ACC406: Tax Accounting II (4 hours)  
ACC407: Auditing - Capstone Course (4 hours)  
ACC414: Accounting Theory - Capstone Crs (4 hours)  
ACC480: Internship in Accounting - Capstone Course (1 TO 12 hours)  
ACC481: Internship Option - Course Substitution (1 TO 4 hours)  
ACC483: Internship-Prior Work Experience (1 TO 4 hours)  
ACC498: Independent Study in Accounting (1 TO 4 hours)

Business Administration

Mattias Bolmus  
Instructor

Dennis M. Debrecht  
Associate Professor

Sarah Esveldt  
Lecturer

Catherine E. Jorgens  
Instructor

Gregory A. Kuhlemeyer  
Chair and Associate Professor

Michael G. Levas  
Associate Professor

Richard J. Penlesky  
Professor

Gregory J. Schultz  
Senior Lecturer

Mary Ann Wisniewski  
Professor

Preparing Business Professionals for Global Challenges

The Business Program provides superior educational opportunities that increase professional effectiveness and career success in complex business environments.

Learning Outcomes for Business Administration

Graduates of the Business Program are able to:

1. Define and describe business-related terminology and concepts.
2. Solve complex business problems using appropriate tools and techniques.
3. Formulate business policies and strategies and evaluate their effectiveness.
4. Integrate global considerations in business decisions.
5. Demonstrate multiple effective communication skills.
6. Work effectively in team environments.
7. Demonstrate appropriate habits, behaviors and attitudes in professional situations.

Students who major in Business Administration are prepared for a variety of fulfilling and challenging careers with domestic and international organizations. These organizations need articulate, well-reasoning, effective leaders to manage in business environments that are dynamic and increasingly complex.

A Carroll University business degree facilitates integration of knowledge, development of lifelong skills, career preparation, and formulation of enduring personal values. These pillars of a Carroll University education are grounded in the liberal arts and provide the foundation upon which Business programs are built. This combination of liberal and professional education has been carefully designed to enhance personal and professional success.

Courses in the Business Administration major address the theory (why?) and practice (how?) of business decision-making within a global context. Courses are delivered by experienced, highly educated faculty who pay careful attention to individual student needs. Classes are often augmented and enriched by carefully selected guest speakers, videos, interactive games or exercises, and judicious use of online content and delivery. All Business Administration majors complete a common group of core and support courses. In addition, students select an in-depth area of study, called an emphasis, in one of five areas: entrepreneurship, finance, human resources, management or marketing.

The Business Administration major offers a variety of opportunities beyond the classroom that prepare students for successful lives and careers. All students are required to complete an internship. Internships provide realistic job previews, income and networking opportunities and, in some cases, full-time employment upon graduation. Leadership opportunities are available through a number of scholarly and professional organizations. Interaction with Carroll alumni and other business leaders is fostered through a required
career management course, occasional classroom visits by guest lecturers, an optional mentoring program, and other on-campus and off-campus events.

- **Business Administration Major**
  - Core Courses for the Major (36 credits)
    - BUS101: Introduction to Business (4 hours)
    - BUS290: Principles of Business Law (4 hours)
    - BUS301: Principles of Marketing (4 hours)
    - BUS302: Principles of Management (4 hours)
    - BUS304: Principles of Finance (4 hours)
    - BUS305: Principles of Operations Management (4 hours)
    - BUS360: Career Management (4 hours)
    - BUS480: Internship in Business (1 TO 12 hours)
    - BUS496: Business Policy (4 hours)
  
  *BUS 310 should be taken in place of BUS 290 for the Human Resource emphasis.
  **BUS 340 should be taken in place of BUS 304 for the Entrepreneurship emphasis
  *** BUS 480 Internship (minimum of 4 credits)

- Required Support Courses (30 credits)
  - ACC205: Financial Accounting (4 hours)
  - ACC206: Managerial Accounting (4 hours)
  - CSC220: Information Systems (4 hours)
  - ECO124: Principles of Economics I - Microeconomics (4 hours)
  - ECO225: Principles of Economics II - Macroeconomics (4 hours)
  - CMP112: Computational Thinking I (4 hours)
  - CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)

- Bachelor of Science Requirement
  The requirements for a Bachelor of Science degree are:
  - CMP112 and either CMP113 or CMP114 or
  - MAT140 or higher and CSC110 or higher;

  **NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR**

- General Education Requirement
  For more information on General Education Requirement, click here.

- Distribution Component
  For more information on the Distribution Component, click here.

  - GE1 and GE2 Courses
    Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
    Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
    - Fine Arts (F1, F2)
    - Humanities (F1, F2)
    - Philosophy/Ethics/Religion (P1, P2)
    - Natural Sciences (N1, N2)

- Cross-Cultural Component
  The Cross-Cultural Component is a five-course series through which students explore the study of culture:
  
  Transfer students will register for CCS101 for one credit.

  - Cultural Seminar (CCS100)
    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

  - Writing Seminar (ENG 170)
    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

  - Cross-Cultural Development (CCD)
    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

  - Cross-Cultural Experience (CCE)
    The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

    For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- **Human Resource Emphasis (16 credits)**
  - Core and support courses, plus 16 credits in emphasis
    - BUS265: Human Resource Management (4 hours)
    - BUS315: Organization Behavior (4 hours)
    - COM241: Communication and Conflict (4 hours)
  - One elective from:
    - BUS250: Culture and Diversity in Organizations (4 hours)
    - BUS291: Special Topics (1 TO 4 hours)
    - OR - BUS391: Special Topics (1 TO 4 hours)
    - COM230: Organizational Communication (4 hours)
    - LEA302: Leadership-Theory and Practice (4 hours)

- **Management Emphasis (16 credits)**
  - Core and support courses, plus 16 credits in emphasis
    - BUS315: Organization Behavior (4 hours)
    - BUS479: Consulting Management (4 hours)
    - LEA302: Leadership-Theory and Practice (4 hours)
  - One elective from:
    - BUS250: Culture and Diversity in Organizations (4 hours)
    - BUS260: Ethics in Business, Govt, and Society (4 hours)
    - BUS265: Human Resource Management (4 hours)
    - BUS291: Special Topics (1 TO 4 hours)
    - OR - BUS391: Special Topics (1 TO 4 hours)

- **Marketing Emphasis (18-20 credits)**
  - Core and support courses, plus 18-20 credits in emphasis
    - BUS320: Promotion Management (4 hours)
    - BUS327: Business-to-Business Marketing (4 hours)
    - BUS435: Marketing Research (4 hours)
  - Management Track (choose two)
    - BUS291: Special Topics (1 TO 4 hours)
    - OR - BUS391: Special Topics (1 TO 4 hours)
    - COM208: Introduction to Public Relations (4 hours)
    - PSY228: Consumer Behavior (4 hours)
  - Promotion Management Track (choose two)
    - BUS291: Special Topics (1 TO 4 hours)
    - OR - BUS391: Special Topics (1 TO 4 hours)
    - ART238: Visual Communication (4 hours)
    - GRC106: Intro-Communication Technology (2 hours)
    - GRC150: Digital Toolbox - Photoshop/ Illustrator 1 (4 hours)
    - GRC360: Digital Flash Gaming (4 hours)
  - General Track (choose two)
    - BUS291: Special Topics (1 TO 4 hours)
    - OR - BUS391: Special Topics (1 TO 4 hours)
    - COM208: Introduction to Public Relations (4 hours)
    - ART238: Visual Communication (4 hours)
    - GRC106: Intro-Communication Technology (2 hours)
    - GRC150: Digital Toolbox - Photoshop/ Illustrator 1 (4 hours)
    - PSY228: Consumer Behavior (4 hours)

- **Finance Emphasis (20 credits)**
  - Core and support courses, plus 20 credits in emphasis from the following selection:
    - Investment Track
      - BUS200: Personal Financial Management (4 hours)
      - BUS342: Investment Management (4 hours)
      - BUS446: Applied Portfolio Management (4 hours)
      - Two electives from:
        - ACC405: Tax Accounting I (4 hours)
        - BUS291: Special Topics (1 TO 4 hours)
        - OR - BUS391: Special Topics (1 TO 4 hours)
        - BUS341: Applied Risk Management (4 hours)
        - BUS344: Mgmt of Financial Institutions (4 hours)
        - BUS356: Applied Financial Management (4 hours)
        - ECO343: Money and Banking (4 hours)
  - Financial Institutions Track
    - BUS344: Mgmt of Financial Institutions (4 hours)
    - BUS356: Applied Financial Management (4 hours)
    - ECO343: Money and Banking (4 hours)
    - Two electives from:
      - ACC207: Intermediate Accounting I (4 hours)
      - BUS291: Special Topics (1 TO 4 hours)
      - OR - BUS391: Special Topics (1 TO 4 hours)
      - BUS341: Applied Risk Management (4 hours)
      - BUS342: Investment Management (4 hours)
      - BUS446: Applied Portfolio Management (4 hours)
      - ECO307: Macroeconomic Theory (4 hours)

* Recommended minors: Accounting, Psychology or Economics
Corporate Track
- BUS341: Applied Risk Management (4 hours)
- BUS342: Investment Management (4 hours)
- BUS356: Applied Financial Management (4 hours)
- Two electives from:
  - ACC207: Intermediate Accounting I (4 hours)
  - BUS291: Special Topics (1 TO 4 hours)
  - BUS391: Special Topics (1 TO 4 hours)
  - BUS344: Mgmt of Financial Institutions (4 hours)
  - BUS446: Applied Portfolio Management (4 hours)
  - ECO306: Microeconomic Theory (4 hours)
  - ECO343: Money and Banking (4 hours)

*Recommended minors: Accounting or Economics

Entrepreneurship Emphasis (16 credits)
- Core and support courses, plus 16 credits in emphasis
  - BUS204: Start-Ups and New Venture Planning (4 hours)
  - BUS475: Managing Growth in Entrepreneurial Companies - Venture Development (4 hours)
  - BUS479: Consulting Management (4 hours)
  - BUS485: Organizational Strategy and Social Entrepreneurship (4 hours)

Business Minors
There are four Business minors:
Entrepreneurship
Finance
Management
Marketing.

Each minor provides in-depth understanding in the respective business discipline. Business minors are intended for non-business majors who may ultimately assume business responsibilities in the private or public sector.

Students majoring in Business Administration are not eligible to complete Business minors. However, they may complete the Economics minor and/or the Global Studies minor.

Business Marketing Minor (20 credits)
- BUS101: Introduction to Business (4 hours)
- BUS301: Principles of Marketing (4 hours)
- BUS302: Principles of Management (4 hours)
- BUS320: Promotion Management (4 hours)
- BUS327: Business-to-Business Marketing (4 hours)
  - OR - PSY228: Consumer Behavior (4 hours)

Business Management Minor (20 credits)
- BUS101: Introduction to Business (4 hours)
- BUS265: Human Resource Management (4 hours)
- BUS302: Principles of Management (4 hours)
- BUS315: Organization Behavior (4 hours)
- LEA302: Leadership-Theory and Practice (4 hours)

Business Finance Minor (20 credits)
- BUS101: Introduction to Business (4 hours)
- BUS304: Principles of Finance (4 hours)
- BUS342: Investment Management (4 hours)
- BUS344: Mgmt of Financial Institutions (4 hours)
- One elective from:
  - BUS341: Applied Risk Management (4 hours)
  - BUS356: Applied Financial Management (4 hours)
  - BUS361: International Business (4 hours)
  - BUS446: Applied Portfolio Management (4 hours)
  - ECO343: Money and Banking (4 hours)

Business Entrepreneurship Minor (24 credits)
- ACC205: Financial Accounting (4 hours)
- BUS101: Introduction to Business (4 hours)
- BUS204: Start-Ups and New Venture Planning (4 hours)
- BUS340: Entrepreneurial Finance (4 hours)
- BUS475: Managing Growth in Entrepreneurial Companies - Venture Development (4 hours)
- BUS485: Organizational Strategy and Social Entrepreneurship (4 hours)

Global Studies Minor - International Business Track
The International Business track of the Global Studies minor addresses political, economic and business issues that affect global commerce. A full description of the minor appears in the Politics and Global Studies section of the catalog. Business Administration majors are eligible to complete the Global Studies minor.

General Business Minor
- ACC205: Financial Accounting (4 hours)
- BUS101: Introduction to Business (4 hours)
- BUS301: Principles of Marketing (4 hours)
- BUS302: Principles of Management (4 hours)
- ECO124: Principles of Economics I - Microeconomics (4 hours)
  - OR - ECO225: Principles of Economics II - Macroeconomics (4 hours)

Major Courses
The list below displays all the courses offered by the major:
**BUS101: Introduction to Business (4 hours)**

**BUS200: Personal Financial Management (4 hours)**

**BUS204: Start-Ups and New Venture Planning (4 hours)**

**BUS250: Culture and Diversity in Organizations (4 hours)**

**BUS260: Ethics in Business, Govt, and Society (4 hours)**

**BUS265: Human Resource Management (4 hours)**

**BUS290: Principles of Business Law (4 hours)**

**BUS291: Special Topics (1 TO 4 hours)**

**BUS301: Principles of Marketing (4 hours)**

**BUS302: Principles of Management (4 hours)**

**BUS304: Principles of Finance (4 hours)**

**BUS305: Principles of Operations Management (4 hours)**

**BUS310: Employment and Labor Law (4 hours)**

**BUS315: Organization Behavior (4 hours)**

**BUS320: Promotion Management (4 hours)**

**BUS327: Business-to-Business Marketing (4 hours)**

**BUS340: Entrepreneurial Finance (4 hours)**

**BUS341: Applied Risk Management (4 hours)**

**BUS342: Investment Management (4 hours)**

**BUS344: Mgmt of Financial Institutions (4 hours)**

**BUS356: Applied Financial Management (4 hours)**

**BUS360: Career Management (4 hours)**

**BUS361: International Business (4 hours)**

**BUS365: Marketing Research (4 hours)**

**BUS366: Applied Portfolio Management (4 hours)**

**BUS435: Marketing Research (4 hours)**

**BUS446: Applied Portfolio Management (4 hours)**

**BUS475: Managing Growth in Entrepreneurial Companies - Venture Development (4 hours)**

**BUS479: Consulting Management (4 hours)**

**BUS480: Internship in Business (1 TO 12 hours)**

**BUS483: Internship-Prior Work Experience (1 TO 4 hours)**

**BUS485: Organizational Strategy and Social Entrepreneurship (4 hours)**

**BUS496: Business Policy (4 hours)**

**BUS498: Independent Study in Business (1 TO 4 hours)**

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**Economics**

**Dennis M. Debrecht**  
**Associate Professor**

**Richard Penlesky**  
**Professor**

**Learning Outcomes for Economics**

Minors in economics are able to:

1. Define and describe economics-related terminology and concepts.
2. Solve complex economics problems using appropriate tools and techniques.
3. Formulate economics policies and strategies and evaluate their effectiveness.
4. Integrate global considerations in economics decisions.
5. Demonstrate multiple effective communication skills.
6. Work effectively in team environments.
7. Demonstrate appropriate habits, behaviors and attitudes in professional situations.

**Economics Minor**

The Economics minor is intended for students who seek better understanding of how individuals and societies choose to employ scarce resources in the production, distribution and consumption of goods and services. This understanding facilitates application of economic principles to business and public-sector decision-making in domestic and global settings. All Carroll University students are eligible to complete the Economics minor.

**ECO124: Principles of Economics I - Microeconomics (4 hours)**

**ECO225: Principles of Economics II - Macroeconomics (4 hours)**

**ECO306: Microeconomic Theory (4 hours)**

**ECO307: Macroeconomic Theory (4 hours)**

**ECO343: Money and Banking (4 hours)**

**ECO363: International Economics (4 hours)**

**OR - HIGHER: Other higher level course of the same subject**

**Minor Courses**

The list below displays all the courses offered by the minor:

**ECO105: History of Economic Thought (4 hours)**

**ECO110: Introduction to Economics (4 hours)**

**ECO124: Principles of Economics I - Microeconomics (4 hours)**

**ECO225: Principles of Economics II - Macroeconomics (4 hours)**

**ECO306: Microeconomic Theory (4 hours)**

**ECO307: Macroeconomic Theory (4 hours)**

**ECO343: Money and Banking (4 hours)**

**ECO363: International Economics (4 hours)**

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**Organizational Leadership**

**Gregory J. Schultz**  
**Senior Lecturer**

**Mary Ann Wisniewski**  
**Professor**

**Preparing Leaders for Global Challenges**

The Organizational Leadership Program provides superior educational opportunities that increase leadership effectiveness and career success in complex organizational environments.

**Learning Outcomes for Organizational Leadership**

---
Graduates of the Organizational Leadership Program are able to:

1. Define and describe leadership-related terminology and concepts.
2. Solve complex leadership problems using appropriate tools and techniques.
3. Formulate leadership and not-for-profit organization policies and strategies and evaluate their effectiveness.
4. Integrate global considerations in leadership decisions.
5. Work effectively in team environments.
6. Demonstrate appropriate habits, behaviors and attitudes in leadership situations.

Both the public and the private sectors demand competent leadership for their increasingly complex organizations. Change is constant, and corporate boardrooms, public agencies, and government offices are looking for individuals who can provide an effective, constructive force for their organizations.

This program integrates the study of effective leadership to provide students with a broad perspective on the challenges and opportunities related to leadership. The program is designed to strengthen students’ abilities to create a compelling vision, translate that vision into action, and lead others in creating new ventures or in revitalizing existing ones. In short, the program is designed to create a new generation of leaders—characterized by passion, integrity and competence.

Organizational leadership enhances students’ potential for leadership positions in careers such as public management, community service, health promotion, law, and human resource management.

Organizational Leadership majors are not eligible to earn the Business Management minor.

- Organizational Leadership Major (42 credits)
  - Core Courses
    - BUS101: Introduction to Business (4 hours)
    - BUS302: Principles of Management (4 hours)
    - LEA190: Leadership and Personal Effectiveness (4 hours)
    - LEA302: Leadership-Theory and Practice (4 hours)
    - LEA375: Nonprofit Leadership (4 hours)
    - LEA390: Contemporary Issues and Perspectives in Leadership (4 hours)
    - LEA480: Leadership Internship (1 TO 12 hours)
    - LEA499: Leading Change (4 hours)
  - Support Courses
    - PHI206: Ethics (4 hours)
    - CMP112: Computational Thinking I (4 hours)
    - CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)

- Bachelor of Science Requirement
  The requirements for a Bachelor of Science degree are:
  - CMP112 and either CMP113 or CMP114 or
  - MAT140 or higher and CSC110 or higher;

  **NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

- General Education Requirement
  For more information on General Education Requirement, click here.

- Distribution Component
  For more information on the Distribution Component, click here.

  - GE1 and GE2 Courses
    Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
    Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
    Fine Arts (F1, F2)
    Humanities (F1, F2)
    Philosophy/Ethics/Religion (P1, P2)
    Natural Sciences (N1, N2)

- Cross-Cultural Component
  The Cross-Cultural Component is a five-course series through which students explore the study of culture:

  - Transfer students will register for CCS101 for one credit.
  - Cultural Seminar (CCS100)
    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.
  - Writing Seminar (ENG 170)
    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.
  - Cross-Cultural Component
    The Cross-Cultural Component is a five-course series through which students explore the study of culture:
Undergraduate

Transfer students will register for CCS101 for one credit.

- **Cross-Cultural Development (CCD)**
  
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- **Cross-Cultural Experience (CCE)**
  
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

  *For more information and course listings, click here*

**Organizational Leadership Minor**

- **Core Courses**
  - LEA190: Leadership and Personal Effectiveness (4 hours)
  - LEA302: Leadership-Theory and Practice (4 hours)
  - LEA375: Nonprofit Leadership (4 hours)
  - LEA390: Contemporary Issues and Perspectives in Leadership (4 hours)

- **Major Courses**

  The list below displays all the courses offered by the major:

  - LEA190: Leadership and Personal Effectiveness (4 hours)
  - LEA302: Leadership-Theory and Practice (4 hours)
  - LEA375: Nonprofit Leadership (4 hours)
  - LEA390: Contemporary Issues and Perspectives in Leadership (4 hours)
  - LEA480: Leadership Internship (1 TO 12 hours)
  - LEA499: Leading Change (4 hours)
Additional Certifications for Accountants

With careful planning, the 150-credit accounting curriculum (CPA Emphasis) can provide the competency needed to sit for examinations that can lead to the following professional designations:

**CIA-CERTIFIED INTERNAL AUDITOR:**
*Major: Accounting (CPA) Emphasis*
*Electives: CSC 110, CSC 271, and CSC 409.*

For more information contact:
Institute of Internal Auditors
247 Maitland Avenue
Altamonte Springs, FL 32701
407-937.1111 www.theiia.org

**CMA-CERTIFIED MANAGEMENT ACCOUNTANT:**
*Major: Accounting (CPA) Emphasis*
*Electives: BUS 260, BUS 341, BUS 342, ECO 343 or BUS 344 and BUS 361.*

**CFM-CERTIFIED FINANCIAL MANAGER:**
*Major: Accounting (CPA) Emphasis*
*Electives: ACC 100, BUS 341, BUS 342, ECO 343 or BUS 344, and BUS 446.*

For more information on the CMA/CFM contact:
Institute of Certified Management Accountants
10 Paragon Drive, Suite 1
Montvale, NJ 07645-1760
800-638-4427 www.imanet.org

**CFE-CERTIFIED FRAUD EXAMINER:**
*Major: Accounting (CPA) Emphasis*
*Electives: SOC 103, SOC 212, SOC 303, SOC 304, and CHE 104.*

For more information contact: Association of Certified Fraud Examiner Gregor Building
716 West Avenue
Austin, TX 78701-2727
800-245-3321 www.acfe.com

Students seeking multiple certifications are encouraged to add specific electives to the 150-credit CPA Emphasis in preparation for the national exams.

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## Accounting Tracks

### Accounting Program

<table>
<thead>
<tr>
<th>Track #1: Accounting Emphasis</th>
<th>Track #2: 150 Hours BS with CPA Emphasis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Class Standing</strong></td>
<td><strong>Fall Semester</strong></td>
</tr>
<tr>
<td><strong>Freshman</strong></td>
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<td>CCS 100</td>
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<td>ECO 225</td>
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<td></td>
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<td><strong>Junior</strong></td>
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<td>ACC 305</td>
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<td>CSC 220</td>
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<td>ACC 480</td>
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<td>GE2</td>
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*Note: If a student’s math placement indicates that s/he is not ready for MAT 140, then s/he should take MAT 101 or MAT 130 before taking MAT 140.*

### Track #2: 150 Hours BS with CPA Emphasis

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<thead>
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<th>Class Standing</th>
<th>Fall Semester</th>
<th>Jan/Winter Term</th>
<th>Spring Semester</th>
<th>Summer Term</th>
<th>Total Hours</th>
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<td>36 credits</td>
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= 136 hours
Accounting Tracks

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<tr>
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<th>ACC 405</th>
<th>ACC 407</th>
<th>ACC 480</th>
<th>ACC 480 or</th>
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<td>Elective/MBA</td>
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<td>ACC 414</td>
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<td>ACC 480</td>
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<td></td>
<td></td>
<td></td>
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<td>CCS 400</td>
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<td>34 credits</td>
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= 150 hours

*Note: If a student's math placement indicates that s/he is not ready for MAT 140, then s/he should take MAT 101 or MAT 130.

With careful planning as outlined below, students can complete the requirement for an accounting major with a CPA emphasis and an MBA degree. Students should carefully coordinate, at each registration session, with their academic advisor if they wish to complete this track in four years.

**Track #3: BS/MBA/CPA**

<table>
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<tr>
<th>Class Standing</th>
<th>Fall Semester</th>
<th>Jan/Winter Term</th>
<th>Spring Semester</th>
<th>Summer Term</th>
<th>Total Hours</th>
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<td>ECO124</td>
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<td>ENG 170</td>
<td>GE 1</td>
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<td>MAT 140*</td>
<td></td>
<td>GE 1</td>
<td>12 credits</td>
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<tr>
<td></td>
<td>16 credits +</td>
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<td>16 credits +</td>
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</tr>
</tbody>
</table>

| Sophomore      | ACC 305       | (optional)      | ACC 306         | GE1         | 46 credits  |
|                | BUS 290       |                 | BUS 301         | CMP 114     |             |
|                | CMP 112       |                 | BUS 302         | CSC 220     |             |
|                | GE1           |                 | ACC 109         |             |             |
|                | 16 credits +  |                 | ACC 324         | 12 credits  |             |
|                |               |                 | 18 credits +    |             |             |

| Junior         | ACC 405       | (optional)      | ACC 406         | CCS 400     | 46 credits  |
|                | ACC 310       |                 | ACC 414         | BUS 305     |             |
|                | ACC 375       |                 | ACC 414         | CMP 113     |             |
|                | GE 2          |                 | CCE             |             | 10 credits  |
|                | ACC 480       |                 | ACC 480         |             |             |
|                | 18 credits +  |                 | 18 credits +    |             |             |

| Senior         | MBA 1         | (optional)      | MBA 5           | MBA 9       | 33 credits  |
|                | MBA 2         |                 | MBA 6           | MBA 10      |             |
|                | MBA 3         |                 | MBA 7           | MBA 11      |             |
|                | MBA 4         |                 | MBA 8           | 9 credits =  |             |
|                | 12 credits +  |                 | 12 credits +    |             |             |

= 169 hours

*Note: If a student's math placement indicates that s/he is not ready for MAT 140, then s/he should take MAT 101 or MAT 130.

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Department:  Computational and Physical Sciences

Chairperson:  Kevin McMahon
Room:  Lowry 215  Email:  kmcmahon@carrollu.edu
Telephone:  262-524-7157  Fax:  262-524-7112

Programs

Undergraduate

- Actuarial Science
- Applied Physics/Engineering Dual Degree Program
- Chemistry and Biochemistry
- Computational Science
- Computer Science and Information Technology
- Computer Science Dual Degree Program
- Mathematics
- Applied Physics

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Program: Undergraduate
College of Natural Sciences, Health Sciences and Business
Department: Computational and Physical Sciences

- Actuarial Science

John Symms Associate Professor of Mathematics

Broadly speaking, actuaries are professionals who analyze financial risks of future events. Trained in mathematics, statistics, economics and finance, actuaries quantify these risks by building and evaluating mathematical models. Such analyses are essential for the success of businesses in areas such as insurance, investment, and employee benefits. The Carroll University Actuarial Sciences Major gives students a broad and in-depth background in these core disciplines in preparation for entry into the actuarial sciences profession.

Carroll University has internship programs with Northwestern Mutual and the Assurant insurance companies. Each year, representatives from Northwestern Mutual and Assurant select interns from among Carroll University Actuarial Science majors for full-time (or part-time) paid internships. Selected student interns receive an authentic experience in the actuary profession while earning Carroll University credit. The full-time internships also include 100 hours of paid study time for the intern's next actuarial sciences exam.

Learning Outcomes for Actuarial Science

Students majoring in actuarial science are expected to:

1. Develop an understanding of the actuarial profession, what actuaries do, and how they do it.
2. Develop a knowledge base and proficiency in the core subjects needed for entry into the profession.
3. Develop an appreciation for the linkages between these core subjects.
4. Develop the critical and analytical thinking skills necessary for success in the profession.
5. Develop the communication skills that are essential in the business environment.
6. Develop the learning skills necessary for continued success in the profession.

Actuarial Sciences Major (76 credits) Bachelor of Science

- ACC205: Financial Accounting (4 hours)
- ACC206: Managerial Accounting (4 hours)
- ASC301: Financial Mathematics (4 hours)
- ASC302: Probability (4 hours)
- ASC401: Financial Economics (4 hours)
- ASC402: Life Contingencies (4 hours)
- BUS101: Introduction to Business (4 hours)
- BUS304: Principles of Finance (4 hours)
- ECO124: Principles of Economics I - Microeconomics (4 hours)
- ECO225: Principles of Economics II - Macroeconomics (4 hours)
- MAT160: Calculus I (4 hours)
- MAT161: Calculus II (4 hours)
- MAT207: Calculus III (4 hours)
- MAT208: Linear Algebra (4 hours)
- CMP112: Computational Thinking I (4 hours)
- CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)

Required Support Courses (Required for all majors)
- CSC110: Problem Solving through Programming (4 hours)
- CSC211: Database Web Creation and Networks (4 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or MAT140 or higher and CSC110 or higher;

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study. Students must take one GE2 course. The GE2 course chosen must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

Fine Arts (F1, F2)

Humanities (H1, H2)

Philosophy/Ethics/Religion (P1, P2)

Social Sciences (S1, S2)

- Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)

  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)

  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)

  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)

  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

  For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)

  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Major Courses

  The list below displays all the courses offered by the major:

  - ASC301: Financial Mathematics (4 hours)
  - ASC302: Probability (4 hours)
  - ASC313: Time Series and Forecasting (2 hours)
  - ASC380: Internship in Actuarial Science (4 to 16 hours)
  - ASC401: Financial Economics (4 hours)
  - ASC402: Life Contingencies (4 hours)
  - ASC451: Financial Economics II (4 hours)
  - ASC452: Life Contingencies II (4 hours)
  - ASC480: Internship in Actuarial Science (4 to 16 hours)

- Applied Physics/Engineering Dual Degree Program

  | Greg Gabrielsen | Lecturer |
  | Bret Kelso      | Lecturer |
  | Damon A. Resnick | Assistant Professor |
  | Tate Wilson     | Lecturer |

  Carroll University, the University of Wisconsin Platteville and the University of Wisconsin Milwaukee offer an inter-university program that allows students to earn two degrees: a B.S. in Applied Physics from Carroll University, and a B.S. in Engineering from the UW-Platteville or UW-Milwaukee. There is also an option to earn a B.S. in Applied Physics from Carroll University and an M.S. in Engineering from UW-Milwaukee. Usually taking 5 years to complete, the Carroll University portion of these 3+2 programs consists of an intensive integrated experience in general engineering, physical science, applied mathematics, computation, and liberal studies. Upon completing the 3 year program at Carroll University, students transfer to the UW-Platteville or UW-Milwaukee for 2 years to complete an engineering degree in any one of the following disciplines: Civil Engineering, Electrical Engineering, Engineering Physics, Industrial Engineering, Mechanical Engineering, and Materials Science. Students receive an Applied Physics degree after the successful completion of their first year at UWP or UWM.

  Learning Outcomes for Applied Physics/Engineering

  1. Prepare students to successfully complete an intensive 2-year engineering curriculum at UW-Platteville or UW-Milwaukee.
  2. Introduce students to the engineering profession, including engineering problem solving, judgment and practice.
  3. Begin development of student awareness of the impact of their work on society, locally, nationally and globally.
Core Courses

- CHE109: Principles of Chemistry I (4 hours)
- CHE110: Principles of Chemistry II (4 hours)
- CHE109L: Principles of Chemistry I - Lab
- CHE110L: Principles of Chemistry II - Lab
- CSC110: Problem Solving through Programming (4 hours)
- GEN100: Engineering Seminar I (1 hour)
- GEN101: Engineering Seminar II (1 hour)
- GEN105: Engineering Graphics (4 hours)
- GEN210: Statics and Dynamics (4 hours)
- GEN310: Strengths of Materials (4 hours)
- GEN320: Advanced Circuits and Electronics (2 hours)
- MAT215: Engineering Mathematics I (4 hours)
- MAT216: Engineering Mathematics II (4 hours)
- MAT160: Calculus I (4 hours)
- MAT161: Calculus II (4 hours)
- MAT207: Calculus III (4 hours)
- PHY203: General Physics I (4 hours)
- PHY204: General Physics II (4 hours)
- PHY303: Modern Physics (4 hours)
- PHY304: Classical Mechanics (4 hours)
- PHY320: Thermodynamics (4 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or MAT140 or higher and CSC110 or higher;

**NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.
FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
  
  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
  
  Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g.
  
  PSY101 (S1) and PSY 221 (S2)).
  
  Fine Arts (F1, F2)

  Humanities (H1, H2)

  Philosophy/Ethics/Religion (P1, P2)

  Social Sciences (S1, S2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)
  
  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's
  
  own culture and a different culture. This course develops oral communication skills through critical reading and
  
  discussion.

- Writing Seminar (ENG 170)
  
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops
  
  foundational writing skills.

- Cross-Cultural Development (CCD)
  
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a
  
  Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as
  
  preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-
  
  campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other
  
  than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)
In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Major Courses

The list below displays all the courses offered by the major:

- GEN100: Engineering Seminar I (1 hours)
- GEN101: Engineering Seminar II (1 hours)
- GEN105: Engineering Graphics (4 hours)
- GEN210: Statics and Dynamics (4 hours)
- GEN310: Strengths of Materials (4 hours)
- GEN320: Advanced Circuits and Electronics (2 hours)
- GEN320L: Advanced Circuits and Electronics Laboratory
- GEN380: Engineering Internship (4 hours)

Chemistry and Biochemistry

Kathleen M. Kiedrowicz  Instructor
Gregory T. Marks  Assistant Professor
Kevin McMahon  Associate Professor
Kent E. Molter  Lecturer
Joseph J. Piatt  Associate Professor
Michael D. Schuder  Associate Professor
Gail M. Vojta  Senior Lecturer

The Chemistry and Biochemistry Program is approved by the Committee on Professional Training of the American Chemical Society. This approval means that the program has the faculty, curriculum and instrumentation necessary to provide a quality education for undergraduate students.

Learning Outcomes for Chemistry and Biochemistry

Upon successful completion of the chemistry or biochemistry major, students will:

1. Understand the basic definitions, concepts and relationships of chemistry.
2. Develop advanced skills in evaluating library searches for primary literature.
3. Understand fundamental laboratory analyses and safety protocols.
4. Perform quantitative and qualitative scientific analyses.
5. Understand the basic theory and use of modern instrumentation.
6. Use computers for chemical applications including technical writing, modeling, data collecting and processing, and database searching.
7. Prepare effective written scientific reports and oral presentations for professional audiences.
8. Work cooperatively in problem solving situations.
9. Understand the benefits and problems of modern chemistry for our society.

Recognizing the individuality of students and that chemistry can be a strong preparation for a variety of careers, the program offers two majors, chemistry and biochemistry, each with multiple emphases. Each of these majors offers courses in the basic areas of inorganic, organic, analytical, physical, and biochemistry, and can be supplemented by special opportunities such as industrial internships and independent research. Modern scientific instrumentation is available and incorporated into all courses of the curriculum. Students are encouraged to consult with chemistry and biochemistry faculty about the various emphases and opportunities associated with each.

Chemistry Major

1. **ACS-Approved Emphasis** is especially suited for students planning on graduate work or desiring the best preparation for industrial employment.
   Upon completion of this emphasis, students will:
   - Develop an advanced understanding in multiple fields of chemistry.
   - Develop an independent research project, acquire and analyze data, and present the results at an off-campus professional meeting.

2. **Forensic Science Emphases** are multidisciplinary programs designed to train students in the analysis of physical and chemical case evidence and the associated legal implications.
   Upon completion of one of these emphases, students will:
   - Understand the basic definitions, concepts and relationships of criminalistics.
   - Understand intake, transport and biochemical processes of toxins in the human body.
   - Gain expertise in the collection and analysis of evidence specific to forensic science.
   - Develop an independent research project, acquire and analyze data, and present the results at Celebrate Carroll.

3. **Pre-Health Science/Professional Emphasis** is for those students who plan to pursue professional work in an allied health field such as medicine, dentistry, optometry, or veterinary science or pursue an industrial career.
   Upon completion of this emphasis, students will:
   - Develop an advanced understanding in a particular field of chemistry.
   - Obtain work-related career experience in an industrial, corporate or medical setting.
FEES

Specific Courses that require use of equipment and disposable supplies are assigned a fee.

- Chemistry Major Core Courses
  - CHE109: Principles of Chemistry I (4 hours)
  - CHE110: Principles of Chemistry II (4 hours)
  - CHE201: Analytical Chemistry (4 hours)
  - CHE203: Organic Chemistry I (4 hours)
  - CHE204: Organic Chemistry II (4 hours)
  - CHE209: Principles of Chemistry I - Lab
  - CHE110L: Principles of Chemistry II - Lab
  - CHE201L: Analytic Chemistry Laboratory
  - CHE203L: Organic Chemistry I Laboratory
  - CHE204L: Organic Chemistry II Laboratory
  - CHE303: Quantum Mechanics and Spectroscopy (4 hours)
  - CHE303L: Quantum Mechanics and Spectroscopy Laboratory
  - CHE308: Biochemistry I (4 hours)
  - CHE308L: Biochemistry I Laboratory
  - CHE401: Advanced Chemical Analysis and Instrumentation (4 hours)
  - CHE402: Capstone - Modern Chemistry (4 hours)
  - CHE209L: Organic Chemistry I Laboratory
  - CHE201L: Analytic Chemistry Laboratory
  - CHE303L: Quantum Mechanics and Spectroscopy Laboratory
  - CHE308L: Biochemistry I Laboratory
  - CHE401L: Advanced Chemical Analysis and Instrumentation Laboratory
  - CHE402L: Capstone - Modern Chemistry Laboratory

- Required Support Courses:
  - MAT160: Calculus I (4 hours)
  - MAT161: Calculus II (4 hours)
  - CSC110: Problem Solving through Programming (4 hours)
  - PHY203: General Physics I (4 hours)
  - PHY204: General Physics II (4 hours)
  - MAT160L: Calculus I - Lab
  - MAT161L: Calculus II - Lab
  - CSC110L: Problem Solving through Programming - Lab
  - PHY203L: General Physics I - Lab
  - PHY204L: General Physics II - Lab

- Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.
FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

- General Education Requirement

For more information on General Education Requirement, click here.

- Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

  - Fine Arts (F1, F2)
  - Humanities (H1, H2)
  - Philosophy/Ethics/Religion (P1, P2)
  - Social Sciences (S1, S2)

- Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)

  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)

  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)

  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS200 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

Global Perspectives Colloquium (CCS400)
In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

ACS-Approved Emphasis
- CHE302: Advanced Inorganic Chemistry (4 hours)
  AND -CHE302L: Advanced Inorganic Chemistry Laboratory
- CHE304: Thermodynamics and Kinetics (4 hours)
  AND -CHE304L: Thermodynamics and Kinetics Lab

To receive recognition of completion of this emphasis, students must earn a C or better in all chemistry major core courses and emphasis specific courses, and present results of a research project at a national chemistry meeting.

Pre-Health Science/Professional Emphasis
One chemistry course numbered 300 or greater (4 credits).

Forensic Science Emphasis
Core Courses plus
- BIO100: Introductory Human Biology (4 hours)
  AND -BIO100L: Introductory Human Biology Laboratory
  OR -HIGHER: Other higher level course of the same subject
- CHE104: Forensic Science (4 hours)
  AND -CHE104L: Forensic Science Laboratory
- SOC103: Introduction to Criminal Justice (4 hours)
- SOC303: Criminal Procedure, Evidence and Investigation (4 hours)

Forensic Science Professional Emphasis
Core Courses plus
- BIO120: General Biology I (4 hours)
  AND -BIO120L: General Biology I Laboratory
- BIO131: Human Genetics (4 hours)
  AND -BIO131L: Human Genetics Lab
- CHE104: Forensic Science (4 hours)
  AND -CHE104L: Forensic Science Laboratory
- CHE310: Advanced Forensic Science (4 hours)
- SOC103: Introduction to Criminal Justice (4 hours)
- SOC303: Criminal Procedure, Evidence and Investigation (4 hours)

Choose three from the following:
- CHE302: Advanced Inorganic Chemistry (4 hours)
  AND -CHE302L: Advanced Inorganic Chemistry Laboratory
- CHE304: Thermodynamics and Kinetics (4 hours)
  AND -CHE304L: Thermodynamics and Kinetics Lab
- CHE306: Synthesis and Structure (4 hours)
- CHE309: Biochemistry II (4 hours)
- CHE480: Internship in Chemistry (1 TO 4 hours)
- GRC230: Digital Photography (4 hours)
- CMP112: Computational Thinking I (4 hours)
- SOC212: Criminology (4 hours)
- SOC304: Introduction to Criminal Law (4 hours)

Chemistry Minor
- CHE109: Principles of Chemistry I (4 hours)
  AND -CHE109L: Principles of Chemistry I - Lab
- CHE110: Principles of Chemistry II (4 hours)
  AND -CHE110L: Principles of Chemistry II - Lab
- CHE201: Analytical Chemistry (4 hours)
  AND -CHE201L: Analytical Chemistry Laboratory
- CHE203: Organic Chemistry I (4 hours)
  AND -CHE203L: Organic Chemistry I Laboratory
- CHE308: Biochemistry I (4 hours)
  AND -CHE308L: Biochemistry I Laboratory

Major Courses
The list below displays all the courses offered by the major:
- CHE101: General Chemistry (4 hours)
- CHE101L: General Chemistry - Laboratory
- CHE102: Biological Chemistry (4 hours)
- CHE102L: Biological Chemistry-Laboratory
- CHE104: Forensic Science (4 hours)
- CHE104L: Forensic Science Laboratory
- CHE106: Drug Discovery (4 hours)
- CHE106L: Drug Discovery Laboratory
- CHE109: Principles of Chemistry I (4 hours)
- CHE109L: Principles of Chemistry I - Lab
- CHE110: Principles of Chemistry II (4 hours)
- CHE110L: Principles of Chemistry II - Lab
- CHE201: Analytical Chemistry (4 hours)
- CHE201L: Analytic Chemistry Laboratory
- CHE203: Organic Chemistry I (4 hours)
Biochemistry Major

1. **ACS-Approved Emphasis** is designed to prepare students for graduate school in chemistry or biochemistry, medical school, or employment in biomedical sciences.

   Upon completion of this emphasis, students will:
   - Develop an advanced understanding in multiple fields of chemistry and biological chemistry.
   - Develop an independent research project, acquire and analyze data, and present the results at an off-campus professional meeting.

2. **Pre-Health Science / Professional Emphasis** provides a mixture of chemistry and biology courses and is designed for students who are interested in biology but want to solidify their understanding of the molecular view of it. Graduates will be prepared for professional school, graduate school, medical school or employment in biological and biomedical sciences.

   Upon completion of this emphasis, students will:
   - Develop an advanced understanding in a particular field of biological chemistry.
   - Develop an advanced understanding of medical biology.
   - Develop an independent research project, acquire and analyze data, and present the results at Celebrate Carroll.

3. **Pre-Pharmacy Emphasis** is a 3+1 program designed to prepare students for direct admission to a pharmacy program. While this emphasis contains courses required for admission to most pharmacy programs in the US during the student’s first three years, a matriculation agreement with Rosalind Franklin University of Medicine and Science (RFUMS) allows students who are admitted to RFUMS to transfer first year coursework completed at RFUMS back to Carroll and receive a Bachelor of Science in biochemistry with Pre-Pharmacy Emphasis from Carroll University. Students not attending RFUMS may add a fourth year at Carroll to complete a biochemistry degree with Pre-Health Science/Professional Emphasis.

### Biochemistry Major Core Courses

- BIO120: General Biology I (4 hours)
  - AND -BIO120L: General Biology I Laboratory
- BIO125: General Biology II (4 hours)
  - AND -BIO125L: General Biology II Laboratory
- CHE109: Principles of Chemistry I (4 hours)
  - AND -CHE109L: Principles of Chemistry I - Lab
- CHE110: Principles of Chemistry II (4 hours)
  - AND -CHE110L: Principles of Chemistry II - Lab
- CHE203: Organic Chemistry I (4 hours)
  - AND -CHE203L: Organic Chemistry I Laboratory
- CHE204: Organic Chemistry II (4 hours)
  - AND -CHE204L: Organic Chemistry II Laboratory
- CHE308: Biochemistry I (4 hours)
  - AND -CHE308L: Biochemistry I Laboratory
- CHE309: Biochemistry II (4 hours)

### Required Support Courses

- CSC110: Problem Solving through Programming (4 hours)
- MAT160: Calculus I (4 hours)
  - AND -MAT161: Calculus II (4 hours)
- PHY203: General Physics I (4 hours)
  - AND -PHY203L: General Physics Laboratory
- PHY204: General Physics II (4 hours)
  - AND -PHY204L: General Physics Laboratory

### Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;
NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

• General Education Requirement

For more information on General Education Requirement, click here.

• Distribution Component

For more information on the Distribution Component, click here.

  • GE1 and GE2 Courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
Fine Arts (F1, F2)
Humanities (H1, H2)
Philosophy/Ethics/Religion (P1, P2)
Social Sciences (S1, S2)

• Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

  • Cultural Seminar (CCS100)

The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

  • Writing Seminar (ENG 170)

The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

  • Cross-Cultural Development (CCD)

The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

  • Cross-Cultural Experience (CCE)

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

• Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

• ACS-Approved Emphasis

• Core Courses plus

  • BIO220: Genetics (4 hours)
    AND -BIO220L: Genetics Laboratory
  • BIO332: Gene Manipulation and Genomics (4 hours)
    AND -BIO332L: Gene Manipulation and Genomics Lab
  • BIO452: Advanced Cell Biology (4 hours)
    AND -BIO452L: Advanced Cell Biology Laboratory
  • CHE201: Analytical Chemistry (4 hours)
    AND -CHE201L: Analytic Chemistry Laboratory
  • CHE302: Advanced Inorganic Chemistry (4 hours)
    AND -CHE302L: Advanced Inorganic Chemistry Laboratory
  • CHE303: Quantum Mechanics and Spectroscopy (4 hours)
    AND -CHE303L: Quantum Mechanics and Spectroscopy Laboratory
  • CHE304: Thermodynamics and Kinetics (4 hours)
    AND -CHE304L: Thermodynamics and Kinetics Lab
  • CHE401: Advanced Chemical Analysis and Instrumentation (4 hours)
    AND -CHE401L: Advanced Chemical Analysis and Instrumentation Laboratory
  • CHE402: Capstone - Modern Chemistry (4 hours)
    AND -CHE402L: Capstone - Modern Chemistry Laboratory

To receive recognition of completion of this emphasis, students must earn a C or better in all chemistry major core courses and emphasis specific courses, and present results of a research project at a national chemistry meeting.

• Pre-Health Science/Professional Emphasis

• Core Courses Plus
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>BIO220</td>
<td>Genetics</td>
<td>4</td>
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<tr>
<td>BIO220L</td>
<td>Genetics Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIO452</td>
<td>Advanced Cell Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO452L</td>
<td>Advanced Cell Biology Laboratory</td>
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<tr>
<td>CHE201</td>
<td>Analytical Chemistry</td>
<td>4</td>
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<td>CHE201L</td>
<td>Analytic Chemistry Laboratory</td>
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<tr>
<td>CHE401</td>
<td>Advanced Chemical Analysis and Instrumentation</td>
<td>4</td>
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<tr>
<td>CHE401L</td>
<td>Advanced Chemical Analysis and Instrumentation Laboratory</td>
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<tr>
<td>CHE402</td>
<td>Capstone - Modern Chemistry</td>
<td>4</td>
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<tr>
<td>CHE402L</td>
<td>Capstone - Modern Chemistry Laboratory</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>CHE480: Internship in Chemistry (1 TO 4 hours)</td>
<td></td>
</tr>
</tbody>
</table>

Choose one course from the following:

- BIO225: Organismal Physiology (4 hours)
- BIO225L: Organismal Physiology Laboratory
- BIO271: Clinical Immunology (4 hours)
- BIO271L: Clinical Immunology Laboratory
- BIO312: Microbiology (4 hours)
- BIO312L: Microbiology Laboratory
- BIO332: Gene Manipulation and Genomics (4 hours)
- BIO332L: Gene Manipulation and Genomics Lab
- BIO350: Endocrinology (4 hours)
- BIO130: Introduction to Human Anatomy and Physiology I (4 hours)
- BIO130L: Intro to Human Anat and Phys I Lab
- BIO140: Introduction to Human Anatomy and Physiology II (4 hours)
- BIO140L: Intro to Human Anat and Phys II Lab
- ECO124: Principles of Economics I - Microeconomics (4 hours)
- HIS103: Roots of the Western World (4 hours)
- HIS104: Europe and the Modern World (4 hours)
- PSY101: Introductory Psychology (4 hours)
- RFUMS YPHS504: Biochemical Principles for Pharmacy
- RFUMS PBBS 505A: Microbiology and Immunology

**Biochemistry Minor**

- BIO130: Introduction to Human Anatomy and Physiology I (4 hours)
- BIO130L: Intro to Human Anat and Phys I Lab
- BIO140: Introduction to Human Anatomy and Physiology II (4 hours)
- BIO140L: Intro to Human Anat and Phys II Lab
- CHE109: Principles of Chemistry I (4 hours)
- CHE109L: Principles of Chemistry I - Lab
- CHE110: Principles of Chemistry II (4 hours)
- CHE110L: Principles of Chemistry II - Lab
- CHE203: Organic Chemistry I (4 hours)
- CHE203L: Organic Chemistry I Laboratory
- CHE308: Biochemistry I (4 hours)
- CHE308L: Biochemistry I Laboratory

**Computational Science**

- Chenglie Hu: Professor of Computer Science
- Darrel Johnson: Instructor of Mathematics
- Michael G. Konemann: Associate Professor
- Chris Kuster: Assistant Professor of Mathematics
- Christopher May: Associate Professor of Psychology
- Marie S. Schwermer: Lecturer
- John Symms: Associate Professor of Mathematics

Computational Science is the third branch of science. It is a marriage of the experimental and theoretical, combining modeling and programming to test scientific hypotheses. Techniques and skills in data analysis, algorithmic design and implementation, and mathematical modeling are fundamental in the discipline. Increasingly in modern scientific research, doing exploratory computational work prior to actual laboratory experimentation is common, both as a time and money-saver. In health-related areas, dealing successfully with massive amounts of data in different formats is a critical hurdle toward effective and efficient care.

**Learning Outcomes for Computational Science**

Upon completion of the major and degree requirements the successful graduate will have:

1. a robust understanding of the three broad areas that comprise computational science:
   a. Data processing and analysis
   b. Algorithmic design, analysis, and implementation c. Mathematical modeling and analysis;
2. the ability to work independently to effectively describe a problem within a computational science framework, and create and implement a plan to solve that problem;
3. understanding of the interdisciplinary nature of computational science, and being able to solve, computationally, problems in an chosen related major/minor discipline;
4. an understanding and appreciation of the historical development of computation and the role of computational science in modern applications within data-dependent disciplines.
NOTE: Students must minor or major in another discipline in which a Bachelor of Science can be earned.

- CMP112: Computational Thinking I (4 hours)
- CMP113: Computational Thinking II (4 hours)
  OR -CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)
- CMP330: Computational Techniques for Life and Behavioral Sciences (4 hours)
- CMP340: Computational Techniques for Physical Sciences (4 hours)
- CSC111: Introduction to JAVA (4 hours)
  OR -CSC112: Advanced Programming with C# (4 hours)
- CSC226: Data Structures using JAVA (4 hours)
- CSC351: Database Design and Implementation (4 hours)
- MAT160: Calculus I (4 hours)
- MAT161: Calculus II (4 hours)
- MAT208: Linear Algebra (4 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.
FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
  Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

Fine Arts (F1, F2)

Humanities (H1, H2)

Philosophy/Ethics/Religion (P1, P2)

Social Sciences (S1, S2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)
  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Computational Science Minor

- CMP112: Computational Thinking I (4 hours)
- CMP113: Computational Thinking II (4 hours)
  OR -CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)
  OR -CSC110: Problem Solving through Programming (4 hours)
- CMP330: Computational Techniques for Life and Behavioral Sciences (4 hours)
  OR - CMP340: Computational Techniques for Physical Sciences (4 hours)
- CSC111: Introduction to JAVA (4 hours)
  OR - CSC112: Advanced Programming with C# (4 hours)
- MAT140: Calculus and Its Applications (4 hours)
  OR - MAT160: Calculus I (4 hours)

**Major Courses**

The list below displays all the courses offered by the major:

- CMP112: Computational Thinking I (4 hours)
- CMP113: Computational Thinking II (4 hours)
- CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)
- CMP330: Computational Techniques for Life and Behavioral Sciences (4 hours)
- CMP340: Computational Techniques for Physical Sciences (4 hours)

**Computer Science and Information Technology**

Chenglie Hu  Professor
Gerald L. Isaacs  Professor
Michael G. Konemann  Associate Professor
Marie S. Schwerm  Lecturer

**Mission Statement**

In accordance with the mission of Carroll University, the Computing and IT Programs provide an excellent and state-of-the-art educational opportunity for students based on their individual skill sets, interests and career goals in the areas of modern software development, business problem solving, and IT problem solving and support. Both programs enable students to combine their theoretical and technical understanding with their broad-based liberal-arts education to think analytically and critically when designing and implementing software or IT solutions.

**Learning Outcomes for Computer Science Major**

Graduates of the Computer Science Program are able to:

1. Problem-solve (for business, scientific, Web, and recreational problems) through programming using multiple programming paradigms, enterprise resources, different software development frameworks, sound software design techniques and software engineering practices.
2. Successfully work in or be adapted to an organization in any business setting to meet technology challenges.
3. Further their academic pursuits and meet challenges in graduate schools by having the necessary body of theory that underpins the discipline of computer science.
4. Demonstrate an understanding of ethics as it applies to the discipline of computer science.
5. Work effectively as part of a team.

**Learning Outcomes for Information Technology Major**

Graduates of the Information Technology Program are able to:

1. Think creatively and analytically in technological problem-solving.
2. Problem-solve using productivity software and through computer programming.
3. Demonstrate an understanding of information system and technology evaluation and management.
4. Demonstrate an understanding of the application of new and developing technologies with sensitivity for security and ethical issues at global, societal, organizational, and personal levels.
5. Work effectively as part of a team.

In addition, graduates of the CSC major with Computer-Game Development emphasis are able to:

1. Design game stories, implement them in code, and test working games against various game-playing platforms,
2. Apply knowledge of data structures, software analysis and design to implement efficient game programs,
3. Apply knowledge of artificial intelligence and computer graphics to develop interactive and aesthetic games of good quality and reasonable size.

The Computer Science and IT programs are grounded in the liberal arts tradition, balance theory and practice, and focus on the problem-solving skills necessary for life-long learning in a field characterized by rapid change in technology. We succeed in our mission by preparing our students through classroom work and appropriate external internships to secure fulfilling careers in the field of their choosing.

The world has been in an era of rapid technological advancement. The Internet, World Wide Web, and Mobile Computing have increasingly become critically important in corporate strategies, people’s social lives and personal development. We recognize this by integrating the latest technologies into the curricula. The curricula are designed to emphasize problem solving, multiple programming paradigms, and higher order thought processes that will always be needed by corporate America under any business models.

Several emphases and minors are available within the computer science program. Each allows students to begin taking required major courses during the fall semester of the freshman year.

Computer Science majors may select the:

* Software Engineering emphasis if interested in developing the skills necessary to design and build large and reliable software systems.
* Information Systems emphasis if they desire to work as system analysts in business.
* Internet & Mobile Software Development emphasis if interested in software development for smartphones, tablets, etc.
* Computer-Game Development emphasis if they wish to work as video game developers. These skills also carry over to developing a wide range of other types of software.
Note that the CSC major emphases are defined by additional courses taken beyond the core.

Computer Science or Information Technology minors complete the same core minor courses and select an additional set of courses based on personal interests.

Our programs have close ties with local industry and offer students the opportunity to participate in paid internships or cooperative programs with various companies for university credit.

Computer science and information technology students at Carroll work on state-of-the-art computing facilities with the latest software application packages. They have access to Microsoft, Macintosh, and Unix/Linux computing platforms, and Oracle or Microsoft SQL Server Database Management Systems via the campus-wide network. There is equipment exclusively available for the use of computer science and information technology majors.

- **Computer Science Major (48 to 92 credits)**

  Students with any major emphasis must complete 16 credit hours of core courses for the Computer Science major along with the emphasis support and required support courses of their chosen emphasis in addition to all other university requirements.

  **Note:** The upper limit is achieved via the joint Carroll-MATC game development program, a credit-heavy professional experience.

  - **Core Courses for the Computer Science Major (40 credits)**
    - CSC110: Problem Solving through Programming (4 hours)
    - CSC111: Introduction to JAVA (4 hours)
    - CSC211: Database Web Creation and Networks (4 hours)
    - CSC226: Data Structures using JAVA (4 hours)
    - CSC271: Computer Organization (2 hours)
    - CSC272: Computer Architecture (2 hours)
    - CSC303: Network Protocols (4 hours)
    - CSC341: Software Design and Development (4 hours)
    - CSC351: Database Design and Implementation (4 hours)
    - CSC450: Projects-Computer Science Majors (4 hours)
    - CSC480: Internship in Computer Science (1 TO 12 hours)

  - **Required Support Courses for the Computer Science Major (8 credits)**
    - COM101: Principles of Communication (4 hours)
    - MAT140: Calculus and Its Applications (4 hours)
    - OR -MAT160: Calculus I (4 hours)

- **Information Technology Major (60 credits)**

  - **Core for Information Technology Major (44 credits)**
    - CMP112: Computational Thinking I (4 hours)
    - CSC112: Advanced Programming with C# (4 hours)
    - CSC211: Database Web Creation and Networks (4 hours)
    - CSC220: Information Systems (4 hours)
    - CSC271: Computer Organization (2 hours)
    - CSC272: Computer Architecture (2 hours)
    - CSC303: Network Protocols (4 hours)
    - CSC307: Operating Systems and Web Master Fundamentals-Unix/Linux Apache (4 hours)
    - CSC319: World Wide Web Programming (4 hours)
    - CSC351: Database Design and Implementation (4 hours)
    - CSC401: Advanced Network Protocols and Programming (4 hours)
    - CSC409: Information Technology Mgmt in an E-Commerce World (4 hours)
    - CSC480: Internship in Computer Science (1 TO 12 hours)

  - **Required Support Courses for Information Technology Major (12 additional credits)**
    - BUS101: Introduction to Business (4 hours)
    - BUS302: Principles of Management (4 hours)
    - COM101: Principles of Communication (4 hours)

- **Bachelor of Science Requirement**

  The requirements for a Bachelor of Science degree are:

  - CMP112 and either CMP113 or CMP114 or
  - MAT140 or higher and CSC110 or higher;

  **NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.  
  FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR**

- **General Education Requirement**

  For more information on General Education Requirement, [click here](#).

  - **Distribution Component**

    For more information on the Distribution Component, [click here](#).

    - **GE1 and GE2 Courses**
      
      Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
      Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

      - Fine Arts (F1, F2)
      - Humanities (H1, H2)
Philosophy/Ethics/Religion (P1, P2)

Social Sciences (S1, S2)

Cross-Cultural Component
The Cross-Cultural Component is a five-course series through which students explore the study of culture:

- Cultural Seminar (CCS100)
  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

Global Perspectives Colloquium (CCS400)
In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Software Engineering Emphasis (28 additional credits)
  - CMP112: Computational Thinking I (4 hours)
    OR -MAT161: Calculus II (4 hours)
  - CSC319: World Wide Web Programming (4 hours)
  - CSC323: Programming Languages (4 hours)
  - CSC431: Artificial Intelligence (4 hours)
    OR -CSC437: Computer Graphics (4 hours)
  - CSC440: Software Engineering (4 hours)
  - MAT205: Discrete Mathematics (4 hours)
  - PHY203: General Physics I (4 hours)
    AND -PHY203L: General Physics Laboratory

- Information Systems Emphasis (32 additional credits)
  - ACC205: Financial Accounting (4 hours)
  - BUS101: Introduction to Business (4 hours)
  - BUS301: Principles of Marketing (4 hours)
  - CMP112: Computational Thinking I (4 hours)
  - CSC220: Information Systems (4 hours)
  - CSC409: Information Technology Mgmt in an E-Commerce World (4 hours)
  - ECO124: Principles of Economics I - Microeconomics (4 hours)
  - MAT205: Discrete Mathematics (4 hours)

- Internet & Mobile Software Development Emphasis (24 additional credits)
  - CMP112: Computational Thinking I (4 hours)
  - CSC220: Information Systems (4 hours)
  - CSC319: World Wide Web Programming (4 hours)
  - CSC352: Advanced Business Web Applications (4 hours)
  - CSC353: Mobile Application Development (4 hours)
  - GRC320: Intro to Multimedia Production (4 hours)

- Computer-Game Development Emphasis (44 additional credits)
  - BUS101: Introduction to Business (4 hours)
  - CSC431: Artificial Intelligence (4 hours)
  - CSC437: Computer Graphics (4 hours)
  - GRC360: Digital Flash Gaming (4 hours)
  - PHY101: Introductory Physics I (4 hours)
    AND -PHY101L: Introductory Physics Laboratory
  - PHY102: Introductory Physics II (4 hours)
    AND -PHY102L: Introductory Physics Laboratory
  - Courses taken at MATC:
    - VICOM-110: Introduction to Computer Simulation and Gaming (3 hours)
    - VICOM-115: CSG Production (3 hours)
    - VICOM-129: CSG Architecture (2 hours)
    - VICOM-130: CSG Design (3 hours)
    - VICOM-140: Visual Communication Practices (2 hours)
    - VICOM-180: Multimedia Collaborative Lab (3 hours)
    - VICOM-181: CSG Collaborative Lab (4 hours)

- Computer Science Minor (24 credits)

Required Core Courses
- CSC111: Introduction to JAVA (4 hours)
- CSC226: Data Structures using JAVA (4 hours)
- CSC271: Computer Organization (2 hours)
- CSC272: Computer Architecture (2 hours)
- CSC341: Software Design and Development (4 hours)

Choose two courses from the following list:
- CSC220: Information Systems (4 hours)
- CSC303: Network Protocols (4 hours)
- CSC307: Operating Systems and Web Master Fundamentals-Unix/Linux Apache (4 hours)
- CSC319: World Wide Web Programming (4 hours)
- CSC323: Programming Languages (4 hours)
- CSC351: Database Design and Implementation (4 hours)
- CSC401: Advanced Network Protocols and Programming (4 hours)
- CSC402: Fundamentals of Network Security Design and Implementation (4 hours)
- CSC409: Information Technology Mgmt in an E-Commerce World (4 hours)
- CSC421: Algorithms (4 hours)
- CSC431: Artificial Intelligence (4 hours)
- CSC437: Computer Graphics (4 hours)
- CSC440: Software Engineering (4 hours)

It is recommended that student refer to the following list to choose two courses based on an area of interest:

- Web Development: Computer Science 319 and Computer Science 351
- Computer Networking: Computer Science 303 and Computer Science 401
- Software Engineering: Computer Science 409 and Computer Science 440
- Computer Science Core: Computer Science 323 and Computer Science 421
- Information Systems: Computer Science 220 and Computer Science 409
- Information Technology: Computer Science 309 and Computer Science 351
- Computer Game Development: Computer Science 401 and Computer Science 437

Information Technology Minor (26 credits)

Required Core Courses
- CSC110: Problem Solving through Programming (4 hours)
- CSC211: Database Web Creation and Networks (4 hours)
- CSC271: Computer Organization (2 hours)
- CSC409: Information Technology Mgmt in an E-Commerce World (4 hours)

Choose three courses from the following list:
- CSC111: Introduction to JAVA (4 hours)
  OR - CSC112: Advanced Programming with C# (4 hours)
- CSC220: Information Systems (4 hours)
- CSC303: Network Protocols (4 hours)
- CSC307: Operating Systems and Web Master Fundamentals-Unix/Linux Apache (4 hours)
- CSC319: World Wide Web Programming (4 hours)
- CSC351: Database Design and Implementation (4 hours)
- CSC352: Advanced Business Web Applications (4 hours)
- CSC401: Advanced Network Protocols and Programming (4 hours)
- CSC402: Fundamentals of Network Security Design and Implementation (4 hours)
- GRC295: 3-D Digital Design (4 hours)
- GRC320: Intro to Multimedia Production (4 hours)
- GRC360: Digital Flash Gaming (4 hours)

It is recommended that students refer to the following list to choose three courses based on an area of interest:

- Web Development: Computer Science 112, Computer Science 319 and Computer Science 351
- Computer Networking: Computer Science 303, Computer Science 304 and Computer Science 401
- Server and Database Administrator: Computer Science 111 or Computer Science 112, Computer Science 309 and Computer Science 351
- Digital Production: Graphic Communication 295, Graphic Communication 320 and Graphic Communication 360
- Network Security: Computer Science 303, Computer Science 304, and Computer Science 402

Because of rapid advancement of computing technology, some computer science courses taken by students with one or more semester gaps between registrations (summer not included) and outside of a four year period may be subject to approval by computer science faculty before meeting graduation requirements.

Major Courses

The list below displays all the courses offered by the major:

- CSC107: Problem Solving Using Information Technology (2 hours)
- CSC109: Technological Productivity (2 hours)
- CSC110: Problem Solving through Programming (4 hours)
- CSC111: Introduction to JAVA (4 hours)
- CSC112: Advanced Programming with C# (4 hours)
- CSC211: Database Web Creation and Networks (4 hours)
- CSC220: Information Systems (4 hours)
- CSC226: Data Structures using JAVA (4 hours)
- CSC271: Computer Organization (2 hours)
- CSC272: Computer Architecture (2 hours)
- CSC303: Network Protocols (4 hours)
- CSC307: Operating Systems and Web Master Fundamentals-Unix/Linux Apache (4 hours)
- CSC319: World Wide Web Programming (4 hours)
- CSC320: Programming Using C++ (4 hours)
Computer Science Dual Degree Program

This program allows students to gain a solid computer science background and advanced professional software development skills on an accelerated pace and be ready for the challenges of the information technology industry upon graduation. The program allows students to be able to still finish a Bachelor of Science degree in four years or fewer should they choose not to continue with the five-year program.

Admission Requirement

Students must major in Computer Science with emphasis in either Software Engineering or ABET-Suggested Curriculum to be eligible for this five-year program. Students may be admitted to the five-year BS-MSE dual degree program as freshmen. However, a combination of a GPA of 3.0 or higher in the major and an overall GPA of 2.75 or higher is required to remain in the five-year program. Alternatively, a student with a GPA of 3.0 or higher in the major and overall GPA of 2.75 or higher may be admitted to the five-year degree program any time before 80 undergraduate credit hours are completed. The latest that a student can apply for admission is during the second semester of his or her junior year.

Sample Course Completion Schedule for CS/SE Emphasis

Sample Course Completion Schedule for CS/ABET-Suggested Curriculum Emphasis

Mathematics

The major in mathematics includes courses in pure and applied mathematics, offering a broad and in-depth foundation for students with diverse interests and backgrounds. All courses in the curriculum develop logical thinking, quantitative reasoning, and deductive analysis, making majors and minors highly attractive to graduate schools and employers in industry.

Combined with complementary course work, a mathematics major gives strong preparation for graduate study in an increasingly wide variety of disciplines. These include biostatistics, computer science, economics, forestry, genetics, meteorology, operations research, physics, psychology, pure and applied mathematics, sociology, and most engineering fields.

Career opportunities for those with a mathematics major are equally varied. These include positions in the fields of actuarial science, banking and financial services, communications, computer science, consulting, government, health services, management, public policy, research organizations, utilities, and transportation.

The major in mathematics is approved by the Wisconsin Department of Public Instruction for certification in mathematics.1

Please see Academic Program and Policies in this catalog for information about how retroactive credits in calculus may be earned.

Learning Outcomes for Mathematics

Students majoring in mathematics are expected to:

1. Learn to read, write, speak and do mathematics.
2. Demonstrate competence in the use of appropriate technology in support of mathematical calculation, symbolic manipulation and graphical analysis.
3. Demonstrate their understanding of the nature of mathematical proof.
4. Apply mathematics to a variety of problems in the natural, computational and social sciences.
5. Learn the contributions of mathematics and mathematicians to the growth of knowledge.
6. Prepare for advanced studies in mathematics or for a profession.
7. Develop an appreciation for mathematics as an art.

Students must normally maintain a 2.75 grade point average in the major to remain in good standing in the Teacher Education Program.

Mathematics Major (B.A.)

- **Courses in the Major**
  - MAT160: Calculus I (4 hours)
  - MAT161: Calculus II (4 hours)
  - MAT207: Calculus III (4 hours)
  - MAT206: Transition to Adv Mathematics (4 hours)
  - MAT208: Linear Algebra (4 hours)
  - MAT320: Abstract Algebra (4 hours)
  - MAT409: Mathematical Analysis (4 hours)
  - MAT450: Mathematics Senior Capstone (2 TO 4 hours)
  - Two of the following six courses:
    - MAT250: Mathematics Seminar (4 hours)
    - MAT305: Modern Geometry (4 hours)
    - MAT309: Differential Equations (4 hours)
    - MAT312: Theory of Probability & Statistics (4 hours)
    - MAT324: Numerical Analysis (4 hours)
    - MAT350: Mathematics Seminar (4 hours)

- **Required Support Courses (Required for primary majors only)**
  
  Completion of a Modern Language through 202

  *To be certified by the DPI, students must take Mathematics 305 and 312.

- **Bachelor of Arts Requirement**

  Bachelor of Arts students must take 8 credits in a modern language (MLL) other than English and MAT106 or higher.

  **NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR.

General Education Requirement

For more information on General Education Requirement, click here.

- **Distribution Component**

  For more information on the Distribution Component, click here.

  - GE1 and GE2 Courses

    Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study. Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

    Fine Arts (F1, F2)

    Humanities (H1, H2)

    Philosophy/Ethics/Religion (P1, P2)

    Social Sciences (S1, S2)

- **Cross-Cultural Component**

  The Cross-Cultural Component is a five-course series through which students explore the study of culture:

  Transfer students will register for CCS101 for one credit.

  - Cultural Seminar (CCS100)

    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

  - Writing Seminar (ENG 170)

    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

  - Cross-Cultural Development (CCD)
The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- **Cross-Cultural Experience (CCE)**

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- **Global Perspectives Colloquium (CCS400)**

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- **Mathematics Major (B.S.)**

  - **Courses in the Major**
    - MAT160: Calculus I (4 hours)
    - MAT161: Calculus II (4 hours)
    - MAT207: Calculus III (4 hours)
    - MAT206: Transition to Adv Mathematics (4 hours)
    - MAT208: Linear Algebra (4 hours)
    - MAT300: Abstract Algebra (4 hours)
    - MAT409: Mathematical Analysis (4 hours)
    - MAT450: Mathematics Senior Capstone (2 TO 4 hours)
  - **Three of the following four courses:**
    - MAT305: Modern Geometry (4 hours)
    - MAT309: Differential Equations (4 hours)
    - MAT312: Theory of Probability & Statistics (4 hours)
    - MAT324: Numerical Analysis (4 hours)
  - **Required Support Courses (Required for primary majors only)**
    - CSC110: Problem Solving through Programming (4 hours)
    - PHY203: General Physics I (4 hours)
    - PHY204: General Physics II (4 hours)

*To be certified by the DPI, students must take Mathematics 305 and 312, and a biological science. Students not minoring in secondary education must take Physics 204.

- **Bachelor of Science Requirement**

  The requirements for a Bachelor of Science degree are:

  - CMP112 and either CMP113 or CMP114 or
  - MAT140 or higher and CSC110 or higher;

  **NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

- **General Education Requirement**

  For more information on General Education Requirement, click here.

- **Distribution Component**

  For more information on the Distribution Component, click here.

  - **GE1 and GE2 Courses**
    - Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
    - Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
    - Fine Arts (F1, F2)
    - Humanities (H1, H2)
    - Philosophy/Ethics/Religion (P1, P2)
    - Social Sciences (S1, S2)

- **Cross-Cultural Component**

  The Cross-Cultural Component is a five-course series through which students explore the study of culture:

  - Transfer students will register for CCS101 for one credit.
  - Cultural Seminar (CCS100)
    - The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.
  - Writing Seminar (ENG 170)
The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

  For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Mathematics Minor
  Three additional courses in Mathematics at the 200-level or higher excluding Mathematics 201, 205.
  - CMP112: Computational Thinking I (4 hours)
  - MAT160: Calculus I (4 hours)
  - MAT161: Calculus II (4 hours)
  - Other requirements
    Three additional courses in Mathematics at the 200-level or higher excluding:
    Mathematics 201, 205

- Secondary Education Mathematics Minor
  - MAT160: Calculus I (4 hours)
  - MAT161: Calculus II (4 hours)
  - MAT206: Transition to Adv Mathematics (4 hours)
  - MAT207: Calculus III (4 hours)
  - MAT305: Modern Geometry (4 hours)
  - MAT312: Theory of Probability & Statistics (4 hours)

- Elementary Education Mathematics Minor
  - MAT104: Foundations of Elementary Mathematics I (4 hours)
  - MAT140: Calculus and Its Applications (4 hours)
    OR - MAT160: Calculus I (4 hours)
  - MAT201: Foundations of Elementary Mathematics II (4 hours)
  - MAT206: Transition to Adv Mathematics (4 hours)
  - MAT305: Modern Geometry (4 hours)
  - CMP112: Computational Thinking I (4 hours)

- Major Courses
  The list below displays all the courses offered by the major:
  - MAT101: Intermediate Algebra (4 hours)
  - MAT104: Foundations of Elementary Mathematics I (4 hours)
  - MAT106: Mathematics for the Liberal Arts (4 hours)
  - MAT130: Elementary Functions (4 hours)
  - MAT140: Calculus and Its Applications (4 hours)
  - MAT160: Calculus I (4 hours)
  - MAT160L: Calculus I - Laboratory
  - MAT161: Calculus II (4 hours)
  - MAT161L: Calculus II - Laboratory
  - MAT201: Foundations of Elementary Mathematics II (4 hours)
  - MAT205: Discrete Mathematics (4 hours)
  - MAT206: Transition to Adv Mathematics (4 hours)
  - MAT207: Calculus III (4 hours)
  - MAT208: Linear Algebra (4 hours)
  - MAT215: Engineering Mathematics I (4 hours)
  - MAT216: Engineering Mathematics II (4 hours)
  - MAT250: Mathematics Seminar (4 hours)
  - MAT305: Modern Geometry (4 hours)
  - MAT309: Differential Equations (4 hours)
  - MAT312: Theory of Probability & Statistics (4 hours)
  - MAT320: Abstract Algebra (4 hours)
  - MAT324: Numerical Analysis (4 hours)
  - MAT330: Mathematics Seminar (4 hours)
  - MAT391: Adv Topics in Mathematics (2 TO 4 hours)
  - MAT409: Mathematical Analysis (4 hours)
  - MAT450: Mathematics Senior Capstone (2 TO 4 hours)
  - MAT491: Adv Topics in Mathematics (2 TO 4 hours)

- Applied Physics
  - Bret Kelso: Lecturer
  - Greg Gabrielsen: Lecturer
  - Damon A. Resnick: Assistant Professor
  - Tate Wilson: Lecturer

  Applied Physics majors may complete their degree at Carroll University, the University of Wisconsin–Platteville, or the University of Wisconsin–Milwaukee in accordance with the pre-engineering program. For details on this program see a member of the Physics or
Mathematics faculty. In either case, the Applied Physics major provides a strong foundation for further studies in physics, engineering, computers, law and medicine. Applied Physics majors can find jobs immediately after graduation in a variety of technologically demanding careers.

Physics minors are encouraged to select additional supporting courses in the other sciences. The minor provides excellent preparation for a career in many fields including mathematics, chemistry, biology, medicine and physical therapy.

A certification program to teach physics at the secondary level, with a minor in physics, is available. Details of this program can be obtained from either the physics or the education faculty.

Learning Outcomes for the Applied Physics

Upon completion of the major and degree requirements the successful graduate will have:

1. a robust understanding of classical physics theories, including Newtonian mechanics, classical electrodynamics, thermodynamics, and 20th century physics, as well as some current topics in physics and engineering;
2. the ability to work independently to describe a problem within a physical system and create a plan to solve that problem;
3. the ability to apply physical theories to practical problems using both analytical and numerical techniques;
4. an understanding and appreciation of the interdisciplinary nature of physics, particularly in relation to chemistry and mathematics;
5. an understanding and appreciation of the historical development of physics and the role of physics in modern technology.
6. an understanding and appreciation of the basic physical principles underlying the universe.

Fees

Specific courses that require use of equipment and disposable supplies are assigned a course fee.

Applied Physics Major

Core

- PHY203: General Physics I (4 hours)
  - PHY203L: General Physics Laboratory
- PHY204: General Physics II (4 hours)
  - PHY204L: General Physics Laboratory
- OR - PHY101: Introductory Physics I (4 hours)
  - PHY101L: Introductory Physics Laboratory
- PHY102: Introductory Physics II (4 hours)
  - PHY102L: Introductory Physics Laboratory
- PHY301: Electricity and Magnetism (4 hours)
  - PHY301L: Electricity and Magnetism Laboratory
- PHY303: Modern Physics (4 hours)
  - PHY303L: Modern Physics Laboratory
- PHY304: Classical Mechanics (4 hours)
  - PHY304L: Classical Mechanics Laboratory
- PHY320: Thermodynamics (4 hours)
- PHY450: Advanced Experimental Physics (4 hours)
- MAT160: Calculus I (4 hours)
- MAT161: Calculus II (4 hours)
- MAT207: Calculus III (4 hours)
- GEN100: Engineering Seminar I (1 hours)
- GEN101: Engineering Seminar II (1 hours)

Required Support Courses

- CHE109: Principles of Chemistry I (4 hours)
  - CHE109L: Principles of Chemistry I - Lab
- CHE110: Principles of Chemistry II (4 hours)
  - CHE110L: Principles of Chemistry II - Lab
- CSC110: Problem Solving through Programming (4 hours)
- MAT216: Engineering Mathematics II (4 hours)
  - MAT216L: Engineering Mathematics II - Lab
  - OR - MAT309: Differential Equations (4 hours)

12 hours of electives in the Mathematics and Physics programs.

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112
- and either CMP113 or CMP114
- or MAT140 or higher and CSC110 or higher;

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.

FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

GE1 and GE2 Courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

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For more information and course listings, click here

Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Physics Minor

- Core
  
  - PHY203: General Physics I (4 hours)
  - AND -PHY203L: General Physics Laboratory
  - AND -PHY204: General Physics II (4 hours)
  - AND -PHY204L: General Physics Laboratory
  - OR -PHY101: Introductory Physics I (4 hours)
  - AND -PHY101L: Introductory Physics Laboratory
  - AND -PHY102: Introductory Physics II (4 hours)
  - AND -PHY102L: Introductory Physics Laboratory

- Two of the following
  
  - PHY301: Electricity and Magnetism (4 hours)
  - AND -PHY301L: Electricity and Magnetism Laboratory
  - PHY303: Modern Physics (4 hours)
  - AND -PHY303L: Modern Physics Laboratory
  - PHY304: Classical Mechanics (4 hours)
  - AND -PHY304L: Classical Mechanics Laboratory
  - PHY320: Thermodynamics (4 hours)

Major Courses

The list below displays all the courses offered by the major:

- PHY101: Introductory Physics I (4 hours)
- PHY101L: Introductory Physics Laboratory
- PHY102: Introductory Physics II (4 hours)
- PHY102L: Introductory Physics Laboratory
- PHY105: Astronomy (4 hours)
- PHY105L: Astronomy Laboratory
- PHY203: General Physics I (4 hours)
- PHY203L: General Physics Laboratory
- PHY204: General Physics II (4 hours)
- PHY204L: General Physics Laboratory
- PHY301: Electricity and Magnetism (4 hours)
- PHY301L: Electricity and Magnetism Laboratory
- PHY303: Modern Physics (4 hours)
- PHY303L: Modern Physics Laboratory
- PHY304: Classical Mechanics (4 hours)
- PHY304L: Classical Mechanics Laboratory
- PHY320: Thermodynamics (4 hours)
- PHY380: Engineering Internship (4 hours)
- PHY396: Special Problems and Research (4 hours)
- PHY398: Independent Study in Physics (1 TO 4 hours)
- PHY450: Advanced Experimental Physics (4 hours)
- PHY450L: Advanced Experimental Physics Laboratory
- PHY480: Work-Oriented Experience (4 hours)
- PHY496: Special Problems and Research (4 hours)
### Sample Course Completion Schedule for CS/ABET-Suggested Curriculum Emphasis

#### Year 1

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<thead>
<tr>
<th>Fall Semester</th>
<th>Credit Hours</th>
<th>Spring Semester</th>
<th>Credit Hours</th>
<th>Winter/Summer Term</th>
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<th>Winter/Summer Term</th>
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<th>Credit Hours</th>
<th>Winter/Summer Term</th>
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# Sample Course Completion Schedule for CS/SE Emphasis

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<td>CSC 271 &amp; 272 (even yrs)</td>
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<td>TOTAL</td>
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<td>9</td>
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</table>

= 159 CREDITS

Note: Courses with an astrisk may be taken during winter and/or summer sessions.

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Department: Health and Medicine

Chairperson: Monika Baldridge
Room: Rankin Hall Room 304A
Email: mbaldrid@carrollu.edu
Telephone: 262-524-7627
Fax: 262-524-7112

Programs

Undergraduate

- Health Sciences
- Health Sciences - Diagnostic Medical Sonography Emphasis
- Health Sciences - Radiologic Technology Emphasis
- Hispanic Health and Human Service
- Pre-Medical Laboratory Sciences
- Physical and Health Education
- Public Health
- Sport and Recreation Management
- Therapeutic Recreation Emphasis
The aim of the health science major is to:
1) facilitate professional advancement for health care providers who currently hold a technical (associate) degree in a health-related profession
2) provide a program of study for those Carroll University students interested in obtaining coursework leading to professional licensure in one of the imaging modalities (Radiologic Technology or Diagnostic Medical Sonography).

This program is designed to lead to various 2+2 degree completion or professional programs only. The health science major is not to be used as a stand-alone major.

This major provides depth and breadth within the basic and behavioral sciences to prepare students for the balanced integration of critical thinking, basic science knowledge application, and interpersonal skills necessary to provide the best care in a variety of health science disciplines. To meet the educational missions of the university and of the health science major, students study in a variety of academic and professional disciplines including biology, psychology, chemistry, physics and mathematics.

### Health Science Major

#### Major Core Courses (49 credits)
- **BIO130**: Introduction to Human Anatomy and Physiology I (4 hours)
- **BIO140**: Introduction to Human Anatomy and Physiology II (4 hours)
- **CHE101**: General Chemistry (4 hours)
- **CHE102**: Biological Chemistry (4 hours)
- **PHY101**: Introductory Physics I (4 hours)
- **PHY102**: Introductory Physics II (4 hours)
- **PSY101**: Introductory Psychology (4 hours)
- **PSY221**: Life-Span Psychology (4 hours)
- **PSY260**: Health Psychology (4 hours)

#### Bachelor of Science Degree Completion Emphasis

For students who have earned, or might be currently earning an Associate Degree in a health related profession such as surgical technician, radiography, etc., the Health Science major provides an avenue for professional growth and advancement. Students are awarded thirty credits by Carroll University for course work taken at either Waukesha County Technical College (WCTC) or Milwaukee Area Technical College (MATC) in conjunction with their respective degree.

The remaining required courses will vary depending on the degree program. For example, students with a surgical technician degree from MATC would be required to complete 36 of the above 48 core credits while a student with a radiography degree from WCTC would be required to complete 44 of the 48 core credits above. Students with a degree from either WCTC or MATC who wish to pursue the Health Science major would have an opportunity to take between ten and twenty-six elective credits.

Additional course work focuses on preparing the individual for enhanced personal and professional development. Recommended options include a minor in a desired area of interest such as Hispanic Health and Human Services or Organizational Leadership, or a broad course of study within the liberal arts and sciences.

### Fees

Specific courses that require use of disposable supplies are assigned a course fee as noted in the course description.

### Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:
- **CMP112** and either **CMP113** or **CMP114**
- **MAT140** or higher and **CSC110** or higher;

**NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.

**FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR**

### General Education Requirement

For more information on General Education Requirement, click here.
Distribution Component

For more information on the Distribution Component, click here.

GE1 and GE2 Courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

Students must take one GE2 course. The GE2 course chosen must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

Fine Arts (F1, F2)

Humanities (H1, H2)

Philosophy/Ethics/Religion (P1, P2)

Social Sciences (S1, S2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)
  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Interdisciplinary Health Sciences Courses

- HSC101: Intro to Health Care Skills (1 hours)
- HSC103: Personal and Community Health (4 hours)
- HSC105: Group Exercise Instruction (1 hours)
  AND -HSC105L: Group Exercise Instruction Lab
- HSC110: Basic Weight Training Instruction (1 hours)
  AND -HSC110L: Basic Weight Training Instruction Laboratory
- HSC120: Fundamental Motor Development (4 hours)
- HSC130: Health Careers Exploration (2 hours)
- HSC290: Cultural Influences in Hispanic Health Care (2 hours)
- HSC300: Pharmacology (3 hours)
- HSC303: Exercise Physiology (4 hours)
- HSC322: Kinesiology (4 hours)

Major Courses

The list below displays all the courses offered by the major:

- HSC101: Intro to Health Care Skills (1 hours)
- HSC103: Personal and Community Health (4 hours)
- HSC105: Group Exercise Instruction (1 hours)
- HSC105L: Group Exercise Instruction Lab
- HSC110: Basic Weight Training Instruction (1 hours)
- HSC110L: Basic Weight Training Instruction Laboratory
- HSC120: Fundamental Motor Development (4 hours)
- HSC130: Health Careers Exploration (2 hours)
- HSC290: Cultural Influences in Hispanic Health Care (2 hours)
- HSC300: Pharmacology (3 hours)
- HSC303: Exercise Physiology (4 hours)
- HSC322: Kinesiology (4 hours)

- Health Sciences - Diagnostic Medical Sonography Emphasis

Lynn Health Sciences and 2+2 Program Advisor

catalog.carrollu.edu/contentm/blueprints/blueprint_display.php?bp_listing_id=160&blueprint_id=34&sid=11&menu_id=5961
Carroll University offers an opportunity to major in Health Sciences with an Emphasis in Diagnostic Medical Sonography (DMS) through Aurora Health Care in Milwaukee or through the University of Wisconsin Hospital and Clinics in Madison. The partnership allows students the benefits of close, personal attention during the first two years at Carroll followed by two years at Aurora’s School of Diagnostic Medical Sonography and its associated clinical sites or the University of Wisconsin Hospital and Clinicals School of Diagnostic Medical Sonography and its associated clinical sites. The student will be placed with a small class of other students pursuing diagnostic medical sonography.

Diagnostic medical sonographers most often are employed in hospitals, but can also find employment with physicians, medical and diagnostic laboratories, diagnostic imaging centers and outpatient care centers. Some diagnostic medical sonographers find employment with manufacturers of equipment used in the field. Long-term employment prospects in this area are forecast to be excellent.

Two tracks within the emphasis are available:
(1) General and Vascular or
(2) Cardiac and Vascular.

Entry into the Aurora Health Care or the University of Wisconsin Hospital and Clinics professional phase of the program is highly competitive and dependent upon completion of Carroll University general education and Health Science requirements, a minimum cumulative and required science course GPA of 3.0, a grade of 'C' or better in all science courses (the Physics 101 and Physics 102 averaged GPA must be at 2.5 or higher), CNA training (at the student’s own expense), and the accumulation of at least 100 hours of direct patient care prior to application. The acceptance of students into the professional phase of the curriculum lies with the Aurora Health Care or UW Hospital and Clinics School of Diagnostic Medical Sonography Admissions Committee. There is a requirement that the student obtain CPR certification from the American Heart Association, prior to application. This program requires year round classes. See Admissions section of the catalog for details on applying.

- **Required Carroll University Courses**
  - BIO130: Introduction to Human Anatomy and Physiology I (4 hours)
    AND -BIO130L: Intro to Human Anat and Phys I Lab
  - BIO140: Introduction to Human Anatomy and Physiology II (4 hours)
    AND -BIO140L: Intro to Human Anat and Phys II Lab
  - BIO324: Bioethics (4 hours)
  - CCS100: Cultural Seminar (4 hours)
  - CHE101: General Chemistry (4 hours)
    AND -CHE101L: General Chemistry - Laboratory
  - CHE102: Biological Chemistry (4 hours)
    AND -CHE102L: Biological Chemistry-Laboratory
  - CMP112: Computational Thinking I (4 hours)
  - CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)
  - COM207: Intercultural Communication (4 hours)
  - ENGI00: Writing Seminar (4 hours)
  - NRS100: Health Care and Nursing (4 hours)
    AND -NRS100L: Health Care and Nursing Laboratory
  - NRS230: Health Assessment (4 hours)
    AND -NRS230L: Health Assessment Laboratory
  - NRS236: Human Pathophysiologic Responses (4 hours)
  - PHY101: Introductory Physics I (4 hours)
    AND -PHY101L: Introductory Physics Laboratory
  - PHY102: Introductory Physics II (4 hours)
    AND -PHY102L: Introductory Physics Laboratory
  - PSY101: Introductory Psychology (4 hours)
  - PSY221: Life-Span Psychology (4 hours)

- **Bachelor of Science Requirement**

  The requirements for a Bachelor of Science degree are:
  - CMP112 and either CMP113 or CMP114 or
  - MAT140 or higher and CSC110 or higher;

  **NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.
  **FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR**

- **General Education Requirement**

  For more information on General Education Requirement, [click here.](#)

  - **Distribution Component**
    - For more information on the Distribution Component, [click here.](#)
      - **GE1 and GE2 Courses**
        - Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
        - Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
        - Fine Arts (F1, F2)
Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- **Cultural Seminar (CCS100)**
  - The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- **Writing Seminar (ENG 170)**
  - The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- **Cross-Cultural Development (CCD)**
  - The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- **Cross-Cultural Experience (CCE)**
  - The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- **Global Perspectives Colloquium (CCS400)**
  - In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Sonography Program sample program and Carroll University

- Sample program at Aurora Health Care DMS: General and Vascular track

Health Sciences - Radiologic Technology Emphasis

**Cindy Bradley**  
Program Supervisor,  
Aurora Health Care School of Radiologic Technology

**Rochell Olive-Harmon**  
Program Director  
Froedtert Memorial Luther Hospital School of Radiologic Technology

**Lynn M. Peterson**  
Health Sciences and 2 + 2 Program Advisor

**Diane Wingenter**  
Program Director  
Wheaton Franciscan Healthcare St. Joseph School of Radiologic Technology

Carroll University offers an opportunity to major in Health Sciences with an Emphasis in Radiologic Technology with the Radiology Alliance (Froedtert Hospital and Wheaton Franciscan–St. Joseph) as well as with Aurora Health Care. The partnership allows students the benefits of close, personal attention during the first two years at Carroll followed by two years at one of these area hospitals with a small class of other students pursuing Radiologic Technology.

Radiologic technologists are most often employed in hospitals, but can also find employment with physicians, medical and diagnostic laboratories, diagnostic imaging centers and outpatient care centers. Some radiologic technologists find employment with manufacturers of equipment used in the field. Long-term employment prospects in this area are forecast to be favorable.

Entry into the professional training phase at the hospitals is highly competitive and dependent upon completion of general education requirements, a minimum overall and science GPA of 2.75, a grade of 'C' or better in all science courses and completion of all required and elective courses within the first two years. A Certified Nursing Assistant license (CNA) is highly recommended. Lack of patient care experience will prevent acceptance into a hospital School of Radiologic Technology. CPR certification through the American Heart Association is required for some of the programs. This program requires year round classes. See Admissions section of this catalog for requirements.

Carroll University Courses

- **BIO130: Introduction to Human Anatomy and Physiology I (4 hours)**  
  AND -BIO130L: Intro to Human Anat and Phys I Lab

- **BIO140: Introduction to Human Anatomy and Physiology II (4 hours)**  
  AND -BIO140L: Intro to Human Anat and Phys II Lab
• BIO324: Bioethics (4 hours)
• CCS100: Cultural Seminar (4 hours)
• CHE101: General Chemistry (4 hours)
  AND -CHE101L: General Chemistry - Laboratory
• CHE102: Biological Chemistry (4 hours)
  AND -CHE102L: Biological Chemistry-Laboratory
• COM207: Intercultural Communication (4 hours)
• ENG170: Writing Seminar (4 hours)
• CMP112: Computational Thinking I (4 hours)
• CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)
• PHY101: Introductory Physics I (4 hours)
  AND -PHY101L: Introductory Physics Laboratory
• PHY102: Introductory Physics II (4 hours)
  AND -PHY102L: Introductory Physics Laboratory
• PSY101: Introductory Psychology (4 hours)
• PSY221: Life-Span Psychology (4 hours)
• PSY260: Health Psychology (4 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:
• CMP112
  and either
  CMP113 or CMP114 or
  MAT140 or higher and CSC110 or higher;

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.

FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

GE1 and GE2 Courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

Fine Arts (F1, F2)

Humanities (H1, H2)

Philosophy/Ethics/Religion (P1, P2)

Social Sciences (S1, S2)

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The Cross-Cultural Component is a five-course series through which students explore the study of culture:

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• Writing Seminar (ENG 170)
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.
• Cross-Cultural Development (CCD)
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.
• Cross-Cultural Experience (CCE)
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

• Global Perspectives Colloquium (CCS400)
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.
Hispanic Health and Human Service

Lynn Peterson      Health Sciences and 2 + 2 Program Advisor

The Hispanic Health and Human Service (HHHS) minor is open to all students in any major who are interested in combining knowledge and skills related to health and human services with an emphasis on serving Hispanic communities.

The interdisciplinary HHHS minor is an excellent companion minor for students who are pursuing careers in health (nursing, pre-med, physical therapy, public health, biology, chemistry or biochemistry) or human services (criminal justice, psychology, sociology, communication). It is also relevant to Spanish majors and minors who wish to acquire skills to work in health and human service fields.

The goals of the HHHS minor are to educate students who will:

1. Function competently in a professional capacity within a Hispanic/Latino health and human service delivery setting.
2. Recognize and respond to cultural characteristics that affect health and human service delivery in the Hispanic/Latino community.
3. Demonstrate ability to communicate effectively using Spanish terminology in reading, writing and speaking.

Hispanic Health and Human Service Minor

Note: The research project that is a part of COM 207 must focus on a specific Hispanic cultural group for this course to be accepted in this minor.

NCEP 326, Culture and Health Care in Central America (An alternative experience may satisfy this NCEP requirement with approval from HHHS advisor and associated faculty and staff.)

Courses required for the Minor

- COM207: Intercultural Communication (4 hours)
- HSC290: Cultural Influences in Hispanic Health Care (2 hours)
- HIS112: Intro to Latin America History (4 hours)
- SPA201: Intermediate Spanish I (4 hours)
- SPA202: Intermediate Spanish II (4 hours)
- SPA290: Spanish for Health and Human Services (2 hours)

HHHS Minor Sample Four-Year Curriculum Model

<table>
<thead>
<tr>
<th>Class Standing</th>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>COM 207</td>
<td>HIS 112</td>
</tr>
<tr>
<td></td>
<td>(SPA 101)</td>
<td>(SPA 102)</td>
</tr>
<tr>
<td>Sophomore</td>
<td>SPA 201</td>
<td>SPA 202</td>
</tr>
<tr>
<td>Junior</td>
<td>HSC 290</td>
<td>SPA 290</td>
</tr>
<tr>
<td>Senior</td>
<td>NCEP 326. Travel in May term</td>
<td></td>
</tr>
</tbody>
</table>

Pre-Medical Laboratory Sciences

Cindy Brown      Clinical Associate Professor and Education Coordinator
University of Wisconsin - Milwaukee

Bill Mueller     Academic Advisor
Office of Student Affairs
University of Wisconsin - Milwaukee

Lynn M. Peterson Health Sciences and 2 + 2 Program Advisor
Carroll University

Carroll University offers an opportunity to major in Medical Laboratory Sciences (formerly Clinical Laboratory Sciences) through a partnership with the University of Wisconsin-Milwaukee (UWM). The partnership allows students the benefits of close, personal attention during the first two and one-half years at Carroll while still providing access to the advanced clinical training facilities at UWM in the final stages of the program.

Medical Laboratory Science students can select one of several emphases at UWM:

- Medical Technology
- Cytotechnology
- Public Health Microbiology

These emphases provide a range of career opportunities in settings including hospitals, independent laboratories, public health facilities, industries, research laboratories, or sales and marketing centers. Long-term employment prospects in these areas are forecasted to be excellent.

Entry into the professional training phase of the program is competitive and dependent upon completion of general education requirements, a minimum GPA of 2.50 (overall and in required science courses), a grade of ‘C’ or better in courses transferring from Carroll and in all junior-level courses, and completion of all required and elective courses (90 credits) by second semester of the junior year.

Medical Laboratory Sciences Major

- Science and mathematics courses taken at Carroll University
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
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<tr>
<td>BIO130</td>
<td>Introduction to Human Anatomy and Physiology I</td>
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<td>Intro to Human Anat and Phys I Lab</td>
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<tr>
<td>BIO140</td>
<td>Introduction to Human Anatomy and Physiology II</td>
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<td>- BIO140L</td>
<td>Intro to Human Anat and Phys II Lab</td>
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<td>BIO212</td>
<td>Microbiology</td>
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<td>- BIO212L</td>
<td>Microbiology Laboratory</td>
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<td>BIO220</td>
<td>Genetics</td>
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<td>- BIO220L</td>
<td>Genetics Laboratory</td>
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<td>BIO271</td>
<td>Clinical Immunology</td>
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<td>- BIO271L</td>
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<td>CHE109</td>
<td>Principles of Chemistry I</td>
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<tr>
<td>CMP114</td>
<td>Computational Thinking II - Statistical Analysis Emphasis</td>
<td>4</td>
</tr>
</tbody>
</table>

### Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114
- MAT140 or higher and CSC110 or higher;

**NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

### General Education Requirement

For more information on General Education Requirement, [click here](#).

### Distribution Component

For more information on the Distribution Component, [click here](#).

- GE1 and GE2 Courses
  - Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
  - Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

  - Fine Arts (F1, F2)
  - Humanities (H1, H2)
  - Philosophy/Ethics/Religion (P1, P2)
  - Social Sciences (S1, S2)

### Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

- Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)
  - The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)
  - The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)
  - The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  - The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, [click here](#).

- Global Perspectives Colloquium (CCS400)
In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Other Carroll University courses required in this transfer program
  - CCS100: Cultural Seminar (4 hours)
  - ENG170: Writing Seminar (4 hours)

GE 1 (F,H,S)
GE 2 (F,H,S or P)

One social science elective must satisfy UWM’s Diversity requirement prior to graduation. ENG 164, American Indian Literature and Cultures will satisfy this diversity requirement as well as a GE 1 (F, CCD).

Students must also demonstrate completion of UWM’s language requirement by achieving one of the following:
- complete with passing grades (prior to entering university) at least two years of high school level instruction in a single foreign language, or
- complete with passing grades at least two semesters (minimum of 6 credits) of university level instruction in a single foreign language, or
- demonstrate foreign language ability at least equivalent to the above by means of a satisfactory score on an approved placement, proficiency, program or other appropriate examination.

Because of the specialized requirements of this program, students should work closely with the MLS Advisor.

It is also important to be in contact with the University of Wisconsin-Milwaukee advisor early in the junior year. There is a mandatory meeting for all MLS students each fall at UW-M.

- Sample Medical Laboratory Program at Carroll University
- Sample Program for Medical Technology at UWM

**Physical and Health Education**

Stephen J. Dannhoff  Director and Assistant Clinical Professor
Pamela Pinahs-Schultz  Professor

The physical education with health major and adapted physical education licensure are designed for students who wish to acquire the diverse competencies needed to teach physical education, health education, and adapted physical education at the Pre-K-12 level. This program provides students with competencies necessary to meet Wisconsin Department of Public Instruction (DPI) requirements.

- **Physical and Health Education (K-12) Major**

  Descriptions of Health Science courses in the Physical and Health Education major and the major’s academic progression standards are in the Health Sciences section of this Catalog. Descriptions of Education Program courses in the Physical and Health Education program are in the Education Program section of this Catalog.

  All physical education majors must be proficient to the intermediate level in swimming; a Water Safety Instructor and/or Lifeguarding certificate is strongly recommended.

**Learning Outcomes for Physical Education**

Upon graduation and entry into the profession of Physical and Health Education, the individual will:

1. Articulate basic physical education knowledge, central physical education concepts, and pedagogical practices within the field of physical education. Articulate basic health knowledge, central health concepts, health tools of inquiry, and pedagogical practices within the field of health education.
2. Develop a professional philosophy consistent with current National Association for Sport and Physical Education (NASPE) and state physical education standards, developmentally appropriate curriculum and instructional design, assessment, and professional development. Develop a professional philosophy consistent with current research findings and best practices in health education, curriculum and instructional design, assessment and professional development.
3. Identify the role, function, and responsibility of a physical education teacher and physical education program coordinator as part of the K-12 physical education program. Identify the role, function, and responsibility of a health education teacher and health education program coordinator as part of the comprehensive school health program.
4. Assess informally student physical education and health education needs based on a student’s prior physical education experiences, physical fitness level, interests and needs in order to implement quality physical education instruction. Assess informally student health needs based on a student’s prior knowledge, interests and needs in order to implement quality health instruction.
5. Identify and articulate the concepts and skills contained in the current state and NASPE physical education standards in the development of curriculum and instruction. Identify and articulate current state and national health standards in the development of curriculum and instruction. Identify and articulate the concepts and skills contained in the current state and national health standards in the development of curriculum and instruction.
6. Design and deliver developmentally appropriate instructional programs based on stated goals and objectives contained in the current state and NASPE standards. Design and deliver developmentally appropriate instructional programs based on stated goals and objectives contained in the current state and national health standards in the development of curriculum and instruction.
7. Analyze and articulate the social, cultural, economic and political factors that affect physical education engagement, school relations, and classroom strategies in physical and health education.
8. Evaluate commercial physical education programs as well as state, national, and international resources utilizing research-based principles in physical education curriculum, instruction and assessment. Critically evaluate developmentally appropriate commercial health education programs as well as state, national, and international resources utilizing research-based and best practices principles in health education curriculum, instruction, and assessment.
9. Implement effective developmentally appropriate instructional approaches including the use of media and technology, multiple intelligences, differentiated instruction and brain based learning that will create learning experiences that will meet the diverse needs of pupils, the community and curricular goals.
10. Apply formal and informal assessment strategies to evaluate and ensure continuous intellectual, social, and physical development of the pupil.
11. Reflect and evaluate the impact of his or her instructional capacity on others (e.g. learners, parents/guardians, and other
professionals) as well as his/her classroom management skills and seek opportunities to grow professionally (i.e. Wisconsin Family and Consumer Educators, and Wisconsin Association for Health, Physical Education, Recreation, and Dance).

Fees

Specific courses that require use of equipment and disposable supplies are assigned a course fee.

Academic Progression Standards

The academic progression standards for the physical and health education major are presented in the Academic Policies and Procedures section of this catalog.

Courses in the Physical and Health Education Major (70 credits)

- HSC101: Intro to Health Care Skills (1 hours)
- HSC103: Personal and Community Health (4 hours)
- HSC105: Group Exercise Instruction (1 hours)
- HSC110: Basic Weight Training Instruction (1 hours)
  AND - HSC110L: Basic Weight Training Instruction Laboratory
- HSC120: Fundamental Motor Development (4 hours)
- HSC303: Exercise Physiology (4 hours)
- HSC322: Kinesiology (4 hours)
- ATH101: Athletic Training Seminar I (2 hours)
  AND - ATH101L: Athletic Training Seminar I Lab
- PED101: Dance (1 hours)
- PED102: Basic and Intermediate Swim (2 hours)
- PED103: Philosophy, Principles & History of Physical Education/Athletics (3 hours)
- PED208: Organization and Administration of Physical Activities/Athletics (2 hours)
- PED214: Teaching Outdoor Activities in Physical Education (2 hours)
- PED310: Elementary Physical Education Activities (3 hours)
- PED311: Team Sports and Officiating (3 hours)
  AND - PED311L: Team Sports and Officiating Laboratory
- PED312: Individual/Dual and Lifetime Activities (3 hours)
  AND - PED312L: Individual/Dual and Lifetime Activities Laboratory
- PED324: Physical Education Laboratory (2 hours)
- PED353: Capstone: Special Methods in Teaching Physical Education (4 hours)
- PED411: Adapted Physical Education (4 hours)
- PED421: Psycho-Social Aspects of Physical Activity (4 hours)
- HED201: Nutrition (2 hours)
- HED202: Drugs, Society and Human Behavior (2 hours)
- HED203: Consumerism in Health (2 hours)
- HED204: Human Sexuality (2 hours)
- HED323: School Health Programs (4 hours)
- HED353: Special Methods in Teaching Health Education (4 hours)

Courses toward the Adapted Physical Education License

Note: Physical Education (PED) 311 and 312 must be taken concurrently.

- HSC120: Fundamental Motor Development (4 hours)
- PED411: Adapted Physical Education (4 hours)
- EDU336: Collaborating with Families of Students with Disabilities (3 hours)
- PED412: Assessment/Program Evaluation in Adapted Physical Education (2 hours)
- PED414: Field Experience in Adapted P.E. (1 hours)

*Refer to the Education Program-Secondary Education Minor for additional course requirements necessary for Wisconsin Department of Public Instruction licensure.

Required Support Courses (14 credits)

- BIO130: Introduction to Human Anatomy and Physiology I (4 hours)
  AND - BIO130L: Intro to Human Anat and Phys I Lab
- BIO140: Introduction to Human Anatomy and Physiology II (4 hours)
  AND - BIO140L: Intro to Human Anat and Phys II Lab
- CMP112: Computational Thinking I (4 hours)
- CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.

FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
Students must take one GE2 course. The GE2 course chosen must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

- Fine Arts (F1, F2)
- Humanities (F1, F2)
- Philosophy/Ethics/Religion (P1, P2)
- Natural Sciences (N1, N2)

**Cross-Cultural Component**

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

- **Cultural Seminar (CCS100)**
  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- **Writing Seminar (ENG 170)**
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- **Cross-Cultural Development (CCD)**
  The Cross-Cultural Development course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- **Cross-Cultural Experience (CCE)**
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

*For more information and course listings, click here*

- **Global Perspectives Colloquium (CCS400)**
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

**Major Courses**

The list below displays all the courses offered by the major:

- HED201: Nutrition (2 hours)
- HED202: Drugs, Society and Human Behavior (2 hours)
- HED203: Consumerism in Health (2 hours)
- HED204: Human Sexuality (2 hours)
- HED223: School Health Programs (4 hours)
- HED353: Special Methods in Teaching Health Education (4 hours)
- PED101: Dance (1 hours)
- PED102: Basic and Intermediate Swim (2 hours)
- PED103: Philosophy, Principles & History of Physical Education/Athletics (3 hours)
- PED208: Organization and Administration of Physical Activities/Athletics (2 hours)
- PED214: Teaching Outdoor Activities in Physical Education (2 hours)
- PED310: Elementary Physical Education Activities (3 hours)
- PED311: Team Sports and Officiating (3 hours)
- PED311L: Team Sports and Officiating Laboratory
- PED312: Individual/Dual and Lifetime Activities (3 hours)
- PED312L: Individual/Dual and Lifetime Activities Laboratory
- PED324: Physical Education Laboratory (2 hours)
- PED328: Elem Phy Ed Activities and Health Education (3 hours)
- PED353: Capstone: Special Methods in Teaching Physical Education (4 hours)
- PED391: Special Problems and Research (4 hours)
- PED398: Special Studies in Physical Educ (1 TO 3 hours)
- PED411: Adapted Physical Education (4 hours)
- PED412: Assessment/Program Evaluation in Adapted Physical Education (2 hours)
- PED414: Field Experience in Adapted P.E. (1 hours)
- PED421: Psycho-Social Aspects of Physical Activity (4 hours)

**Public Health**

<table>
<thead>
<tr>
<th>Pamela Pinahs-Schultz</th>
<th>Professor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbra J. Beck</td>
<td>Associate Professor</td>
</tr>
</tbody>
</table>

The mission of public health is to fulfill society’s interest in assuring conditions in which people can be healthy. Public health carries out its mission through organized, interdisciplinary efforts that address the physical, mental, and environmental health concerns of communities and populations at risk for disease and injury. Its mission is achieved through the application of health promotion and disease prevention technologies and interventions designed to improve and enhance the quality of life. The core areas of public health include health services administration, biostatistics, epidemiology, behavioral sciences/health education and environmental health sciences.

Students in the Public Health major will also become eligible to sit for the Certified Health Education Specialist exam offered by the National Commission for Health Education Credentialing (NCHEC). NCHEC’s voluntary professional certification program establishes
a national standard for individual health education practitioners. Health educators are professionals who design, conduct and evaluate activities that help improve the health of all people. These activities can take place in a variety of settings that include schools, communities, health care facilities, businesses, colleges and government agencies. Certified Health Education Specialists (CHES) are those who have met the standards of competence established by NCHEC and have successfully passed the CHES examination. The CHES designation after a health educator’s name is an indication of professional competency and commitment to continued professional development.

Learning Outcomes for the Public Health Program

Graduates of the Public Health Program:
1. Are able to use existing sources of health data, name the major causes of morbidity and mortality in the United States based on age and gender, and the important modifiable risk factors for each.
2. Can identify recommended clinical preventive services based on patient’s age, sex, and risk factor status using appropriate guidelines.
3. Demonstrate the communication and psychomotor skills required to provide appropriate, recommended preventive services.
4. Understand features of health systems that promote the integration and utilization of disease prevention-health promotion services.
5. Describe the clinical, ethical, and legal issues associated with case finding and screening programs.
6. Identify the roles of various health care providers, interdisciplinary health care teams, consultation/referral sources, and community resources in providing clinical preventive services and complementary clinical care.
7. Understand the transmission of disease in clinical settings and demonstrate knowledge and skills necessary to take universal precautions.

These learning outcomes are delivered through a focused curriculum in disease prevention, quantitative skills, health service organization and delivery, and community dimensions of practice.

Admission and Progression Standards

Students will be subject to Carroll University admission and progression standards.

Caregiver Background and Criminal History Check

The student must complete a Background Information Disclosure Form prior to community placements. Certain convictions may prevent or significantly limit the ability of the university to place a student in the field experience and internship courses resulting in the student being unable to meet the university's graduation requirements.

Public Health Major

Core Courses (34–40 credits)
- PBH101: Introduction to Public Health (4 hours)
- PBH102: Global Health (4 hours)
- PBH210: Public Health for Communities (4 hours)
- PBH211: Public Health Field Experience (2 hours)
- PBH302: Environmental and Occupational Health (2 hours)
- PBH312: Public Health Policy and Administration (4 hours)
- PBH324: Program Development, Assessment, and Evaluation in Public Health (4 hours)
- PBH421: Epidemiology (4 hours)
- PBH480: Public Health Internship (6-12 hours)

Required Supporting Courses (25 credits)
- BIO130: Introduction to Human Anatomy and Physiology I (4 hours)
  AND -BIO130L: Intro to Human Anat and Phys I Lab
- BIO140: Introduction to Human Anatomy and Physiology II (4 hours)
  AND -BIO140L: Intro to Human Anat and Phys II Lab
- COM290: Intro to Health Communication (4 hours)
- HED201: Nutrition (2 hours)
  OR -CHE208: Nutrition (3 hours)
- HSC101: Intro to Health Care Skills (1 hour)
  OR - Equivalent CPR
- PSY101: Introductory Psychology (4 hours)
- PSY260: Health Psychology (4 hours)
- GRC106: Intro-Communication Technology (2 hours)

*Biology 120 and 125 could be substituted for Biology 130/140 for students pursuing a more biology based education or Biology minor.

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:
- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study. Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

- Fine Arts (F1, F2)
- Humanities (F1, F2)
- Philosophy/Ethics/Religion (P1, P2)
- Natural Sciences (N1, N2)

- Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

- Cultural Seminar (CCS100)
  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Public Health Minor
  - Core Courses
    The Public Health minor will utilize core public health courses while potentially fulfilling some General Education requirements. This minor helps the undergraduate gain an understanding of important local, national, and global public health issues giving additional diversity to their current course of study.
    - PBH101: Introduction to Public Health (4 hours)
    - PBH102: Global Health (4 hours)
    - PBH210: Public Health for Communities (4 hours)
    - PBH324: Program Development, Assessment, and Evaluation in Public Health (4 hours)
    - PBH421: Epidemiology (4 hours)
  - Major Courses
    The list below displays all the courses offered by the major:
    - PBH101: Introduction to Public Health (4 hours)
    - PBH102: Global Health (4 hours)
    - PBH210: Public Health for Communities (4 hours)
    - PBH211: Public Health Field Experience (2 hours)
    - PBH302: Environmental and Occupational Health (2 hours)
    - PBH312: Public Health Policy and Administration (4 hours)
    - PBH324: Program Development, Assessment, and Evaluation in Public Health (4 hours)
    - PBH421: Epidemiology (4 hours)
    - PBH480: Public Health Internship (6-12 hours)

- Sport and Recreation Management

The curriculum in sports management is designed to prepare students for careers of leadership in the field of sport management. During the course of study, sports management students gain expertise for multi-faceted sports careers in the fields of facilities management, information technology, front office administration and community recreation. The program provides students the opportunity to garner knowledge and develop skills though coursework and mentorship experience within the sport industry.

Sport and Recreation Management Major
Bachelor of Science
The Carroll University Sport and Recreation Management Major will provide students with a knowledge, understanding, and appreciation of the sport industry that will provide career advancement opportunities. The tools and resources provided to the students will occur in a positive learning environment combining both theory and practice. In pursuit of our mission we will: Prepare students to critically analyze issues and problems related to the sport management field, Ensure students are proficient in the outcome areas of personal and professional decision making, ethical and legal practices, practical and theoretical competence, and professional development, and require students to acquire significant contact hours in practical and internship settings to enhance authentic learning.

Program Level Student Learning Outcomes
1) Display an understanding of the managerial considerations involved in sport management practice within a variety of professional settings
2) Display an understanding of how marketing principles may be effectively applied in a variety of sport management settings, particularly as they pertain to ticket and sponsorship sales and customer service
3) Display an understanding of how public relations tactics such as news releases and community relations may be effectively employed in a variety of sport management settings,
4) Display an understanding of the financial dimensions of sport management practice, including resource acquisition and budget considerations,
5) Display an understanding of the economic dimensions of sport management practice, particularly as it relates to public finance of sport and economic impact evaluations,
6) Display an understanding of the ethical dimensions of sport management practice and be able to make ethical decisions based on sound professional judgment,
7) Display an understanding of the legal dimensions of sport management practice and be able to apply legal theory such as contract law and tort law in various sport management settings,
8) Display an understanding of the key considerations involved in successful sport event and sport facility management,
9) Display sound critical thinking skills that can be employed in sport management settings,
10) Display effective oral, written and interpersonal communication skills as required for successful sport management practice,
11) Display proficiency in employing technologies commonly utilized by sport managers,
12) Display proficiency in applying sport management knowledge and related skills in an in-depth experiential learning assignment (i.e., internship).

Student Learning Goals
1) Secure an understanding of how relevant managerial, marketing, public relations, economic, and financial theory are applicable to the various facets of sport management practice
2) Develop an understanding of and an appreciation for the psycho-social dimensions of sport and sport management practice
3) Gain an understanding of the ethical and legal dimensions of successful sport management practice
4) Develop critical thinking skills, particularly as they are relevant to successful sport management practice
5) Advance oral, written and interpersonal communication skills as necessary for successful sport management practice
6) Develop skills pertaining to the use of technology in sport management
7) Acquire relevant professional experience in which knowledge secured in sport management classes is successfully applied in a sport management setting

Internship Requirements
- A minimum grade point average of 2.0 at the time of application for the internship.
- A minimum of 480 hours of actual work-related experience, preferably for an entire semester.
- The intern works under the guidance of experienced individuals/supervisors in the area of interest that has been pre-approved by the Director of Internships.
- Periodic and final written reports about the work experiences, by both the intern and his/her supervisors, are submitted to the Director of Internships.

Fees
Specific courses that require use of equipment and disposable supplies are assigned a course fee.

- Core courses (51)
  - BUS265: Human Resource Management (4 hours)
  - BUS301: Principles of Marketing (4 hours)
  - LEA190: Leadership and Personal Effectiveness (4 hours)
  - PED103: Philosophy, Principles & History of Physical Education/Athletics (3 hours)
  - PED208: Organization and Administration of Physical Activities/Athletics (2 hours)
  - PED421: Psycho-Social Aspects of Physical Activity (4 hours)
  - SRM315: Sport Management Practicum I (1 hours)
  - SRM405: Recreational Programming (4 hours)
  - SRM407: Facility Operation (2 hours)
  - SRM409: Sports Promotion and Event Planning (2 hours)
  - SRM410: Recreation Administration and Supervision (4 hours)
SRM435: Sport Management Practicum II (1 hours)

Capstone Course (12 Credits)

SRM480: Capstone: Internship in Sport Management (12 hours)

Required Support Courses (8 Credits)

BUS101: Introduction to Business (4 hours)
BUS302: Principles of Management (4 hours)

Minors Available

Business Marketing Minor (20 Credits)

BUS101: Introduction to Business (4 hours)
BUS301: Principles of Marketing (4 hours)
BUS302: Principles of Management (4 hours)
BUS320: Promotion Management (4 hours)
BUS327: Business-to-Business Marketing (4 hours)

OR - PSY228: Consumer Behavior (4 hours)

Business Management Minor (20 Credits)

BUS101: Introduction to Business (4 hours)
BUS265: Human Resource Management (4 hours)
BUS302: Principles of Management (4 hours)
BUS315: Organization Behavior (4 hours)
LEA302: Leadership-Theory and Practice (4 hours)

Business Entrepreneurship Minor (24 Credits)

ACC205: Financial Accounting (4 hours)
BUS101: Introduction to Business (4 hours)
BUS204: Start-Ups and New Venture Planning (4 hours)
BUS340: Entrepreneurial Finance (4 hours)
BUS475: Managing Growth in Entrepreneurial Companies - Venture Development (4 hours)
BUS485: Organizational Strategy and Social Entrepreneurship (4 hours)

General Business Minor (20 Credits)

BUS101: Introduction to Business (4 hours)
ECO124: Principles of Economics I - Microeconomics (4 hours)
OR - ECO225: Principles of Economics II - Macroeconomics (4 hours)
ACC205: Financial Accounting (4 hours)
BUS301: Principles of Marketing (4 hours)
BUS302: Principles of Management (4 hours)
BUS304: Principles of Finance (4 hours)
BUS305: Principles of Operations Management (4 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

CMP112 and either CMP113 or CMP114 or
MAT140 or higher and CSC110 or higher;

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.
FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

GE1 and GE2 Courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study. Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

Fine Arts (F1, F2)

Humanities (H1, H2)

Philosophy/Ethics/Religion (P1, P2)

Social Sciences (S1, S2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

Cultural Seminar (CCS100)

The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

Writing Seminar (ENG 170)

The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

Cross-Cultural Development (CCD)
The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Sport and Recreation Management 4 Year Plan
- Sport and Recreation Management Business Minor Plans
- Major Courses

The list below displays all the courses offered by the major:

- SRM315: Sport Management Practicum I (1 hours)
- SRM405: Recreational Programming (4 hours)
- SRM407: Facility Operation (2 hours)
- SRM409: Sports Promotion and Event Planning (2 hours)
- SRM410: Recreation Administration and Supervision (4 hours)
- SRM435: Sport Management Practicum II (1 hours)
- SRM480: Capstone: Internship in Sport Management (12 hours)
- Therapeutic Recreation Emphasis

Lynn Peterson 2 + 2 Program Advisor
Health Sciences Advisor
Carroll University

Patty Thomas Clinical Assistant Professor
Therapeutic Recreation Certificate Coordinator
University of Wisconsin – Milwaukee

Carroll University offers an opportunity to receive an emphasis in Therapeutic Recreation in collaboration with the University of Wisconsin-Milwaukee via online course work. Students majoring in Recreation Management, Psychology, Public Health, or Exercise Science are thought to be the primary users of this certification route; however other students may opt to use this course sequence. Courses done in collaboration with the University of Wisconsin-Milwaukee are in an online format which requires regular coursework with assignments due every week throughout a typical academic semester. Due to the need to be admitted and registered as a student at UW-M, it is important for the student to plan ahead. A lead time of at least 7-10 days prior to the start of the class through UW-M is necessary.

Therapeutic Recreation, also known as recreation therapy, is a unique profession that utilizes recreation and activity based interventions to help improve an individual’s physical, emotional, cognitive, social, spiritual and leisure functioning for optimal participation in life. The Therapeutic Recreation Specialist, also known as a Recreation Therapist, assists clients to develop skills, knowledge and behaviors for daily living and community involvement. The therapist works with the client and his/her family to incorporate specific leisure interests and community resources into therapy to achieve optimal outcomes that transfer to his/her real life situation.

This emphasis is designed for a broad audience of individuals who work with people with disabilities. The program focuses on the development of knowledge and acquisition of skills and abilities in the areas of Health and Therapeutic Recreation. In preparation for the nationally recognized certification examination, coursework covers topic areas included in the National Council for Therapeutic Recreation Certification Job Analysis categories. Courses present the concepts of health, wellness, disease and illness in relation to quality of life for individuals with disabilities. Specific skill development in the areas of assessment and facilitation techniques is also taught and complemented with an ongoing focus on emerging issues in the field of therapeutic recreation.

Completion of this emphasis allows the individual to meet one portion of the academic coursework required for the credential as a Certified Therapeutic Recreation Specialist (CTRS) with National Council for Therapeutic Recreation Certification. Additional requirements are needed to fully qualify for the credential. The individual must take responsibility to meet the additional requirements to be eligible to sit for the CTRS certification exam. The additional requirements include supportive coursework, a minimum of a bachelor’s degree, and one year of direct care experience under the direction of a Certified Therapeutic Recreation Specialist (a 14 week internship option may exist for students studying Sport and Recreation Management). Completion of these requirements will meet Equivalency Path B of the National Council for Therapeutic Recreation Certification requirements for exam eligibility. Please refer to the National Council for Therapeutic Recreation Certification Standards for additional information. Students are responsible for the procurement of their internship site however a faculty adviser may offer some assistance.

Emphasis Certification Coursework
18 credits of supported courses are required in Therapeutic Recreation or Recreation Management. 12 of those 18 credits must be Therapeutic Recreation specific. REC 203, 300, 308, 310, 400 are offered online only, in collaboration with UW-Milwaukee. Recreation 405 and 410 are currently offered on the Carroll University campus and are required in the Recreation Management major. Specific course descriptions are located in the Recreation Management section of the catalog.

- Emphasis Certification Coursework
18 credits of supported courses are required in Therapeutic Recreation or Recreation Management. 12 of those 18 credits must be Therapeutic Recreation specific. All courses with an asterisk are offered online only, in collaboration with UW-Milwaukee. Sport and Recreation Management 405 and 410 are currently offered on campus and required in the Sport and
Recreation Management major. Specific course descriptions are located in the Sport and Recreation Management section of the catalog.

- UW-M Online courses:
  - REC 203: Therapeutic Recreation Process*
  - REC300: Therapeutic Recreation Assessment and Documentation* (4 hours)
  - REC308: Therapeutic Recreation in Physical Rehabilitation and Behavioral Health* (4 hours)
  - REC310: Facilitation Techniques in Therapeutic Recreation* (4 hours)
  - REC400: Issues and Trends in Therapeutic Recreation* (3 hours)

Must earn a grade of "B" or higher in all Therapeutic Recreation courses to sit for certification examination.

- Carroll University courses:
  - REC405: Recreational Programming (4 hours)
  - REC410: Recreation Administration and Supervision (4 hours)

- Required Emphasis Support Courses
  (Required supportive coursework for CTRS Exam)
  - BIO130: Introduction to Human Anatomy and Physiology I (4 hours)
    AND -BIO130L: Intro to Human Anat and Phys I Lab
  - BIO140: Introduction to Human Anatomy and Physiology II (4 hours)
    AND -BIO140L: Intro to Human Anat and Phys II Lab
  - HSC120: Fundamental Motor Development (4 hours)
  - PSY101: Introductory Psychology (4 hours)
  - PSY201: Abnormal Psychology (4 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

**NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.
FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

General Education Requirement

For more information on General Education Requirement, click here.

- Distribution Component
  For more information on the Distribution Component, click here.

  - GE1 and GE2 Courses
    Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
    Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
    
    Fine Arts (F1, F2)

    Humanities (H1, H2)

    Philosophy/Ethics/Religion (P1, P2)

    Social Sciences (S1, S2)

- Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

  - Cultural Seminar (CCS100)
    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

  - Writing Seminar (ENG 170)
    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

  - Cross-Cultural Development (CCD)
    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

  - Cross-Cultural Experience (CCE)
    The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- **Therapeutic Recreation Emphasis**
- Recreation Management Four-Year Plan Therapeutic Recreation Emphasis
- Major Courses

The list below displays all the courses offered by the major:

- **UW-M Online courses:**
  - REC203: Therapeutic Recreation Process* (3 hours)
  - REC300: Therapeutic Recreation Assessment and Documentation* (4 hours)
  - REC308: Therapeutic Recreation in Physical Rehabilitation and Behavioral Health* (4 hours)
  - REC310: Facilitation Techniques in Therapeutic Recreation* (4 hours)
  - REC400: Issues and Trends in Therapeutic Recreation* (3 hours)

Must earn a grade of "B" or higher in all Therapeutic Recreation courses to sit for certification examination.

- **Carroll University Courses**
  - REC480: Internship-Recreation Management (12 hours)
## Radiologic Technology Emphasis Sample Program

### Sample program at Carroll University

<table>
<thead>
<tr>
<th>Class Standing</th>
<th>Fall Semester</th>
<th>Spring Semester</th>
<th>Summer Term</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshman</strong></td>
<td>CCS 100</td>
<td>ENG 170</td>
<td>Last chance to earn CNA license.</td>
</tr>
<tr>
<td></td>
<td>BIO 130</td>
<td>BIO 140</td>
<td>CMP 112</td>
</tr>
<tr>
<td></td>
<td>MAT 101 (if needed) or PSY 101 (S 1)</td>
<td>PHY 101</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GE 1 (H1 or F1)</td>
<td>GE 1 (H1 or F1)</td>
<td></td>
</tr>
<tr>
<td><strong>Sophomore</strong></td>
<td>CHE 101</td>
<td>CHE 102</td>
<td>GE-CCE</td>
</tr>
<tr>
<td></td>
<td>PSY 221 (GE 2,S2)</td>
<td>PSY 260</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHY 102</td>
<td>CMP 114</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM 207 (S 1, CCD)</td>
<td>BIO 324 (P1)</td>
<td></td>
</tr>
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</table>

### Sample program at Radiology Alliance Hospital

<table>
<thead>
<tr>
<th>Class Standing</th>
<th>Fall Semester</th>
<th>Spring Semester</th>
<th>Summer Term</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Junior</strong></td>
<td>HSC 350</td>
<td>HSC 351</td>
<td>HSC 358</td>
</tr>
<tr>
<td></td>
<td>HSC 352</td>
<td>HSC 355</td>
<td>HSC 361</td>
</tr>
<tr>
<td></td>
<td>HSC 354</td>
<td>HSC 353</td>
<td>GE - GPC (or in spring semester)</td>
</tr>
<tr>
<td></td>
<td>HSC 356</td>
<td>HSC 357</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HSC 359</td>
<td>HSC 360</td>
<td></td>
</tr>
<tr>
<td><strong>Senior</strong></td>
<td>HSC 450</td>
<td>HSC 451</td>
<td>HSC 461</td>
</tr>
<tr>
<td></td>
<td>HSC 452</td>
<td>HSC 453</td>
<td>HSC 462</td>
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<tr>
<td></td>
<td>HSC 454</td>
<td>HSC 455</td>
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<tr>
<td></td>
<td>HSC 456</td>
<td>HSC 457</td>
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<td>HSC 459</td>
<td>HSC 458</td>
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<tr>
<td></td>
<td></td>
<td>HSC 460</td>
<td></td>
</tr>
</tbody>
</table>
## Sample Medical Laboratory Program at Carroll University

<table>
<thead>
<tr>
<th>Class Standing</th>
<th>Fall Semester</th>
<th>Spring Semester</th>
<th>Winter/Summer Term</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshman</strong></td>
<td>BIO 130</td>
<td>BIO 140</td>
<td>BIO 212</td>
</tr>
<tr>
<td></td>
<td>CHE 109</td>
<td>CHE 110</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CCS 100</td>
<td>ENG 170</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GE 1 (F,H,S)**</td>
<td>ENG 164 (GE1 - P, CCD)</td>
<td></td>
</tr>
<tr>
<td><strong>Sophomore</strong></td>
<td>CHE 203*</td>
<td>CHE 204*</td>
<td>CMP 114</td>
</tr>
<tr>
<td></td>
<td>BIO 220</td>
<td>NRS 236</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CMP 112</td>
<td>GE 1 (F,H,S)**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GE 1 (F,H,S)</td>
<td>Elective**</td>
<td></td>
</tr>
<tr>
<td><strong>Junior</strong></td>
<td>BIO 271***</td>
<td>[at UWM]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIO 201</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHE 201</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GE 2 (F,H,S or P)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHE 308</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Organic Chemistry courses (CHE 203 and 204) are also offered in the summer.

**Work with the University of Wisconsin - Milwaukee Academic Advisor regarding appropriate coursework that will transfer.

***Currently Immunology (BIO271) is held in the fall of odd years. Although not a prerequisite, BIO 212 would be helpful prior to taking this course.
Sample program at Aurora Health Care DMS: General and Vascular track

<table>
<thead>
<tr>
<th>Junior</th>
<th>HSC 370</th>
<th>HSC 371</th>
<th>HSC 376</th>
<th>HSC 470</th>
<th>HSC 373</th>
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<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td>HSC 430</td>
<td>HSC 431</td>
<td>HSC 433</td>
<td>HSC 473</td>
<td>GE-GPC (or in spring semester)</td>
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<tr>
<td></td>
<td>HSC 372</td>
<td>HSC 377</td>
<td>HSC 471</td>
<td>HSC 380</td>
<td>HSC 374</td>
</tr>
<tr>
<td></td>
<td>HSC 375</td>
<td>HSC 432</td>
<td>HSC 379</td>
<td>HSC 374</td>
<td>HSC 474</td>
</tr>
</tbody>
</table>

* See Health Science advisor for information regarding other DMS tracks.
## Sample Program for Medical Technology at UWM

<table>
<thead>
<tr>
<th></th>
<th>Fall Semester</th>
<th>Spring Semester</th>
<th>Summer Term</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Junior</strong></td>
<td>[at Carroll University]</td>
<td>Hematology</td>
<td>Clinical Hematology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clinical Chemistry</td>
<td>Hemostasis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medical Microbiology</td>
<td>Clinical Microbiology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Molecular Diagnostics</td>
<td>Medical Parasitology</td>
</tr>
<tr>
<td><strong>Senior</strong></td>
<td>Adv. Hematology</td>
<td>Adv. Hematology Practicum</td>
<td>Urology</td>
</tr>
<tr>
<td></td>
<td>Immunohematology</td>
<td>Adv. Clinical Lab Science</td>
<td>Clinical Chemistry</td>
</tr>
<tr>
<td></td>
<td>Blood Banking</td>
<td>Adv. Immunohematology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lab Diagnosis</td>
<td>Adv. Microbiology Practicum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lab Practicum</td>
<td>Adv. Chemistry Practicum</td>
<td></td>
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<tr>
<td></td>
<td>Toxicology</td>
<td>Professional Development</td>
<td></td>
</tr>
</tbody>
</table>
### Sonography Program sample program and Carroll University

<table>
<thead>
<tr>
<th>Class Standing</th>
<th>Fall Semester</th>
<th>Spring Semester</th>
<th>Winter/Summer Term</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshman</strong></td>
<td>CCS 100</td>
<td>ENG 170</td>
<td>Get CNA training and begin to work as a CNA to get 100 hours of patient care</td>
</tr>
<tr>
<td></td>
<td>BIO 130</td>
<td>BIO 140</td>
<td>PSY 101 (S1)</td>
</tr>
<tr>
<td></td>
<td>MAT 101 or GE 1 (H1, F1)</td>
<td>PHY 101</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM 207 (S1, CCD)</td>
<td>NRS 100</td>
<td></td>
</tr>
<tr>
<td><strong>Sophomore</strong></td>
<td>CHE 101</td>
<td>CHE 102</td>
<td>CSC 107</td>
</tr>
<tr>
<td></td>
<td>PHY 102</td>
<td>NRS 236</td>
<td>BIO 212</td>
</tr>
<tr>
<td></td>
<td>BIO 324 (P1)</td>
<td>NRS 230</td>
<td>GE1 (H1, F1) or in senior year</td>
</tr>
<tr>
<td></td>
<td>MAT 112</td>
<td>PSY 260 (GE2, S2)</td>
<td>GE-CCE</td>
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</tbody>
</table>

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Department: Human Movement Sciences

Chairperson: Thomas Pahnke
Room: Physical Therapy 113  Email: tpahnke@carrollu.edu
Telephone: 262-951-3158  Fax: 262-524-7690

Programs

Undergraduate

Athletic Training Education
Exercise Science
Pre-Occupational Therapy
Pre-Physical Therapy
Sports Nutrition
The Athletic Training Education Program at Carroll University is accredited by the Commission on Accreditation of Athletic Training Education (CAATE).

The aim of the athletic training program is to train qualified health care professionals at the baccalaureate level who are educated and experienced in the management of health care problems associated with physical activity across the life span as defined by the National Athletic Trainers’ Association. Students are educated to work with athletic and physically active populations in a variety of settings including, but not limited to, secondary schools, universities, professional sports programs, sports medicine clinics, prevention and wellness settings, and industrial settings.

The graduate athletic trainer is competent in the delivery of athletic training. The graduate possesses the knowledge and skills needed for risk management and prevention of injuries associated with physical activity, the pathology of injuries and illnesses, assessment and evaluation, and acute care of injury and illnesses for the physically active. The graduate applies knowledge and skills concerning pharmacology, therapeutic modalities, therapeutic exercise, general medical conditions and disabilities, and nutritional aspects of injury and illness for the physically active population. The athletic trainer demonstrates the ability to carry out psychosocial intervention and referral, perform health care administration, and uphold professional development and responsibilities as outlined by the National Athletic Trainers’ Association. To ensure that the program is reflective of the development of athletic trainers at the baccalaureate level in a changing health care environment, ongoing student, faculty, program, institutional, and professional assessments occur regularly.

To meet the education mission for service and scholarly activity, the program utilizes a variety of individuals including, but not limited to, academic and clinical athletic trainers; basic, behavioral, and social scientists; other health care professionals; athletes and coaches; and community members. The athletic training academic faculty is responsible for design, implementation, and evaluation of the professional curriculum. In addition to the academic training of future athletic trainers, the program is committed to intra-and interdisciplinary service and scholarly activity in the delivery of athletic training.

Learning Outcomes for Athletic Training Education Program

Upon graduation and entry into the field of athletic training, the individual:

1. Will possess the knowledge and skills of an entry-level athletic trainer in the six practice domains of athletic training set forth by the National Athletic Trainers’ Association Board of Certification: Prevention of Injuries; Recognition, Evaluation & Assessment of Injuries; Immediate Care of Injuries; Treatment, Rehabilitation & Reconditioning of Injuries; Organization & Administration; and Professional Development & Responsibility.
2. Will have experience with multiple athletic training and health care settings including interactions with health care providers from various disciplines.
3. Will be able to think critically to effectively solve problems in a variety of dynamic athletic training environments.
4. Will understand the importance and process of becoming life-long learners in order to contribute to the field of athletic training.
5. Will be an effective communicator among health care providers, administrators, coaches, athletes, family, and community in their delivery of athletic training.
6. Will practice with professionalism and integrity and adhere to the professional code of ethics outlined by the National Athletic Trainers’ Association.

Academic Progression Standards

The academic progression standards for the athletic training education program are presented in the Academic Program and Policies section of this catalog on page 27.

Admission Requirements

The admission requirements for the athletic training education program are presented in the Admission section of the catalog.
Technical Standards for Admission to and Progression in the Athletic Training Education Program

Successful participation in the Athletic Training Education Program requires that a student possess the ability to meet the requirements of the program. Though the program may modify certain course requirements in order to provide a handicapped person (handicapped is defined by the federal government pursuant to SS 504 of the Rehabilitation Act of 1973) with an equivalent opportunity to achieve results equal to those of a non-handicapped person, there are no substitutes for the following essential skills. The applicant must initially meet these requirements to gain admission to the program, and must also continue to meet them throughout participation in the program.

1. Physical requirements: The applicant/student must be willing and capable of performing physical assessments (e.g. range of motion, manual muscle testing, visual observations) of patients using various evaluative and therapeutic instruments and equipment. The applicant/student must also be able to perform athletic training skills (e.g. taping, splinting, ambulatory aid, rehabilitative and treatment techniques, activities of daily living). In addition, an applicant/student must successfully complete and maintain certification in first aid and cardiopulmonary resuscitation.

2. Communication: An applicant/student must be able to elicit information, describe changes in health, mood, and activity and perceive non-verbal communication. An applicant/student must be able to communicate effectively and efficiently with patients and all members of the health care team.

3. Intellectual abilities: Problem solving, a critical skill of athletic trainers, requires abilities in measurement, calculation, reasoning and analysis.

4. Behavioral and social attributes: The applicant/student must be able to tolerate physically active taxing workloads and to function effectively under stress, must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in athletic training care provided to people. The applicant/student must possess the qualities of integrity, concern for others, compassion, skills in interpersonal relationships and motivation for a career in health care.

The athletic training program can require that an applicant/student undergo a physical examination. A handicapped applicant/student shall not, on the basis of his or her handicap (except those which would preclude the essential skills outlined above) be excluded from participation in, denied benefits of, nor be subjected to discrimination in the athletic training program. Policies for students with disabilities can be found in the Student Life section of the academic catalog.

Caregiver Background and Criminal History Check

On October 1, 1998, the State of Wisconsin Department of Health and Family Services mandated that all persons who seek to be employed and/or licensed in the caregiver industry must fulfill the caregiver and background check requirements in Section 50.065 of the Wisconsin State Statute. Professional phase athletic training students are required to complete a background and criminal history check and abide by state regulations and university policies pertaining to any findings.

Insurance

Health: Athletic Training Education Program students are required to have medical insurance. Those who are covered by a family or personal policy must provide the insuring company’s name and the policy number on a waiver form that is sent to the student by the university business office. For students without their own coverage, a group insurance policy is available through the university. Athletic Training students are also required to have a personal health history and physical form completed and on file in the administrative area of the Health Science.

Professional Liability: Students are required to purchase on an annual basis professional liability insurance through a university-endorsed company.

Fees

Students enrolled in the professional phase of the Athletic Training Education Program are assessed a program fee for course related supplies and equipment, assistance with membership dues in the National Athletic Trainer Association, and liability insurance. Select athletic training course in the preprofessional phase that require use of equipment and disposable supplies are assigned a course fee.

Curriculum

Throughout the curriculum, subject matter progresses from the basic sciences to clinical sciences to professional content. In coordination with academic coursework, learning over time occurs by interaction with clinical instructors through field experiences in traditional athletic training settings, other health care settings, and practice and athletic event coverage. Students can expect to travel to offsite clinical rotations/laboratory sessions or field experiences in the professional phase of the program. Throughout the program, students are evaluated on the attainment of knowledge to include psychomotor, cognitive, and affective competencies as outlined by the National Athletic Trainers’ Association Education Council. Outcomes are measured through ongoing self, peer, and clinical instructor assessments.

Ongoing program assessments include student evaluations and feedback, curriculum evaluations, institutional self study assessment and site visits by the Commission on Accreditation of Athletic Training Education (CAATE).

Athletic Training Major

- ATH301: Assessment and Evaluation I (4 hours)
- ATH302: Assessment and Evaluation II (4 hours)
- ATH303: Therapeutic Modalities (4 hours)
- ATH304: Therapeutic Modalities Lab
- ATH311: Athletic Training Practicum I (1 hours)
- ATH312: Athletic Training Practicum II (1 hours)
- ATH403: Applied Exercise for Musculoskeletal Injuries (4 hours)
- ATH404: Admin of Athletic Training (2 hours)
- ATH407: Athletic Training Seminar III (2 hours)
ATH411: Athletic Training Practicum III (1 hours)
ATH499: Capstone-Internship in Athletic Training (14 hours)
HSC300: Pharmacology (3 hours)
HSC120: Fundamental Motor Development (4 hours)

Required Support Courses (51 credits)

ATH101: Athletic Training Seminar I (2 hours)
AND -ATH101L: Athletic Training Seminar I Lab
ATH102: Athletic Training Seminar II (2 hours)
AND -ATH102L: Athletic Training Seminar II Laboratory
BID130: Introduction to Human Anatomy and Physiology I (4 hours)
AND -BID130L: Intro to Human Anat and Phys I Lab
BID140: Introduction to Human Anatomy and Physiology II (4 hours)
AND -BID140L: Intro to Human Anat and Phys II Lab
CHE101: General Chemistry (4 hours)
AND -CHE101L: General Chemistry - Laboratory
CHE102: Biological Chemistry (4 hours)
AND -CHE102L: Biological Chemistry-Laboratory
COM207: Intercultural Communication (4 hours)
ESC324: Exercise Science Laboratory (2 hours)
HSC101: Intro to Health Care Skills (1 hours)
OR -: Equivalent CPR
HSC103: Personal and Community Health (4 hours)
AND -HSC110L: Basic Weight Training Instruction Laboratory
HED201: Nutrition (2 hours)
OR -CHE208: Nutrition (3 hours)
HSC322: Kinesiology (4 hours)
HSC303: Exercise Physiology (4 hours)
PHY101: Introductory Physics I (4 hours)
AND -PHY101L: Introductory Physics Laboratory
PHY102: Introductory Physics II (4 hours)
AND -PHY102L: Introductory Physics Laboratory
PSY101: Introductory Psychology (4 hours)

Degree Support Courses (8 credits)

CMP112: Computational Thinking I (4 hours)
CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.
FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

Fine Arts (F1, F2)

Humanities (H1, H2)

Philosophy/Ethics/Religion (P1, P2)

Social Sciences (S1, S2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)

The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)

The Writing Seminar is taken during the first or second semester; includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)

The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)
For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Athletic Training Education Program Four-Year Curriculum Model

## Major Courses

The list below displays all the courses offered by the major:

- ATH101: Athletic Training Seminar I (2 hours)
- ATH101L: Athletic Training Seminar I Lab
- ATH102: Athletic Training Seminar II (2 hours)
- ATH102L: Athletic Training Seminar II Laboratory
- ATH301: Assessment and Evaluation I (4 hours)
- ATH301L: Assessment and Evaluation I Laboratory
- ATH302: Assessment and Evaluation II (4 hours)
- ATH302L: Assessment and Evaluation II Laboratory
- ATH304: Therapeutic Modalities (4 hours)
- ATH304L: Therapeutic Modalities Lab
- ATH311: Athletic Training Practicum I (1 hours)
- ATH312: Athletic Training Practicum II (1 hours)
- ATH403: Applied Exercise for Musculoskeletal Injuries (4 hours)
- ATH403L: Applied Exercise for Musculoskeletal Injuries Laboratory
- ATH405: Admin of Athletic Training (2 hours)
- ATH407: Athletic Training Seminar III (2 hours)
- ATH411: Athletic Training Practicum III (1 hours)
- ATH499: Capstone-Internship in Athletic Training (14 hours)

## Exercise Science

### Faculty

- **Brian P. Edlbeck**  Clinical Assistant Professor
- **Jamie L. Krzykowski**  Clinical Assistant Professor
- **David B. MacIntyre**  Clinical Associate Professor
- **Brenda D. Reeves**  Clinical Assistant Professor
- **Jason T. Roe**  Lecturer

The mission of the Exercise Science Program at Carroll University is to develop entry-level professionals who can perform a range of health/fitness assessments and prescribe evidence-based interventions across various populations and abilities. Students will possess strong critical thinking, communication, and interpersonal skills appropriate for multiple settings. The program will prepare students for professional certification exams (ACSM, NSCA) and postgraduate study in exercise science or other related disciplines.

The exercise science program emphasizes the area's body of knowledge, research, and practice. Constant reinforcement of content through practical experiences occurs through observations, exposure to clients in academic courses, practicum experiences, and full-time internships. Graduates are qualified professionals who are liberally educated and possess the foundations for lifelong learning.

Individuals interested in health/fitness management are prepared to provide exercise and general wellness programs to apparently healthy individuals across the life span in safe and effective environments. Those interested in strength and conditioning are prepared to provide training programs to improve athletic performance across the life span. Students are also well prepared for advanced study in either graduate school or a clinical health field.

### Learning Outcomes for Exercise Science

Upon completion of the Exercise Science Program, the individual:

1. Will demonstrate fundamental and applied scientific knowledge of human movement and performance in preparation for certification, entry-level employment, or advanced degrees in health-related graduate programs.

2. Will demonstrate competency in appropriately screening and assessing the health status of individuals across various populations and abilities.

3. Will be able to appropriately select, design, implement, and modify individualized health and fitness interventions for clients across various populations and abilities.

4. Will be able to educate, instruct, and motivate individuals in lifestyle modification in diverse settings across various populations and abilities.

5. Will be able to appropriately select, implement, and interpret health and fitness assessments across various populations and abilities.

6. Will possess strong communication and interpersonal skills to interact and collaborate effectively with professionals and peers.

7. Will be able to read and interpret scientific research and utilize the scientific inquiry process to collect appropriate data, analyze data, interpret results, and present conclusions in suitable oral, written, and technology formats.

8. Will display a strong sense of responsibility/accountability, initiative, and professional engagement.

### Fees

Specific courses that require use of equipment and disposable supplies are assigned a course fee.

- **Exercise Science Major**

  - **Core Courses (32 credits)**
    - ESC100: Introduction to Exercise Science (2 hours)
    - ESC215: Group Exercise Workshop (2 hours)
    - ESC280: Exercise Physiology (4 hours)
    - ESC300: Nutrition and Health (4 hours)
    - ESC320: Exercise Testing and Prescription (4 hours)
    - ESC322: Kinesiology (4 hours)

    - AND - ESC300L: Exercise Physiology Lab
    - AND - ESC301L: Exercise Testing and Prescription Lab
    - AND - ESC320L: Exercise Testing & Prescription Lab
    - AND - ESC322L: Kinesiology Lab
    - ESC390: Strength & Conditioning Theory Across the Lifespan (4 hours)
    - ESC390L: Strength and Conditioning Theory Across the Lifespan Lab
ESC420: Exercise Prescription for Special Populations (4 hours)
ESC440: Lifetime Weight Management and Behavior Change (4 hours)

Track Courses (35 credits)

■ US ESC Option
  ■ ESC460: Practicum (4 hours)
  ■ ESC480: Internship (12 hours)

Electives, 20 credits (may include 2 courses in the graduate ESC program).

■ ESC-DPT Option
  ■ PHY102: Introductory Physics II (4 hours)
  AND -PHY102L: Introductory Physics Laboratory
  ■ BIO402: Human Anatomy (4 hours)
  AND -BIO402L: Human Anatomy Laboratory
  ■ BIO403: Human Physiology (4 hours)
  AND -BIO403L: Human Physiology Laboratory

Transfer 23 credits from Phase 1 of DPT program.

■ ESC-MS ESC Option
  Electives (12 credits)

Transfer 23 credits from grad program

Supporting Courses (28 credits)

■ BIO130: Introduction to Human Anatomy and Physiology I (4 hours)
  AND -BIO130L: Intro to Human Anat and Phys I Lab
■ BIO140: Introduction to Human Anatomy and Physiology II (4 hours)
  AND -BIO140L: Intro to Human Anat and Phys II Lab
■ CHE101: General Chemistry (4 hours)
  AND -CHE101L: General Chemistry - Laboratory
■ CHE102: Biological Chemistry (4 hours)
  AND -CHE102L: Biological Chemistry-Laboratory
■ PHY101: Introductory Physics I (4 hours)
  AND -PHY101L: Introductory Physics Laboratory
■ CMP112: Computational Thinking I (4 hours)
■ CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)
■ PSY101: Introductory Psychology (4 hours)

Bachelor of Science Requirement

For more information on the Bachelor of Science Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

■ GE1 and GE2 Courses
  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
  Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
  Fine Arts (F1, F2)
  Humanities (H1, H2)
  Philosophy/Ethics/Religion (P1, P2)
  Social Sciences (S1, S2)

■ Cross-Cultural Component
  The Cross-Cultural Component is a five-course series through which students explore the study of culture:
  Transfer students will register for CCS101 for one credit.
  ■ Cultural Seminar (CCS100)
    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.
  ■ Writing Seminar (ENG 170)
    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.
  ■ Cross-Cultural Development (CCD)
    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.
  ■ Cross-Cultural Experience (CCE)
Undergraduate

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CSC330 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Exercise Science Four-Year Curriculum Model

- Major Courses

The list below displays all the courses offered by the major:

- ESC100: Introduction to Exercise Science (2 hours)
- ESC201: Sports Nutrition (4 hours)
- ESC202: Advanced Sports Nutrition (4 hours)
- ESC210: Exercise Testing & Prescription (3 hours)
- ESC215: Group Exercise Workshop (2 hours)
- ESC280: Exercise Physiology (4 hours)
- ESC280L: Exercise Physiology Lab
- ESC300: Nutrition and Health (4 hours)
- ESC302: Exercise in Health & Disease (3 hours)
- ESC303: Nutrition Assessment and Prescription (3 hours)
- ESC304: Nutrition and Fitness for Special Populations (3 hours)
- ESC305: Supplements for Sports Performance (2 hours)
- ESC315: Exercise Science Practicum I (1 hours)
- ESC320: Exercise Testing and Prescription (4 hours)
- ESC320L: Exercise Testing & Prescription Lab
- ESC322: Kinesiology (4 hours)
- ESC322L: Kinesiology Lab
- ESC324: Exercise Science Laboratory (2 hours)
- ESC390: Strength & Conditioning Theory Across the Lifespan (4 hours)
- ESC390L: Strength and Conditioning Theory Across the Lifespan Lab
- ESC391: Strength & Conditioning for Sport (2 hours)
- ESC420: Exercise Prescription for Special Populations (4 hours)
- ESC421: Exercise and Sport Psychology (4 hours)
- ESC435: Exercise Science Practicum II (1 hours)
- ESC440: Lifetime Weight Management and Behavior Change (4 hours)
- ESC460: Practicum (4 hours)
- ESC480: Internship (12 hours)

Pre-Occupational Therapy

Carroll University offers an opportunity to pursue an emphasis in Pre Occupational Therapy for those students wishing to pursue future graduate education in Occupational Therapy. Occupational therapy is a health care profession that focuses on helping people of all ages regain, develop, or master everyday skills in order to live independent, productive, and satisfying lives. Students interested in pursuing occupational therapy as a career must complete an undergraduate degree (with required prerequisites), graduate from an entry level occupational therapy education program (Master’s or Doctoral level) accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) and sit for the National Occupational Therapy Certification Examination.

Students are prepared for graduate occupational therapy education through the completion of an undergraduate degree and the specific required prerequisite courses of the occupational therapy educational program. Suggested undergraduate majors may include Psychology, Biology, Public Health, or Exercise Science.

- Admission/Progression Requirements

Acceptance into a graduate occupational therapy education program is competitive and dependent upon multiple requirements. If you are interested in applying to an occupational therapy program, you must obtain specific requirements, prerequisites, and program content from the schools to which you are applying. Most programs also require volunteer or paid work experience with persons with disabilities, satisfactory performance on the Graduate Record Examination (GRE), letters of recommendation, Caregiver Background Check and a minimum undergraduate and professional grade point of 3.0 on a 4.0 scale. Many schools minimum GPA exceeds the 3.0 minimum. Courses required in Carroll Pre Occupational Therapy emphasis include:

- BIO130: Introduction to Human Anatomy and Physiology I (4 hours)
- BIO130L: Intro to Human Anat and Phys I Lab
- BIO140: Introduction to Human Anatomy and Physiology II (4 hours)
- BIO140L: Intro to Human Anat and Phys II Lab
- PSY101: Introductory Psychology (4 hours)
- PHY101: Introductory Physics I (4 hours)
- PHY101L: Introductory Physics Laboratory
- PSY221: Life-Span Psychology (4 hours)
- CMP112: Computational Thinking I (4 hours)
- CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)

Completion of the above Pre Occupational Therapy emphasis does not ensure future admittance to an occupational therapy program. Some educational programs may require additional prerequisite courses. Students are encouraged to identify the occupational therapy education program they intend to apply to by the completion of their senior year.

- Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

**NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

- General Education Requirement

For more information on General Education Requirement, click here.

- Distribution Component

For more information on the Distribution Component, click here.
GE1 and GE2 Courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

Fine Arts (F1, F2)

Humanities (H1, H2)

Philosophy/Ethics/Religion (P1, P2)

Social Sciences (S1, S2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

Cultural Seminar (CCS100)

The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one’s own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

Writing Seminar (ENG 170)

The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

Cross-Cultural Development (CCD)

The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

Cross-Cultural Experience (CCE)

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

Pre-Physical Therapy

Sara M. Deprey Clinical Associate Professor
Mark R. Erickson Clinical Associate Professor
John P. McCarthy Associate Professor
Amy E. McQuade Clinical Assistant Professor
Thomas G. Pahnke Clinical Associate Professor
Kathleen A. Shields Clinical Assistant Professor
Jeffrey P. Sischo Clinical Assistant Professor

The aim of the professional phase of the Doctor of Physical Therapy Program is to produce clinicians, trained for general practice in a dynamic health care environment, who provide best care, respectful of patient/client values, grounded in evidence-based practice and clinical reasoning, and contribute to the profession and their community.

The Entry-level Doctor of Physical Therapy Program is fully accredited by the Higher Learning Commission of the North Central Association. The Doctor of Physical Therapy Program at Carroll University is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, Virginia 22314; telephone: 703-706-3245; email: accreditation@apta.org; website: http://www.capteonline.org.

Curriculum

The Carroll University Entry-level Physical Therapy Program consists of a six-year course of study, divided into pre-professional and professional phases.

During the pre-professional phase (freshman, sophomore and junior years), students complete their undergraduate course work while fulfilling the requirements to enter the professional phase. Pre-physical therapy education at Carroll University is grounded in the humanities and the natural, behavioral and social sciences. For pre-Physical Therapy students pursuing an undergraduate degree at Carroll University, a Bachelor of Science degree in Psychology, Exercise Science, Biology, Communication or Spanish is typically used to complete the Physical Therapy Program in six years.

The professional phase begins the senior year, lasts eight semesters, and is subdivided into two phases, Phase I and Phase II. During Phase I of the professional program, fall and spring terms of senior year, course work in physical therapy begins at the 400 level. The 400 level courses present the basic, behavioral, professional, and applied science foundations that are subsequently applied in the 500 and 600 level courses taken during Phase II of the professional program. Bachelor’s degrees are awarded at the conclusion of the senior year to those individuals satisfying all Carroll undergraduate requirements.

Immediately following Commencement, students begin the graduate segment of Phase II course work within the professional program. Here the 500 and 600 level courses in physical therapy are offered in a developmental sequence that integrates knowledge throughout the student’s professional education. Upon successful completion of Phase I and II of the professional curriculum, an Entry-level Doctor of Physical Therapy degree is awarded. Graduates participate in the University’s Commencement ceremony in May of year six.

Admission
See the Admission section of this catalog.

**Academic Progression**

The Academic Progression standards for the Pre-Physical Therapy Program are presented in the Academic Program and Policies section of this catalog.

NOTE: See the Carroll University Graduate Catalog for descriptions of Physical Therapy (PTH) courses in Phase II of the Entry-level Physical Therapy Program.

- Pre-Physical Therapy Majors (96 credits)
  - Psychology Major (Bachelor of Science)
  - Biology Major (Bachelor of Science)
  - Exercise Science Major (Bachelor of Science)
  - Communication Major (Bachelor of Science)
  - Spanish (Bachelor of Science)

**Optional Minors:** Biology, Business, Chemistry, Psychology, Public Health, Sociology

**Professional Program**

Senior Year for Direct Admission and Transfer Students (32 credits).

**Phase I**

- Fall Semester 16 credits
  - PTH400: Foundations of Professional Practice (4 hours)
  - PTH404: Biomechanics I (4 hours)
  - PTH406: Exercise Physiology I (4 hours)
  - PTH407: Human Learning and Behavior (4 hours)

- Spring Semester 16 credits
  - PTH401: Clinical Research I (4 hours)
  - PTH405: Neuroscience (4 hours)
  - PTH414: Biomechanics II (4 hours)
  - PTH416: Exercise Physiology II (4 hours)

**Summary of Credits**

- Pre-Professional Phase 96 credits
- Professional Phase 1 32 credits

Pre-Physical Therapy Emphasis with undergraduate major 128 credits

See the Carroll University Graduate Catalog for descriptions of Physical Therapy (PTH) courses in Phase II of the Entry-level Physical Therapy Program.

**Sports Nutrition**

**Brian P. Edlebeck**  
Clinical Assistant Professor

**Jamie L. Krzykowski**  
Clinical Assistant Professor

Program Goals: The overall goal of the Sports Nutrition minor is to provide the student with information on the combination of sound nutrition and exercise principles to improve both sports performance and health. A further goal is to give the student tools to make decisions on sports nutrition information presented in the popular media and effectively work with a client on unique sports related needs. Additionally, the minor has been recognized by the International Society of Sports Nutrition (ISSN) and is designed to prepare students for CISSN sports nutrition certification.

**Learning Outcomes for Sports Nutrition**

Upon completion of the sports nutrition minor program, the individual:

1. Will be able to effectively evaluate popular nutrition claims.
2. Will be able to identify and evaluate related research.
3. Will be able to effectively assess a client’s needs and prescribe appropriate nutrition and exercise programs.
4. Will be able to communicate effectively to the client.
5. Will possess the knowledge and skills needed to sit for the CISSN certification exam.

**Sports Nutrition Minor**

**Courses required for the Minor**

- CHE208: Nutrition (3 hours)
- ESC210: Exercise Testing & Prescription (3 hours)
- ESC220: Advanced Sports Nutrition (4 hours)
- ESC303: Nutrition Assessment and Prescription (3 hours)
- ESC304: Nutrition and Fitness for Special Populations (3 hours)
- ESC305: Supplements for Sports Performance (2 hours)
Bachelor of Science Degree Completion Emphasis

For students who have earned, or might be currently earning an Associate Degree in a health related profession such as surgical technician, radiography, etc., the Health Science major provides an avenue for professional growth and advancement. Students are awarded thirty credits by Carroll University for course work taken at either Waukesha County Technical College (WCTC) or Milwaukee Area Technical College (MATC) in conjunction with their respective degree.

The remaining required courses will vary depending on the degree program. For example, students with a surgical technician degree from MATC would be required to complete 36 of the above 48 core credits while a student with a radiography degree from WCTC would be required to complete 44 of the 48 core credits above. Students with a degree from either WCTC or MATC who wish to pursue the Health Science major would have an opportunity to take between ten and twenty-six elective credits. Additional course work focuses on preparing the individual for enhanced personal and professional development. Recommended options include a minor in a desired area of interest such as Hispanic Health and Human Services or Organizational Leadership, or a broad course of study within the liberal arts and sciences.

Fees

Specific courses that require use of disposable supplies are assigned a course fee as noted in the course description.
Dr. Denise Guastello is the coordinator for the Psychology Department. Her email is dguast@carrollu.edu and telephone number is 262-524-7249.

Dr. Michael Schuder is the coordinator for the Biology, Environmental Science, and Marine Sciences Departments.

Dr. Guastello and Dr. Schuder are coordinators for Animal Behavior as this is interdisciplinary.

Programs

Undergraduate

- Animal Behavior
- Biology
- Environmental Science
- Marine Sciences
- Psychology

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Program: Undergraduate
College of Natural Sciences, Health Sciences and Business
Department: Life Sciences

- Animal Behavior
  Susan E. Lewis  Professor of Biology
  Christopher J. May  Associate Professor of Psychology
  Matthew Scheel  Associate Professor of Psychology

The interdisciplinary major in Animal Behavior supports the mission of Carroll University and the Division of Natural Health Sciences. The program is designed to give students a thorough knowledge of Animal Behavior within the domains of comparative psychology, behavioral ecology, and behavioral neuroscience. It will also enrich students' ability to apply scientific methods to understand the behavior of animals. The major will provide a foundation for those who wish to pursue graduate studies or professional careers in animal behavior or a related field, including veterinary medicine.

**Learning Outcomes for Animal Behavior**

As students progress through the animal behavior major, they will strengthen their abilities to:

1. Define and describe animal behavior-related terminology and concepts.
2. Understand experimental design.
3. Execute empirical procedures.
4. Demonstrate multiple effective communication skills.
5. Work effectively in a team environment.
6. Use technology for academic or professional activities.

- Animal Behavior Major Bachelor of Science
  - BIO120: General Biology I (4 hours)
    AND -BIO120L: General Biology I Laboratory
  - BIO125: General Biology II (4 hours)
    AND -BIO125L: General Biology II Laboratory
  - BIO220: Genetics (4 hours)
    AND -BIO220L: Genetics Laboratory
  - BIO417: Behavioral Ecology (4 hours)
    AND -BIO417L: Behavioral Ecology Laboratory
  - PSY101: Introductory Psychology (4 hours)
  - PSY205: Statistics and Experimental Design (4 hours)
    AND -PSY205L: Statistics and Experimental Design Lab
  - PSY240: Biopsychology (4 hours)
  - PSY314: Learning and Animal Behavior (4 hours)
  - PSY414: Research Methods in Behavior Analysis (2 hours)
  - PSY401: Behavioral Neuroscience (4 hours)
  - ANB380: Internship in Animal Behavior (2-4 hours)

- Required Support Courses (14 credits)
  - CHE109: Principles of Chemistry I (4 hours)
    AND -CHE109L: Principles of Chemistry I - Lab
  - CHE110: Principles of Chemistry II (4 hours)
    AND -CHE110L: Principles of Chemistry II - Lab
  - CMP112: Computational Thinking I (4 hours)
  - CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)

- Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

**NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

- General Education Requirement

For more information on General Education Requirement, click here.

- Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

- Fine Arts (F1, F2)
- Humanities (H1, H2)
- Philosophy/Ethics/Religion (P1, P2)
- Social Sciences (S1, S2)

- Cross-Cultural Component
  The Cross-Cultural Component is a five-course series through which students explore the study of culture:
  Transfer students will register for CCS101 for one credit.
  - Cultural Seminar (CCS100)
    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.
  - Writing Seminar (ENG 170)
    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.
  - Cross-Cultural Development (CCD)
    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.
  - Cross-Cultural Experience (CCE)
    The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

  For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Major Courses
  The list below displays all the courses offered by the major:
  - ANB301: Theory and Practice of Animal Training (3 hours)
  - ANB302: Winter Ecology of Wolf and Lynx (3 hours)
  - ANB380: Internship in Animal Behavior (2-4 hours)

- Biology
  - Susan M. Hanson, Senior Lecturer
  - Cynthia J. Horst, Associate Professor
  - Susan E. Lewis, Professor
  - Christine Schneider, Assistant Professor
  - Eric T. Thoboben, Assistant Professor

  The Biology Program will transform students into biologists with enhanced skills in critical thinking and scientific reasoning. Students will learn in an environment that fosters creativity, independent thinking, and the application of knowledge in the biological sciences. When biology students graduate from Carroll University, they will have the confidence and skills necessary to be successful professionals in a dynamic work force.

  The biology major is designed to give students excellent preparation for graduate study or professional careers in the life sciences, including molecular biology, physiology, field biology, research, teaching, dentistry, medicine, physical therapy, physician assistant, or veterinary medicine. All students have opportunities to develop excellent research skills throughout the core courses and upper-level biology electives, and many students collaborate with biology faculty on their current scholarly research.

  Learning Outcomes for Biology

  As students progress through the biology major, they will strengthen abilities to:

  1. Learn how to learn.
  2. Read scientific literature.
  3. Understand basic biological principles.
  4. Apply knowledge to new situations.
  5. Analyze complex issues.
  6. Synthesize their understanding of diverse concepts.
  7. Effectively conduct research.
8. Effectively communicate scientific information.
9. Understand and apply ethical principles.
10. Focus their career options.

Students in the Biology program may be considered for graduation with program honors if they complete the following requirements:

- GPA, Biology courses: 3.6 or higher
- GPA, Overall: 3.4 or higher

Presentation of research project results at a regional or national meeting (e.g., BBB or a disciplinary society) or submission of a manuscript to a peer-reviewed journal

Demonstrated commitment to the biology profession, broadly defined, above and beyond that of the average student. Evidence of such commitment will come from one or more of the following:
- Active membership in Beta Beta Beta, the Biological Honor Society.
- Active membership in a professional/scholarly organization related to biology (e.g., Ecological Society of America, American Society for Microbiology, etc.).
- Significant educational activity/outreach (e.g., tutoring, mentoring) at the university or other level.
- Consistent and sustained volunteer activity in an organization working on environmental, health, or other issues relevant to biology.
- Significant research activity separate from or above and beyond the capstone.
- Sustained activity in science-related policy/consulting in communication, journalism, government, public policy, business, industry or education.

The Biology faculty will review these requirements for all graduating seniors in the spring semester of each year.

Fees

Specific courses that require use of transportation, equipment or disposable supplies are assigned a course fee.

- **Biology Major**
  - Core Courses
    - BIO120: General Biology I (4 hours)  
      AND -BIO120L: General Biology I Laboratory
    - BIO125: General Biology II (4 hours)  
      AND -BIO125L: General Biology II Laboratory
    - BIO220: Genetics (4 hours)  
      AND -BIO220L: Genetics Laboratory
    - BIO225: Organismal Physiology (4 hours)  
      AND -BIO225L: Organismal Physiology Laboratory
    - BIO399: Capstone in Biological Sciences (4 hours)
  - Four Elective Courses
    - Including at least one course from each area listed below:
    - Ecological, Organismal, and Cellular/Molecular.
    - Biology 324, Bioethics, may be counted as a fourth elective course.
    - Ecological
      - BIO319: Field Botany (4 hours)
      - BIO333: Experimental Methods in Field Biology (4 hours)  
        AND -BIO333L: Experimental Methods in Field Biology Laboratory
      - BIO360: Aquatic Ecology (4 hours)  
        AND -BIO360L: Aquatic Ecology Laboratory
      - BIO417: Behavioral Ecology (4 hours)  
        AND -BIO417L: Behavioral Ecology Laboratory
      - BIO460: Restoration Ecology (4 hours)
    - Organismal
      - BIO322: Comparative Vertebrate Zoology (4 hours)  
        AND -BIO322L: Comparative Vertebrate Zoology Laboratory
      - BIO350: Endocrinology (4 hours)
      - BIO402: Human Anatomy (4 hours)  
        AND -BIO402L: Human Anatomy Laboratory
      - BIO403: Human Physiology (4 hours)  
        AND -BIO403L: Human Physiology Laboratory
    - Cellular/Molecular
      - BIO312: Microbiology (4 hours)  
        AND -BIO312L: Microbiology Laboratory
      - BIO332: Gene Manipulation and Genomics (4 hours)  
        AND -BIO332L: Gene Manipulation and Genomics Lab
      - BIO452: Advanced Cell Biology (4 hours)  
        AND -BIO452L: Advanced Cell Biology Laboratory
  - Required Support Courses (*Required for primary majors only)
    - CHE109: Principles of Chemistry I (4 hours)  
      AND -CHE109L: Principles of Chemistry I - Lab
    - CHE110: Principles of Chemistry II (4 hours)  
      AND -CHE110L: Principles of Chemistry II - Lab
    - CHE203: Organic Chemistry I (4 hours)  
      AND -CHE203L: Organic Chemistry I Laboratory
    - CMP112: Computational Thinking I (4 hours)
    - CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)
    - One of the following:
      - CHE204: Organic Chemistry II (4 hours)  
        AND -CHE204L: Organic Chemistry II Laboratory
- CHE308: Biochemistry I (4 hours) AND -CHE308L: Biochemistry I Laboratory
- PHY101: Introductory Physics I (4 hours) AND -PHY101L: Introductory Physics Laboratory

- Bachelor of Science Requirement

  The requirements for a Bachelor of Science degree are:
  - CMP112 and either CMP113 or CMP114 or
  - MAT140 or higher and CSC110 or higher;

  **NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

- General Education Requirement

  For more information on General Education Requirement, click here.

- Distribution Component

  For more information on the Distribution Component, click here.

  - GE1 and GE2 Courses

    Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
    Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

    Fine Arts (F1, F2)

    Humanities (H1, H2)

    Philosophy/Ethics/Religion (P1, P2)

    Social Sciences (S1, S2)

- Cross-Cultural Component

  The Cross-Cultural Component is a five-course series through which students explore the study of culture:

  Transfer students will register for CCS101 for one credit.

  - Cultural Seminar (CCS100)

    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

  - Writing Seminar (ENG 170)

    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

  - Cross-Cultural Development (CCD)

    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

  - Cross-Cultural Experience (CCE)

    The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

    For more information and course listings, click here

  - Global Perspectives Colloquium (CCS400)

    In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Pre-Dental, Pre-Medical, Pre-Physician Assistant, Pre-Physical Therapy, and Pre-Veterinary

  Students preparing for pre-professional programs must complete the requirements in the Biology major as well as some of the following courses as appropriate for the specific professional program.

  It is the responsibility of each pre-professional student to compile a list of schools and their admittance requirements related to the courses below.

  Pre-professional students should then consult with the appropriate pre-professional advisor to ensure that the requirements will be met prior to graduation.

  - CHE204: Organic Chemistry II (4 hours) AND -CHE204L: Organic Chemistry II Laboratory
  - CHE308: Biochemistry I (4 hours) AND -CHE308L: Biochemistry I Laboratory
  - CMP112: Computational Thinking I (4 hours)
  - MAT160: Calculus I (4 hours)
- PHY101: Introductory Physics I (4 hours)
  AND - PHY101L: Introductory Physics Laboratory
- PHY102: Introductory Physics II (4 hours)
  AND - PHY102L: Introductory Physics Laboratory
- PSY101: Introductory Psychology (4 hours)
- ENG190: Intro to Creative Writing - Imagination and Rhetoric (4 hours)
  OR - ENG206: Fiction Writing (4 hours)
  OR - ENG207: Poetry Writing (4 hours)
  OR - ENG208: Creative Nonfiction Writing - The Documentary Impulse (4 hours)
  OR - ENG308: Advanced Creative Nonfiction (4 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:
- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

**NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.
For specific requirements, see "REQUIRED SUPPORT COURSES" within each major.

General Education Requirement

For more information on General Education Requirement, click here.

- Distribution Component
  For more information on the Distribution Component, click here.
  - GE1 and GE2 Courses
    Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
    Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
    Fine Arts (F1, F2)

    Humanities (H1, H2)

    Philosophy/Ethics/Religion (P1, P2)

    Social Sciences (S1, S2)

- Cross-Cultural Component
  The Cross-Cultural Component is a five-course series through which students explore the study of culture:
  Transfer students will register for CCS101 for one credit.
  - Cultural Seminar (CCS100)
    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.
  - Writing Seminar (ENG 170)
    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.
  - Cross-Cultural Development (CCD)
    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.
  - Cross-Cultural Experience (CCE)
    The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)
    For more information and course listings, click here
  - Global Perspectives Colloquium (CCS400)
    In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Secondary Education
  Students should be prepared to demonstrate mastery of biological concepts on the ETS Praxis II exam, which is required for licensure.

  To meet DPI requirements, Biology majors with a secondary education minor must complete the following courses:
  - Core Courses, plus
    - BIO312: Microbiology (4 hours)
      AND - BIO312L: Microbiology Laboratory
11/14/2019

- BIO322: Comparative Vertebrate Zoology (4 hours)
  AND -BIO322L: Comparative Vertebrate Zoology Laboratory
- BIO333: Experimental Methods in Field Biology (4 hours)
  AND -BIO333L: Experimental Methods in Field Biology Laboratory

One elective course in Biology (see Electives under Biology Major)

Students should be prepared to demonstrate mastery of biological concepts on the ETS Praxis II exam, which is required for licensure.

- Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:
- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

**NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS. FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR**

- General Education Requirement

For more information on General Education Requirement, click here.

- Distribution Component

For more information on the Distribution Component, click here.

  - GE1 and GE2 Courses

    Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
    Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

    Fine Arts (F1, F2)

    Humanities (H1, H2)

    Philosophy/Ethics/Religion (P1, P2)

    Social Sciences (S1, S2)

- Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

  - Cultural Seminar (CCS100)

    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

  - Writing Seminar (ENG 170)

    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

  - Cross-Cultural Development (CCD)

    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

  - Cross-Cultural Experience (CCE)

    The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

    For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Biology Minor

  - BIO120: General Biology I (4 hours)
    AND -BIO120L: General Biology I Laboratory
  - BIO125: General Biology II (4 hours)
    AND -BIO125L: General Biology II Laboratory
  - BIO220: Genetics (4 hours)
    AND -BIO220L: Genetics Laboratory
  - BIO225: Organismal Physiology (4 hours)
    AND -BIO225L: Organismal Physiology Laboratory

Two elective courses in Biology (see Electives under Biology Major above)
Major Courses

The list below displays all the courses offered by the major:

- BIO100: Introductory Human Biology (4 hours)
- BIO100L: Introductory Human Biology Laboratory
- BIO120: General Biology I (4 hours)
- BIO120L: General Biology I Laboratory
- BIO125: General Biology II (4 hours)
- BIO125L: General Biology II Laboratory
- BIO130: Introduction to Human Anatomy and Physiology I (4 hours)
- BIO130L: Intro to Human Anat and Phys I Lab
- BIO131: Human Genetics (4 hours)
- BIO131L: Human Genetics Lab
- BIO140: Introduction to Human Anatomy and Physiology II (4 hours)
- BIO140L: Intro to Human Anat and Phys II Lab
- BIO212: Microbiology (4 hours)
- BIO212L: Microbiology Laboratory
- BIO220: Genetics (4 hours)
- BIO220L: Genetics Laboratory
- BIO225: Organismal Physiology (4 hours)
- BIO225L: Organismal Physiology Laboratory
- BIO271: Clinical Immunology (4 hours)
- BIO271L: Clinical Immunology Laboratory
- BIO312: Microbiology (4 hours)
- BIO312L: Microbiology Laboratory
- BIO319: Field Botany (4 hours)
- BIO322: Comparative Vertebrate Zoology (4 hours)
- BIO322L: Comparative Vertebrate Zoology Laboratory
- BIO324: Bioethics (4 hours)
- BIO332: Gene Manipulation and Genomics (4 hours)
- BIO332L: Gene Manipulation and Genomics Lab
- BIO333: Experimental Methods in Field Biology (4 hours)
- BIO333L: Experimental Methods in Field Biology Laboratory
- BIO350: Endocrinology (4 hours)
- BIO360: Aquatic Ecology (4 hours)
- BIO360L: Aquatic Ecology Laboratory
- BIO399: Capstone in Biological Sciences (4 hours)
- BIO402: Human Anatomy (4 hours)
- BIO402L: Human Anatomy Laboratory
- BIO403: Human Physiology (4 hours)
- BIO403L: Human Physiology Laboratory
- BIO417: Behavioral Ecology (4 hours)
- BIO417L: Behavioral Ecology Laboratory
- BIO452: Advanced Cell Biology (4 hours)
- BIO452L: Advanced Cell Biology Laboratory
- BIO460: Restoration Ecology (4 hours)
- BIO480: Internship in Biology (1 TO 4 hours)
- BIO485: Research in Biology (1 TO 4 hours)
- BIO491: Special Topics in Biology (1 TO 4 hours)
- BIO498: Independent Study (1 TO 4 hours)

Environmental Science

The Environmental Science program houses one academic major and two related minors: Earth Science and Geography & Environmental Studies.

The Environmental Science major provides students with a comprehensive background in the physical and life sciences as well as applications in the social and management dimensions of environmental issues that are central to the quality of human life on earth as well as to the conservation and protection of the planet’s natural resources.

Environmental Science as a career includes such professions as: water, soil, or air quality analyst, natural resource manager, environmental protection agent, environmental planner, soil scientist, hydrologist, park ranger, conservation warden, resource mapping specialist, government researcher, environmental educator and private environmental consultant.

The program manages the 65-acre Greene Scientific Field Station located in the Kettle Moraine region just west of Waukesha. This site features a pristine trout stream, several surface springs, and associated wetland vegetative communities. The site provides students with opportunities for outdoor laboratory and research activities, and also provides work experience for students interested in hands-on management of private resource conservancy sites.

Last, a student can earn a Master of Science in Environmental Science via a partnership with Alaska Pacific University (APU). Students who enroll at Carroll for three years and then transfer to APU for two years can earn both a Bachelor of Science degree from Carroll University and a Master of Science degree from APU.

Objectives of the Environmental Science Major

To provide students with an integrated awareness and understanding of the biological, physical, chemical, and social components of the global natural resource base. Students should be able to apply this knowledge to the management of resources, the measurement of environmental quality, and the assessment of related societal impacts and implications. To provide students with an academic experience that facilitates advanced graduate study and career work in environmentally related fields.

Key Elements of the Major

- Jason G. Freund  Assistant Professor of Environmental Science
- Kelly J. LaBlanc  Instructor of Environmental Science
- Joseph J. Piatt  Associate Professor of Chemistry and Environmental Science
- Eric Thobaben  Assistant Professor of Biology
Several required core courses that provide students not only with a broad introduction to the field of environmental science, but also with upper-level research or internship experiences in environmental analysis and assessment. Upon completion of the major students will:

- Recognize the interrelated biophysical components and processes (i.e., structure and function) of the natural environment.
- Understand how physical/chemical processes dynamically shape the earth's surface and how such phenomena are distributed globally.
- Correlate a broad understanding of environmental science with a specific/correlative understanding of related scientific fields.
- Cultivate a set of personal values and attitudes concerning the environment, which will then prepare oneself to actively address environmental problems and participate in their solutions.
- Understand how human activities and physical systems affect one another, and how to assess the impacts and implications of these interrelationships.
- Apply appropriate scientific methods and techniques to the acquisition, analysis, and evaluation of environmental data.
- Analyze environmental variables in measurable (quantitative/objective) and perceptual (qualitative/subjective) ways using modern equipment and instrumentation.
- Acquire and analyze environmental samples and variables in outdoor settings using field equipment and instrumentation.
- Utilize computers for acquiring, organizing, analyzing, and displaying valid environmental information and research results.
- Demonstrate competency in written and oral communication by preparing effective written reports and oral presentations for peer and professional audiences.
- Work cooperatively and purposefully with others in research and problem-solving situations.

Fees

Specific courses that require use of equipment and disposable supplies are assigned a course fee.

- Environmental Science Major
  - Core Courses
    - ENV105: Earth Science (4 hours)
      AND -ENV105L: Earth Science Laboratory
    - ENV201: Problem Solving in Environmental Systems (4 hours)
    - ENV220: Weather and Climate (4 hours)
      AND -ENV220L: Weather and Climate Laboratory
    - ENV253: Mapping and Remote Sensing (4 hours)
    - ENV267: Geographic Information Systems (4 hours)
    - ENV292: Environmental Ethics (4 hours)
    - ENV325: Soils and Hydrology (4 hours)
      AND -ENV325L: Soils and Hydrology Laboratory
    - ENV349: Environmental Planning and Policy (4 hours)
    - ENV455: Watershed Management (4 hours)
    - ENV499: Capstone Seminar in Environmental Assessment (2 hours)
  - Required Supporting Courses
    - BIO120: General Biology I (4 hours)
      AND -BIO120L: General Biology I Laboratory
    - CHE109: Principles of Chemistry I (4 hours)
      AND -CHE109L: Principles of Chemistry I - Lab
    - CHE110: Principles of Chemistry II (4 hours)
      AND -CHE110L: Principles of Chemistry II - Lab
    - POL155: Contemporary Global Politics (4 hours)
      OR -POL332: Public Policy (4 hours)
      OR -SOC202: Society and Ecology (4 hours)
    - CMP112: Computational Thinking I (4 hours)
    - CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)
  - Bachelor of Science Requirement
    - The requirements for a Bachelor of Science degree are:
    - CMP112 and either CMP113 or CMP114 or
    - MAT140 or higher and CSC110 or higher;
  - NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.
    FOR SPECIFIC REQUIREMENTS, SEE “REQUIRED SUPPORT COURSES” WITHIN EACH MAJOR
  - General Education Requirement
    - For more information on General Education Requirement, click here.
  - Distribution Component
    - For more information on the Distribution Component, click here.
    - GE1 and GE2 Courses
      - Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
      - Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
      - Fine Arts (F1, F2)
      - Humanities (H1, H2)
Philosophy/Ethics/Religion (P1, P2)

Social Sciences (S1, S2)

- Cross-Cultural Component
  The Cross-Cultural Component is a five-course series through which students explore the study of culture:
  
  Transfer students will register for CCS101 for one credit.

  - Cultural Seminar (CCS100)
    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

  - Writing Seminar (ENG 170)
    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

  - Cross-Cultural Development (CCD)
    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

  - Cross-Cultural Experience (CCE)
    The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

    For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Environmental Science Minors
  - Earth Science
    ENV105: Earth Science (4 hours)
    AND -ENV105L: Earth Science Laboratory
    ENV220: Weather and Climate (4 hours)
    AND -ENV220L: Weather and Climate Laboratory
    ENV223: Geologic Landscape of N America (4 hours)
    ENV253: Mapping and Remote Sensing (4 hours)
    PHY105: Astronomy (4 hours)
    In addition, two courses (minimum 6 credits) from the following:
    - ENV215: Natural Hazards (2 hours)
    - ENV255: Environmental Resource-Wisconsin (4 hours)
    - ENV325: Soils and Hydrology (4 hours)
    AND -ENV325L: Soils and Hydrology Laboratory
    - ENV290: Workshop-Environmental Science (2 TO 4 hours)
    OR -ENV490: Workshop-Environmental Science (2 TO 4 hours)

  - Geography & Environmental Studies
    ENV105: Earth Science (4 hours)
    AND -ENV105L: Earth Science Laboratory
    ENV120: Conservation and Environmental Improvement (4 hours)
    AND -ENV120L: Conservation and Environmental Improvement Laboratory
    ENV138: Cultural Geography (4 hours)
    ENV160: World Regional Geography (4 hours)
    ENV292: Environmental Ethics (4 hours)
    In addition, two or three courses (minimum 8 credits) from the following offerings:
    - ENV215: Natural Hazards (2 hours)
    - ENV220: Weather and Climate (4 hours)
    AND -ENV220L: Weather and Climate Laboratory
    - ENV223: Geologic Landscape of N America (4 hours)
    - ENV253: Mapping and Remote Sensing (4 hours)
    - ENV252: Contemporary Issues in Geog and the Environment (2 hours)
    - ENV255: Environmental Resource-Wisconsin (4 hours)
    - ENV267: Geographic Information Systems (4 hours)
    - ENV290: Workshop-Environmental Science (2 TO 4 hours)
    OR -ENV490: Workshop-Environmental Science (2 TO 4 hours)
    ENV349: Environmental Planning and Policy (4 hours)
    ENV455: Watershed Management (4 hours)
    SOC202: Society and Ecology (4 hours)

- Graduate Degree in Environmental Science in Alaska
  Three years of undergraduate coursework are completed at Carroll University followed by two years of graduate study at Alaska Pacific University (APU). The first year of APU courses transfer back to Carroll to complete the Bachelor of Science degree in Environmental Science with a minor in biology or chemistry. The agreement with APU specifies that students should be able to complete the Master of Science degree after two years of study in Alaska.

  In preparation for this graduate program, students must complete a minimum of 104 credits at Carroll, Cross-Cultural and Distribution courses, plus the following math and science courses during their first three years at Carroll:
• BIO120: General Biology I (4 hours)
  AND -BIO120L: General Biology I Laboratory
• BIO125: General Biology II (4 hours)
  AND -BIO125L: General Biology II Laboratory
• CHE109: Principles of Chemistry I (4 hours)
  AND -CHE109L: Principles of Chemistry I - Lab
• CHE110: Principles of Chemistry II (4 hours)
  AND -CHE110L: Principles of Chemistry II - Lab
• ENV105: Earth Science (4 hours)
  AND -ENV105L: Earth Science Laboratory
• ENV201: Problem Solving in Environmental Systems (4 hours)
• ENV220: Weather and Climate (4 hours)
  AND -ENV220L: Weather and Climate Laboratory
• ENV223: Geologic Landscape of N America (4 hours)
• ENV253: Mapping and Remote Sensing (4 hours)
• ENV267: Geographic Information Systems (4 hours)
• ENV292: Environmental Ethics (4 hours)
• ENV349: Environmental Planning and Policy (4 hours)
• ENV455: Watershed Management (4 hours)
• ENV499: Capstone Seminar in Environmental Assessment (2 hours)
• CMP112: Computational Thinking I (4 hours)
• MAT140: Calculus and Its Applications (4 hours)

Major Courses

The list below displays all the courses offered by the major:

• ENV105: Earth Science (4 hours)
• ENV105L: Earth Science Laboratory
• ENV120: Conservation and Environmental Improvement (4 hours)
• ENV120L: Conservation and Environmental Improvement Laboratory
• ENV120H: Conservation and Environmental Improvement (4 hours)
• ENV120HL: Conservation and Environmental Improvement Laboratory
• ENV138: Cultural Geography (4 hours)
• ENV160: World Regional Geography (4 hours)
• ENV201: Problem Solving in Environmental Systems (4 hours)
• ENV215: Natural Hazards (2 hours)
• ENV220: Weather and Climate (4 hours)
• ENV220L: Weather and Climate Laboratory
• ENV222: Environmental Sustainability (4 hours)
• ENV223: Geologic Landscape of N America (4 hours)
• ENV252: Contemporary Issues in Geog and the Environment (2 hours)
• ENV253: Mapping and Remote Sensing (4 hours)
• ENV255: Environmental Resource-Wisconsin (4 hours)
• ENV267: Geographic Information Systems (4 hours)
• ENV290: Workshop-Environmental Science (2 TO 4 hours)
• ENV292: Environmental Ethics (4 hours)
• ENV325: Soils and Hydrology (4 hours)
• ENV349: Environmental Planning and Policy (4 hours)
• ENV380: Internship in Environmental Science (2 TO 4 hours)
• ENV391: Topics in Environmental Science (1 TO 4 hours)
• ENV396: Research-Environmental Science (2 TO 4 hours)
• ENV398: Independent Study in Environmental Science (1 TO 4 hours)
• ENV455: Watershed Management (4 hours)
• ENV480: Work-Oriented Internship (2 TO 4 hours)
• ENV491: Topics in Environmental Science (1 TO 4 hours)
• ENV496: Research in Environmental Science (2 TO 4 hours)
• ENV498: Independent Study in Envir Sci (1 TO 4 hours)
• ENV499: Capstone Seminar in Environmental Assessment (2 hours)

Marine Sciences

Susan E. Lewis  Professor of Biology
Eric T. Thobaben  Assistant Professor of Biology
Christopher D. Winn  Associate Dean of Marine Science Programs
Hawaii Pacific University

Carroll University offers access to majors in marine biology and oceanography via a cooperative arrangement with Hawaii Pacific University (HPU). The objective of the Marine Science Program at HPU is to help students gain a scientific understanding of the world's oceans and the life they contain, and a sense of appreciation for their beauty and fragility. Students are given a theoretical framework in the basic and applied sciences as well as ample opportunities to get hands-on experience conducting laboratory and field observations and experiments. Lecture and laboratory facilities are located on the Hawaii Loa Campus of Hawaii Pacific University. The campus is only a twenty-minute drive from Kaneohe Bay, a large natural embayment protected from the open ocean by the only true barrier reef in the Hawaiian Islands. This bay serves as one of the finest natural laboratories in the world for studying the marine sciences, and its protected nature allows HPU students to do field work in almost any type of weather.

Students desiring to major in marine biology or oceanography will spend two years at Carroll University taking basic science and liberal arts courses. After the two years, students transfer to Hawaii Pacific University and complete the requirements for a Marine Biology/Oceanography degree from Hawaii Pacific University.

Marine Biology or Oceanography Major

Science and mathematics courses taken at Carroll University

• BIO120: General Biology I (4 hours)
  AND -BIO120L: General Biology I Laboratory
• BIO125: General Biology II (4 hours)
  AND -BIO125L: General Biology II Laboratory
- CHE109: Principles of Chemistry I (4 hours)
  AND -CHE109L: Principles of Chemistry I - Lab
- CHE110: Principles of Chemistry II (4 hours)
  AND -CHE110L: Principles of Chemistry II - Lab
- ENV105: Earth Science (4 hours)
  AND -ENV105L: Earth Science Laboratory
- CMP112: Computational Thinking I (4 hours)
- CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)
- MAT160: Calculus I (4 hours)
- MAT161: Calculus II (4 hours)
- PHY101: Introductory Physics I (4 hours)
  AND -PHY101L: Introductory Physics Laboratory
  OR -PHY203: General Physics I (4 hours)
  AND -PHY203L: General Physics Laboratory
- PHY102: Introductory Physics II (4 hours)
  AND -PHY102L: Introductory Physics Laboratory
  OR -PHY204: General Physics II (4 hours)
  AND -PHY204L: General Physics Laboratory

- Additional Courses to fulfill HPUs General Education Curriculum
  (contact a Marine Biology advisor for a listing of all approved general education courses)

  Communication Skills:
  English 170, Writing Seminar; plus 1 additional course, e.g. Spanish 101 or Communication 101

  Global Systems:
  1 course, e.g., Economics 105 or History 104

  Research and Epistemology:
  Requirements are completed at HPU

  Values and Choices:
  3 courses, e.g. Environmental Science 292, Politics 101, or Philosophy 101

  World Cultures:
  CCS 100, Cultural Seminar; plus 2 additional courses, e.g., Art 103, Religion 102

  Bachelor of Science Requirement
  The requirements for a Bachelor of Science degree are:
  - CMP112 and either CMP113 or CMP114 or
  - MAT140 or higher and CSC110 or higher;

  NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.
  FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

  General Education Requirement
  For more information on General Education Requirement, click here.

  Distribution Component
  For more information on the Distribution Component, click here.
  - GE1 and GE2 Courses
    Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
    Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
    Fine Arts (F1, F2)
    Humanities (H1, H2)
    Philosophy/Ethics/Religion (P1, P2)
    Social Sciences (S1, S2)

  Cross-Cultural Component
  The Cross-Cultural Component is a five-course series through which students explore the study of culture:
  Transfer students will register for CCS101 for one credit.
  - Cultural Seminar (CCS100)
    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.
  - Writing Seminar (ENG 170)
    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.
  - Cross-Cultural Development (CCD)
The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here.

- Global Perspectives Colloquium (CCS400)

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

### Sample program at Carroll University

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>CCS 100</td>
<td>ENG 170</td>
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<tr>
<td>BIO 120</td>
<td>BIO 125</td>
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<tr>
<td>COM 101</td>
<td>ART 103</td>
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<tr>
<td>MAT 130</td>
<td>MAT 160</td>
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<table>
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<tr>
<th>Sophomore</th>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>CHE 109</td>
<td>CHE 110</td>
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<tr>
<td>MAT 161</td>
<td>ENV 105</td>
<td>(Oceanography majors only)</td>
</tr>
<tr>
<td>CMP112</td>
<td>CMP114</td>
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<tr>
<td>HIS 104</td>
<td>SOC 110</td>
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</tbody>
</table>

### Sample program for Marine Biology at Hawaii Pacific University

- Summer at CU or HPU before Junior Year
  - **PHY101**: Introductory Physics I (4 hours)
    - AND **PHY101L**: Introductory Physics Laboratory
  - **PHY102**: Introductory Physics II (4 hours)
    - AND **PHY102L**: Introductory Physics Laboratory
  - OR
  - HPU Physics I and HPU Physics II

### Sample program for Oceanography at Hawaii Pacific University

- Summer at CU or HPU before Junior Year
  - **PHY203**: General Physics I (4 hours)
    - AND **PHY203L**: General Physics Laboratory
  - **PHY204**: General Physics II (4 hours)
    - AND **PHY204L**: General Physics Laboratory
  - OR
  - HPU Physics I and HPU Physics II

### Psychology

- **Sandra K. Arntz**: Instructor
- **Denise D. Guastello**: Associate Professor
- **Margaret D. Kasimatis**: Assistant Professor
- **Christopher J. May**: Associate Professor
- **Matthew Scheel**: Associate Professor
- **Tara J. Schmidt**: Assistant Professor
- **David D. Simpson**: Professor
Psychology is a life science that focuses upon the physical and mental processes that underlie individual behavior. This definition provides a focus for the objectives of the psychology program at Carroll University. The program numbers among its liberal learning objectives those of enriching students' understanding of scientific methods and giving students a thorough knowledge of the subject matter central to their better comprehending people.

In addition to its emphasis upon liberal learning, the program strives to offer a major that provides an excellent foundation for those who wish to pursue graduate studies. The program takes great pride in its strong track record of launching psychology majors into academic and professional careers. Academic careers include teaching and research in biological, cognitive, or social psychology; professional careers include serving people in clinical, counseling, or industrial/organizational settings.

**Program Goals for Psychology**

1. Majors will understand psychology as a scientific discipline with regard to its content and research methods.
2. Majors will demonstrate intellectual skills in thinking, communication, information gathering and synthesis, as well as in quantitative and scientific methodology.
3. Demonstrate effective written skills
4. Demonstrate effective interpersonal communication skills

**Learning Outcomes**

Upon successful completion of the Psychology major, students will be able to:

1. Define and describe psychology-related terminology and concepts
2. Evaluate and generate psychological research
3. Demonstrate multiple effective communication skills
4. Work effectively in a team environment

Students may take up to 12 psychology courses plus Psychology 480 (Internship); however, only 10 4-credit, graded courses (i.e., 40 credits) are required for the major. In addition to Psychology 101, 205 and 307, and the senior capstone course 403, students complete additional requirements by selecting any six remaining psychology courses (excluding 398 and 480).

**Suggested groupings:**
- Clinical/Counseling (201; 206; 240; 303; 306 or 321; 314 or 316)
- Industrial/Organizational (211, 228, 303, 306, 316, and 321)
- Research (240, 303, 314, 401, and 492)

Pre-PT (201, 221 or 206, 260, 303 or 321, CMP112 and CMP114, plus two electives excluding 240 and 314) (PTH 405 and 407 do not count for psychology major or minor.)

**Fees**

Specific courses that require use of equipment and disposable supplies including certain types of psychological tests are assigned a course fee.

- **Psychology Major**
  - Core Courses
    - PSY101: Introductory Psychology (4 hours)
    - PSY205: Statistics and Experimental Design (4 hours)
    - PSY307: Experimental Psychology (4 hours)
  - AND
    - PSY205L: Statistics and Experimental Design Lab
    - PSY307L: Experimental Psychology Lab
    - PSY403: Capstone-Historical and Modern Viewpoints of Psychology (4 hours)
  - Six elective courses in Psychology or completion of an area grouping. (Cannot include both 206 and 221)
  - Forty credits are required as a minimum.
  - Only courses listed as psychology (PSY) courses may be used as core courses for a psychology major or count toward a psychology minor.

- **Required Support Courses (For primary majors only)**
  - CMP112: Computational Thinking I (4 hours)
  - CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)
  - Choose 8 additional credits from the following:
    - COM101: Principles of Communication (4 hours)
    - ENG305: Advanced Exposition and the Rhetorical Tradition (4 hours)
    - BUS250: Culture and Diversity in Organizations (4 hours)
    - OR
      - SOC110: Cultural Anthropology (4 hours)
    - CHE101: General Chemistry (4 hours)
      - AND
        - CHE101L: General Chemistry - Laboratory
    - CHE102: Biological Chemistry (4 hours)
      - AND
        - CHE102L: Biological Chemistry-Laboratory
    - OR
      - CHE109: Principles of Chemistry I (4 hours)
      - AND
        - CHE109L: Principles of Chemistry I - Lab
    - CHE110: Principles of Chemistry II (4 hours)
      - AND
        - CHE110L: Principles of Chemistry II - Lab

- **Bachelor of Science Requirement**
  - The requirements for a Bachelor of Science degree are:
    - CMP112 and either CMP113 or CMP114 or
    - MAT140 or higher and CSC110 or higher;
NOTE: EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.
FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

- General Education Requirement
  For more information on General Education Requirement, click here.

- Distribution Component
  For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.
  Students must take one GE2 course. The GE2 course chosen must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).
  - Fine Arts (F1, F2)
  - Humanities (F1, F2)
  - Philosophy/Ethics/Religion (P1, P2)
  - Natural Sciences (N1, N2)

- Cross-Cultural Component
  The Cross-Cultural Component is a five-course series through which students explore the study of culture:
  - Cultural Seminar (CCS100)
    The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.
  - Writing Seminar (ENG 170)
    The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.
  - Cross-Cultural Development (CCD)
    The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.
  - Cross-Cultural Experience (CCE)
    The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)
    For more information and course listings, click here
  - Global Perspectives Colloquium (CCS400)
    In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Psychology Minor
  - PSY101: Introductory Psychology (4 hours)
  - Additional coursework
    A minimum of four additional Psychology (PSY) courses, excluding PSY 398 and PSY 480. (Cannot include both PSY 206 and PSY 221.)
    At least one elective must be 300-level or higher. Twenty credits are required as a minimum.

- Major Courses
  The list below displays all the courses offered by the major:
  - PSY101: Introductory Psychology (4 hours)
  - PSY201: Abnormal Psychology (4 hours)
  - PSY205: Statistics and Experimental Design (4 hours)
  - PSY205L: Statistics and Experimental Design Lab
  - PSY206: Developmental Psychology (4 hours)
  - PSY210: The Science of Sleep (2 hours)
  - PSY211: Industrial and Organizational Psychology (4 hours)
  - PSY221: Life-Span Psychology (4 hours)
  - PSY228: Consumer Behavior (4 hours)
  - PSY240: Biopsychology (4 hours)
  - PSY260: Health Psychology (4 hours)
  - PSY303: Experimental Social Psychology (4 hours)
  - PSY306: Psychological Testing and Assessment (4 hours)
  - PSY307: Experimental Psychology (4 hours)
  - PSY307L: Experimental Psychology Lab
  - PSY314: Learning and Animal Behavior (4 hours)
  - PSY316: Thinking, Problem Solving, and Cognition (4 hours)
  - PSY317: Adult Development & Aging (2 hours)
  - PSY321: Personality - Theory and Assessment (4 hours)
  - PSY391: Special Studies in Psychology (2 hours)
- PSY398: Independent Study in Psychology (1 TO 4 hours)
- PSY401: Behavioral Neuroscience (4 hours)
- PSY401L: Behavioral Neuroscience Laboratory
- PSY403: Capstone-Historical and Modern Viewpoints of Psychology (4 hours)
- PSY414: Research Methods in Behavior Analysis (2 hours)
- PSY480: Internship in Psychology (2 TO 4 hours)
- PSY492: Research Seminar (4 hours)
Department: Nursing

Chairperson: Angela Brindowski  
Room: Henke Nursing Center 06  
Email: abrindow@carrollu.edu

Telephone: 262-650-4927  
Fax: 262-574-2618

Programs

Undergraduate

Nursing
Nursing

Angela Brindowski  Department Chair and Clinical Assistant Professor
JoAnn Browne  Lecturer
Joyce A. Ennis  Clinical Assistant Professor
Lisa Green  Clinical Assistant Professor
Jamie Hansen  Clinical Assistant Professor
Megan Holz  Clinical Assistant Professor
Karie Ruekert Kobiske  Clinical Assistant Professor
Laurie Kunkel-Jordan  Clinical Assistant Professor
Linda Phillips  Clinical Assistant Professor
Kathy Sampson  Lecturer
Jill Switalski  Laboratory Coordinator

Carroll University offers a program leading to a Bachelor of Science in Nursing degree. Established in fall of 2002, the nursing program is accredited by the Commission on Collegiate Nursing Education, has ongoing approval of the Wisconsin State Board of Nursing, is a member of the American Association of Colleges of Nursing and the National League for Nursing. Carroll University is accredited by the Higher Learning Commission and is a member of the North Central Association.

Mission of the Nursing Program

The Carroll University nursing program builds on Carroll University's mission of providing a superior educational opportunity to our students, one grounded in the liberal arts tradition and focused on career preparation and lifelong learning. Nursing practice is built on nursing knowledge, theory, and research. Nursing practice derives knowledge from a wide array of other fields and disciplines, adapting and applying this knowledge as appropriate to professional practice. It is the mission of the Carroll University nursing program to prepare nurses for professional practice in a variety of settings, preparing them to take on characteristics that will allow them to function in the generalist professional nursing role.

Philosophy and Vision of the Nursing Program

Our philosophy, in preparing professional nurses at the generalist level, is to provide grounding in the liberal arts in addition to career preparation. The educational process must allow for diversity, curiosity, and difference of opinion, but must not allow for indiscipline or neglect of academic rigor. We expect nursing students to focus on and connect nursing to every general education or liberal studies course. However, it is in clinical practice that the student will demonstrate patterns of professional behaviors that follow the legal and ethical codes of nursing and promote the actual or potential well being of patients. The promotion of health and wellness is a focus of all nursing practice, but nurses, more than any other health care discipline, takes care of the sick; therefore, acute care experience is a necessary background for any generalist practice setting and is a focus of generalist education. We believe nursing students are best served when they are educated in a variety of settings to provide...
care to diverse populations across all environments. The promotion of health and wellness, the prevention of injury and restoration of health are accomplished for a diversity of socio-economic, racial and ethnic populations in all settings.

Nursing faculty at Carroll University believe students are individuals who come with learning preferences, different experiences, varied goals, and therefore, have unique learning needs. Active learning is a teaching/learning partnership. The faculty recognizes that learning is a lifelong process and that undergraduate education is the beginning of the progression from novice to expert nurse. The baccalaureate program prepares the student to enter professional nursing practice as a beginning provider of nursing care in a variety of settings, cultivates a commitment to professional development, and provides the foundation for graduate study.

Curriculum
Our philosophy requires that the curriculum be responsive to the community of interest. To accomplish our mission, we consider it necessary to be flexible, to change quickly as society needs and technology changes. The program has been designed to be flexible in progression and sequencing, without sacrificing academic rigor. The conceptual framework, developed by nursing faculty, organizes the curriculum in a logical progression over the length of the program. The overviews in each course syllabus will illustrate how the essential components of professional nursing education are used in that course to prepare students to take on the characteristics that will allow them to function in the professional nursing role. Course objectives will demonstrate the achievement necessary for the student, at each level of the curriculum, to evidence competency as they progress.

Vision of the Carroll University Nursing Program

Be a leader of Baccalaureate Nursing education among Liberal Arts Universities in Wisconsin.

• Program Outcomes

Program Outcomes

At the completion of the Bachelor of Science Nursing program, the graduate nurse will:

I. Value a solid base in liberal education as the cornerstone of nursing practice and education.

II. Operationalize knowledge and skills in leadership, quality improvement and patient safety to provide high quality healthcare.

III. Model professional nursing practice that is grounded in the translation of current evidence into practice.

IV. Integrate knowledge and skills in information management and patient care technology in the delivery of quality patient care.

V. Recognize and distinguish healthcare policies, including financial and regulatory, which influence the nature and functioning of the healthcare system.

VI. Effectively communicate and collaborate to deliver high quality and safe patient care.

VII. Incorporate the concepts of health promotion and disease prevention at the individual and population level.

VIII. Internalize professionalism and the inherent values of altruism, autonomy, human dignity, integrity and social justice.

IX. Practice as a baccalaureate-graduate nurse

a. prepared to deliver care to individuals, families, groups, communities and populations across the lifespan and across the continuum of healthcare environments.

b. understanding and respecting the variations of care, the increased complexity and the increased use of healthcare resources inherent in caring for patients.

• Academic Progression Standards

The academic progression standards for the nursing program are presented in the Academic Program and Policies section of this Catalog.

• Technical Standards

Technical Standards for Admission to and Progression in the Carroll University Bachelor of Science in Nursing Program

Successful participation in the Carroll University Bachelor of Science in Nursing Program requires that a candidate possess the ability to meet the requirements of the program. Though the program may modify certain course requirements in order to provide a handicapped1 person with an equivalent opportunity to achieve results equal to those of a non-handicapped person, there are no substitutes for the following essential skills. The applicant/candidate must initially meet these requirements to gain admission to the program and must also continue to meet them throughout participation in the program.

General Ability: The student is expected to possess functional use of the senses of vision, touch, hearing and smell so that data received by the senses is integrated, analyzed and synthesized in a consistent and accurate manner. The student is expected to possess the ability to perceive pain, pressure, temperature, position, vibration and movement in order to effectively evaluate patients. A student must be able to respond promptly to urgent situations.

Observational Ability: The student must have the ability to make accurate visual observations and interpret them in the context of clinical/laboratory activities and patient care experiences. The student must be able to document these observations accurately.

Communication Ability: The student must communicate effectively verbally and non-verbally to obtain information and explain that information to others. Each student must have the ability to read, write, comprehend and speak the English language to facilitate communication with patients, family members and other members of the health care team. The student must be able to document and maintain accurate records, presents information in a professional manner and provide patient instruction to effectively care for patients and their families.

Motor Ability: The student must be able to perform gross and fine motor movements with sufficient coordination needed to provide complete physical assessments and provide safe effective care for patients. The student is expected to have psychomotor skills necessary to perform or assist with procedures, treatments, administration of medication and emergency interventions including CPR if necessary. The student must have sufficient levels of neuromuscular control and eye-to-hand
Undergraduate

coordination as well as possess the physical and mental stamina to meet the demands associated with extended periods of sitting, standing, moving and physical exertion required for safe patient care. Students must be able to bend, squat, reach, kneel or balance. Clinical settings may require that students have the ability to carry and lift loads from the floor, from 12 inches from the floor, to shoulder height and overhead. The student must be able to occasionally lift 50 pounds, frequently lift 25 pounds and constantly lift 10 pounds. The student is expected to be able to maintain consciousness and equilibrium and have the physical strength and stamina to perform satisfactorily in clinical settings.

Intellectual: Conceptual Ability: The student must have the ability to develop problem-solving skills essential to professional nursing practice. Problem solving skills include the ability to measure, calculate reason, analyze, synthesize objective and subjective data, and to make decisions in a timely manner that reflects thoughtful deliberation and sound clinical judgment. The student must demonstrate application of these skills and possess the ability to incorporate new information from peers, instructors and the nursing/healthcare literature to formulate sound judgment to establish care plans and priorities in patient care activities.

Behavioral and Social Attributes: The student is expected to have the emotional stability required to exercise sound judgment, complete assessment and intervention activities. Compassion, integrity, motivation and concern for others are personal attributes required of those in the nursing program. The student must fully utilize intellectual capacities that facilitate prompt completion of all responsibilities in the classroom and clinical settings; the development of mature, sensitive and effective relationship with patients and other members of the healthcare team. The ability to establish rapport and maintain interpersonal relationships with individuals, families and groups from a variety of social, emotional, cultural and intellectual backgrounds is critical for practice as a nurse. Each student must be able to adapt to changing environments; display flexibility; accept and integrate constructive criticism given in the classroom and clinical settings; and effectively collaborate in the clinical setting with other members of the healthcare team.

Ability to Manage Stressful Situations: The student must be able to adapt to and function effectively in relation to stressful situations encountered in both the classroom and clinical settings, including emergency situations. Students will encounter multiple stressors while in the nursing program. These stressors may be (but are not limited to) personal, patient care/family, faculty/peer and/or program related.

Background Check: Clinical facilities require that Carroll University perform background checks on all students before they are allowed to participate in clinical experiences. Therefore, students will be required to have a background check performed before being allowed into clinical practice

Evaluation: Carroll University may require that the applicant/student undergo a physical examination and/or an occupational skills evaluation. The University will endeavor to select and administer evaluations which accurately reflect the applicant’s/candidate’s aptitude or achievement level rather than the applicant’s/candidate’s handicap. A handicapped applicant/candidate shall not, on the basis of his or her handicap (except those which would preclude the essential skills outlined above) be excluded from participation in, denied the benefits of, nor be subjected to discrimination in the program.

1. Handicapped as defined by the federal government pursuant to SS 504 of the Rehabilitation Act of 1973.

- Caregiver Background Check

**Caregiver Background Check**

The applicant/candidate/student must complete a Background Information Disclosure Form prior to clinical placement in the program. The university intends to fully comply with the requirements of the Wisconsin Caregiver Background Check Law which requires hospitals and other health care and treatment entities to perform background checks on all persons who have direct, regular contact with clients. Certain convictions may prevent or significantly limit the ability of the university to place a student in a clinical program resulting in the student being unable to meet the university’s graduation requirements. The university reserves the right to reject the application of a candidate or remove a student from the program if the university determines that the results of the caregiver background check demonstrate that the applicant/student does not exhibit behavior and social attributes consistent with the program’s Technical Standards.

- Carroll University Health Policy for Nursing Students

**Health Policy for Nursing Students**

Policy:
Prior to the first clinical placement each student must show evidence that they are able to meet the requirements of the nursing program. These requirements include current health history, immunization and physical examination data. In addition, all students must have on file current CPR certification and a caregiver background check.

Procedure:
- Evidence of the completed history and exam must be on file before the onset of the first clinical experience. The University Physical Examination and Immunization record meets the history and exam requirement for the nursing program.
- Students may have the exam and screening completed with a private physician or nurse practitioner.
- It is not necessary to repeat the physical exam every year if there is no change in the student’s health status.
- An annual TB skin test is required before clinical experience.
- Some clinical partners require a urine drug screen. The urine drug screen can be completed at the Carroll University Health Center.
- Cost of the physical exam, immunizations, and drug screen is the responsibility of the student.
- Students who have not complied with the health policy will not be allowed in any clinical site.

- Time Commitment

**Time Commitment**

The Nursing Program is rigorous, labor intensive, and requires more time and commitment than many other areas of study. Clinical nursing courses require a minimum of 3 hours of direct clinical experience per semester credit hour. This does not
include time that is required for travel, clinical preparation at the assigned clinical agency or study prior to or after the clinical experience. Therefore, it is strongly recommended that students in the Nursing Program limit their employment and/or involvement in non-student related activities. Students are expected to be available Monday through Friday throughout the academic year. Students will be expected to participate in clinical experiences that occur on weekends and on shifts other than day shifts (0700-1530). Students in the capstone experience must understand that their clinical experience may be evenings or night shifts and/or weekend shifts.

- **Clinical Nursing Core Requirements**

  **Clinical Nursing Core Requirements**

  All applicants must be in good health and free from communicable diseases and be able to carry out the functions of a professional nurse as specified in the Technical Standards. Students must maintain current immunizations, CPR certification and professional liability insurance. Additional tests may be required by specific agencies in which the student has clinical experiences. The program will notify students when such tests are required. Students who fail to comply will not be allowed in clinical. All costs associated with clinical requirements is the responsibility of the student.

  Nursing courses begin during the freshman year allowing early participation in clinical service learning activities. Students will have diverse service learning experiences in a variety of clinical settings.

  The number of hours spent in laboratory (including clinical) experience varies from semester to semester and is based on one (1) semester credit being equal to three (3) hours of clinical per week.

  Approximate time commitment for clinical courses:

  - 200 level – 6 hours/week for one semester
  - 300 level Junior year – 15 hours/week during both semesters
  - 400 level Senior year – 15 hours/week during both semesters

- **Policy Statement on Student Attendance at Clinical**

  **Policy Statement on Student Attendance**

  Learning resource centers for student learning and testing are available. The nursing laboratory provides space and resources for students to practice and test their mastery of psychomotor skills used in patient care. The Carroll Library Learning Commons has a range of resources to support the nursing curriculum. The Walter Young Center provides personal counseling and the Study Center offers students opportunities to strengthen academic skills. All students should work closely with their advisor in planning their programs.

- **Learning and Study Resources**

  **Learning and Study Resources**

  Learning resource centers for student learning and testing are available. The nursing laboratory provides space and resources for students to practice and test their mastery of psychomotor skills used in patient care. The Carroll Library Learning Commons has a range of resources to support the nursing curriculum. The Walter Young Center provides personal counseling and the Study Center offers students opportunities to strengthen academic skills. All students should work closely with their advisor in planning their programs.

- **Fees**

  **Fees**

  Undergraduate tuition and other fees apply to nursing students. A program fee of $525.00 per year is also assessed for proficiency testing, disposable supplies, and equipment maintenance.

- **Licensure Examination**

  **Licensure Examination**

  Upon completion of all program requirements, the graduate is eligible to sit for the National Council Licensure Examination for Registered Nurses (NCLEX-RN). A graduate must pass this examination to be licensed and practice as a registered nurse (RN).

  Although, no nursing program can guarantee success on the NCLEX-RN examination, the Carroll nursing curriculum integrates preparation for the licensure exam through-out the nursing program.

- **Bachelor of Science in Nursing Major (57 credits)**

  Nursing courses build on the knowledge gained from liberal arts background in humanities, fine arts, social sciences, and natural sciences. The overall objective of the program is to provide students with the ability to critically apply knowledge of nursing art and science to improve the quality of health and health care in the communities they serve.

  - **Courses in the Major**

    - NRS100: Health Care and Nursing (4 hours)
    - AND - NRS100L: Health Care and Nursing Laboratory
    - NRS230: Health Assessment (4 hours)
    - AND - NRS230L: Health Assessment Laboratory
    - NRS233: Foundations of Nursing Practice (4 hours)
    - NRS234: Foundations - Practicum (2 hours)
    - NRS236: Human Pathophysiologic Responses (4 hours)
    - NRS300: Critical Inquiry in Nursing Research (2 hours)
    - NRS310: Mental Health Nursing Care (3 hours)
    - NRS312: Family Centered Obstetric Nursing Care (2 hours)
    - NRS316: Introduction to Medical Surgical Nursing (4 hours)
    - NRS317: Medical Surgical Nursing Practicum (5 hours)
    - NRS320: Family Centered Pediatric Nursing Care (2 hours)
    - NRS415: Community Health Practicum (2 hours)
    - NRS416: Community Health Nursing Care (3 hours)
    - NRS417: Advanced Medical Surgical Nursing (3 hours)
    - NRS419: Advanced Medical Surgical Practicum (5 hours)
NRS429: Health Policy and Administration (3 hours)
NRS431: Capstone (4 hours)
NRS432: Professional Practice Preparation (1 hour)

Nursing electives in specialty clinical areas may be offered occasionally. If these courses are elected the nursing student may accomplish a nursing major of 62 or 66 credits.

Required Support Courses

- BIO130: Introduction to Human Anatomy and Physiology I (4 hours)
  - AND - BIO130L: Intro to Human Anat and Phys I Lab
- BIO140: Introduction to Human Anatomy and Physiology II (4 hours)
  - AND - BIO140L: Intro to Human Anat and Phys II Lab
- BIO212: Microbiology (4 hours)
  - AND - BIO212L: Microbiology Laboratory
- CHE101: General Chemistry (4 hours)
  - AND - CHE101L: General Chemistry - Laboratory
- CHE102: Biological Chemistry (4 hours)
  - AND - CHE102L: Biological Chemistry-Laboratory
- HSC300: Pharmacology (3 hours)
- PSY101: Introductory Psychology (4 hours)
- PSY102: Life-Span Psychology (4 hours)
- COM207: Intercultural Communication (4 hours)
  - OR - SOC110: Cultural Anthropology (4 hours)
- CMP112: Computational Thinking I (4 hours)
- CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)

Bachelor of Science Requirement

The requirements for a Bachelor of Science degree are:

- CMP112 and either CMP113 or CMP114 or
- MAT140 or higher and CSC110 or higher;

**NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.

**FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR**

General Education Requirement

For more information on General Education Requirement, click here.

Distribution Component

For more information on the Distribution Component, click here.

- GE1 and GE2 Courses
  
  Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

  Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

  Fine Arts (F1, F2)

  Humanities (H1, H2)

  Philosophy/Ethics/Religion (P1, P2)

  Social Sciences (S1, S2)

Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

Transfer students will register for CCS101 for one credit.

- Cultural Seminar (CCS100)

  The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)

  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

Cross-Cultural Development (CCD)

The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)

  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- **Nursing Four-Year Curriculum Model**

- **Curricular Modifications for the Registered Nurse**

Students who are registered nurses through an associate degree program will follow the same degree requirements as all of the Carroll University students with the following curricular modifications to acknowledge the scholarship and competence the Registered Nurse already possesses. Completion students may earn up to 34 nursing credits from previous nursing course work upon successful completion or challenge of NRS 230, Health Assessment and NRS 236, Human Pathophysiologic Responses.

A registered nurse student applying for admission to Carroll University submits a written plan for completion of the BSN. The plan will comment on his/her self identified professional and academic strengths and weaknesses and further indicate his/her current professional interest area(s) and area of employment. The written statement assists the nurse advisor in helping the student create the most meaningful curricular plan. Registered nurse students are required to select course groupings that lead to some focus of career interest. They should select an appropriate emphasis in the liberal studies to enhance their chosen area of nursing practice. Students will consult with their assigned nursing advisor regarding the most appropriate course selections. The nursing faculty will attempt to work closely with the RN student in focusing their clinical experiences in an area of interest to the RN.

- **Major for the Registered Nurse Student (57 Credits)**

  - 34 credits earned as previously stated, plus
    - NRS230: Health Assessment (4 hours)
      AND NRS230L: Health Assessment Laboratory
    - NRS236: Human Pathophysiologic Responses (4 hours)
    - NRS300: Critical Inquiry in Nursing Research (2 hours)
    - NRS310: Mental Health Nursing Care (3 hours)
    - NRS415: Community Health Practicum (2 hours)
    - NRS416: Community Health Nursing Care (3 hours)
    - NRS429: Health Policy and Administration (3 hours)
    - NRS431: Capstone (4 hours)

  - **Required Support Courses**
    - BIO130: Introduction to Human Anatomy and Physiology I (4 hours)
      AND BIO130L: Intro to Human Anat and Phys I Lab
    - BIO140: Introduction to Human Anatomy and Physiology II (4 hours)
      AND BIO140L: Intro to Human Anat and Phys II Lab
    - BIO212: Microbiology (4 hours)
      AND BIO212L: Microbiology Laboratory
    - CMP112: Computational Thinking I (4 hours)
    - CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)
    - PSY101: Introductory Psychology (4 hours)
    - PSY221: Life-Span Psychology (4 hours)

  Two semesters of university chemistry

  One semester of university sociology

- **Bachelor of Science Requirement**

  The requirements for a Bachelor of Science degree are:
  - CMP112 and either CMP113 or CMP114 or
  - MAT140 or higher and CSC110 or higher;

  **NOTE:** EACH MAJOR MAY HAVE SPECIFIC COURSE SEQUENCING REQUIREMENTS.

  FOR SPECIFIC REQUIREMENTS, SEE "REQUIRED SUPPORT COURSES" WITHIN EACH MAJOR

- **General Education Requirement**

For more information on General Education Requirement, click here.

- **Distribution Component**

For more information on the Distribution Component, click here.

  - **GE1 and GE2 Courses**

    Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study.

    Students must take one GE2 course. The GE2 course chosen, must build upon a discipline taken at the GE1 level (e.g. PSY101 (S1) and PSY 221 (S2)).

    Fine Arts (F1, F2)

    Humanities (H1, H2)

    Philosophy/Ethics/Religion (P1, P2)

    Social Sciences (S1, S2)

- **Cross-Cultural Component**

  The Cross-Cultural Component is a five-course series through which students explore the study of culture:

  Transfer students will register for CCS101 for one credit.

  - Cultural Seminar (CCS100)
The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral communication skills through critical reading and discussion.

- Writing Seminar (ENG 170)
  The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

- Cross-Cultural Development (CCD)
  The Cross-Cultural Designation course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

- Cross-Cultural Experience (CCE)
  The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own. (CCS300 for 2 credits, NCEP courses for 4 credits, or study abroad for 12+ credits)

For more information and course listings, click here

- Global Perspectives Colloquium (CCS400)
  In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.

- Major Courses

The list below displays all the courses offered by the major:

- NRS100: Health Care and Nursing (4 hours)
- NRS100L: Health Care and Nursing Laboratory
- NRS230: Health Assessment (4 hours)
- NRS230L: Health Assessment Laboratory
- NRS233: Foundations of Nursing Practice (4 hours)
- NRS234: Foundations - Practicum (2 hours)
- NRS236: Human Pathophysiologic Responses (4 hours)
- NRS300: Critical Inquiry in Nursing Research (2 hours)
- NRS310: Mental Health Nursing Care (3 hours)
- NRS310L: Mental Health Nursing Care Laboratory
- NRS312: Family Centered Obstetric Nursing Care (2 hours)
- NRS316: Introduction to Medical Surgical Nursing (4 hours)
- NRS317: Medical Surgical Nursing Practicum (5 hours)
- NRS320: Family Centered Pediatric Nursing Care (2 hours)
- NRS391: Special Topics in Nursing (2-4 hours)
- NRS415: Community Health Practicum (2 hours)
- NRS416: Community Health Nursing Care (3 hours)
- NRS417: Advanced Medical Surgical Nursing (3 hours)
- NRS419: Advanced Medical Surgical Practicum (5 hours)
- NRS429: Health Policy and Administration (3 hours)
- NRS431: Capstone (4 hours)
- NRS432: Professional Practice Preparation (1 hour)
- NRS498: Independent Study in Nursing (1 TO 4 hours)
Alphabetical List of Majors/Minors

Accounting
Actuarial Sciences
Animal Behavior
Applied Physics/Engineering Dual Degree Program
Art and Photography
Athletic Training Education
Biology
Business Administration
Chemistry and Biochemistry
Communication
Computational Science
Computer Science and Information Technology
Computer Science Dual Degree Program
Economics
Education
English
Environmental Science
European Studies
Exercise Science
Global Studies
Graphic Communication
Health Science
Health Science - Diagnostic Medical Sonography
Health Science - Radiologic Technology
Hispanic Health and Human Service
History
Marine Sciences (Marine Biology)
Mathematics
Medical Laboratory Sciences
Medieval and Renaissance Studies Minor
Modern Languages and Literatures (Spanish, French, German)
Music and Music Education
Nursing
Organizational Leadership
Philosophy, Political Science and Economics
Philosophy Minor
Physical and Health Education
Physics
Political Science
Pre-Occupational Therapy
Pre-Physical Therapy
Professional Writing
Psychology
Public Health
Religious Studies
Sociology and Criminal Justice
Sports Nutrition
Sport and Recreation Management
Theatre Arts
Therapeutic Recreation
Special Academic Programs

Intensive English Language Programs (English as a second language - ESL)
Honors
Study Abroad and Off-Campus Study
Cross Cultural Experiences
Intensive English Language Program (English as a Second Language - ESL)

Katherine Hammett  
Director of International Education

Carroll University offers an Intensive English Program designed to help non-native English speakers increase their English language skills. The goal of the program is to prepare students with the oral and written language skills they need to be successful in an American university. The curriculum is designed for students at all levels of English language proficiency.

Learning Outcomes for ESL

Students in Carroll University's intensive English program can expect to:

1. Speak English more fluently in formal and informal settings;
2. Build listening and comprehension skills, enabling them to better understand and participate in university level lectures;
3. Write effective academic papers and essays;
4. Refine oral communication skills and pronunciation in order to be better understood;
5. Actively practice using English appropriately in various social contexts.

The Intensive English program at Carroll University is flexible in nature, assessing the needs of the international students we serve, and placing them accordingly. Students entering the program may be placed in a full time intensive English course of study (20 instructional hours per week), or placed in a combination of university level academic courses, in conjunction with some intensive English language study.

121. Listening and Speaking I (Beginning Level)
This course aims to increase the spoken fluency, conversational vocabulary and listening comprehension of emerging English language learners. Students will be given opportunities hearing English used in natural conversations in a variety of contexts. Students will also practice speaking English in structured and semi-structured situations, with an emphasis on providing students with a grammatical and communicative framework for managing everyday functions, such as asking and responding to questions and directions.

122. Reading and Writing I (Beginning Level)
This course is designed for emerging English language learners to learn strategies such as skimming, scanning, and prediction using context clues to improve their reading comprehension in English. In addition, there will be a component on grammar to improve their writing skills.

123. ESL Special Topics (Beginning Level)
This course will engage beginning English language learners on a variety of topics, which may include: pronunciation, English for special purposes, cultural diversity in the U.S., current events and media.

221. Listening and Speaking II (Intermediate Level):
This course will focus on developing students' English communication skills appropriate for an academic environment. Students will develop their skills in creating presentations and participating in class discussions, as well as engage in interactive activities that will strengthen their pronunciation skills in English.

222. Reading and Writing II (Intermediate Level):
This course is designed for intermediate English language learners to build academic vocabulary, and develop more advanced reading comprehension skills. A grammar component will also be integrated to help students develop well articulated paragraphs with topic sentences and logical conclusions in their writing. In addition, some attention will be given to strengthen students' note taking skills.

231. Advanced Integrated Communications (Advanced Level):
In this course, students will practice communication in various settings and for a wide range of professional and academic purposes, integrating all the language skills, with a special emphasis on speaking and listening in an academic environment. The course will provide a support framework for the English language learner who is ready to be immersed in full-time university academic work. Topics include: oral presentations skills, group work, multimedia activities involving listening and speaking, and higher level pronunciation work.

232. Reading and Writing III (Advanced Level):
This course is designed for advanced English language learners to prepare them for university academic reading, writing and research. Special emphasis will be placed on writing well-formed paragraphs and longer essays with clear topic sentences, proper research citation, and higher level academic reading strategies.

233. Special Topics (Intermediate/Advanced Level):
This course will engage English language learners in stimulating conversation and writing practice on a variety of topics, which may include: English for professional contexts, cultural diversity in the U.S., current events and media.

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Lynne L. Bernier  Associate Professor of Political Science and Global Studies, Director

The Honors Program at Carroll University offers students an enriched curriculum which challenges current perspectives and fosters intellectual development as they pursue a greater breadth and depth of knowledge. Honors courses are distinguished by strong emphases on active learning, critical thinking, articulate communication, and interdisciplinary perspectives.

**Learning Outcomes for the Honors Program**

1. Students will expand the breadth and depth of their knowledge through special readings, interdisciplinary approaches, and current research.
2. Students will be able to address issues and problems in an open-minded, analytical and creative way. They will learn to make connections between disparate subjects, to approach topics from a variety of perspectives, and to relate their coursework to contemporary issues.
3. Students will demonstrate the ability to do independent research, or other creative work, while working with faculty mentors and similarly motivated students.

Students admitted to the Honors Program upon matriculation to the University are expected to complete a six course curriculum. These include:

- CCS 100H, Cultural Seminar
- ENG 170H, Writing Seminar
- CCS 400H, Global Perspectives Seminar

**Three additional honors courses, which may be:**

Courses designated as honors (H) in the timetable.
One honors contract course (arranged with the instructor on an individual basis).
A Pioneer Scholar Experience.
A course completed on a semester or year study abroad program.

Students who enter the Honors Program after their first year must complete a five course curriculum.

Four honors courses, which may be:
Courses designated as honors (H) in the timetable.
One honors contract course (arranged with the instructor on an individual basis).
A Pioneer Scholar Experience.
A course completed on a semester or year study abroad program.
Honors courses completed at a previous institution.

CCS 400H: Global Perspectives Seminar

To graduate as a member of the University Honors Program, a student must attain an overall grade point average of at least 3.40 with grades of B or better in each honors course. For more information, please contact the Carroll University Scholars Center.

**A List of Honors Courses**

- CCS100H: Honors - Cultural Seminar (4 hours)
- ENG170H: Writing Seminar (4 hours)
- ENG255H: Postcolonial Literature and Theory (4 hours)
- ENV120H: Conservation and Environmental Improvement (4 hours)
- HIS106H: America Since 1877 (4 hours)
- HIS224H: The World Since 1945 (4 hours)
- HIS225H: Medieval Europe, China, and the Islamic Crescent (4 hours)
- HON291H: Topics in Honors - Fine Arts (4 hours)
- HON292H: Topics in Honors - Humanities (4 hours)
- HON293H: Topics in Honors - Natural Sciences (4 hours)
- HON294H: Topics in Honors - Philosophy, Ethics, Religion (4 hours)
- HON295H: Topics in Honors-Social Science (4 hours)
- PHI206H: Ethics (4 hours)
- PHY105H: Astronomy (4 hours)
- PHY105HL: Astronomy lab
- SOC102H: Sociology of Social Problems (4 hours)
Study Abroad and Domestic Study Away

Katherine Hammett  Director  
Jeannie Burns  Assistant Director  
Heather Elam  Cross-Cultural Experiences Coordinator  
Cynara Fode  Administrative Assistant

International education programs are an integral part of Carroll's academic offerings. The Office of International Education (OIE), located in A. Paul Jones Scholars Hall, directs semester, summer and academic-year study abroad programs, as well as international faculty-led CCE courses. Unless noted otherwise, all study abroad/away programs listed in this catalog meet the Cross-Cultural Experiences (CCE) requirement of the Pioneer Core.

Study Abroad and Domestic Study Away Programs

Students who are in good academic standing and have completed at least 16 Carroll University credits at the time of participation are eligible to apply to enroll in a study abroad or domestic study away program. Students should note that each study abroad/away program may have its own requirements for acceptance and are encouraged to review the individual program’s materials for additional expectations.

Approved study abroad/away students remain enrolled at the university during the semester or academic-year study abroad/away period. Applications for study abroad/away are due at least one semester prior to the semester in which the student intends to study; however, students are advised to apply for study abroad/away a full year ahead of their intended study. Details about the programs, eligibility, applications and costs are available on the Carroll University CCE Web site or from OIE.

International study abroad and domestic study away opportunities include three types of programs: exchange, affiliated and non-affiliated.

1. Exchange Programs
Exchange programs are programs in which the school abroad/away sends us their students and we, in turn, send our students for a semester or academic year. Students participating in semester and year exchange programs receive their regular financial aid package, including institutional scholarships. They pay their Carroll University tuition. In most cases, room and board are paid directly to the institution. Students are assessed a $250 per semester or $150 per summer study abroad/away fee by Carroll University. Note that the list below is subject to change. Link to the Carroll University CCE website here for the most up-to-date list.

Austria
Management Center Innsbruck (MCI) - MCI, in beautiful Innsbruck, Austria, has a strong international and business focus on academics and offers classes taught not only in German, but English and other languages. The special exchange program classes offered in English are available during the spring semester only.

France
Institut d'Etudes, Politiques de Bordeaux (IEP) - IEP enrolls 1,300 students who study history, political science, economics and law. Visiting international students may choose courses from any discipline. All IEP courses are taught in French; hence, the student needs to be approved by the modern languages faculty, as well as by theGCC Committee and/or OIE.

Burgundy School of Business (BSB) - BSB, located in Dijon, France, is an international business school that attracts students from all over the world. It provides students with an opportunity to study business in a town and region known for its cultural and historical contributions to Europe. BSB courses that are taught in English include business law, economics, marketing, entrepreneurship, sociology, psychology, finance and market research.

Germany
Philippes-Universitat Marburg - Students may take courses in German or English at Philippes-Universitat Marburg. The university has 17 different departments offering a broad range of course opportunities for students. This 500-year old institution enrolls 20,000 students, 12 percent from countries other than Germany. The university is located in the historic city of Marburg in the state of Hessen.

Hong Kong
Hong Kong Baptist University (HKBU) - Located in Kowloon, the heart of Hong Kong, HKBU is a vibrant campus of more than 5000 undergraduate students. The university offers a wide-range of courses taught in English and Chinese, including Arts, Business, Communication, Science, and Social Sciences. Students may enroll for either semester or for the academic year.

Lingnan University - Known as "The Liberal Arts University of Hong Kong", Lingnan is located on a small, beautiful campus in the New Territories. Offering strong courses in the Humanities, Arts, Business and Sciences, the university has a "whole-person" approach to education and offers many co-curricular activities, including many service learning opportunities.

Mexico
Universidad De La Salle Bajo-León, Mexico - Located in León, ULS is a private school that offers a wide range of coursework, including psychology, education, communication, business and information technology. Carroll students may take courses in any discipline. All ULS courses are taught in Spanish; therefore Carroll students must receive a recommendation from the Spanish faculty.
South Korea

Ewha University - Located in Seoul, with more than 120 years of rich history, Ewha is Korea's oldest women's university. Carroll students, both men and women, can study in English at Ewha. More than 20 percent of undergraduate courses are taught in English. These include art history, Asian studies, business, ceramics, economics, international studies, Korean studies, literature, media studies, politics, psychology, religion and women's studies. Carroll students are housed on the beautiful Ewha campus in the new International House dormitory.

United Kingdom

University of Hull - Hull is located about 3 1/2 hours from London. The university has 14,000 students and is noted for its excellence in teaching and research. Study abroad students can choose coursework from many disciplines, including the humanities, social sciences, sciences, business, and the arts.

Wales

Aberystwyth University - Founded in 1872, Aberystwyth was the first university established in Wales. UWA is on the coast in central Wales and has more than 7,000 students. All courses are taught in English. Aberystwyth has excellent academic and cultural opportunities and students can take courses in any discipline. Additional scholarships are available for study in Wales.

2. Affiliated Programs

Affiliated programs are universities or study programs determined by Carroll to meet our academic standards. Students remain a Carroll University student while studying abroad/away at an affiliate program. Students participating in affiliated programs may be eligible for federal, state and outside funding as applicable. Institutional aid is generally not available for affiliated programs. Students pay program tuition to Carroll University which, in turn, remits the monies to the program provider. Room and board are paid directly to the host institution. Students are assessed a $250 per semester or $150 per summer study abroad/away fee by Carroll University.

Note that the list below is subject to change. Link to the Carroll University CCE Website here for the most up-to-date list of partner programs.

Austria

Webster University Vienna - Webster's Vienna campus is on the banks of the Danube River in Vienna's 22nd district, not far from the Vienna International Center (head- quarters for the UN and its agencies). Campus facilities include classrooms, four computer labs with Mac and PC workstations, a library with online access to Webster's main library in St. Louis, conference facilities, an art gallery, a bookstore, student lounge and an American-style restaurant. Webster is well served by public transport and is only 20 minutes from the city center.

Australia

Macquarie University-Sydney, Australia-Macquarie has 24,000 students, including 4,000 international students, and offers a wide range of courses, including humanities, social sciences, biology, psychology and business.

La Trobe University-Melbourne, Australia - Located in the cultural capital of Australia, La Trobe hosts 17,000 students from over 90 countries. Offering a wide variety of programs, La Trobe is especially strong in business, media studies, math, science, and education.

China

Webster University China - Beijing Language and Culture University (BLCU) was founded in 1962. BLCU has the longest history, the largest scope, and the most qualified teaching faculties of its kind in teaching the Chinese language and culture to foreigners. The university is comprised of 11 teaching units and 13 research institutions, and has 1,425 teaching and administrative staff, including 829 in teaching and researching. Of these, 303 have advanced titles. BLCU always attaches great importance to international exchanges and cooperation. With the expansion of China's exchanges and cooperation with other countries, the university is also increasing its cooperation and exchanges with foreign countries. Today, it has partnerships with 157 universities in 31 countries.

Ireland

University of Limerick (WAICU program) - The university campus is located on the banks of the Shannon. The university is composed of six constituent colleges: business, education, engineering, science, informatics and electronics, and humanities. International students can choose courses from any of these areas.

National University of Ireland-Galway (WAICU program) - NUI Galway has 13,000 students and nearly 1,000 international students attend the university each year. Because of its dynamic and pioneering role in theater, arts and culture, Galway has earned the title Cultural Capital of Ireland.

National University of Ireland-Maynooth (WAICU program) - NUI Maynooth is an innovative university of 5,500 students from every county in Ireland, as well as an increasing number of international students. Situated 25 km west of Dublin, it is located in Ireland's only university town, Maynooth.

Italy

Florence University of the Arts (FUA) - In affiliation with Study Abroad Italy, FUA offers students the opportunity to study in one of the leading educational and cultural centers of Europe. FUA is located in the historic center of Florence and offers English-taught courses in areas such as business, economics, liberal arts, environmental studies, human services, natural sciences, mathematics, fine and visual arts.

John Cabot University - Through program provider Study Abroad Italy, students can study a wide variety of programs in the heart of Rome. Courses are offered in English include Arts and Humanities, French, Italian, and Latin languages, Sciences, and Social Sciences.

Japan

Webster University Japan - Study Japanese language, literature, history, culture, politics and economics in one of Japan's most exciting cities. Osaka is located slightly west of the geographic center of the Japanese archipelago, and forms one of the two focal points of the country's dual urban center structure, along with that of Tokyo.

Netherlands

Webster University Netherlands - Leiden is an historic university town close to Amsterdam, The Netherlands. Leiden also has Leiden University, so there are plenty of things to do and see. Historic architecture, cafes, bars, restaurants, shops and museums attract thousands of visitors each year. Students living in Leiden feel safe and comfortable. Only 30 minutes by train to Amsterdam and 10 from The Hague, Leiden is a convenient location for discovering the cultural and social action in the Netherlands. Webster University Netherlands is home to 400 students representing more than 50 nationalities with an alumni network of nearly 2,000.
Study Abroad and Domestic Study Away

New Zealand
University of Canterbury (WAICU program) - This university is located in Christchurch, New Zealand. This is a larger city on the south island, which is not as heavily populated as the north island. The school is strong in the areas of biology, chemistry, business, economics, environmental science, geology, mathematics, political science, and computer science.

Switzerland
Webster University Geneva - At Webster University Geneva, the concept of an international education becomes reality, as 600 students from more than 90 countries come together as a community of learners engaged by a faculty representing 25 nations. Given the presence of the United Nations and other major international organizations, many important international businesses and the largest private banking center in the world, Webster students have the opportunity to take advantage of the resources offered by these institutions to augment classroom learning. When it comes to recreation, whether skiing, hiking, climbing or cycling, the Alps offer some of the best sporting terrain in the world.

Thailand
Webster University Thailand - The main campus of Webster University in Thailand is 185 km south of Bangkok. It is a small, closely knit family of students, faculty and staff occupying a delightful rural campus near the resort towns of Chaam and Hua Hin. The main campus offers undergraduate level courses. Webster University Thailand offers undergraduate and graduate programs in media communications, business administration, psychology and international relations. The campus has excellent facilities to support your educational experience, including computer labs, library, cafeteria, recreational and exercise facilities, media lab, Internet access and offices.

United Kingdom
University of Lancaster - Lancaster is in the northwest of England, 250 miles from London. It is a preferred location to study environmental and natural sciences. Other coursework for international students includes applied sciences, arts, humanities, business and social sciences.

Regents College London - Regent's American College London (RACL) is the official London campus of Webster University, St. Louis, USA. Webster RACL offers an internationally-focused, stimulating and supportive educational experience, with a wide choice of majors. Located in Regent’s Park in the center of London students are able to explore the city through their curricular and co-curricular offerings.

Bader International Study Centre (Queen's University site) - Based at a castle in the English countryside south of London, students take internationally themed courses combined with field studies throughout England and Europe. The program emphasizes intercultural learning, offering a flexible choice of Queen's accredited courses — ranging from the Humanities and International Business, to Social Sciences and Nursing.

University of Stirling-Scotland (WAICU program) - The highly rated University of Stirling offers international students the chance to receive a quality Scottish education. The university is proud of its international community, which comprises 12 to 15 percent of the student population.

United States – New York City
Wisconsin Universities program, conducted during a six-week summer term, concentrates the study of the United Nations in a two-week intensive course at the University of Wisconsin-Milwaukee followed by a four-week session in New York City. Students participating in this program earn six credits which may be transferred to Carroll.

United States – Washington D.C.
Washington Center This program includes an internship of at least 30 hours per week supplemented by enrollment in a single course during the semester. International opportunities are also available in London and Sydney.

Washington Semester program at American University This program includes a four-credit internship in the public, private or nonprofit sectors of Washington D.C., and is offered during the academic year and summer terms.

Worldwide
CEA Global Education – CEA Global Education was founded in 1997 and offers programs in Argentina, Brazil, Chile, China, Costa Rica, Czech Republic, England, France, Germany, Ireland, Italy, South Africa, and Spain. The mission of CEA Global Education is to create and facilitate opportunities for academic achievement, global competence and personal growth through quality international education.

ProWorld – ProWorld offers intern, volunteer and study abroad experiences for individuals and families looking to make a difference abroad while gaining the cross-cultural skills and knowledge to succeed as global citizens. Programs are offered in Belize, Brazil, Ghana, Peru, Thailand, Costa Rica, Nepal, Ecuador, and South Africa. The mission of ProWorld is to empower communities, promote social and economic development, conserve the environment and cultivate educated, compassionate global citizens.

Up With People
Recognized as one of the preeminent global educational programs in the world, Up with People achieves its mission through a unique experience for young adults that combines 22 weeks of international travel and intercultural living, community service and the universal language of music. Students are able to earn 16 credits selected from a pre-determined list of courses.

3. Unaffiliated Programs
Unaffiliated programs are programs that students independently identify as a preferred study abroad option. Students sometimes want a study abroad experience that is not available through our Exchange or Affiliated Programs. Students need approval for a unaffiliated program in order to remain a Carroll University student while abroad. Students participating in affiliated programs may be eligible for federal, state and outside funding as applicable. Institutional aid is generally not available for affiliated programs. Students pay all tuition and fees directly to the host institutions. Students are assessed a $500 per semester or $150 per summer study abroad/away fee by Carroll University. Link to the Carroll University CCE Website here.

Examples of unaffiliated programs Carroll University students have participated in the past:

Semester at Sea – Semester at Sea is a multiple country study abroad program open to students of all majors emphasizing comparative academic examination, hands-on field experiences, and meaningful engagement in the global community. A wide variety of coursework from 20-25 disciplines is integrated with relevant field studies in up to a dozen countries, allowing for a comparative study abroad experience that is truly global.
<table>
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<tr>
<th>Study Abroad and Domestic Study Away</th>
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<tbody>
<tr>
<td><strong>School for Field Studies</strong> - SFS creates transformative study abroad experiences through field-based learning and research. Their educational programs explore the human and ecological dimensions of the complex environmental problems faced by local partners, contributing to sustainable solutions in the places where they live and work. The SFS community is part of a growing network of individuals and institutions committed to environmental stewardship.</td>
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<td><strong>AIFS</strong> - Founded in 1964, the American Institute For Foreign Study (AIFS) is one of the oldest, largest and most respected cultural exchange organizations in the world. With global offices in 6 countries, Programs include college study abroad, au pair placement, camp counselors and staff, gifted education, college prep, high school study/travel and insurance services.</td>
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<tr>
<td><strong>SIT Study Abroad</strong> - A pioneer in experiential, field-based study abroad, SIT offers semester, summer, and academic year programs for undergraduate students in Africa, Asia and the Pacific, Europe, Latin America, and the Middle East, as well as comparative programs in multiple locations.</td>
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Cross Cultural Experience Options

The Cross-Cultural Experience is a signature component of Carroll’s Pioneer Core curriculum, which is characterized by an integrating theme of culture and a requirement for domestic or international Cross-Cultural immersion. This experience challenges students to apply classroom-based examinations of culture and to interact with cultures other than their own in an off-campus setting.

Students may choose from a variety of choices to fulfill the CCE requirement. Options include local, domestic and international experiences:

- International study abroad or domestic study away, for a summer, semester, or year-long program
- CCS 300 (2 credits) or NCEP course (4 credits)
- Discipline-specific courses approved for CCE credit
- Internships, practicums and clinical experiences approved for CCE credit

Study Abroad and Domestic Study Away Cross-Cultural Experiences (CCEs)

Students in good academic standing and at least 16 completed Carroll University credits at the time of participation may apply for approval to enroll in a study abroad/away program.

Approved study abroad/away students remain enrolled at the university during the semester or academic-year study abroad/away period. Applications for study abroad/away are due at least one semester prior to the semester in which the student intends to study; however, students are advised to apply for study abroad/away a full year ahead of their intended study.

A listing of the many and varied study abroad opportunities is available on the "Study Abroad" link of this site or on the Carroll University CCE webpage.

CCS 300

CCS 300 courses are typically short-term travel courses led by Carroll faculty. CCS 300 courses carry two academic credits and generally take students off-campus during the Winter Term, in the summer or during spring break. Prior to any travel, students will participate in some academic preparation. Students also will engage in post-experience reflective academic activities.

CCS300 - Faculty-led

CCS300 courses carry two academic credits and are taught by Carroll University faculty members. In most cases, the faculty member travels with the students and continues to teach the course while at the immersion site.

Eligibility: Students interested in the faculty-led CCS 300 must submit a CCE application and have a minimum of 16 completed credit hours from Carroll University at the time of participation. Enrollment is determined by the course instructor and offices of General Education and/or International Education who review student records to ensure that the applicant is in good standing related to both academics and conduct.

CCS 300 - Faculty-supported

Students participate in this two-credit course by taking the academic portion of the class on campus prior to and after the approved immersion experience. The immersion experience may be an individual and/or group pre-approved immersion.

Eligibility: Students interested in the faculty-supported CCS 300 course must submit a CCE application and have a minimum of 16 completed credit hours from Carroll University at the time of participation. In addition, if the student is proposing a site that isn’t on the approved immersion site list, the student must submit a site approval form. Site approval is determined by the offices of General Education and/or International Education. Enrollment is determined by the course instructor and offices of General Education and/or International Education who review student records to ensure that the applicant is in good standing related to both academics and conduct.

Fees for CCS 300 courses vary according to the program. Additional information for CCE courses is available on the Carroll University CCE Webpage or from A. Paul Jones Scholars Hall.

CCS 300 Course Offerings
Cross Cultural Experiences

NCEP course offerings are typically announced each spring for the next academic year. CCS 300 courses may vary from those listed below depending on availability of faculty.

CCS 300. Health and Wellness in Guatemala 2 credits
Section letter for course to be determined.
In partnership with Hearts in Motion (HIM) and Sports in Motion (SIM), students completing this course will explore the cultural differences between Guatemala and the United States, investigate the various dimensions of wellness in Guatemala, and improve cross-cultural communication and treatment skills.

CCS 300. Footprints of Our Ancestors: An Immersion 2 credits into the Life-Way of the Anishinaabeg
Section letter for course to be determined.
This immersion is a journey into Anishinaabe culture, team-taught by an Ojibwe elder, artist, and teacher of Anishinaabe Life-way and a Professor of American Indian study. Taking place in Michigan's upper peninsula, the course will include traditional arts in copper bowl making, smoked clay, earthworks, field study, traditional teachings, drumming, and other experiences. There will be additional days for trip preparation and conclusion.

CCS 300. Experiencing Bordertowns: Immigration issues up close 2 credits
Section letter for course to be determined.
Immigration issues between the U.S. and Mexico are not just legal issues, they are cultural issues. Borderlinks is a bi-national non-profit organization in Tucson, Arizona that leads educational delegations in the exploration of border issues. The organization prides itself on providing a 360 degree view of border and immigration issues. Delegations have opportunities to meet with multiple non-profits and service agencies dedicated to the needs of migrants as well as Border Patrol, artists, leaders of local native nations and many others. Each delegation works with Borderlinks to prepare an itinerary that meets their needs. This course will investigate the cultural similarities and differences in mainstream U.S. and Mexican culture. However, the primary focus will be on border towns as cross-cultural experiences themselves given the primacy that immigration issues play in the everyday lives of these regions.

CCS 300. Self-Designed CCE 2 credits
Section letter for course to be determined.
The Self-Designed CCE is intended as an umbrella course to encourage and enable students to meet the CCE requirement through outside immersion experiences. Students who are participating in off-campus experiences with other organizations, small groups, or even individually are eligible to propose Self-Designed Experiences to the instructor at least one session prior to the experience. The instructor will then work with the student or students to design a course with significant academic content and aligned with the Cross-Cultural Experience learning outcomes below. The course will need to include a pre-experience period of preparation and a post-experience period of reflection, as well as an immersion experience with a minimum of 60 contact hours in another culture. All self-designed CCEs will include reading, research, and be graded. Pre- and post-periods may occur with other students also enrolled in the self-designed CCE and be held in a classroom or an online setting.

New Cultural Experience Programs (NCEP)

NCEP courses carry four academic credits and are taught by Carroll University faculty members. Each course has a specific academic focus along with a particular emphasis on understanding new cultures. Prior to travel, the students spend a semester in academic preparation.

Eligibility: Students interested in the NCEP course must submit a CCE application and have a minimum of 16 completed credit hours from Carroll University at the time of participation. Enrollment is determined by the course instructor and offices of General Education and/or International Education who review student records to ensure that the applicant is in good standing related to both academics and conduct.

Fees for NCEP courses vary according to the program. Additional information for CCE courses is available on the Carroll University CCE Webpage or from A. Paul Jones Scholars Hall.

NCEP Course Offerings

NCEP course offerings are announced each spring for the next academic year. NCEP courses may vary from those listed below depending on availability of faculty.

NCEP 207. Practicing Intercultural Communication in Thailand 4 credits
This context course is an introduction to the cultural dimensions of human communication, leading to a better understanding of the ways in which shared patterns of perception and belief affect the ways we create and share meaning. We will examine the complex relationship between culture and communication from a variety of conceptual perspectives. While we will cover the basic intercultural communication principles, the specific application of this study will be Thailand. For those who have already completed COM 207: Intercultural Communication, an advanced version of the class will be offered simultaneously. This will allow you to review and build on your previous course experience and still have the opportunity to travel to Thailand.

NCEP 302. Russia and Central Asia: History, Environment and Geography Halfway Around the World 4 credits
This course is designed to provide students the opportunity to study and have firsthand experience in Russia and Central Asia. Students will have a better understanding of the region’s culture, history, geography and environment. Students will study the interrelationalship of historical events, cultural characteristics and environmental quality.

NCEP 305/ENV 290. Reefs, Rainforests and Ruins of Belize 4 credits
This course focuses on tropical reef biology and rainforest ecology. Students are introduced to these topics in the fall followed by a three-week winterim experience in Belize. While in Belize, students explore the world’s second largest barrier reef and trek through a tropical rainforest to observe bullet trees, howler monkeys and exotic birds. While at these sites, students design and perform investigative experiments to gain an understanding of the scientific method. In addition, students experience the ancient Mayan civilization visiting the ruins at Lamanai, Caracol and Tikal.

NCEP 309. Germany, Poland and Hungary 4 credits
This course examines personal and communal treatment of “the other” in Eastern Europe, where recent history has left not only deep scars, but also a strong commitment to social justice and tolerance. Guided by visits to historical sites, guest speakers, one-on-one conversations and individual observations, students examine how questions of tolerance and intolerance have shaped and still inform Eastern European culture and society.
NCEP 312. China: Its Modern Reality 4 credits
This course examines Chinese culture with an emphasis on the roles China currently plays on the international stage. Specific attention is given to China’s reform that has brought about great changes taking place in its economy and the social lives of the people. Important current issues in semi-capitalism, U.S. business outsourcing and internationalism in education will be stressed.

NCEP 313. Revising Italy: Travel Writing and the Italian Tradition 4 credits
This course is designed as an advanced-level writing class intending to explore various craft elements related to the subgenre, and allow students to create their own new travel essays within the Italian tradition. By subsequently traveling to Italy and interacting with the “place,” the people, and the other aspects of the culture, students will be able to reflect on the works they read during the semester as they seek their own “meaning” of the place/self.

NCEP 315. Australia: The Land and the People Down Under 4 credits
This course explores the geographic and demographic forces that have shaped Australia by focusing on the amazing geographic diversity and how the peoples of Australia have left their mark on contemporary culture. The course will review the economic, political, religious, environmental and social realities of Australia and its neighboring Oceanic Islands.

NCEP 316. Multicultural South Africa 4 credits
This course builds on the material covered in the prerequisite course. A truly interdisciplinary experience, the course incorporates discussions of politics, history, economics and language in an attempt to understand the nature of power, particularly as it is exercised within the context of racial and ethnic oppression of indigenous peoples. Prerequisite: ENG 226, Africa: Literature and Culture of Its Many Nations.

NCEP 317/ENV 490. The Cultural and Environmental Geography of Alaska 4 credits
The purpose of this academic field study is to explore the environmental resources and cultural heritage of America’s final frontier. Spring coursework will ground students in an understanding of Alaska’s history, physical landscape, Native American heritage, and current natural resource base. The three-week May itinerary will include cultural activities in Sitka, Fairbanks and Anchorage involving Tlingit, Athabascan and Inuit Indian groups, plus environmental field investigations that include Denali National Park and the historic Yukon mining region.

NCEP 318. Mexico: Culture, Health and Human Services 4 credits
This course has been designed for students who are interested in careers where they will work in health or human service settings that serve Hispanic populations. Using Mexico as a central focus, students will gain an understanding of Mexican and Mexican-American culture and customs. In May students will study in Cuernavaca, Mexico, where they will live with families, participate in seminars related to health, social services, migration, medical anthropology and politics. Intensive language classes are optional for those with near-native fluency.

NCEP 319. Research in Art: Art and Culture of the Ancient and Modern Maya 4 credits
In this course, students will spend the first half of the spring semester at Carroll studying ancient Mayan history, culture and art/architecture. Over spring break, students will spend 10 days in Mexico exploring the world they have studied. Upon return to Carroll, the second half of the semester will involve developing written and artistic projects that reflect what they have learned on campus and abroad.

NCEP 320. Paris: Art and Culture 4 credits
This course traces the civilization and culture of France through the centuries, beginning with the Gallo-Roman times and progressing to the present. While in Paris, students will experience first-hand the wealth of art and architecture which Paris has to offer. Students will be introduced to various artistic movements born in France and will investigate how history is reflected by the many monuments in the “City of Light.” Previous knowledge of French is not required. Note: Students planning to use NCEP320, Paris: Art and Culture, for credit toward their French language minor need to work with the course instructor in the semester before they plan to take the course to develop a plan for ways to adapt their coursework to incorporate and demonstrate appropriate use of the language.

NCEP 321. Contemporary Germany: Its Culture, Economy, and Politics 4 credits
This course fosters an appreciation of German culture, language and history in an effort to prepare students to interact with people and organizations from Germany and other German-speaking countries (i.e. Austria, Switzerland, Lichtenstein). A semester-long pre course introduces history, culture and politics through readings, discussions and group projects. The in-country experience is focused in Marburg, Germany, where Carroll students will learn alongside students, faculty and staff of the Philipps-Universität. Day trips to surrounding cities and sites round out the 14-day experience. There are no prerequisites. Note: Students planning to use this course for credit toward their German language minor need to work with the course instructor in the semester before they plan to take the course to develop a plan for ways to adapt their coursework to incorporate and demonstrate appropriate use of the language.

NCEP 322. The Historical Evolution of Culture, Trade and Economics within the British Isles 4 credits
This course offers an examination of how cultures in England, Ireland and Scotland evolved through the centuries as their economies advanced toward their current state in the global environment. The course fosters an appreciation of the differences in culture—as well as the multifarious ways in which “culture” is to be understood—and the history of the British Isles through readings, discussions and projects while including a three-week hands-on experience to Ireland and the London cultural and business centers.

NCEP 323. Travel Journals: Italy 4 credits
Writing and drawing both require refined observational skills. This course seeks to develop these skills in an interrelated, experiential workshop format, partially taught off campus. By reading and viewing journals from the travel experiences of others, we will seek to uncover the way writers/artists influence our perceptions of place and culture. Our travel to Italy provides an opportunity to practice observational and expressive skills, and to develop a new way of being in the world—a traveler rather than a tourist. The process of keeping a travel journal as well as the final essay and/or series of visual works about this experience will reflect this new awareness of place and self. This course is also offered as ART 306: Advanced Drawing or ART 313: Travel Journals.

NCEP 324. Identity, Culture and the European Union 4 credits
This NCEP examines the themes of identity and culture within the European Union through an examination of how the arts and political structures disseminate and define culture. The preparatory portion of the course provides students a background in the history, politics, and cultures of the EU, France, Germany, and Belgium. The on-site portion of the course immerses students within the two “capital cities” of the EU: Brussels, Belgium, and Strasbourg, France, where we will meet various local, national and EU officials. Students will spend time experiencing the two capital cities and countries that have shaped the EU more than any others since its inception: Paris, France and Berlin, Germany where we will focus on visiting major historical and cultural sites.

NCEP 325. Politics and Theatre in the UK and USA 4 credits
In depth look into the interrelationship of Politics and Theatre in the dynamic defining and redefining of the British culture. Students will explore plays and politics from three distinct periods: Elizabethan, Victorian, and Modern England and pinpoint them with study of American responses and innovations during the same eras. Travel to London during will include visits to the New Globe Theatre.
Theatre, the National Theatre, Stratford on Avon, Parliament, the Victoria & Albert Museum, and the British Imperial War Rooms. Travel to Chicago to explore US correlations will take place during the semester.

**NCEP 328 Spain: Multicultural Faces and Footprints 4 credits**

This course in particular will explore the complicated connection between Christians, Muslims and Jews in Spain. We will learn of the history, art, architecture and politics of the medieval and early modern eras, focusing on the shared spaces in which cultures and religions came together within the Iberian Peninsula. In May, students will spend two weeks visiting the pivotal cities of Madrid, Toledo, Granada, Seville, and Cordoba, touring the palaces, cathedrals, mosques, synagogues and markets where these diverse cultures historically interacted. Reflecting on the dynamics of such cross-cultural contact in Spain, students will gain a fresh perspective on contemporary relations between Christians, Jews and Muslims, while becoming more aware of their own cultural backgrounds. Although students will have ample opportunity to practice their Spanish skills, if they opt to do so, there are no language requirements for this course.

**NCEP 329. Japan: Exploring a Land of Contrasts 4 credits**

Japan is a floating world of contrasts. This archipelago of nearly 7,000 islands is home to one of the most technologically advanced cities in the modern world. It is also a land that is deeply rooted in historic and cultural traditionalism. With nearly 130 million people living in a geographical footprint the size of California, the Japanese have created a harmonious balance between traditionalism and modernism. This course will allow students to engage in a full immersion into Japanese culture in Tokyo and Hiroshima. Students will spend most of their cross-cultural experience in Tokyo and the immediate surrounding area paying special attention to arts, fashion, language, food, historical events, music, religion, and popular culture. Students will then travel to Hiroshima for a values-based exploration into the historic importance of that geographic area, including an extended stay in Peace Park and the Peace Memorial Center. A dedicated time for comparison to one's own culture will result in a reflection project that may include digital storytelling, photo essay, expanded journal, and more. This NCEP is designed to challenge the hearts and minds of students.

**NCEP 330. Iceland: A Comparative Exploration Through Cinematography and Storytelling 4 credits**

The course is a comparative exploration of Iceland through film. Throughout the course, students will learn the principles of film editing. They will explore and compare our local history and tradition to Iceland's. During the first half of this course, students will create three videos locally: Interview, Documentary, and Short Story. During the immersion, students will travel to Iceland and explore its history and traditions by means of cinematography and storytelling. The students will also create three videos in Iceland: Interview, Documentary, and Short Story. At the end of the course, students will reflect by creating a composite of each project, comparing our local culture to that of Iceland.

**Discipline-specific courses approved for CCE credit**

**NRS 341. Health Care in Guatemala 2 credits**

This course offers an introduction to the field of international health, using Guatemala as a focus of study. After an overview of the geography, history and culture of Guatemala, there will be an emphasis on understanding factors that impact illness and injury, data assessment and the development of meaningful solutions to identified problems. The semester-long course will serve as preparation for a practicum experience in Guatemala. During the immersion in Guatemala, students will have the opportunity to tour health care facilities in eastern Guatemala. They will also visit Mayan and colonial historical sites and cultural points of interest. Students will also assist with mobile clinics in several villages and present a health educational lecture. Prerequisites: NRS 233 and 234.
Accreditation Information

Regional Accreditation

Accredited by The Higher Learning Commission and a member of the North Central Association. The commission's address, phone number and website are as follows: 230 South La Salle St., Suite 7-500, Chicago, Illinois, 60604-1413. Phone: 800.621.7440. Website: [www.ncahlc.org](http://www.ncahlc.org)

In addition, several individual academic programs have additional accreditations:

- **Athletic Training**: this program is currently accredited through the Commission on Accreditation of Allied Health Programs. In Fall 2006, athletic training program accreditation will transition to the Commission on Accreditation of Athletic Training Education.
- **Chemistry and Biochemistry**: approved by the Committee on Professional Training of the American Chemical Society
- **Education**: full program approval through the Wisconsin Department of Public Instruction
- **Exercise Science**: National Strength and Conditioning Recognition. The program also fulfills the American College of Sports Medicine Institutional Evaluation Standards.
- **Nursing**: Approved by the Department of Regulation and Licensing, Wisconsin State Board of Nursing, and Accredited by Commission on Collegiate Nursing Education
- **Physical and Health Education**: approved by the Wisconsin Department of Public Instruction
- **Physical Therapy**: The Doctor of Physical Therapy Program at Carroll University is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, Virginia 22314; telephone: 703-706-3245; email: accreditation@apta.org; website: [http://www.capteonline.org](http://www.capteonline.org).
- **Physician Assistant Studies**: Provisional accreditation by the Accreditation Review Commission on Education for the Physician Assistant, Inc.

Notice of Non-Discrimination Policy

Carroll University does not discriminate in any manner contrary to law or justice on the basis of race, color, sex, age, religion, sexual orientation, national origin, disability or veteran’s status in administration of its educational, admission, financial aid, athletic or other university policies and programs nor in the employment of its faculty and staff.
Admissions

Admission to Carroll University is offered to those for whom academic and personal success seems likely. Each candidate is evaluated individually. Evidence of good character and demonstrated ability to do university level work is essential.

For more information on Admissions, click on a topic below.

Options for Attending Carroll

- Procedures for Admission - Full-Time Freshmen
- Application Deadline
- Admission Options
- Advanced Placement
- Procedures for Admission - Full-Time Transfer
- Procedures for Admission - Part-Time Students
- Returning Students
- Articulation Agreements
- Athletic Training Education Program Admission
- Diagnostic Medical Sonography Admission
- Bachelor of Science in Nursing Degree Admission
- Pre-Master of Science in Exercise Physiology Program Admission
- Pre-Physical Therapy and Entry-Level Doctor of Physical Therapy Program Admission
- Radiologic Technology Program Admissions
- Air Force ROTC Information
Options for Attending Carroll

Students who wish to attend Carroll University may choose from two basic options.

**Full time** - students who carry 12 credits or more per semester.

**Part time** - students who carry 11 credits or fewer per semester. There are two types of part-time students.

- **Degree seeking** - students working toward a Bachelor of Arts, Bachelor of Science, Bachelor of Science in Music Education, Bachelor of Science in Nursing, Master of Business Administration, or Master of Software Engineering degree.

- **Non-degree seeking** - students taking courses for enrichment, skill-building, or preparation for graduate study purposes. Courses may be taken for credit or audited (students do not receive university credit for their work).

Note: Students may move between full-time and part-time status. However, they should be aware of implications for tuition and fees, financial aid, housing, etc. **Part-time students who wish to attend the University as full-time students must apply through the Office of Admission. Questions should be directed to the appropriate offices.**

Students come to Carroll from different environments. Some matriculate directly from secondary schools or transfer from other institutions. Other students enroll at Carroll as working adults.

Carroll offers classes during the day, in the evening, and online. Students at Carroll may choose from more than 45 areas of study or they may design their own major. Six majors can be completed through evening courses.
The following credentials must be submitted to the Office of Admission:

1. **Application for admission**, which may be submitted at any time following the successful completion of the junior year in secondary school.
2. **Transcript from an accredited secondary school** that shows progress toward, or the completion of, graduation requirements.
3. **School Report Form**, which consists of a personal evaluation by the secondary school guidance counselor.
4. **SAT or ACT scores**; these tests are administered by the College Entrance Examination Board and the American College Testing Program, respectively.
5. **Nursing students** must submit a transcript from an accredited secondary school that shows satisfactory completion of coursework in algebra II, chemistry and biology.

Decisions are made on applications when they are complete, and applicants are notified promptly through the Office of Admission. In some instances, the files of prospective students are referred to the Admission Committee for review and action. That body may grant admission to the University provided certain conditions are met or may require the student to satisfy specified criteria. Final admission to the Carroll athletic training, nursing, and physical therapy programs is contingent upon the ability of the applicant to comply with the technical standards as listed in the catalog under each area of study, as well as the health standards listed on the Carroll University health forms.

University applicants with disabilities bear no obligation to disclose their disabilities during the application process. However, an applicant may choose to disclose his/her disability to the Office of Admission if the student believes that he/she does not meet the University's regular admission requirements. The disability may be taken into consideration in relationship to the student's overall achievement, the effect of the disability on his/her academic achievement, and the likelihood of the student's success in the University's programs, courses and activities.

Following acceptance, students intending to enroll must pay a $200 **confirmation deposit**, complete the health information form and submit a statement of medical insurance coverage. All students are required to have medical insurance coverage as listed in the Catalog under Student Life, Health Insurance.

Those who apply for financial aid are not required to declare their intention to enroll until after they have been notified of their final financial aid award.
Application Deadline

Students are encouraged to file applications for admission to the first semester (fall) before March 15. Applications will be considered and qualified candidates will be accepted as long as there are openings in the entering class. Applications and all supporting documents for admission to the second semester should be filed before November 1.

To assure early notification of admission, either the ACT or SAT should be taken before March 15. Ordinarily, the SAT is administered seven times a year in October, November, December, January, April, May and June. The ACT is administered five times a year in October, December, February, April and June.

Test scores obtained in the junior year may be submitted. Students should contact their guidance counselor or write the testing agency to obtain test registration forms.
Admission Options

Carroll recognizes the varying needs of individual students with the following options:

**Early admission** may be granted following the completion of three years of secondary school, provided the secondary school indicates that it is in the applicant's best interest to do so. The applicant may or may not have completed the coursework required for secondary school graduation at the time of admission, but must show unusual promise and achievement.

**Deferred admission** may be offered to students who want to delay university study for a semester or full year after graduating from secondary school.
Advanced Placement

Applicants will be considered for advanced placement according to the policies established by Carroll University. The applicant’s advanced standing is determined individually and is based on an evaluation of all prior academic work.

Options for advanced placement are:

1. Advanced placement exams administered in high school.
2. Retroactive credit for modern languages and math.
3. CLEP exams (College Level Examination Program).
4. Program exams.
5. Challenge exams to complete requirements in specified nursing courses or portions of courses, for registered nurses.
6. Credit for prior learning application.
The following credentials must be submitted to the Office of Admission:

1. **Application for admission**, which may be submitted at any time.
2. **Transcript from an accredited secondary school**.
3. **Transcript(s) from all post-secondary institutions** attended.
4. **College Report Form** to be completed by the dean or assistant dean of students at the post-secondary institution most recently attended.

Students must normally be eligible to return in good standing (be free of academic or disciplinary probation) to all institutions previously attended.

Application criteria and academic progression standards for specific academic programs are listed separately in the catalog.

Students from a two-year or four-year accredited post-secondary institution may receive transfer credits provided:

1. Transfer courses parallel Carroll University courses or are deemed eligible for elective credit.
2. All courses accepted in transfer and applied to graduation hours are graded C or better.
3. A maximum of 64 credits may transfer from a two-year institution.
4. There is no limit as to the number of credits eligible for transfer from a four-year institution.
5. Students must complete their final 32 credits at Carroll, including at least one-fourth of their major credits and at least one-fourth of the minor credits.

Transfer credit will be evaluated under the following provisions:

1. A course in which a student received a grade of D may be used to complete general education curriculum and major or minor requirements, but the credit hours will not count as hours toward graduation. All D and F graded courses normally acceptable for transfer credit will be figured into the calculation of the cumulative grade point average.
2. A course in which a student received a D or F grade may be repeated for credit and only the last grade earned will be used in the grade point average calculation.
3. Transfer students with an Associate of Arts or an Associate of Arts & Science degree with at least 52 hours of acceptable transfer credit will have the writing seminar waived and will meet all GE 1 distribution components in the general education curriculum. In addition, transfer credit may be received for the CCD, GE2 and CCE requirements.
4. A student who completes an advanced modern language course with a grade of B or better may be eligible for retroactive credit. See the Modern Language section of the current Catalog for specific information.
5. All transfer coursework is evaluated on a course by course basis. General education curriculum requirements must be completed by either transfer or Carroll University credit.
6. If a student repeated a course in which s/he initially received a grade of C or better and the repeated course had an unsatisfactory grade (D or F), s/he will receive the last grade earned. The final grade will be used in the grade point average calculation.

**Transfer credit policy after enrollment at Carroll University:** It is necessary to obtain permission in advance from the Carroll University Registrar's Office in order to have coursework from another institution accepted in transfer. All coursework must be graded at C or better to be accepted. Grade point deficiencies at Carroll University cannot be made up with transfer course credit. Note: Full-time and part-time students are required to complete their final 32 hours at Carroll.

The Carroll Nursing Program requires that any relevant transfer coursework in biology, chemistry, health sciences and nursing in which a grade less than a BC was earned must be repeated prior to application.

USAFI credits and/or any other accredited correspondence experiences are evaluated against course offerings at Carroll, and credit is assigned accordingly. Ordinarily, not more than two such courses may receive credit toward a degree at the University.
Procedure for Admission - Part-Time Students

Degree-seeking students must submit the following credentials to the Office of Admission:

1. Application for Admission
2. Transcript from an accredited secondary school
3. Transcripts from all post-secondary institutions attended

Non-degree seeking students must submit the following credentials to the Office of Admission:

1. Application for Admission
2. Transcripts from all post-secondary institutions attended may be required to verify prerequisite coursework.

Students must normally be eligible to return in good standing (be free of academic or disciplinary probation) to all institutions previously attended.

Evaluation for acceptance generally takes one to three weeks and is done on a rolling basis. Part-time students may be cleared to register for classes pending review of the application and supporting documentation, but may be administratively withdrawn once a formal admission decision has been made. Part-time students may register for no more than 16 credits before providing official transcripts and other supporting documentation requested by the Office of Admission.

Application criteria and academic progression standards for specific academic programs are listed separately in the catalog. Transfer credit provisions may be found under the full-time transfer admission information.

Part-time students who wish to apply to the University as full-time students must do so through the Office of Admission. If possible, this process should be completed one full semester prior to anticipated full-time enrollment.
Returning Students

After the lapse of one or more semesters, students seeking to return to Carroll on a full-time or part-time basis must reapply. Students who have been suspended from the University and have become eligible to apply for readmission must do so through the Office of Admission. The Admission Committee reviews each application and determines the current status of the student and the conditions of readmission.
Articulation Agreements

Carroll University maintains articulation agreements with a number of Wisconsin institutions of higher learning in various areas of study. More information is available from the Office of Admission.
Athletic Training Education Program Admission

The athletic training program admits qualified students regardless of race, color, creed, sex, age, sexual orientation, marital status, national or ethnic origin or handicap that does not interfere with the performance of professional athletic training practice as provided by law.

Applications and credentials for admission to the athletic training program must be submitted for processing to the Carroll University Office of Admission. Applicants must be in good standing (be free of academic and or disciplinary probation) at all institutions previously attended. Decisions on applications are made by a selection committee comprised of the athletic training faculty/staff members. Applicants are notified of their status through the Office of Admission.

Students who meet the admission and prerequisite professional phase criteria are granted admission to the professional phase of the athletic training program. Students must also fulfill technical standards and caregiver background and criminal history check to be admitted to the professional phase of the athletic training program.

Students who fail to meet the professional phase admission criteria, who fail to meet technical standards requirements, or who do not pass the caregiver and background criminal history check can be denied admittance to the professional phase of the athletic training program.

Students can enter the athletic training program in one of two ways:

Direct Admission
Individuals can be admitted to the program as freshmen. Selection decisions for direct admission are based on evaluation of the following:

a. Carroll University application form
b. Transcript from an accredited secondary school that shows seven semesters of coursework. In addition, the following high school courses must be completed by graduation:
   Required:
   1. Three or more years of mathematics
   2. One or more years of high school biology
   3. One or more years of high school chemistry
   4. One or more years of high school English
   5. One or more years of high school history
   6. Two or more years of high school foreign language
   Recommended:
   1. One or more years of high school physics
   c. ACT composite score of 21 or SAT total score of 990

To advance into the professional phase of the program in their junior year, direct admission students must satisfy all of the following requirements during their freshman and sophomore years at the University:

a. A cumulative and semester grade point average (GPA) of 2.75 or higher
b. Pre-professional science courses (BIO 130 and 140, CHE 101 and 102, PHY 101 and 102, PSY 101) GPA of 2.5 or higher
c. A minimum course grade of "C" is required in all coursework used to calculate pre-professional GPA.
d. Completion of the following courses prior to the beginning of the professional phase of the program in the students’ junior year:
   1. Cultural Seminar
   2. Writing Seminar
   3. Athletic Training 101 and 102
   4. Pre-professional Science courses (BIO 130 and 140, CHE 101 and 102, PHY 101 and 102, PSY 101)
   5. Health Sciences 101 or the equivalent of First Aid and CPR for the Professional Rescuer certification with AED certification, HSCI103, HSCI120
   6. Communication 207 (Gen Ed CCD)
e. Submission of transcripts.

Delayed Admission - Students who enroll at Carroll, not having been admitted to the program through direct admission, can be accepted by meeting the athletic training program progression standards including:

a. A cumulative and semester GPA of 2.75 or higher
b. Pre-professional Science courses (BIO 130 and 140, CHE 101 and 102, PHY 101 and 102, PSY 101) GPA of 2.5 or higher
c. A minimum course grade of "C" is required in all coursework used to calculate pre-professional GPA.
d. Completion of the following courses or equivalent prior to the beginning of the professional phase of the program:
   1. Cultural Seminar
   2. Writing Seminar
   3. Athletic Training 101 and 102
   4. Pre-professional Science courses (BIO 130 and 140, CHE 101 and 102, PHY 101 and 102, PSY 101)
   5. Health Sciences 101 or the equivalent of First Aid and CPR for the Professional Rescuer certification with AED certification, HSCI103, HSCI120
   6. Communication 207
e. Submission of application to include: transcripts, cover letter, résumé, and three letters of reference: one from a professor, one from an athletic trainer, and one character reference.
f. Completion and submission of technical standards form and criminal history check for athletic training.
g. Participation in university, community service, or athletic training activities.
h. May only repeat a course once and not be on academic probation.
i. Admission and progression standards are subject to change based on regulatory, licensing, and/or certification needs.

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Diagnostic Medical Sonography Admission

Entry into the professional phase of the curriculum is done in conjunction with the Aurora Health Care School of Diagnostic Medical Sonography and its associated clinical sites or University Hospitals and Clinics and its associated clinical sites. Admission to the Diagnostic Medical Sonography professional phase of the program is highly competitive and dependent upon completion of multiple requirements. The acceptance of students into the professional phase of the curriculum lies solely with the School of Diagnostic Medical Sonography Admissions Committees at each hospital.

Entrance into the professional program has the following minimum requirements:

1. Carroll University general education requirements.
2. A minimum cumulative grade point of 3.0, a required science course grade point of 3.0, and a minimum grade of "C" in all required science courses, other than Physics. The average of the two grades for Physics 101 and 102 must be 2.5 or higher. Repeated courses will have the grades averaged. Course repeat attempts beyond 2 will not be recognized.
3. Proof (photocopy of license) of current Certified Nursing Assistant (CNA) certificate (at the student's own expense). Verification of patient care experience form filled out by employer.
4. Accumulation of at least 100 hours of direct patient care as a CNA prior to application (November 15).
5. Completion of a drug-screening consent form.
6. Two reference forms and separate letters of professional reference from college professors or employers only. These must be written, dated and sent within 6 months prior to application (May 15-November 1).
7. Original transcripts from all college and universities attended.
8. An autobiography covering the past four years of the applicant's life.
9. A documented minimum job shadowing experience of at least 8 hours (4 hours in cardiac, 4 hours in general) at Aurora St. Luke's Medical Center or University of Wisconsin Hospitals and Clinics.
10. Basic life support certification (photocopy of license) completed by the time of application (November). This must include CPR for infants, children and adults as well as AED training. This is at the student's own expense.
11. Biology 130, Biology 140, Physics 101 and Physics 102 must be completed by December 31st of the application year. Nursing 236 must be completed or in progress at the time of the interviews (Spring semester).
12. All applicants must submit a $50.00 non-refundable application fee to each hospital to which they are applying.

Required Science Courses

1. BIO 130, Introduction to Human Anatomy & Physiology I
2. BIO 140, Introduction to Human Anatomy & Physiology II
3. CHE 101, General Chemistry
4. CHE 102, Biological Chemistry
5. BIO 212, Introduction to Microbiology
6. BIO 324, Bioethics
7. CMP 112, Computational Thinking I
8. NRS 100, Health Care and Nursing
9. NRS 230, Health Assessment
10. NRS 236, Human Pathophysiological Responses
11. PHY 101, Introductory Physics I
12. PHY 102, Introductory Physics II

Students are admitted to the professional program once per year. Typically, in the fall semester of sophomore year, students will submit an application. Students must apply for a position in the DMS class nearly one year prior to transferring. A complete application file must be sent through the Carroll University Health Sciences 2+2 Advisor to Aurora Health Care or University Hospitals and Clinics School of Diagnostic Medical Sonography. The application file is due to the Carroll University Health Sciences and 2+2 Advisor before November 15. The applications are then reviewed by the School of Diagnostic Medical Sonography Admissions Committee at each hospital. Qualified students may then be contacted for a personal interview. Interviews and potential notification of acceptance occur in the spring of sophomore year. If accepted, the student would begin the two-year professional program at Aurora Health Care or University Hospitals and Clinics School of Diagnostic Medical Sonography. Subsequent progression standards and grading criteria are at the discretion of the host institution. After successful completion of the professional program the student would receive a certificate in Diagnostic Medical Sonography and a Carroll University Bachelor of Science degree with a major in Health Sciences: Diagnostic Medical Sonography. Due to the highly specialized nature and requirements of this program the students should work closely with the Carroll University Health Sciences and 2+2 Program Advisor.
The nursing program admits qualified students regardless of race, color, creed, sex, age, sexual orientation, national or ethnic origin or handicap that does not interfere with the performance of professional nursing as provided by law. Students can enter the nursing program in one of two ways:

**Direct Admission** - Individuals matriculate directly from high school into the nursing major with successful completion of the following:

1. One year of high school Algebra II, biology and chemistry (grade C or better).
2. An ACT of 21 or higher and high school cumulative GPA 2.75 or higher.
3. Applicants who have English as a Second Language are required to take the TOEFL and achieve a minimum score of 79, unless satisfactory SAT/ACT scores are available.
4. Submission of the Technical Standards for Admission to and Progression in the Nursing Program.
5. In some instances, applicant files are referred to a Selection Committee for review and action. That body may grant admission provided certain conditions are met or may require the student to satisfy specified criteria.
6. Admission and progression standards are subject to change based on regulatory, licensing and/or certification needs.

**Delayed Admission** - Students who enroll at Carroll, not having been admitted to the program through direct admission, including pre-nursing, change of major and transfer student applicants, may apply to the nursing major upon satisfaction of the following criteria.

1. Submission of a Nursing Program application, and if a transfer student, submission of a Carroll University application.
2. Submission of transcripts from an accredited secondary school and all post-secondary institutions attended. Applicants must be eligible to return in good standing (be free of academic or disciplinary probation) to all institutions previously attended as documented on the college report form.
3. A cumulative GPA of 2.75 or higher in college coursework.
4. A professional GPA of 2.75 or higher in college coursework, including completion of BIO 130 and CHE 101 (grade of BC or higher) and CHE 102, HSC 300 and nursing electives.
5. A minimum course grade of BC is required in all transfer coursework used to calculate the professional GPA (BIO 130, BIO 140, BIO 212, CHE 101, CHE 102, HSC 300 and nursing electives).
6. Candidates with science coursework more than five years old, may be required to repeat coursework prior to application.
7. Written statement to include reason for seeking the BSN degree.
8. Submission of the Technical Standards for Admission to and Progression in the Nursing Program.
9. Admission and progression standards are subject to change based on regulatory, licensing and/or certification needs.

Applications and credentials for admission to the nursing program must be submitted to the Office of Admission. Decisions are made by a selection committee and applicants are notified through the Office of Admission. Students not admitted to the nursing program are encouraged to seek assistance through the Center for Academic Advising Services.

**Registered Nurse Admission**

Registered nurses who have graduated from accredited associate degree nursing programs may be admitted to the nursing program as transfer students. These students may receive transfer credit for applicable university courses provided they were completed at an accredited associate degree program and are accompanied by an official transcript from the institution(s).

Registered nurses who wish to enter the nursing program to earn their Bachelor of Science in Nursing degree must meet the following requirements:

1. Graduation from an accredited associate degree program.
2. Current RN license in the state of Wisconsin.
3. A cumulative GPA of 2.75 or higher.
4. Grades of C or better in all required biology, chemistry, health science and nursing courses.

The following credentials are required:

1. Submission of a Carroll University application.
2. Submission of transcripts from an accredited secondary school and all post-secondary institutions attended.
5. Submission of the Technical Standards for Admission to and Progression in the Nursing Program.
6. Written statement to include:
   a. Reason for seeking the bachelor's degree
   b. Self identified professional and academic strengths and weaknesses c. Professional interest area(s) and area of employment
   d. Options for Attending Carroll
   e. Procedures for Admission - Full-Time Freshmen
   f. Application Deadline
   g. Admission Options
   h. Advanced Placement
   i. Procedures for Admission - Full-Time Transfer
   j. Procedure for Admission - Part-Time Students
   k. Returning Students
   l. Articulation Agreements
   m. Athletic Training
   n. Education Program
   o. Admission
   p. Diagnostic Medical Sonography Admission
   q. Bachelor of Science in Nursing Degree Admission
   r. Pre-Master of Science in Exercise Physiology Program Admission
   s. Pre-Physical Therapy and Entry-Level Doctor of Physical Therapy Program Admission
   t. Radiologic Technology Program Admissions
   u. Air Force ROTC Information

Completion students may earn up to 34 block nursing credits from previous nursing coursework upon successful completion or challenge of Nursing 230, Health Assessment and Nursing 236, Human Pathophysiologic Responses. Please contact the chair of the nursing program to obtain information on the challenge examinations. The nursing program reserves the right, in special circumstances, to require the student to successfully complete an evaluation process to validate the probability of successful program completion. Special circumstances may include no recent work history as a registered nurse.
Pre-Master of Science in Exercise Physiology Program Admission

**ADMISSION**

The Pre-Master of Science in Exercise Physiology Program admits qualified students regardless of race, color, creed, gender, age, sexual orientation, national or ethnic origin, or disability that does not interfere with the performance of professional practice as provided by law. Students can enter the Master of Science in Exercise Physiology Program in one of two ways:

1. **Prior Degree** – Previous degree applicants who have completed an undergraduate or graduate degree from Carroll or another institution.
2. **3 + 2 Completion** - Current Carroll University undergraduate student seeking a Bachelor of Science degree in Exercise Science who intends to follow the 3 + 2 completion plan. The applicant generally is of junior standing when applying to the program. The 3 + 2 completion plan requires the first three years of study to be completed at the undergraduate level of study with a major in exercise science (a minimum of 101 undergraduate credits is required prior to entering the graduate program) and then, the final two years consists of graduate level study in the Master of Science in Exercise Physiology Program. Upon completion of the first 27 credits in the Master of Science in Exercise Physiology Program, a Carroll University Bachelor of Science degree in Exercise Science is awarded, and upon successful completion of all graduate credits (58 total credits), the Master of Science in Exercise Physiology degree is awarded.

Applications and credentials for admission to the Master of Science in Exercise Physiology Program must be submitted for processing to the Carroll University Office of Admission. As decisions are made on applications, applicants are notified through the Office of Admission. Applicants must be eligible to return in good standing (be free of academic or disciplinary probation) to all institutions previously attended.

- **First Priority Deadline:** March 1, 2014
- **Second Priority Deadline:** June 1, 2014
- **Final Deadline:** August 2014 or until the class is full

Requirements for admission into the Master of Science in Exercise Physiology Program include:

1. Evidence a baccalaureate degree from an accredited institution or an equivalent institution will be awarded prior to the start of the Master of Science in Exercise Physiology Program for all non-traditional applicants and by the completion of senior year for all 3 + 2 completion plan applicants.
2. Cumulative GPA of 3.0 or higher (on a 4.0 scale).
3. Pre-professional prerequisite GPA of a 3.0 or higher (on a 4.0 scale).
4. Successful completion of all pre-professional prerequisite course work with a letter grade of "C" or better within seven years from the time of application and prior to beginning the graduate program.
5. Current CPR certification for the professional rescuer.

Applicants must comply with all admission requirements listed above. Selection decisions will be based on evaluation of:

1. Graduate Studies Application.
2. Official transcripts from all post-secondary institutions attended, including both graduate and undergraduate course work – must be mailed directly to Carroll University Admission Department.
3. Official GRE Score Report sent directly to Carroll University (university code 1101) – exam date must be within the past 5 years.
4. Course Work in Progress Form.
5. Personal Essay.
6. Two Letters of Recommendation.
7. Safety and Technical Standards Form.
8. Successful completion of all pre-professional and prerequisite course work completed within seven years from the time of application with a letter grade of "C" or better (see required prerequisites below).
The entry-level Doctor of Physical Therapy Program admits qualified students regardless of race, color, creed, gender, age, sexual orientation, national or ethnic origin, or disability that does not interfere with the performance of professional physical therapy practice as provided by law. Applications and credentials for admission to the physical therapy program must be submitted for processing to the Carroll University Office of Admission. As decisions are made on applications, applicants are notified through the Office of Admission. Students can enter the physical therapy program in one of three ways: direct admission, non-direct admission, or non-traditional admission.

Direct Admission Option - Individuals with direct admission status matriculate directly from high school into the pre-professional phase of the program. The pre-professional phase includes the Freshman, Sophomore and Junior years at the University. If a student with direct admission status meets all progression standards after his or her junior year at the University, he or she transitions into the professional phase of the DPT Program. This option allows students to earn an undergraduate bachelor's degree as well as the entry-level DPT degree in a six-year time frame.

Selection decisions for direct admission status will be based on evaluation of:

1. Carroll University general admission application form.
2. Carroll University Physical Therapy Program Direct Admission Form, (February 3, 2014 deadline date).
3. The Safety and Technical Standards Form.
4. Transcript from an accredited secondary school which shows six semesters of coursework (It is recommended that a senior course schedule is included with general application materials). In addition, the following high school courses are recommended, with grades of "C" or better:
   - Strongly Recommended
     *1 semester of Psychology, either PSY101 or higher. Up to 1 additional psychology course, at a 200-level or higher, may be included in the pre-professional GPA calculation.
     *2 semesters of Physics, either PHY101/102 or PHY203/204
     *2 semesters of Chemistry, either CHE101/102 or CHE109/110
     *4 semesters of Biology, either BIO120/125 or BIO130/140 and BIO402/403
   - One or more years of high school biology
   - One or more years of high school chemistry
   - Two or more years of high school foreign language
   - Three or more years of mathematics
   - One year of physics

During their freshman, sophomore and junior years at the University, students with direct admission status pursue their undergraduate degrees in existing Carroll majors which have a pre-physical therapy emphasis. Approved majors are biology, communication, exercise science, psychology and Spanish. The undergraduate degree is completed the senior year while enrolled in the first year (Phase I) of the professional Physical Therapy Program. To advance into the professional phase of the program in their senior year, students with direct admission status must satisfy all of the following progression requirements by the end of spring semester junior year:

1. A university cumulative grade point average of 3.0 or higher at the time of application and prior to progressing into the pre-professional phase.
2. A pre-professional course grade point average of 3.0 or higher at the time of application and prior to progressing into the professional phase. Pre-professional courses include:
   - 4 semesters of Biology, either BIO120/125 or BIO130/140 and BIO402/403
   - 2 semesters of Chemistry, either CHE101/102 or CHE109/110
   - 2 semesters of Physics, either PHY101/102 or PHY203/204
   - 1 semester of Psychology, either PSY101 or higher. Up to 1 additional psychology course, at a 200-level or higher, may be included in the pre-professional GPA calculation.
3. A minimum course grade of "C" is required in all course work used to calculate pre-professional GPA.
4. A maximum of one course within the pre-professional, prerequisite coursework (i.e., biology, chemistry, physics, and psychology) can be repeated.
5. Successful completion of the following by the end of spring semester junior year.
   1. The Graduate Studies Application for admission to progress into the entry-level Doctor of Physical Therapy Program Professional Phase (submitted in mid-December of junior year at Carroll).
   2. The Supplemental Application Materials, which include:
      - Clinical Experience Documentation Form(s): Participation in a minimum of three clinical observation experiences from three different types of practice environments (e.g. inpatient acute care, outpatient orthopedic or neurological, skilled nursing facility, pediatric, etc. A Clinical Experience Documentation Form must be submitted to the program. A minimum of twenty-five hours at each type of the three environments for a total minimum of 75 hours is required.
      - Three Letter of Reference— Form(s): one from a physical therapist, one from a university professor, and one from a non-family member that attests to the student’s character.
      - Essay Form.
      - Employment, Service, and Academic Honor(s) Form: Participation in university or community service activities documentation is required.
      - Health Science Statement(s) Form
      - Safety and Technical Standards Form
      - Course Work in Progress Form.
      - Application for Graduation Form – must submit an application for graduation to the Registrar’s Office prior to the application deadline (mid-December) to receive a graduation audit.

3. 3. Official GRE scores: Carroll’s School Code is 1101 and Department Code is 0619
4. Carroll University General Education Requirements, with the exception of CCS400 Global Perspectives Colloquium.
Pre-Physical Therapy and Entry-Level Doctor of Physical Therapy Program Admission

5. Pre-professional prerequisite courses (see above for specific course details).
6. 2 semesters of Computational Thinking (CMP112/CMP114)
7. Evidence that the bachelor's degree will be awarded at the completion of the senior year.
8. Current CPR and First Aid certification. CPR certification must be either American Heart Association Basic Life Support for Healthcare Providers or American Red Cross CPR/AED for the Professional Rescuer. First Aid certification must be through an organization recognized as a valid issuer of certification such as the American Red Cross.
9. Test credits will not satisfy the natural, health and social science prerequisite coursework requirements.
10. Admission and progression standards are subject to change based on regulatory, licensing, and/or certification needs.

*Indicates course work included in pre-professional GPA calculation. Minimum of a 3.0 pre-professional GPA is required.

If, for any reason, a direct admission student does not advance into the professional phase of the program, they are encouraged to seek assistance through the Center for Academic Advising Services.

Non-Direct Admission Option - Students not selected for direct admission will follow the non-direct admission process. Examples include high school students not selected for direct admission, undergraduate transfer students, Carroll alumni, and direct admission students who did not meet progression standards. Applicants who complete 60 or more undergraduate degree credits and will earn a bachelor's degree from Carroll receive a calculated preference in consideration for the professional phase of the program. Non-direct admission students may apply to the professional phase of the DPT program during their junior year at Carroll.

Applicants must comply and meet the following requirements for admission into the entry-level Doctor of Physical Therapy Program, which include:

1. Evidence a baccalaureate degree will be awarded by the completion of the senior year.
2. Cumulative GPA of 3.0 or higher (on a 4.0 scale) at the time of application and prior to the start of the professional phase.
3. Pre-professional prerequisite GPA of a 3.0 or higher (on a 4.0 scale) at the time of application and prior to the start of the professional phase.
4. A minimum course grade of "C" is required in all course work used to calculate pre-professional GPA. (Courses identified with an asterisk below are used to calculate the pre-professional GPA).
5. A maximum of one course within the pre-professional, prerequisite coursework (i.e., biology, chemistry, physics, and psychology) can be repeated.
6. A university transcript that includes five semesters of course work. In addition, the following prerequisite courses must be successfully completed prior to beginning the professional phase of the program, which include:
   - Carroll University General Education requirements, with the exception of CCS400 Global Perspectives Colloquium.
   - Required major and elective courses in the undergraduate major.
   - 2 semesters of computational thinking (CMP112/CMP114).
   - *4 semesters of Biology, either BIO120/125 or BIO130/140 AND BIO402/403
   - *2 semesters of Chemistry, either CHE101/102 or CHE109/110
   - *2 semesters of Physics, either PHY101/102 or PHY203/204
   - *1 semester of Psychology, either PSY101 or higher. Up to 1 additional psychology course, at a 200-level or higher, may be included.
7. Current CPR and First Aid certification. CPR certification must be either American Heart Association Basic Life Support for Healthcare Providers or American Red Cross CPR/AED for the Professional Rescuer. First Aid certification must be through an organization recognized as a valid issuer of certification such as the American Red Cross.
8. Safety and Technical Standards.

*Indicates course work included in pre-professional GPA calculation. Minimum of a 3.0 pre-professional GPA is required.

Selection decisions into the professional phase will be based on evaluation of:

1. Graduate Studies Application for Admission to the entry-level Doctor of Physical Therapy Professional Phase.
2. Supplemental Application Admission Materials, which include:
   - Clinical Experience Documentation Form(s): Participation in a minimum of three clinical observation experiences from three different types of practice environments (e.g. inpatient acute care, outpatient orthopedic or neurological, skilled nursing facility, pediatric, etc.) A minimum of twenty-five hours at each type of the three environments for a total minimum of 75 hours is required.
   - Three Letters of Reference – Form(s): One from a physical therapist, one from a university professor, and one from a non-family member that attests to the student’s character. (If you waive your right of access, letters must be submitted with a signature across the seal in individual envelopes within the complete packet.)
   - Essay Form.
   - Employment, Service, and Academic Honor(s) Form: Participation and documentation of university or community service activities is required.
   - Health Science Statement(s) Form.
   - Safety and Technical Standards Form.
   - Coursework in Progress Form.
   - Application for Graduation Form – must submit an application for graduation to the Registrar Office prior to the application deadline.
3. Official GRE scores: Carroll's School Code is 1101 and Department Code is 0619 (exam date must be within the last 5 years)
4. Official GRE scores: Carroll's School Code is 1101 and Department Code is 0619
5. Test credits will not satisfy the natural, health and social science prerequisite coursework requirements.
6. Admission and progression standards are subject to change based on regulatory, licensing, and/or certification needs.

Non-Traditional Option: An individual who has completed an undergraduate or graduate degree at another institution may apply for admission to the professional phase of the program. Non-traditional applicants are reviewed in a competitive pool consisting of non-traditional and non-direct admission applicants. Please refer to the Graduate catalog for the Non-Traditional Student requirements for admission. Applicants completing a bachelor’s degree and 60 or more undergraduate credits at Carroll University receive a calculated preference in consideration for admission to the DPT Program.
Radiologic Technology Program Admissions

The professional phase of the Radiologic Technology Program is done in conjunction with the Radiology Alliance – Froedtert Hospital and Wheaton Franciscan – St. Joseph as well as with Aurora Health Care. Admission to the Radiology Alliance or Aurora Health Care professional phase of the program is highly competitive and dependent upon completion of multiple requirements. The acceptance of students into the professional phase of the curriculum lies with the Radiologic Technology Admissions Committee. Radiologic Technology students are admitted to the professional phase program once per year, typically in the fall semester of their junior year.

Application requirements include but are not limited to the following:

a. Minimum overall and science GPA of 2.75, a grade of 'C' or better in physical and biological science courses, and completion of all required and elective courses within the first two years or prior to beginning the hospital phase of the program.

   Required Science Courses
   1. BIO 130, Introduction to Human Anatomy & Physiology I
   2. BIO 140, Introduction to Human Anatomy & Physiology II
   3. CMP 112, Computational Thinking I
   4. PHY 101, Introductory Physics I
   5. PHY 102, Introductory Physics II
   6. CHE 101, General Chemistry I
   7. CHE 102, Biological Chemistry II
   8. CHE 208, Nutrition
   9. BIO 324, Bioethics

b. Three written professional references from employers or college instructors only. These letters must be written, dated and sent within 6 months prior to application (May 15 – November 1).

c. Original transcripts from all colleges and universities attended.

d. A personal statement describing why you would like to be a radiologic technologist.

e. A job shadowing experience at one of the Radiology Alliance hospitals or at Aurora Health Care.

f. Patient care experience. Earning a Certified Nursing Assistant (CNA) license is the best way to do this. (This is at the student's own expense). An applicant who has no patient care experience will not get accepted into this program.

Students must apply for a position in a hospital School of Radiologic Technology nearly one year prior to transferring. This means that typically in the fall of the sophomore year an application must be sent to any of the 3 hospitals (Froedtert, Wheaton-St. Joseph or Aurora Health Care). The due date to have all of the information to the Carroll University Health Sciences and 2+2 Advisor is prior to November 15. The advisor will process all information and send to the schools that the student is interested in attending. The applications will be reviewed by the Radiologic Technology Admissions Committee at each hospital and qualified students will be called for an interview. Interviews and notification of potential acceptance occur in spring. The determination of which students will be called for an interview and which students will be accepted lies solely with the Radiologic Technology Admissions Committees. If accepted, the student would begin the two-year professional program at an affiliated Radiologic Technology hospital school. Subsequent progression standards including grading criteria are at the discretion of the host institution. At the completion of the program the student would earn a certificate in Radiologic Technology and a Bachelor of Science degree with a major in Health Sciences: Radiologic Technology from Carroll University.

Due to the highly specialized requirements of this program, students should work closely with the Carroll University Health Sciences and 2+2 Program Advisor.
Air Force ROTC Information

Carroll University students have the opportunity to fully participate in the Air Force Reserve Officers Training Corps program. Students enrolled in the Air Force ROTC program attend AFROTC courses at Marquette University.

Through this program, Carroll University offers its students the opportunity to prepare for initial active duty assignments as Air Force Commissioned Officers. In order to receive a commission, AFROTC cadets must complete all university requirements for a degree and courses specified by the Air Force. AFROTC offers four, three, and two year programs leading to a commission as an Air Force officer. Four-year program students complete the general military course and the professional officer course, in addition to a four-week summer field training between their second and third years in the program. Two-year students complete only the professional officer course, but have a five-week summer field training before entering the professional officer course.

General qualifications:
- be a full-time student
- be a United States citizen (for scholarship appointment)
- be in good physical condition
- be of good moral character
- for pilot or navigator training, fulfill all commissioning requirements before age 26 1/2
- for scholarship recipients, fulfill commissioning requirements before age 27 on June 30 in the estimated year of commissioning
- for non-scholarship students, fulfill all commissioning requirements before age 30

General Military Course: The first-and second-year educational program in Air Force Aerospace Studies consists of a series of one-hour courses designed to give students basic information on world military systems and the role of the U.S. Air Force in the defense of the free world. All required textbooks and uniforms are provided free. The general military course is open to all students at Carroll University without advance application and does not obligate students to the Air Force in any way.

Field Training: AFROTC Field Training is offered during the summer months at selected Air Force bases throughout the U.S. and provides leadership and officer training in a structured military environment. Major areas of study include physical training, drill and ceremony, marksmanship, and survival training. The Air Force pays all expenses associated with field training.

Professional officer course: The third and fourth years of Air Force Aerospace Studies are designed to develop skills and attitudes vital to the professional officer. Students completing the professional officer course are commissioned as officers in the U.S. Air Force upon graduation. All students in the professional officer course receive a non-taxable subsistence allowance of $200 per month during the academic year. Students wanting to enter the professional officer course should apply early in the spring semester in order to begin this course of study in the following fall semester.

Leadership Laboratory: Leadership laboratory is a cadet-centered activity. It is largely cadet planned and directed, in line with the premise that it provides leadership training experience that will improve a cadet’s ability to perform as an Air Force officer. The freshman and sophomore leadership laboratory program introduces Air Force customs and courtesies, drill and ceremonies, wearing the uniform, career opportunities in the Air Force, education and training benefits, the life and work of an Air Force officer, and opportunities for field trips to Air Force installations throughout the U.S. Initial experiences include preparing the cadet for individual squadron and flight movements in drill and ceremonies and for the field training assignment prior to the junior year.

The junior and senior leadership laboratory program involves the cadets in advanced leadership experiences. Cadet responsibilities include planning and directing the activities of the cadet corps, preparing briefings and written communications, and providing interviews, guidance, information and other services which will increase the performance and motivation of other cadets.

AFROTC College Scholarship and Scholarship Actions Programs: These programs provide scholarships to selected students participating in AFROTC. While participating in AFROTC, students receive $200 per month along with paid tuition, fees, and a fixed text-book reimbursement. To be eligible for either of these programs, students must:
- be a U.S. citizen.
- be at least 17 years of age on the date of enrollment and under 27 years of age on June 30 of the estimated year of commissioning.
- pass an Air Force physical exam.
- be selected by a board of Air Force officers.
- have no moral objections or personal convictions that prevent bearing arms and supporting and defending the Constitution of the United States against all enemies, foreign and domestic. (Applicants must not be conscientious objectors.)
- achieve a passing score on the Air Force Officer Qualifying Test.
- maintain a quality grade point average.

High school students can apply for scholarships late in their junior year or early in their senior year; pre-applicant questionnaires are available from high school guidance counselors or any Air Force recruiting office. Completed pre-applicant questionnaires should be mailed as soon as possible (to meet the earliest selection board) but will not be accepted if mailed after December 1 of the year before entering university. For students already enrolled at Carroll, three-and two-year scholarships are available. Submit applications directly to the Department of Aerospace Studies at Marquette University. For more information, call 414.288.7682.
The Carroll academic program draws its inspiration from the University’s rich liberal arts and sciences tradition. As Wisconsin’s oldest institution of higher learning, Carroll continues to fulfill its mission of preparing graduates for lives of achievement, meaning, service and fulfillment by providing a student-centered educational program that promotes breadth of knowledge and responsible intellectual inquiry.

The purpose of this portion of the catalog is to provide clear information about the University’s requirements and academic policies. It is the responsibility of all students to be knowledgeable about the curriculum requirements and academic policies of their particular catalog.

For more information on Academic Program and Policies, click on a topic below.

The Curriculum
General Graduation Requirements
The Pioneer Core Program
Cross-Cultural Component
Distribution Component
Organization of Majors in Distribution Areas
Majors/Minors
Individually-Designed Major
Electives
Method of Course Delivery
International and Off-Campus Study
Honors Program
Alternative Methods of Obtaining Credit
Attendance
Credits
Course/Credit Load
Classification of Students
Grading System and Grade Point Calculation
Grade Policy on Transfer Work
Incomplete Grading
Academic Honesty
Withdrawal Policy
Adding or Dropping Courses
Wait List Policy
Auditing Courses
Repeating Coursework Graded C, D or F at Carroll University
Repeating Transfer Coursework Graded C, D or F
Independent Study
Internships or Work-Oriented Experiences
Satisfactory Grading Option for Juniors and Seniors
Transfer Credit Policy after Enrollment
Transcripts
Policy on Student Records
Students’ Right to Know
Academic Standing
The curriculum for all undergraduates at Carroll consists of:

1) coursework associated with the University's General Education Program
2) completion of a course of study leading to one or more majors (and often a minor) including support courses
3) elective courses that complete the undergraduate's educational experience.

Carroll students earn the baccalaureate degree appropriate to their major field of study and are required to fulfill the degree requirements specified by the various academic programs and detailed in subsequent sections of this catalog. Graduates of the University must fulfill the requirements of a major and its associated degree requirements, the general graduation requirements and a minimum of 128 credit hours.
General Graduation Requirements

1. Students must earn a minimum of 128 credits, with the last 32 credits completed while enrolled at Carroll.

2. To graduate, students must earn a minimum 2.0 cumulative grade point average and a minimum 2.0 Carroll University grade point average.

3. An Application for Graduation form must be filed with the registrar's office one year before the expected date of graduation. Forms are available online and at the Registrar's Office. After the application is filed, a degree audit is sent to the student indicating remaining requirements to be completed.

4. Because mathematical literacy is relevant to both liberal learning and the practical demands of contemporary society, all students must demonstrate a knowledge of and proficiency in mathematics. Mathematics 106 or higher is required for all students pursuing a Bachelor of Arts degree or a Bachelor of Music Education degree. Computational Science 112 and 114 is required for all students pursuing a Bachelor of Science in Nursing degree. Students pursuing the Bachelor of Science degree are required to complete Computational Science 112 plus 113 or 114. This requirement can also be met by Advanced Placement credit in statistics or calculus.

5. Each year the academic community gathers to consider contemporary issues and enduring questions, to honor individual and collective achievement, and to celebrate shared vision and values. Attendance at two of the University's Convocations is required of all full-time students each year.
The Pioneer Core is Carroll’s general education curriculum. Pioneer Core expands student learning beyond the major area of study, providing not only depth and breadth, but also a series of cross-cultural learning opportunities. The knowledge and skills developed through Pioneer Core are essential for students to reach their full potential as educated citizens in diverse communities and in an everchanging work force. Upon completion of Carroll’s Pioneer Core, students will achieve the following learning outcomes:

1. Understand world cultures and reflectively interact with cultures other than their own.
2. Critically evaluate global issues from multiple perspectives.
3. Understand and analyze multiple philosophical, ethical, and religious positions held by persons within their own and other cultures.
4. Understand the methodologies germane to the fine arts, humanities, social sciences, and natural sciences as well as their larger social context.
5. Analyze and integrate material in a field outside the major area of study.
6. Develop and defend a position that demonstrates logical reasoning both orally and in writing.
7. Demonstrate information fluency by gathering, analyzing, and synthesizing information using emerging technologies and traditional media.

Students accomplish these learning outcomes through a Cross-Cultural Component and a Distribution Component.
Cross-Cultural Component

The Cross-Cultural Component is a five-course series through which students explore the study of culture:

- Cultural Seminar
- Writing Seminar
- Cross-Cultural Development
- Cross-Cultural Experience
- Global Perspectives Colloquium

**Cultural Seminar (CCS 100)**

The Cultural Seminar, which is taken in the first semester, begins the exploration of culture through the study of one's own culture and a different culture. This course develops oral and written communication skills through critical reading, discussion, and reflective writing.

**Writing Seminar (ENG 170)**

The Writing Seminar is taken during the first or second semester, includes cross-cultural readings, and develops foundational writing skills.

**Cross-Cultural Development (CCD)**

The Cross-Cultural Development course is taken after the Cultural and Writing Seminars. This course satisfies a Distribution requirement, continues development of writing skills, and includes significant cross-cultural themes as preparation for the Cross-Cultural Experience.

**Cross-Cultural Experience (CCE)**

The Cross-Cultural Experience course is taken concurrently or after the Cross-Cultural Development course. In an off-campus setting, students apply knowledge learned in the previous three courses through interactions with cultures other than their own.

**Global Perspectives Colloquium (CCS 400)**

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills.
Distribution Component

Distribution Component consists of courses that are outside a student's academic major area of study. The Distribution Component includes two main features: four introductory-level General Education 1 (GE1) courses that encourage disciplinary breadth and one higher-level General Education 2 (GE2) course that fosters depth outside the major. There are five Distribution Areas, and each academic major is housed in one of these five Distribution Areas:

For an organization of all majors, click here.

- Fine Arts (F)
- Humanities (H)
- Philosophy/Ethics/Religion (P)
- Social Sciences (S)
- Natural Sciences (N)

GE1 courses

Students must complete four GE1 courses: one from each of the four Distribution Areas outside of their major area of study. Students are not required to take a course from the Distribution Area in which their major is housed (e.g., a Chemistry major need not take a GE1 course from the Natural Sciences Distribution Area).

GE2 courses

A student must take one GE2 course. A GE2 course must be from the same discipline as one of the GE1 courses previously taken (e.g., a GE1 English course and a GE2 English course) or in a pre-approved cognate field.

A GE2 course builds upon knowledge from a previous GE1 course and provides depth in an area of interest outside a student's major.

Cross-Cultural Development

Some GE1 and GE2 Distribution courses are also designated a Cross-Cultural Development (CCD). Students must take at least one CCD course. Students may satisfy the CCD requirement and a Distribution Area requirement in a single course.

A listing of GE1 and GE2 courses by Distribution Area follows. See also those that have a CCD after the course description – they satisfy the Cross-Cultural Development requirement.

More courses, especially GE2 courses, will be added to this list.

For a list of Cross-Cultural Development courses, click below:

CCD courses
Organization of Majors in Distribution Areas

<table>
<thead>
<tr>
<th>Fine Arts</th>
<th>Social Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>Accounting</td>
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<tr>
<td>Book Art</td>
<td>Business Administration</td>
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<tr>
<td>Graphic Communication</td>
<td>Communication</td>
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<tr>
<td>Music</td>
<td>Criminal Justice</td>
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<tr>
<td>Photography</td>
<td>Education</td>
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<tr>
<td>Theatre Arts</td>
<td>Global Studies</td>
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<td></td>
<td>Organizational Leadership</td>
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<tr>
<td>Humanities</td>
<td>Philosophy/Politics/Economics</td>
</tr>
<tr>
<td>English</td>
<td>Physical and Health Education</td>
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<tr>
<td>European Studies</td>
<td>Politics</td>
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<tr>
<td>History</td>
<td>Psychology</td>
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<tr>
<td>Spanish</td>
<td>Public Health</td>
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<tr>
<td>Writing</td>
<td>Recreation Management</td>
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<tr>
<td></td>
<td>Sociology</td>
</tr>
<tr>
<td>Philosophy/Ethics/Religion</td>
<td>Natural Sciences</td>
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<tr>
<td>Religious Studies</td>
<td>Actuarial Sciences</td>
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<td></td>
<td>Animal Behavior</td>
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<td></td>
<td>Applied Physics</td>
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<td></td>
<td>Athletic Training</td>
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<td></td>
<td>Biology</td>
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<td></td>
<td>Chemistry and Biochemistry</td>
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<td></td>
<td>Computational Science</td>
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<td></td>
<td>Computer Science</td>
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<td></td>
<td>Environmental Science</td>
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<td>Exercise Science</td>
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<td></td>
<td>Health Science: Diagnostic Medical Sonography</td>
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<td></td>
<td>Radiological Technology</td>
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<td>Information Technology</td>
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<td></td>
<td>Mathematics</td>
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<td></td>
<td>Medical Laboratory Sciences</td>
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<td></td>
<td>Nursing</td>
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<td></td>
<td>Occupational Therapy</td>
</tr>
<tr>
<td></td>
<td>Software Engineering and Applied Mathematics</td>
</tr>
</tbody>
</table>

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Organization of Majors in Distribution Areas

- Fine Arts
  - Art
  - Book Art
  - Graphic Communication
  - Music
  - Photography
  - Theatre Arts
- Social Sciences
  - Accounting
  - Business Administration
  - Communication
  - Criminal Justice
  - Education
  - Global Studies
  - Organizational Leadership
  - Philosophy/Politics/Economics
  - Physical and Health Education
  - Politics
  - Psychology
  - Public Health
  - Recreation Management
  - Sociology
- Humanities
  - English
  - European Studies
  - History
  - Spanish
  - Writing
- Philosophy/Ethics/Religion
  - Religious Studies
- Natural Sciences
  - Actuarial Sciences
  - Animal Behavior
  - Applied Physics
  - Athletic Training
  - Biology
  - Chemistry and Biochemistry
  - Computational Science
  - Computer Science
  - Environmental Science
  - Exercise Science
  - Health Science: Diagnostic Medical Sonography
  - Radiological Technology
  - Information Technology
  - Mathematics
  - Medical Laboratory Sciences
  - Nursing
  - Occupational Therapy
  - Software Engineering and Applied Mathematics
Majors

In order to be eligible for a Bachelor of Arts, Bachelor of Science or Bachelor of Music Education degree, a student must complete one major and earn a minimum 2.00 grade point average (Carroll and transfer credit) in all courses attempted for the major. Generally majors require no more than 64 credits within a program (exclusive of credit for internships). This regulation does not prevent a student from earning more than 64 credits, which would then permit the student to earn additional course credit in the major. The requirements for satisfying a specific major may be found under each program listing in the course descriptions section of this catalog. When a student has decided on a major field, he/she should consult with a faculty member in that program and make the necessary arrangements with the Registrar's Office. A student who elects to complete a second major should have an adviser from that program also. Students declaring more than one major must declare one major as the primary major. This declaration must be specified when a student applies for graduation.

The primary major will determine which degree is earned (B.S., B.A., B.S.N., or B.M.E.). A course may count toward two majors as long as the majors are in different disciplines. If a student has more than one major, however, each major must have 32 credits unique to each major. The student also may select a minor. A student may also count the same course in the major toward a minor as long as the minor is in a different program. The major must have a minimum of 32 unique credits in the major, and the minor must have 16 unique credits. In programs that have multiple emphases, a student may declare only one emphasis. A transfer student is expected to complete in residence at Carroll at least one-fourth of the number of credits required for the stated major field(s) of study.

Footnotes:
1. Some majors that must meet outside standards for accreditation may require a higher GPA.
2. Required supporting courses are included within the 64-credit limit. Majors within professional programs may exceed 64 credits.
3. Specific programs designate major support courses that are required for primary majors only.

Minors

Students may also decide to select one or more minors from a broad range of fields. While a minor typically requires fewer credits than a major, it provides students with a coherent course of study in the field. Descriptions and course requirements are listed in the program sections. At least one-fourth of the total credits required must be taken at Carroll with a minimum of a 2.00 grade point average. A student may not select a major and minor in the same discipline. A course in the minor may also count toward another minor as long as each minor has 16 unique credits.
Individually-Designed Major

A student interested in designing such a major will, in consultation with an adviser qualified and willing to assist, work out a program of study based primarily on regularly-taught courses at Carroll. The degree requirements of either the Bachelor of Arts or Bachelor of Science will be incorporated into this plan. The entire plan must be submitted to the Academic Steering Committee for review. It will reject any plan that creates staffing problems, violates the principle of the need for balance between concentration and breadth of study, or for any other reason is judged to be academically unsound. It will not impose a general rule about the number of courses in the major, except that no student will be permitted to take more than 40 credits within a program, except in professional programs. All proposals for individually-designed majors must be submitted to the Academic Steering Committee no later than one year prior to the intended date of graduation. A planning and approval form for the Individually Designed Major is available in the Registrar's Office.
Electives

Students also have the opportunity to complete elective courses to broaden their knowledge in areas outside the major. Electives are generally free of restrictions, other than prerequisites, and fulfill neither major nor general education requirements.
Method of Course Delivery

Carroll University offers several different methods of instruction. Please see the descriptions below.

**Traditional and/or Enhanced**
Course instructor and students meet at specified days, times, and location. All or nearly all instruction and course content are presented in the classroom. Some technology may be used for instruction and delivery of course content. This can include posting content (related to learning goals) to MyCourses, use of discussions, blogs or wikis (either through course management system or other), or using technology in the classroom (e.g., clickers).

**Hybrid**
Hybrid courses are noted in the catalog using the following section letters; HY, HX, HZ, etc. Twenty-five percent (25%) to seventy-five percent (75%) of instruction takes place in an online environment. As noted, physical on-campus meeting time is generally one quarter to three quarters of a traditional course. For example, a course that typically meets 4 hours/week in a traditional course will meet for 2 hours/week in a 50% hybrid course.

**Online**
Online courses are noted in the catalog using the following section letters; WW. Instruction is delivered completely online, often through MyCourses. Typically, there are no face-to-face meetings, though an introductory first meeting may occur at the beginning of the semester and/or for the purpose of proctoring exams.
International and Domestic Off-Campus Study Opportunities

The Office of International Education (OIE) provides Carroll students with opportunities to enhance the awareness of their own cultural conditioning, assumptions and perspectives by bringing them in contact with people who have backgrounds significantly different from their own. Two types of benefits result from such an experience:

1. Students develop a more vivid consciousness of the kinds of social, political, economic and religious forces that have contributed to the formation of their own self-concepts, and to the structure of American society as a whole;
2. Students develop a growing understanding of other cultures and customs.

Most international and many domestic study abroad/away activities meet the Cross-Cultural (CCE) requirement of the Pioneer Core curriculum.

Carroll offers a variety of short-term study abroad options, with a worldwide geographic scope that spans all continents but Antarctica. Carroll’s NCEP (New Cultural Experiences Program) and CCS 300 courses are developed and taught by Carroll faculty; NCEP is Carroll’s signature short-term study abroad program. A description of approved NCEP and CCS 300 courses can be found on the CCE web page, click here.

Many semester and academic year study abroad opportunities exist for students who want longer, in-depth academic experiences in another country. Students in good academic standing who have earned 16 Carroll University credit hours at the time of participation may apply for enrollment in study abroad. Most students study abroad during their junior or senior year, although some students find that international study during their sophomore year is a better fit for their program of study. Students who are approved for study abroad must meet the requirements of their chosen program. Approved students will remain enrolled full time at Carroll University during the time they are abroad. Additional information about each of the options, including costs and the application is available on the Carroll University CCE Website.
Honors Program

The mission of the Carroll University Honors Program is to encourage motivated and talented students to pursue a breadth and depth of knowledge within an enriched curriculum. The program creates an environment designed to challenge students' perspectives and to foster intellectual development. This interdisciplinary program offers intensive sections of courses distributed over the arts and sciences. The Honors Program also provides special cultural and social activities on and off campus for all honors scholars.

Upon completion of normal Carroll University admission, all freshman applicants are considered for the Honors Program. Following a comprehensive review, the Honors Committee invites selected candidates to apply to the program. Late applicants, as well as transfer students and students currently enrolled at Carroll, are considered for the program on the basis of available openings.
Alternative Methods of Obtaining Credit

Carroll University recognizes that learning can occur in a variety of environments and through diverse experiences. At Carroll, there are several ways of obtaining credit for prior university-level learning in addition to satisfactory course completion. Students may earn up to 64 credits in a baccalaureate program through any combination of the following types of credit:

1. **Advanced Placement Credit** may be granted to students who are enrolled in a degree program at Carroll and obtain an appropriate score through Advanced Placement examinations. A copy of the current AP requirements is available from the Registrar or online. Qualified students may be granted credit following successful completion of a university-level course in secondary schools provided the course is submitted on a university transcript. A maximum of 48 credits may be obtained through advanced placement.

2. **The College Level Examination Program (CLEP)** grants credit to qualified students enrolled in a degree program at Carroll for up to seven courses (28 credits) on the General Examination when the qualifying level of the 75th percentile has been achieved in each test written. This credit will be divided in the following manner: English, four; mathematics, four; natural sciences, four; humanities, eight; and social sciences/history, eight. Credit for the General Examinations will count as elective credit toward graduation; some credits may meet general education requirements. Credit also may be granted for subject examinations when the scores are at the recommended qualifying level. No more than 48 credits of CLEP credit will be granted for the general and subject matter examinations combined. Additional information and registration forms are available from the Office of Part-Time Studies. This credit must be approved in advance.

3. **Credit by Examination** allows qualified students enrolled in a degree program at Carroll to take examinations for credit in selected courses. Such examinations are developed and administered by departments. In some instances, placement without credit might be recommended. Interested students may consult with department faculty about policies and procedures. Contact the Registrar's Office for the necessary form. A fee is charged for each examination. A student who does not complete the examination with satisfactory results may not repeat the examination.

4. **The International Baccalaureate Diploma** is recognized by Carroll University for purposes of admission, course credit and advanced standing or placement. Sixteen credits will be granted to holders of the International Baccalaureate diploma. Additional credit may be granted when more than four higher-level examinations have been taken and scores of four or higher have been earned. For students in the program who have not earned the diploma, four credits will be granted for each higher-level examination when a score of four or higher is earned. These credits will be declared to meet core and General Education requirements when the subjects validated by examination appear to be reasonably comparable to the subjects taught at Carroll University. Otherwise, the credits will be regarded simply as elective credit toward a Carroll degree. The student must enroll as a degree-seeking student at Carroll.

5. **Credit for Prior Learning** is possible when university-level learning, which relates to a degree program offered by the University, has occurred outside the normal educational setting. Credit for prior learning may be given when verified by employment records and the American Council on Education guidebook and transcripts or when verified by a program for credit within that program. A maximum of 24 credits may be obtained through this method. Carroll University uses the course-equivalency method with the portfolio model for assessment of prior learning that is not easily measured via standardized testing or transfer procedures. Such competency is expected to be related to the student’s present degree program. The evaluation of such credit requires consideration by faculty. Students are expected to demonstrate their learning, competencies and skills. Evidence will usually consist of a portfolio. However, a performance test, an essay examination, or an interview with an internal or outside expert may also be required.

6. **Correspondence Courses**, up to 12 credits from an accredited institution, may be accepted in transfer and may be applied to a Carroll University degree. The course credit must be letter graded C or better. (D graded credit will not meet any graduation requirement.) Students must obtain written approval in advance from their adviser and the Registrar prior to registering for any correspondence or extension course. Forms are available in the Registrar's Office. A copy of the course description for each course to be taken must accompany the Transfer Credit Approval form when it is filed with the Registrar's Office. A maximum of eight semester hours of correspondence or extension course credit may be applied to major or minor requirements with the written approval of the appropriate Department Chair or College Dean. It must be filed in the Registrar's Office. Any correspondence or extension work taken prior to matriculation at Carroll University will be reviewed by the appropriate Department Chair or College Dean to determine its acceptance and application to graduation, major or minor requirements.

7. **D.A.N.T.E.S.** (Defense Activity for Nontraditional Education Support) course work will be considered on an individual case basis.

8. **P.O.N.S.I.** (The National Program on Noncollegiate Sponsored Instruction) credits will be evaluated on an individual basis.

9. **Proficiency Testing in Foreign Languages**: Students who have extensive background in a language other than English may be able to earn up to 16 credits in one language by demonstrating proficiency. The proficiency exam is intended for students with a more extensive background than high school foreign language study only. Carroll University grants credit to qualified degree-seeking Carroll students through the Proficiency Testing Program in Foreign Languages sponsored by New York University.

10. **Retroactive Credit for Modern Languages** allows students who are enrolled in a degree program to earn a maximum of 16 hours of credit in a modern language upon completion of one 300-level course with a grade of B or higher, or four, eight or twelve credits upon completion of 102, 201, or 202, respectively, with a grade of B or higher. This must be the student's first enrollment in an advanced university-level modern language course. Please see the Modern Languages and Literatures section for competency and test requirements.

11. **Retroactive Credit for Mathematics** A student who takes Mathematics 161 and receives a grade of BC or above will receive retroactive credit for Mathematics 160, Calculus 1, if Advanced Placement credit has not been awarded for the course. A student who takes Mathematics 207, Calculus III, and receives a grade of BC or above will receive retroactive credit for Mathematics 160 and Mathematics 161, if Advanced Placement credit has not been awarded for those courses.
12. OCICU

Carroll University has approved for degree credit several online courses offered through the Online Consortium of Independent Colleges and Universities (OCICU). Credits earned in an approved OCICU course are posted to a student’s transcript as the equivalent Carroll University course. The courses offered by OCICU may carry a different number of credits from the equivalent Carroll course. OCICU courses have different add/drop policies, pricing, refund policies, and start and end dates. OCICU courses meet during six eight-week terms throughout the year. Only part-time students may take OCICU courses during the fall and spring terms. All students may enroll in OCICU courses in the summer. Information on all of Carroll University’s Web-based courses is available online.

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Attendance

The University expects students to be prompt and regular in attendance at all scheduled classes. Records of attendance are maintained by each individual professor, and official attention is given any student with excessive absences. Attendance at clinical experiences is mandatory for all health sciences majors.
Credits

The unit of credit is the semester hour. It is defined as one 50-minute class period per week (or its equivalent) for one semester. Thus a lecture-discussion course that meets four 50-minute periods a week ordinarily carries four semester credits. One credit is granted at the completion of a semester for each applied music lesson (one half-hour per week), ensemble or practicum course for which a student is registered.
The University year is divided into two semesters, a winter session and three summer sessions. The first summer session runs for three weeks and the other two for six weeks each. A student's normal class load is 16 credits of academic work each semester, with a total of 128 credits required for graduation. Any student with a cumulative grade point average of 3.00 or higher may petition to take 20 or 21 credits at an additional charge. Under no circumstances may a student take more than 21 credits each semester. A student on academic probation may not register for more than 12 credits. A student who enrolls for fewer than 12 credits is classified as a part-time student. Students must register for all course work in the semester/term in which the work is done. A student may take a maximum of four credits for the winter session and the three-week summer session and eight credits for each six-week summer session, with not more than 20 credits total for the summer.
Grading System and Grade Point Calculation

Grading System

A system of letter grades is used in courses for which degree credit may be earned. A 4.00 grade point system is used under which a student earns grade points for each credit completed.

<table>
<thead>
<tr>
<th>LETTER GRADE</th>
<th>GRADE POINT</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
<td>Excellent</td>
</tr>
<tr>
<td>AB</td>
<td>3.50</td>
<td>Intermediate grade</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
<td>Good</td>
</tr>
<tr>
<td>BC</td>
<td>2.50</td>
<td>Intermediate grade</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
<td>Average</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
<td>Low, merely passing</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
<td>Failure</td>
</tr>
<tr>
<td>AU</td>
<td></td>
<td>Audit</td>
</tr>
<tr>
<td>I</td>
<td></td>
<td>Incomplete (See definition)</td>
</tr>
<tr>
<td>IP</td>
<td></td>
<td>In progress</td>
</tr>
<tr>
<td>NC</td>
<td></td>
<td>No credit allowed</td>
</tr>
<tr>
<td>NR</td>
<td></td>
<td>Grade not received</td>
</tr>
<tr>
<td>S</td>
<td></td>
<td>Satisfactory (A, A/B, B, B/C, C level)</td>
</tr>
<tr>
<td>U</td>
<td></td>
<td>Unsatisfactory (D or F level)</td>
</tr>
<tr>
<td>W</td>
<td></td>
<td>Withdrawal</td>
</tr>
</tbody>
</table>

Grade Point Calculation

The grade point values when multiplied by the number of course credits give the total number of grade points earned for that particular course. In a four-credit course, for example, a grade of B yields 12 grade points; a grade of A yields 16 grade points. The grade point average is the ratio between total academic grade points and total academic hours: that is, the quotient obtained by dividing the total number of academic grade points earned by the total number of academic hours attempted. For example, a program of 16 academic credits in which 48 grade points are earned will yield a grade point average of 3.00 or an average of B (48 divided by 16 = 3.00).
Grade Policy on Transfer Work

Carroll University offers letter grades of A, AB, B, BC, C, D and F upon completion of a Carroll University course. All transfer work grades will be converted into the Carroll University letter grade system. For example: a student transferring in a letter grade of B+ from another institution will receive a grade of B on the Carroll University transcript for that transfer course.

Please note that not all coursework from other institutions are transferable. Official transcripts must be sent to the Carroll University Registrar's Office for review.
Incomplete Grading

A report of incomplete means that the student has been unable to complete the required work for a valid reason; it is not given for neglected work. In order to receive an incomplete, the student must initiate the request by submitting a properly completed form (available online and from the Registrar's Office) to the instructor prior to the end of the term. If the instructor agrees with the request, the completed form is signed by the student, the instructor and the department chair and is then submitted by the instructor to the Registrar. Upon receiving the form with all relevant information and appropriate signatures, the Registrar will post the incomplete grade to the student's transcript. An incomplete must be removed by the end of the eighth week of the next semester or it automatically becomes a failure. An extension of no more than one year may be granted only with written consent from the instructor and the department chair.
Academic Honesty

Cheating on examinations, plagiarism, improper acknowledgment of proper sources in written material, and inaccurate claims of work done are serious offenses in an academic setting. These forms of unethical behavior will be subject to severe disciplinary action.

The Carroll University Policies and Procedures on Student Academic Integrity can be found in the Student Handbook (available on the University’s Web site) under the section entitled Academic Policies and Procedures. Instructors indicate penalties for academic dishonesty in their course syllabi.
Withdrawal Policy

Students who wish to withdraw from all classes must file an Official Withdrawal Form with the Office of Student Success. If a student is not able to visit the office (due to illness, emergency, etc.), he/she may contact the Office of Student Success to communicate their intent. The office is located in Voorhees 331 and the phone number is 262-524-7360.
A student may add a course only during the first week of the fall or spring semesters. For winter session, summer sessions, and other specially timed courses, refer to the published timetables for deadline dates to add courses. With the written consent of the instructor and the advisor, a student may drop a registered course through the eighth complete week of the fall or spring semester. For winter session, summer sessions, and other specially timed courses, refer to the published timetables for deadline dates to drop courses. The course will appear on the transcript as attempted credits; however, the grade will be a W (withdrawal) and will not affect the grade point average. It is the student's responsibility to complete the proper necessary paperwork; otherwise, the course grade will be recorded as an F.
Wait List Policy

All students have an opportunity to wait list for any course that has reached its capacity during open registration. Wait listing must be completed on a wait list card and signed by the student, then turned into the Registrar's Office. Addition to the wait list constitutes consent to be added to the class when a space becomes available. It then becomes the student's responsibility to watch his/her course schedule online and/or watch for communication sent from the Registrar's Office. The student is financially responsible for the course if the student is added from the wait list. A student may choose to drop a wait listed course online or in person at the Registrar's Office.
Auditing Courses

With the instructor's permission, students generally may audit all courses at Carroll, except for studio art courses, applied music, music ensembles and laboratories. The minimum requirement to receive an audit (AU) grade is regular attendance, but individual instructors may have higher requirements. No credit is received for these courses. There are no restrictions for taking the same course for credit at a later date. However, students may not receive credit through "credit by examination" after auditing a course. Students taking the course for credit have priority enrollment over students who wish to audit.
Repeating Coursework Graded C, D or F at Carroll University

Any Carroll University credit earned with a C, D or F grade may be retaken at Carroll one time only for any given course. Both the C, D or F grade and the repeated grade will be recorded on the Carroll University transcript, but only the last grade awarded will be used in the appropriate grade point calculations. A student may not replace a Carroll University earned C, D or F with transfer credit. A student may not replace Carroll coursework graded higher than a C unless this provision is specifically allowed in program-specific policies.
Repeating Transfer Coursework Graded C, D or F

Any transfer credit with an earned C, D or F may be retaken for credit with a similar course at Carroll University or another accredited institution as approved by the Registrar. Upon matriculation at Carroll University, the student must obtain permission in advance from the Registrar to retake a transfer course graded C, D or F with a similar transfer course or with a Carroll University course. Both the C, D or F grade and the repeated grade will be recorded on the Carroll University transcript, but only the last grade awarded will be used in the appropriate grade point calculations. A student may not replace transfer coursework graded higher than a C unless this provision is specifically allowed in program-specific policies.
Independent Study

Independent study is offered by most programs and is subject to the same general university regulations that govern any course offering. Such courses are taken for academic credit (one to four credits) with the appropriate grading from an assigned instructor. The format of study may vary and is formulated in consultation with the assigned instructor. An independent study may be taken only with consent of the instructor and the college dean and must be arranged with the instructor before registering. In general, a student may count a maximum of four independent study credits toward graduation. An approved Permit for Independent Study form, available at the Registrar’s Office, and a syllabus must be presented at the time of registration.
Internships or Work-Oriented Experiences

Students are urged to participate in a work-oriented gateway experience to prepare for their work in the world. Most work-oriented experience will be related to the student's major or minor field and generally will be taken during the senior year. Internships and work-oriented experiences are under the direct supervision of a member of the Carroll University faculty. Such courses are taken for academic credit with the appropriate grading (letter grades or S/U) from an assigned instructor. Each program will determine whether an internship or work-oriented experience will be offered. These courses are subject to the general regulations that govern any course offered, including registration within the time period allowed for an on-campus course. A student must have permission for an internship or work-oriented experience and present an approved Permit for Internship upon registration.
Satisfactory Grading Option for Juniors and Seniors

Juniors and seniors have the choice of taking any or all elective courses on a satisfactory/unsatisfactory (S/U) basis. A student shall not be permitted to alter the decision after the first four weeks of the semester. No student may take any course to complete a general education requirement on an S/U basis. No student may take any course within the major or minor fields, including required supporting courses, on an S/U basis, with one exception: internships or work-oriented experiences may count toward the major or minor even if taken S/U. Students are advised that graduate or professional schools often give less consideration to applicants whose records show this grade option. Satisfactory/unsatisfactory grades will not be included in computing the grade point average.
Transfer Credit Policy after Enrollment

It is necessary to obtain permission in advance from the Carroll University Registrar's Office in order to have coursework from another institution accepted in transfer. All coursework must be graded C or better to be accepted as credit earned toward graduation. However, core distribution courses, major and minor requirements may be fulfilled with a D. Grade point deficiencies at Carroll University cannot be made up with transfer course credit. NOTE: Students are required to complete their final 32 hours at Carroll University.

Official transcripts of all coursework from every post-secondary institution attended must be sent immediately following completion of the course to:

Carroll University Registrar's Office
100 N. East Ave.
Waukesha, WI 53186

Failure to have transcripts sent, even if the course cannot be accepted for credit, may result in the student being dismissed or the degree being rescinded.
The Registrar's Office supplies official transcripts of records of those students who make a written request and who have no outstanding obligations to the university. In accordance with the Family Educational Rights and Privacy Act (1974), transcripts cannot be released without the express written consent of the student.

The written transcript request should be mailed to:

Carroll University Registrar's Office
100 N. East Ave.
Waukesha, WI 53186.

Please note: As of January 2014 all transcript requests will be done completely online. To place an order click here.
Policy on Student Records

Several information sources are maintained concerning each student at Carroll University: the admission file, the permanent academic record, the student personnel file, the placement file, the alumni file, the publicity file, and the financial aid file for students applying for aid. A student may review the applicable files, except for material provided in confidence, with a professional staff member under the provisions of the Family Educational Rights and Privacy Act of 1974 (FERPA) as amended.

FERPA gives certain rights to parents regarding their children's educational records. These rights transfer to the student who has reached the age of 18 or is attending school beyond the high school level. Generally the school must have the student's written permission to release any educational information to anyone, including the student's parents. The law does allow for the following exceptions: school employees who have a need to know; other schools to which a student is transferring; certain government officials to carry out lawful functions; accrediting organizations; persons who need to know in cases of health and safety concerns.

Schools may disclose "directory information" or information published in the student directory unless the student signs a Right to Privacy form each time a student registers. Carroll University has adopted a policy that will only allow the disclosure of directory information if the party asking for the information can identify himself/herself in writing (this Carroll University policy is within FERPA regulations, which allow individual institutions to determine their own policies concerning directory information).

FERPA also grants the student the right to review those records, files, etc., that are maintained by the University. The student must make an appointment with the University Registrar to do so. Students may challenge any information they believe to be inaccurate. If the University official does not agree to modify the information, the student may file a written appeal and has a right to a hearing.

1 Furnished by the United States Department of Education, fact sheet.
Campus Security Act of 1990: Requires the disclosure of data on crimes committed on campus and campus safety policies and procedures. A copy of Carroll University's annual security report is available online.

Equity in Athletics Disclosure Act: Requires disclosure of data on participation rates and financing men's and women's sports in intercollegiate athletic programs at coeducational schools. It also requires data on revenues, total expenses and operating expenses of intercollegiate athletic programs. Data is available on request.

Graduation Rate: Current and prospective students have the right to request the institution's graduation rates. These rates are available in the Office of Admission and online at: http://nces.ed.gov/collegenavigator/.
Academic Standing

Good Standing

All students are expected to maintain at least a C (2.00) overall grade point average in Carroll University course work. Any student who does not maintain at least a 2.00 cumulative average in Carroll course work is subject to academic action following a review by the Academic Steering Committee.

Probation

As soon as a student's Carroll University grade point average drops below 2.00, that student is placed on academic probation. For a student on academic probation, the class load is limited to 12 credits. A student cannot be removed from probation until a 2.00 grade point average is attained.

Suspension

A student on probation for one or more semesters or a student who received no passing grades the previous semester will be suspended for one semester and the adjacent summer or be considered for dismissal. At the end of the suspension period, a student must apply for readmission. Upon suspension, a student may no longer live in on-campus housing or participate in university-related activities.

Dismissal

A student suspended a second time will be dismissed at the close of the semester because of failure to achieve an acceptable level of academic work. Students who are dismissed will be withdrawn from any registered courses at the University and will not be eligible to return to Carroll University.

Academic Appeals

The Academic Steering Committee (ASC) acts as the appeal body for questions related to academic policy, probationary questions, exemptions, etc. An academic petition form (available online or from the Registrar's Office) must be completed and returned to the Registrar's Office to initiate the appeal process. The petition form should carefully explain the nature of the request and include the appropriate signatures. All appeal decisions by the Academic Steering Committee are final.

Course grade appeals and appeals of sanctions for academic dishonesty are heard by the Student/Faculty Ethics Committee. Appeals should be made through the Office of the Associate Dean of Academic Affairs. The procedure for appeals is found in the Student Handbook.

Returning Students

Students returning to Carroll after the lapse of one or more semesters and students who have been suspended from the University and have become eligible to apply for readmission must do so through the Office of Admission. Each application is reviewed and applicants will be informed of the status of the application and, if applicable, the conditions of readmission.
The Academic Steering Committee (ASC) acts as the appeal body for questions related to academic policy, probationary questions, exemptions, etc. An academic petition form (available online or from the Registrar's Office) must be completed and returned to the Registrar's Office to initiate the appeal process. The petition form should carefully explain the nature of the request and include the appropriate signatures. All appeal decisions by the Academic Steering Committee are final.

Course grade appeals and appeals of sanctions for academic dishonesty are heard by the Student/Faculty Ethics Committee. Appeals should be made through the Office of the Associate Dean of Academic Affairs. The procedure for appeals is found in the Student Handbook.
Returning Students

After the lapse of one or more semesters, students seeking to return to Carroll on a full-time or part-time basis must reapply. Students who have been suspended from the University and have become eligible to apply for readmission must do so through the Office of Admission. The Admission Committee reviews each application and determines the current status of the student and the conditions of readmission.
Progression Standards for Athletic Training Education Program

1. A cumulative GPA of 2.75 and preprofessional (natural, behavioral, and social sciences) GPA of 2.5 during the freshman and sophomore years is required for admission to the professional phase (junior and senior years) of the program.

2. Grades of a C or better are required in all preprofessional phase courses (natural, behavioral and social sciences). Any preprofessional phase course may only be repeated once.

3. A student must maintain a cumulative university GPA and a semester GPA of 2.75 throughout the professional phase. A student who gets below a 2.75 cumulative and/or session GPA will be placed on academic probation for the following semester. To have the probationary status removed, a student must attain a 2.75 session GPA or higher in subsequent semesters.

4. If a student fails to attain a 2.75 session GPA, s/he will be dismissed from the program.

5. Grades of C or better are required in all athletic training, exercise science and health science professional phase courses. A satisfactory (S) is required in all completed practica. If a grade below a C is achieved or an S is not achieved, the student may not progress to subsequent courses in the program until course is successfully repeated.

6. When repeating a professional phase athletic training, health science, or exercise science course, a student may be required to successfully complete ancillary learning experiences or clinical competencies/practica that validate theoretical knowledge.

7. A course may be repeated only once. A student receiving a D, F, or U twice in one athletic training course or in two athletic training courses is dismissed from the program.
Progression Standards for the Nursing Program

1. Grades of BC or better are required in all nursing, chemistry, biology and health science courses. A satisfactory (S) is required in all completed clinical. If a grade lower than a BC or a grade of (U) is earned, the student will be placed on probation in the nursing program. In order to have the nursing probationary status removed, the student must repeat the coursework and earn a grade of BC or higher and/or a grade of (S). In all concurrent nursing and practica courses a student is required to earn a BC or better in the didactic course and a (S) grade in the practica. Unsuccessful achievement in either course necessitates repeating the didactic and practica course. If courses are repeated, the university repeat/replace policy applies to all courses.

2. A student must maintain a cumulative GPA of 2.75. For First Time Freshman, GPA progression standards will be evaluated after the students attempt a minimum of 12 credits. A student whose cumulative GPA is below a 2.75 will be placed on academic probation for the following semester. To have the probationary status removed, a student must attain a 2.75 cumulative GPA in the subsequent semesters.

3. A student will be dismissed from the program if:
   1) s/he fails to attain a 2.75 cumulative GPA in the subsequent semester,
   a. If a cumulative GPA is less than a 2.75 due to a course grade and that same course is not offered in the subsequent semester, probation is continued until the Fall or Spring term when the same course is offered.
   2) s/he is placed on academic probation a second time during his or her tenure in the program,
   3) s/he fails to meet the criteria for the removal from academic probation.

4. If a grade below a BC is achieved or an S is not achieved, the student may not progress to subsequent courses in the program if the course is a prerequisite of another. When repeating a nursing, biology, chemistry or, health science course, a student may be required to successfully complete ancillary learning experiences or clinical competencies/practica that validate theoretical knowledge.

5. A course may be repeated only one time. A student receiving a C, D, F, or U twice in one nursing chemistry, biology or health science course or in two nursing, chemistry, biology and health sciences courses is dismissed from the program.

6. A transfer student who takes NRS 100 and 230 concurrently and earns lower than a C in Nursing 100 must retake NRS 100 in the subsequent semester. In this case, the student may register for NRS 236 in the subsequent semester but may not register for NRS 233 or 234.

7. A student who withdraws from any nursing, chemistry, biology or health sciences course twice will be dismissed from the program. A student will be dismissed from the nursing program if they withdraw for academic reasons from a nursing, chemistry, biology or health science course that is being repeated because of a previous earned grade of C, D, F, or U.

8. If a student withdraws from a course for reasons other than director approved request for medical or personal leave, the student must successfully complete the course in the next available semester or academic term.
Prephysical Therapy Program

To proceed to the professional phase of the physical therapy program in the senior year, a student must have a cumulative and preprofessional (natural, behavioral, and social sciences) GPA of 3.0 or higher. Carroll University Academic Standing policies apply to prephysical therapy students.

Professional Phase of the Physical Therapy Program

1. In the professional phase of the physical therapy program (400, 500, and 600 physical therapy courses) student must attain a grade point average of 3.0 or better each semester. If a student earns a semester grade point average between 2.0 and 2.99, s/he is placed on academic probation.

2. If a student is on academic probation during the last semester of the program, the student must earn an S in the clinical internship course and in PTH 612: Clinical Research III, to graduate.

3. A student will be dismissed from the program if 1) s/he is placed on academic probation a second time during his or her tenure in the program, 2) s/he fails to meet the criteria for the removal from academic probation, 3) if s/he earns a semester GPA of 1.99 or less or 4) if s/he receives a D, F, or U twice in one physical course or in two physical courses.

4. When repeating a physical therapy course, a student may be required to successfully complete ancillary learning experiences or clinical competencies/practica that validate theoretical knowledge.

5. If a student is unable to take further courses in the next occurring semester as a result of this policy, the student is placed on academic suspension and repeats the course during the next appropriate semester.

6. A course may be repeated only one time.
Progression Standards for the Physical and Health Education Program

To complete a major in Physical Education with Health, the student must be admitted to the Teacher Education Program (TEP) in the Education Program.

The TEP requires that a student

1. Maintain a minimum cumulative GPA of 2.5
2. Maintain a combined GPA of 2.75 in the physical education major, the health education minor, and Department of Public Instruction approved secondary teaching education minor
3. Demonstrate professional behavior throughout his/her university career. The physical education with health student must make application to the TEP, including submission of the TEP Portfolio and passing scores on the PPST (PRAXIS I) examination, during the fall semester of his/her sophomore year. In the spring semester of the junior year, the student must successfully complete the Praxis II Content Knowledge Exam for health and physical education. Copies of the TEP Handbook are available from the Education Office.
Medical or Personal Leave

If a student must be absent from a health sciences program for an extended period of time for medical or personal reasons or jury duty, written notice must be given to the respective program director prior to the leave, if possible. Written notice must also be given to the program's director prior to the student's return to the program. If applicable, the student may be asked to verify that s/he has complied with the program's technical standards with previously imposed conditions for leave. In addition, remediation or course repetition may be required of the student dependent on the length of the absence. Any course, laboratory, outside learning experience, or clinical practicum/internship makeup or remediation is dependent upon academic and clinical faculty and facility availability.
Policy on Reapplication to a Health Sciences Program

The Policy on Reapplication defines the process by which students may seek readmission to a health sciences program following dismissal of the student from the program for failing to maintain good academic standing. Readmission candidates may apply for readmission to the program no sooner than one year and no later than three years from the date of dismissal. Readmission candidates may exercise their reapplication option only once. Readmission candidates applying to the program must submit the materials required of all applicants for admission. In addition, they must provide transcripts relating to any education experiences completed since leaving the program. A letter indicating why the readmission candidate believes s/he will succeed academically and technically in the program must accompany application materials. Candidates readmitted to a health science program must comply with the progression standards in the current catalog.
Awarding of Diplomas

Diplomas are awarded three times a year (May, August and December) to seniors who have completed all degree requirements. Commencement ceremonies are conducted in May each year.

Seniors who have all degree requirements completed but wish to defer graduation, and those with specific academic deficiencies, will be allowed to participate in Commencement as long as the deficiencies are within the following parameters:

1. A need for one to four additional credits or completion of student teaching that is already in progress.
2. A deficiency of eight or fewer academic grade points.
3. Incomplete grades of from one to four credits.

Students may participate in only one Commencement. Notice of intent to participate in the May Commencement ceremony without the degree being awarded should be filed with the registrar’s office at the time the application for graduation is submitted or by April 15. All students who choose not to receive their degree and those with academic deficiencies will receive their diplomas at the next issuance following completion of all required work.
Additional Undergraduate Degree

With the recommendation of the college dean, a student already holding a baccalaureate degree from Carroll University or another institution may, under certain conditions, qualify for and be awarded an additional baccalaureate degree. Those conditions are as follows:

At least 32 credits beyond those used to achieve the initial degree must be undertaken and successfully completed at Carroll.

All of the university general education requirements in effect at the time of the enrollment for a second undergraduate degree must be met, either through transfer or in subsequent study at Carroll.

All of the program requirements for an additional major field of study must be met either through transfer or in subsequent study at Carroll.
Honors

The Dean's List is determined twice each year at the end of the fall and spring semesters. It includes the names of all full-time degree candidates who earned at least a 3.5 grade point average the previous semester in a minimum of 12 credits with letter grades with the exception of junior- and senior-level nursing students who need seven of the 12 credits with letter grades. The names of students on the dean's list are sent to the student's local newspaper if all of the student's grades are available at the time of the list's release and if the student has authorized the release of this information. Achievement of the dean's list is noted on the student's transcript. Dean's list for part-time students will be determined after a student has earned 12 Carroll credits and has a Carroll cumulative GPA of 3.50. Thereafter, a student who completes fewer than 12 credits per semester and earns at least a 3.500 GPA is designated as being on the dean's list for that semester.

Phi Kappa Phi: Carroll University invites students in the top 7.5% of the junior class and the top 10% of the senior class and graduate programs to join Phi Kappa Phi, the nation's oldest, largest, and most selective all-discipline honor society. Phi Kappa Phi gives its members a lifelong connection to a global network of academic and professional activities, including opportunities to apply for national scholarships.

Delta Sigma Nu is the university's honorary scholastic society. Students in the upper 10 percent of the senior class who have completed by graduation 64 letter-graded credits at Carroll and a total of 100 letter-graded credits are elected to membership. The only exception is students on approved off-campus programs where letter grades are not given. Members of the junior class with an overall grade point average of 3.9 or higher who have completed 64 letter-graded credits at Carroll and have been enrolled at Carroll University for at least four semesters are elected to membership.

Graduation honors based on the cumulative grade point average (GPA)* are awarded to those students who have completed all requirements for the degree: summa cum laude requires a GPA starting at 3.9 on a 4.0 scale; magna cum laude requires a GPA starting at 3.6; cum laude requires a GPA starting at 3.4. The complete record is considered, and there must be a minimum of 64 credits of letter grades. In order to be eligible for honors, a student must complete at Carroll, in letter-graded courses, one-half of the hours (currently 64) required for graduation. Students with transfer work must meet two criteria:

1. The student must have 64 letter-graded credits earned at Carroll.
2. Since a student with transfer work has a Carroll and an overall GPA, the lower of the two GPAs determines eligibility for honors and placement into one of the above three honors categories.

*The GPA is not rounded up.

Second degree graduation honors will be awarded to students who have completed all requirements for the degree. There must be a minimum of 32 letter-graded credits completed at Carroll University. The entire undergraduate record is considered and, if there is transfer work, the lower of the Carroll or overall grade point average (GPA)* determines eligibility for honors and placement into one of the three following categories: summa cum laude requires a GPA starting at 3.9 on a 4.0 scale; magna cum laude requires a GPA starting at 3.6; cum laude requires a GPA starting at 3.4.
Academic Support

Academic Resources provides academic support through the Career Center and the Learning Commons. Both departments are located on the lower lever of the library. The Career Center serves Carroll University students and alumni by offering free services, including choosing a major, career exploration, resume and cover letter assistance, searching for a job or internship, networking tips, interviewing techniques and graduate school preparation. The Learning Commons provides free, peer to peer support services through academic workshops, the math center, subject tutoring, Supplemental Instruction and the writing center.
Note to Students

This catalog provides general information about Carroll University, and it summarizes important information about the University's policies, requirements for graduation, regulations and procedures. It is not intended to establish, nor does it establish, a contractual relationship with students. Rather, the Catalog is published to acquaint students with information that will be helpful to them during their university careers.

It is necessary in the general administration of the University to establish requirements and regulations governing the granting of degrees. Academic advisers, other faculty and academic staff members are available to aid students in understanding the requirements and regulations. It is the students' responsibility, however, to meet them. Students are encouraged to keep this Catalog as a reference, should questions arise.

Changes in curricular requirements may occur between catalog publications. Students will be informed of such changes. When this occurs, students may follow the requirements in effect at the time they entered or they may follow the changed requirements. However, the courses that students take to meet General Education and Distribution requirements must conform to the Catalog year in which the courses are taken. For other degree requirements, students must choose to follow one Catalog or the other; they may not pick and choose from the various requirements outlined in two or more Catalogs. Students must follow the curriculum requirements of any one Catalog in effect during their enrollment. Programs with additional accreditation standards may have different course requirements from the student's original Catalog. Progression standards are subject to change based on regulatory, licensing, and/or certification needs. Students returning to the University after an absence of one academic year or more must meet the degree requirements of the Catalog in effect upon their return or of a subsequent Catalog. Reasonable substitutions will be made for discontinued and changed courses.

The University reserves the right to make other necessary changes without further notice.
Fees

Full-Time (12-19 Credits) Tuition
Resident Meal Plans and Rates
Commuter Meal Plans and Rates
Summer Meal Plans and Rates
BookCHARGE
Other Fees and Deposits
Athletic Training Program Fees
Applied Music Fees
Additional Expenses - Nursing Program
Payment of Student Accounts
Finance Charges
How payments are applied to student accounts
Veterans’ Benefits
Part-time (Less than 12 Credits) Tuition
Payment Options for Part-time Students
Internships
Refund Policies
Full-Time Tuition Fee

Full-Time (12-19 credits)

The charges listed begin with the Summer I 2013 session and continue through the Spring 2014 semester. Full-time status is determined at the end of the first week of classes on the date indicated in the calendar as the last day to add classes.

Tuition
Tuition per year ................................................................. $27,039
Meal Plan Fees

Resident Meal Plans and Rates (FA13 and SP14)

<table>
<thead>
<tr>
<th>Plan</th>
<th>Cost/Semester</th>
<th>My Meal Plan</th>
<th>Meals/Semester or Week</th>
<th>Dining Dollars/Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>$1,676.00</td>
<td>140 My Meals Block Plan</td>
<td>140 meals/semester</td>
<td>$250.00</td>
</tr>
<tr>
<td>E</td>
<td>$1,882.00</td>
<td>160 My Meals Block Plan</td>
<td>160 meals/semester</td>
<td>$350.00</td>
</tr>
<tr>
<td>G</td>
<td>$1,994.00</td>
<td>180 My Meals Block Plan</td>
<td>180 meals/semester</td>
<td>$375.00</td>
</tr>
<tr>
<td>H</td>
<td>$2,248.00</td>
<td>220 My Meals Block Plan</td>
<td>220 meals/semester</td>
<td>$425.00</td>
</tr>
</tbody>
</table>

Commuter Meal Plans and Rates (FA13 and SP14)

<table>
<thead>
<tr>
<th>Plan</th>
<th>Cost/Semester</th>
<th>My Meal Plan</th>
<th>Meals/Semester or Week</th>
<th>Dining Dollars/Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>$436.00</td>
<td>30 My Meals Block Plan</td>
<td>30 meals/semester</td>
<td>$100.00</td>
</tr>
<tr>
<td>S</td>
<td>$808.00</td>
<td>60 My Meals Block Plan</td>
<td>60 meals/semester</td>
<td>$150.00</td>
</tr>
<tr>
<td>T</td>
<td>$1,174.00</td>
<td>90 My Meals Block Plan</td>
<td>90 meals/semester</td>
<td>$200.00</td>
</tr>
<tr>
<td>U</td>
<td>$1,174.00</td>
<td>45 My Meals Block Plan</td>
<td>45 meals/semester</td>
<td>$650.00</td>
</tr>
<tr>
<td>V</td>
<td>$1,174.00</td>
<td>60 My Meals Block Plan</td>
<td>60 meals/semester</td>
<td>$500.00</td>
</tr>
<tr>
<td>W</td>
<td>$1,174.00</td>
<td>75 My Meals Block Plan</td>
<td>75 meals/semester</td>
<td>$350.00</td>
</tr>
</tbody>
</table>

*Grand Avenue Plans - also available for juniors and seniors in Frontier, Pioneer, and Prairie Halls.

Summer Meal Plans and Rates (Summer 13)

<table>
<thead>
<tr>
<th>Plan</th>
<th>Cost/Semester</th>
<th>my meal Plan</th>
<th>Meals/Semester or Week</th>
<th>Dining Dollars/Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>$435.00</td>
<td>30 My Meals Block Plan</td>
<td>30 meals/semester</td>
<td>$150.00</td>
</tr>
<tr>
<td>7</td>
<td>$645.00</td>
<td>45 My Meals Block Plan</td>
<td>45 meals/semester</td>
<td>$225.00</td>
</tr>
<tr>
<td>8</td>
<td>$785.00</td>
<td>60 My Meals Block Plan</td>
<td>60 meals/semester</td>
<td>$275.00</td>
</tr>
</tbody>
</table>
BookCHARGE Fee

Charge Textbooks and Supplies to your Student Account

Currently enrolled students who have a PiONEer Card, have no holds on their student account, and have completed the Financial Responsibility Agreement are eligible.

BookCHARGE starts 10 business days prior to the start of the semester and ends 10 business days after the semester begins. You will need to present your PiONEer Card at the cash register. Your PiONEer Card will be swiped, charge eligibility verified and you will sign a charge receipt.

You are allowed to charge books, and supplies to your student account up to $750 per semester. Please be responsible about your purchases. Remember, your charges will be reflected on your student account and will be billed to you.

The cost of textbooks varies. It is estimated that a student spends an average of $1188 to $1500 per year for books.
Other Fees and Deposits

**Housing deposit (credited to student’s account)** $100.00
This sum is required to be submitted with the housing contract. When this deposit is paid, residence hall reservations are confirmed.

**Housing cancellation penalty** $500.00

A $500 cancellation fee will be assessed if a student cancels a housing license agreement, withdraws, or is dismissed from the university.

A prorated fee will be implemented for cancellations occurring during the summer of 2013 based upon the following schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 15, 2013</td>
<td>loss of $100.00 housing deposit</td>
</tr>
<tr>
<td>April 16 – June 30, 2013</td>
<td>loss of $100.00 housing deposit and $250 cancellation fee</td>
</tr>
<tr>
<td>July 1, 2013 and after</td>
<td>loss of $100.00 housing deposit and $500 cancellation fee</td>
</tr>
</tbody>
</table>

**Housing room change fee** $100.00
This fee will be assessed if a student changes his/her room assignment after the academic year begins.

**Confirmation deposit (credited to student’s account)** $200.00
This sum is due and payable within 30 days after the date the applicant is notified of admission to the University or after financial aid is determined for those who are aid applicants. This deposit is collected only from new full-time students or from part-time students moving to full time status. It is generally not refundable.

**Registration and Orientation fee** $270.00
New full-time students will be assessed this fee on their first billing. It is generally not refundable.

**Comprehensive fee** $535.00
This fee is collected from full-time undergraduate students and is used directly by the University to address needs common to the student body.

**Activity fee** $150.00
This fee is collected by the University at the request of the Student Senate and is distributed by the Senate to eligible student organizations.

**Security deposit for Carroll University students** $100.00
New students are required to post a $100 deposit which is held as security against unpaid damages and fines. The deposit is refunded when a student graduates or when a student withdraws after at least one full semester. Security deposits are nonrefundable for disciplinary or academic dismissals. While students are continuing at Carroll, damages, fines and special charges are to be paid within 10 days of notification; otherwise such amounts will be added to the billing for the semester. Damages, fines, and special charges which remain unpaid will be charged against the security deposit if the student is not returning.

**Nursing program fee** $525.00
This fee is assessed to all full-and part-time nursing students with a Nursing major.

**Professional liability insurance** $20.00
This fee is assessed to Health Sciences majors who are required to carry professional liability insurance when enrolled in any clinical course.

**Completion fee** $110.00
The fee will be charged whether a student participates in the graduation ceremony or not, to cover diplomas, diploma covers, degree audits and other associated costs.

**Parking permit for resident Carroll students** $185.00-290.00
Resident students may apply for parking permits for residence hall lots. Because parking spaces are limited, they are assigned by the safety office according to established criteria.

**Stop Payment Fee (subject to change based on bank fees)** $33.50
**NSF Fee (subject to change based on bank fees)** $25.00
Finance Charge: The University will use a monthly periodic rate of 1% (compounded) to compute the FINANCE CHARGE on myPAYPLAN participants.
Late Fees will be assessed monthly on any outstanding balance on student accounts of any student not enrolled in the my PAYPLAN program as follows:

<table>
<thead>
<tr>
<th>Balance</th>
<th>Late Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5.00 - 200.99</td>
<td>$30.00</td>
</tr>
<tr>
<td>$201.00 - 2,500.99</td>
<td>$35.00</td>
</tr>
<tr>
<td>$2,501.00 - 5,000.99</td>
<td>$50.00</td>
</tr>
<tr>
<td>$5,001.00 - 99,000.00</td>
<td>$75.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fee</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-refundable registration fee for International and Off-Campus Programs</td>
<td>$250.00</td>
</tr>
<tr>
<td>Study Abroad Programs Exchange and Affiliated Programs</td>
<td>$250.00</td>
</tr>
<tr>
<td>Unaffiliated Programs</td>
<td>$500.00</td>
</tr>
<tr>
<td>Summer/J-term Study Abroad Fee</td>
<td>$150.00</td>
</tr>
<tr>
<td>Auditing (per credit)</td>
<td>$100.00</td>
</tr>
<tr>
<td>Auditing (Nursing-per credit)</td>
<td>$110.00</td>
</tr>
<tr>
<td>Credit for work experience (per credit)</td>
<td>$180.00</td>
</tr>
<tr>
<td>Credit for work experience (Nursing-per credit)</td>
<td>$215.00</td>
</tr>
<tr>
<td>Internship (per credit)</td>
<td>$340.00</td>
</tr>
<tr>
<td>Internship (Nursing-per credit)</td>
<td>$440.00</td>
</tr>
<tr>
<td>Internship: Written Project (per credit)</td>
<td>$180.00</td>
</tr>
<tr>
<td>Internship: Written Project (Nursing-per credit)</td>
<td>$215.00</td>
</tr>
<tr>
<td>Credit by examination (per credit)</td>
<td>$175.00</td>
</tr>
<tr>
<td>Credit by examination – Nursing courses (per credit)</td>
<td>$215.00</td>
</tr>
<tr>
<td>Prior Learning Assessment (per credit)</td>
<td>$180.00</td>
</tr>
<tr>
<td>Prior Learning Assessment (Nursing-per credit)</td>
<td>$215.00</td>
</tr>
<tr>
<td>Tuition per credit for additional credits – non-nursing (greater than 19 credits)</td>
<td>$340.00</td>
</tr>
<tr>
<td>Tuition per credit for additional credits – nursing (greater than 19 credits)</td>
<td>$440.00</td>
</tr>
<tr>
<td>Undergraduate tuition for OCICU online courses</td>
<td>$440.00</td>
</tr>
</tbody>
</table>

Course fees (per course) $52.00 - 82.00

These fees are required for classes with expendable material costs, as well as other costs unique to the course, and include, but are not limited to, lab courses.

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Athletic Training Program Fees

Junior Program Fee  $545.00
Senior Program Fee  $440.00
Applied Music Fees

The academic year charges for individual instruction in voice, piano, organ, strings, winds and percussion are:

- One-half hour lesson per week: $490.00
- One hour lesson per week: $980.00

No refunds of applied music fees will be made after the second week of classes.
Additional Expenses - Nursing Program

Nursing is a practice discipline and students enrolled in the nursing program must plan for additional costs that are directly related to the program. These include uniforms, nursing textbooks, health requirements, CPR certification, liability insurance, and transportation costs associated with clinical experiences.

- Uniform cost will vary depending on vendor used. Uniform patch is available through the bookstore. Also required for clinical nursing courses: watch with a second hand, white nurses shoes (or all white athletic shoes), bandage scissors and stethoscope.
- Students are required to carry professional liability insurance when enrolled in any clinical course. Cost varies according to plan selected and agency used.
- Nursing pin. Cost varies.
- For graduating seniors desiring registration and licensure in Wisconsin:
  - Registration fee for NCLEX exam
  - Application for State Board
  - Work permit for graduates working in Wisconsin
  - State Board registration photograph
  - Class composite photograph (optional)
Payment of Student Accounts

It is the responsibility of all Carroll University students to read and complete the Carroll University Financial Responsibility Agreement. This can be found online at my.carrollu.edu>Student>My Info>Financial Responsibility Agreement. Charges for tuition, fees, room and board are the obligation of the student upon registration and are to be paid no later than the first day of the semester. A student may attend classes, take examinations, and be entitled to the benefits of a fully registered student only when all charges have been paid or satisfactory financial arrangements have been approved by the Business Office.

Course and Fee statements will be available online at my.carrollu.edu. Click on Student - Billing and Payment - View Bill. Full payment of the balance must be made by the first day of the semester unless payment plan arrangements have been approved by the Business Office.

Due Dates are:

<table>
<thead>
<tr>
<th>Session</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2013</td>
<td>September 5, 2013</td>
</tr>
<tr>
<td>Winter 2014</td>
<td>January 2, 2014</td>
</tr>
<tr>
<td>Spring 2014</td>
<td>January 21, 2014</td>
</tr>
<tr>
<td>Summer Session I, 2014</td>
<td>May 8, 2014</td>
</tr>
<tr>
<td>Summer Session II, 2014</td>
<td>June 2, 2014</td>
</tr>
<tr>
<td>Summer Session III, 2014</td>
<td>July 15, 2014</td>
</tr>
</tbody>
</table>

*If additional charges are incurred during a semester, a statement available online at my.carrollu.edu will show those supplemental charges. These charges are due upon receipt of the billing.
Finance Charges

The University will use a monthly periodic rate of 1%, (compounded), to compute the FINANCE CHARGE on myPAYPLAN participants. The University calculates FINANCE CHARGES by applying the periodic rate to the adjusted balance of a student account. The adjusted balance is equal to the prior balance shown on the monthly statement less any payments and credits received within the next calendar month. The student may pay the balance in full at any time. If the current month’s charges shown on the monthly statement are paid within the next calendar month, the student will incur no FINANCE CHARGE. If the full payment is not made by that date, a FINANCE CHARGE is imposed on the balance of the account. FINANCE CHARGES and late fees will be compounded on a monthly basis and FINANCE CHARGES will be charged on the entire amount thereafter.

Late Fees will be assessed monthly on any outstanding balances on student accounts of any student not enrolled in the myPAYPLAN program as follows:

- $5.00 - 200.99 late fee of $30.00
- $201.00 - 2,500.99 late fee of $35.00
- $2,501.00 - 5,000.99 late fee of $50.00
- $5,001.00 - 99,000.00 late fee of $75.00

Delinquent accounts occur when the payment terms on a student's account have not been met. The University has the right to take steps to collect the balance, including, but not limited to, the following: prohibiting the student from scheduling classes for the following semester; withholding course credits; academic transcripts, and diploma until the balance is paid; turning over the student's account to a collection agency; and taking legal action to collect the balance due. The student authorizes the University to release financial information about his/her account to those concerned with collecting the balance owing. If the University incurs any expenses in collecting the student's account, the student shall pay all the University’s cost of collection. This includes, but is not limited to, a collection agency fee and/or reasonable attorney's fees. I understand that Carroll University, and/or a collection agency acting on behalf of the University, may contact me regarding any outstanding balance by means of an automated calling system and a pre-recorded message. I agree to be contacted by telephone at any telephone number associated with my account, including wireless telephone numbers.
How payments are applied to student accounts

Credits to students' accounts are applied in the following manner:

Financial aid in the form of grants and scholarships is the first item credited to the student's account and will be applied in the following order:

- Tuition, program fees, other fees, board charges, room charges

Cash payments (other than student loans) will be applied to fines and incidental charges.

The remaining cash and/or loan proceeds made to student accounts are applied against charges not covered by grants and scholarships in the following order:

- Tuition, program fees, other fees, board charges, room charges

Information regarding payment plan options may be obtained from the Business Office of the University. Students are invited to contact the Business Office if they have any questions concerning payments due to the University.
Veteran's Benefits

Veterans eligible for education benefits should apply with the appropriate agency prior to registering for classes. After applying for benefits, veterans should contact the institution's Veterans Certifying Official to notify them of their intent to collect benefits. Federal benefits paid under chapters 30, 35, 1606, or 1607 will be paid directly to the student. Recipients of such payments are advised to anticipate a delay of about two months before receiving the first payment. Students receiving benefits under these chapters should be prepared to pay all expenses since payments are made directly to the veteran. Chapter 33 (Post 9-11 GI Bill) and the Yellow Ribbon Benefits will be paid directly to the higher education institution.
Part-time (less than 12 credits) Tuition

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate course per credit</td>
<td>$340.00</td>
</tr>
<tr>
<td>Nursing course per credit</td>
<td>$440.00</td>
</tr>
<tr>
<td>*Undergraduate OCICU course per credit</td>
<td>$440.00</td>
</tr>
<tr>
<td>Auditing per credit</td>
<td>$100.00</td>
</tr>
<tr>
<td>Auditing Nursing per credit</td>
<td>$110.00</td>
</tr>
<tr>
<td>Credit by examination (per credit)</td>
<td>$175.00</td>
</tr>
<tr>
<td>Credit by examination – Nursing courses</td>
<td>$215.00</td>
</tr>
</tbody>
</table>

These charges do not apply to full-time students who drop a course after the first week of a semester.

*Please refer to the University's Web site for information pertaining to Carroll's online consortium (OCICU) courses.

Students contemplating dropping and substituting courses involving online programs may substitute another section of the same course as long as it is in the same term ("term" applies to the period during which the course is offered, beginning to ending date). Traditional courses and courses offered through the Online Consortium of Independent Colleges and Universities (OCICU) have different start and end dates and drop policies even though they may be equivalent courses. Students contemplating dropping or substituting an OCICU course with a traditional course or an OCICU course must contact the registrar at 262.524.7208 or e-mail ahandfor@carrollu.edu for policy and cost information.

**Finance Charges**

The University will use a monthly periodic rate of 1%, (compounded), to compute the FINANCE CHARGE on myPAYPLAN participants. The University calculates FINANCE CHARGES by applying the periodic rate to the adjusted balance of a student account. The adjusted balance is equal to the prior balance shown on the monthly statement less any payments and credits received within the next calendar month. The student may pay the balance in full at any time. If the current month’s charges shown on the monthly statement are paid within the next calendar month, the student will incur no FINANCE CHARGE. If the full payment is not made by that date, a FINANCE CHARGE is imposed on the balance of the account. FINANCE CHARGES and late fees will be compounded on a monthly basis and FINANCE CHARGES will be charged on the entire amount thereafter.

**Late Fees**

Late Fees will be assessed monthly on any outstanding balances on student accounts of any student not enrolled in the my PAYPLAN program as follows:

- $5.00 - 200.99 late fee of $30.00
- $201.00 - 2,500.99 late fee of $35.00
- $2,501.00 - 5,000.99 late fee of $50.00
- $5,001.00 - 99,000.00 late fee of $75.00

Delinquent accounts occur when the payment terms on a student’s account have not been met. The University has the right to take steps to collect the balance, including, but not limited to, the following: prohibiting the student from scheduling classes for the following semester; withholding course credits; academic transcripts, and diploma until the balance is paid; turning over the student’s account to a collection agency; and taking legal action to collect the balance due. The student authorizes the University to release financial information about his/her account to those concerned with collecting the balance owing. If the University incurs any expenses in collecting the student’s account, the student shall pay all the University’s cost of collection. This includes, but is not limited to, a collection agency fee and/or reasonable attorney’s fees. I understand that Carroll University, and/or a collection agency acting on behalf of the University, may contact me regarding any outstanding balance by means of an automated calling system and a pre-recorded message. I agree to be contacted by telephone at any telephone number associated with my account, including wireless telephone numbers.
Payment Options for Part-time Students

Fall 2013

1. Pay in full on or before the first day of the semester.
2. Enroll (online) in a 4, 5, or 6 month payment plan agreement for Fall 2013 by September 5, 2013.
   - 6 month plan: July through December
   - 5 month plan: August through December
   - 4 month plan: September through December
3. Provide a letter of company sponsorship and/or third party billing to the Carroll University Business Office on or before the first day of the semester. This letter must confirm payment in full regardless of the student’s performance in the course.
4. Provide a letter to the Carroll University Business Office, on or before the first day of the semester, from your employer verifying reimbursement. Student will be required to sign a payment agreement. FINANCE CHARGES of 1% per month (compounded) will apply to this payment option. Payment will be due in full by January 3, 2014. Please contact Judy for information regarding this option at 262-524-7698 or at jedl@carrollu.edu.

Spring 2014

1. Pay in full on or before the first day of the semester.
2. Enroll (online) in a 5 or 6 month payment plan agreement for Spring 2014 by January 5, 2014, or a 4 month payment plan agreement by January 21, 2014.
   - 6 month plan: January through June
   - 5 month plan: January through May
   - 4 month plan: February through May
3. Provide a letter of company sponsorship and/or third party billing to the Carroll University Business Office on or before the first day of the semester. This letter must confirm payment in full regardless of the student’s performance in the course.
4. Provide a letter to the Carroll University Business Office, on or before the first day of the semester, from your employer verifying reimbursement. Student will be required to sign a payment agreement. FINANCE CHARGES of 1% per month (compounded) will apply to this payment option. Payment will be due in full by May 28, 2014. Please contact Judy for information regarding this option at 262-524-7698 or at jedl@carrollu.edu.

Refer to the Graduate Catalog for information regarding the graduate programs.
Internship Fees

The University offers three types of internships. It is the student's responsibility to register for the appropriate internship course.

1. Internship with approval and placement by the program instructor
   (Course 480) ................................................................. $340 per credit
   $440 per credit - Nursing

2. Credit for work experience approved by the program instructor
   (Course 483) ................................................................. $180 per credit
   $215 per credit - Nursing

3. Written project completed at work site and approved by the program instructor . . . $180 per credit
   $215 per credit - Nursing
Refund Policies

Full-time status is determined at the end of the first week of classes on the date indicated in the calendar as the last date to add classes. A full-time student who drops below 12 credits must after this date will continue to be billed at full-time rates unless the student withdraws from the University.

To begin the withdrawal process the student must fill out the withdrawal form. This form may be obtained from the Office of Student Success in the Financial Aid Office. This form must be returned to the Office of Student Success so that the University can calculate the refund, if any, of institutional charges and determine the amount of aid that may need to be refunded to the various sources.

Refunds may be available for students with Title IV federal aid who withdraw from the University.

Students with federal aid who withdraw from the University will have their Title IV aid recalculated in accordance with guidelines established by the U.S. Department of Education derived from the October 7, 1998, Reauthorization of the Higher Education Act.

The federal formula provides a return of the Title IV aid if the student received federal financial assistance in the form of a Pell Grant, Supplemental Education Opportunity Grant, TEACH Grant, Iraq Afghanistan Service Grant, Perkins Loan or Subsidized and Unsubsidized Stafford Loans or PLUS Loans and withdraws on or before completing 60% of the semester. The percentage of Title IV aid earned is equal to the number of calendar days completed in the semester divided by the number of calendar days in the semester. Scheduled breaks of five or more days are excluded.

Pro-rated Title IV federal aid is returned to the respective federal programs in the following order:

1. Federal Unsubsidized Stafford Loan Program
2. Federal Perkins Loan Program
3. Federal Subsidized Stafford Loan Program
4. Federal PLUS Loan Program
5. Federal Pell Grant Program
6. Federal SEOG Program
7. TEACH Grant Program
8. Iraq Afghanistan Service Grant
9. Any other assistance awarded to the student under programs authorized by Title IV HEA

For purposes of repayment, if funds are released to a student because of a credit balance on the student's account, then the student may be required to repay some of the federal grants released to the student. Until the repayment is resolved, the student is ineligible for further Title IV assistance. These refund policies are based upon the rules and regulations of the U.S. Department of Education and are subject to change. Worksheets used to determine the amount of refund or return of Title IV aid are available upon request at the Carroll University Business Office.

Students who withdraw and have Carroll aid and/or aid other than Title IV will earn this aid according to the following schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 4</td>
<td>0%</td>
</tr>
<tr>
<td>September 16</td>
<td>20%</td>
</tr>
<tr>
<td>September 23</td>
<td>40%</td>
</tr>
<tr>
<td>September 30</td>
<td>60%</td>
</tr>
<tr>
<td>October 7</td>
<td>80%</td>
</tr>
<tr>
<td>October 8</td>
<td>100%</td>
</tr>
</tbody>
</table>

Financial aid for part-time students will be adjusted to reflect the final number of credits for which the student is enrolled on Thursday, September 12, 2013 for the fall semester or on Tuesday, January 28, 2014, for the spring semester. If enrollment on either one of these dates is for fewer than six credits, no financial aid will be available for the term unless the student is eligible for a Federal Pell grant.

Although the Financial Aid Census date (adjustment date for financial aid) is one week after the semester begins, we are required by federal law to review any students who received the Federal Pell Grant. Under federal regulations, students can only receive Federal Pell Grants for the classes they attended. The regulation states the following: If a student begins attending some but not all of his or her classes, the Financial Aid Office will have to recalculate the student's Pell Grant award based on the student's actual enrollment status. Therefore, if you receive a Federal Pell Grant, we will review your enrollment status throughout the semester.

Tuition refunds:
- Full or part-time students who withdraw from the university may be eligible for a tuition refund.
- Part-time students who drop courses may be eligible for a tuition refund.

<table>
<thead>
<tr>
<th>Date</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 4</td>
<td>100%</td>
</tr>
<tr>
<td>September 16</td>
<td>80%</td>
</tr>
<tr>
<td>September 23</td>
<td>60%</td>
</tr>
<tr>
<td>September 30</td>
<td>100%</td>
</tr>
<tr>
<td>October 7</td>
<td>80%</td>
</tr>
<tr>
<td>October 8</td>
<td>60%</td>
</tr>
</tbody>
</table>
Refunds of room and board fees are available if a resident student officially withdraws from the University. The amount is determined by the refund calculations listed above or, in the case of board fees, actual use, whichever is greater.

**Specially timed courses for the Fall 13 and Spring 14** have the following refund schedule:

- 100% Before the first day of class
- 75% Before the second day of class
- 25% Before the third day of class
- 0% Before the fourth day of class

**Tuition Refunds for Winter 2014**

<table>
<thead>
<tr>
<th>Percent of Refund</th>
<th>Withdrawal Date on or before</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three or four credit courses:</td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>January 1, 2014</td>
</tr>
<tr>
<td>75%</td>
<td>January 3, 2014</td>
</tr>
<tr>
<td>50%</td>
<td>January 6, 2014</td>
</tr>
<tr>
<td>Two credit courses:</td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>January 1, 2014</td>
</tr>
<tr>
<td>75%</td>
<td>January 3, 2014</td>
</tr>
<tr>
<td>One credit course and specially timed courses:</td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>Before the first day of class</td>
</tr>
<tr>
<td>50%</td>
<td>Before the second day of class</td>
</tr>
</tbody>
</table>

**All refunds will be reduced by a 5% administrative fee (not to exceed $100).**

Courses in the Carroll Online Consortium (OCICU) have a separate refund schedule. Please refer to: www.carrollu.edu/academics/online.

Please contact the Carroll University Business Office at 262-524-7337 for information regarding the refund schedule for summer 2013.

All scholarships, grants, and loans must be credited to a student account before a refund check will be issued.

No refund of tuition, fees, room or board will be made to students dismissed or suspended from the University for disciplinary or academic reasons. Refunds of study abroad program registration fees are subject to regulations available in the Office of International Education.

**Refund policy for military reservists called to active duty:** The University recognizes the sacrifices that those in the armed services make while serving our country. We are proud to have these individuals as a part of our campus community and therefore maintain the following policy:

- The student must provide the Registrar’s Office copies of official military orders. The student will then be automatically withdrawn from all of his/her courses for the given semester. The academic record will reflect the non-punitive "W."
- The student will be eligible for a full refund for tuition and course fees for any courses that are not completed during that semester/session.
- Any room and board charges will be prorated based on the date in the semester the student is required to leave and the remaining amount will be refunded.

All students adding or dropping a course must do so in writing through the Registrar’s Office. Refunds are based on the date of the postmark of withdrawals sent by mail or on date of delivery of those brought in personally to the Registrar’s office. If a student drops from a credit class to an audit, the refund will be based on the credit course fee according to the refund policy. If a class is cancelled due to lack of enrollment, students registered for that class will be given a full refund.

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Financial Aid

The U.S. Department of Education has stated that Carroll University may participate in those student financial assistance programs authorized by Title IV of the Higher Education Act of 1965, as amended. You may contact the Director of Financial Aid at the telephone number or address listed below, if you would like to review a copy of the most current Program Participation Agreement.

Financial aid is available to students who are enrolled at least on a half-time basis per semester (some students may qualify for a Pell Grant if enrolled less than half time), are degree seeking, and meet all other guidelines established by the University and the U.S. Department of Education. For financial aid purposes, half-time status (6-8 credits) is a minimum of six credit hours per semester, three-quarter-time is 9-11 credits and full-time status is a minimum of 12 credit hours per semester. The University participates in four types of financial aid programs: scholarships, grants, loans, and employment. The following titles provide more information about the various financial aid programs and how to apply. More detailed information is available on the University's Web site and upon request by contacting the Office of Financial Aid at 262.524.7296 locally, or at 1-800-Carroll. You may also write to us at the following address:

Carroll University Office of Financial Aid,
100 N. East Ave.,
Waukesha, WI
53186.

Note: Students may be eligible for student financial assistance program funds for attending a study abroad program that is approved for credit by the Carroll University Registrar. For more information, contact the Office of Financial Aid as described above.

Application for Aid

The University uses the results of the Free Application for Federal Student Aid (FAFSA) as the basis for determining a student's eligibility for federal, state, and institutional funds. The FAFSA must be entirely completed and sent to the federal processor. Carroll University’s name and Title IV code (003838) must be listed on the FAFSA in order for the University to receive a copy of the results from the federal processor. Students are encouraged to complete the FAFSA by April 1 for September enrollment, and by November 1 for January enrollment.

In order to receive financial aid, students must have their financial aid paperwork (including the FAFSA and any additional information required by the Financial Aid Office) completed by the following dates for the applicable term:

- **Summer**
  - June 15
- **Fall**
  - November 15
- **Spring**
  - April 15

The information reported on the FAFSA is used to determine a student's expected family contribution (EFC), an amount the student and parent(s) or spouse are expected to contribute toward their education. The EFC is subtracted from a student's cost of attendance to determine his/her financial need. A financial aid counselor will attempt to put together a financial aid package that comes as close as possible to meeting a student's demonstrated financial need. However, due to limited funds, the amount awarded to a student may fall short of the amount for which he/she needs. The University attempts to distribute financial aid to students in a fair and equitable manner among the various student populations.

The Department of Education (or Carroll) may select students for a process known as verification. When selected for verification, the student and parent(s) or spouse must complete a verification document and submit additional documents which may include either using the IRS Data Retrieval when submitting the FAFSA or submit signed tax return transcripts to the Carroll University Office of Financial Aid, along with additional documentation. The Office of Financial Aid will contact the student to request information needed to complete this process. The University is required by the U.S. Department of Education to review the documents to ensure the information reported on the FAFSA is correct.

Scholarships

Carroll University offers a variety of merit scholarships to recognize outstanding student accomplishments. There are two categories of scholarships: academic and additional. For additional scholarship information, please see the University’s Web site.

Grants

Grants are awarded based upon a student's demonstrated financial need as determined by the Free Application for Federal Student Aid (FAFSA). A student can receive a grant from the Federal Government, the State of Wisconsin (if a Wisconsin resident), and Carroll University. Like scholarships, grants are considered gift aid that does not need to be repaid. For additional grant information, please see the University’s Web site.

Loans

Loan options available to eligible students and parents include the Federal Direct Student Loan, the Federal Perkins Loan and the Federal PLUS parent loan, as well as from private lenders. Students who obtain a loan must adhere to the terms of the loan. These
terms include repayment, entrance and exit counseling, and conditions under which students may obtain deferral or partial loan repayment for volunteer service. For additional loan information, please see the University's Web site.

**Student Employment**

University employment opportunities allow students part-time on campus to earn an hourly wage and receive a monthly paycheck while attending Carroll. Students may work from approximately five to 14 hours each week. The number of hours a student may work depends upon the student's financial aid award. Students eligible for federal work-study are given first preference for employment positions. Students eligible for federal work study are encouraged to participate in off-campus community service positions. For additional student employment information, please see the University's Web site.
Student Affairs

Counseling Services
Disability Policy for Students
Diversity
Student Health Center
Insurance
Intercollegiate Athletics
Residence Life & Housing
Dining Services
Spiritual Life Program
Student Activities
Student Handbook

For more information regarding Student Affairs, click here
Counseling Services

Personal confidential counseling is available to all full-time students at the Walter Young Center on the Carroll campus. Experienced, master’s level therapists assist students with concerns regarding family, relationships, self-esteem, academic difficulties and other issues. The counseling center offers solution focused short term counseling. Students needing long-term treatment may be referred to a community resource.
Carroll University is committed to making otherwise qualified students with disabilities full participants in its programs, courses, services and activities. We are guided by the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and the ADA Amendments Act of 2008. Individuals will receive reasonable accommodations according to their needs and the documentation of their disability.

**Accommodation Request Process**

Accommodation requests should be made through the Walter Young Center. In order to be eligible for reasonable accommodation(s) from the University, the student must provide recent, relevant and comprehensive documentation of the disability, and the disability’s impact on the student’s participation in a course, program or activity. Should documentation from the student be inadequate or incomplete, the University reserves the right to require additional documentation. The cost of providing additional documentation will be borne by the student. However, if documentation is complete, but the University seeks a second professional opinion, the University will pay for the cost of that second opinion. The University also reserves the right to deny accommodation until necessary documentation is received. Requested accommodations will be approved or disapproved by the Disabilities Services Office at the Walter Young Center following a Reasonable Accommodation Conference. Any accommodation decision may be appealed in writing to the Dean of Students within five (5) days of the decision. Any request for additional or modified accommodations must be made in writing to the Disabilities Services Office.
Diversity

At Carroll University, diversity is a critical part of the campus culture. International and multicultural students, faculty, and staff are a vital component of the campus’ richness. The university's goal is to create an environment that is open and welcoming for all people.

Carroll University is committed to supporting a diverse student body by providing comprehensive student support services and programs that allow students to explore diversity on campus, in the surrounding communities, and across the globe.

The Office of Cultural Diversity offers services and programs that support diversity such as cultural programming and activities, pre-college and mentor programs, diversity training, classroom presentations and more. These programs and services directly benefit the Carroll student body, faculty, and staff, as well as the Waukesha community. In turn, they provide the whole community with opportunities to gain a greater appreciation for the diversity represented on and off campus.
The Health Center at Carroll is staffed by nurse practitioners who treat students for a variety of minor illnesses and injuries. The nurse practitioners can prescribe medications if needed, and do stock some medications in the Student Health Center. The nurse practitioners can also perform well physicals and pap smears, tuberculosis (TB) skin tests, complete travel forms, and give vaccines. There are charges to see the nurse practitioners, receive medications, have lab tests, vaccines, etc. All charges are billed to the student account, unless the student has enrolled in the student insurance plan offered through the University. Students enrolled under a parent's insurance plan can request a receipt that can be submitted to their insurance to request reimbursement. Students needing further treatment are referred to local clinics, Waukesha Memorial Hospital, or their primary M.D. and are responsible for any associated costs.
Carroll University is committed to promoting good health to help ensure students’ academic success. With this in mind, Carroll requires all full-time undergraduate and international students to have health insurance coverage.

- All full time undergraduate students are charged the health insurance fee upon registration.
- If a student has comparable coverage under another insurance policy, he or she may request a waiver from the University-sponsored health insurance plan.
- The deadline to waive the University-sponsored health insurance is one month after classes begin. Students who do not complete the online waiver before the deadline will be charged the health insurance fee.

The waiver form, plan and coverage information, and enrollment form can be found at http://www.carrollu.edu/campuslife/hsinsurance.asp?nav=5763

Many HMOs do not provide coverage outside of a particular area, so students and their parents should review their coverage carefully before waiving the University’s plan.

**Student-Athletes:** The University carries an insurance policy that provides secondary coverage for the student athlete who may be injured during practice for, or while participating in, an intercollegiate athletic event. The student athlete is responsible for any deductible.

**Vehicles:** The University carries insurance on all of its vehicles. Any student receiving permission to drive a university vehicle must be approved by the University’s insurance company before he or she drives any of its vehicles.

**Property:** Carroll University’s property insurance policy covers damage to, or theft of, University owned property only. The University’s policy does not cover personal property belonging to students.

**Liability:** Certain students are required to carry professional liability insurance when enrolled in clinical courses. These students include, but are not limited to, students enrolled in physical therapy, nursing and other health science programs.
Intercollegiate Athletics

Carroll University is a member of the Midwest Conference and Division III of the NCAA (National Collegiate Athletic Association), and offers 20 intercollegiate sports. For men Carroll sponsors: baseball, basketball, cross country, football, golf, indoor and outdoor track & field, soccer, swimming & diving, and tennis. For women Carroll sponsors: basketball, cross country, golf, indoor and outdoor track & field, soccer, swimming & diving, tennis, softball, and volleyball. Student-athletes are required to maintain good academic and social standing as defined in the student handbook in order to participate in the intercollegiate athletic program.

Carroll also offers Club Sport opportunities in wrestling, men's volleyball and women's volleyball with additional clubs currently under consideration.
Residence Life and Housing

Living on campus is an important part of the University educational experience. Campus housing is staffed with live in professionals and student resident assistants trained to engage students in the community and to act as resources.

**Housing Policies**

A. Full-time students who enroll at Carroll are subject to a junior residency requirement. This requirement remains in effect until a student has achieved senior standing (92 credits) by the beginning of the academic year. Exceptions to this policy include those students who are married or in a partnership legally recognized by a state, 23 years of age or older, are the primary caregiver to a child and those students who are living within fifty (50) miles from campus with parents or legal guardians during the academic year for which they are enrolled.

B. Each year, full time students who wish to live off-campus must submit an application requesting to be released from the residency requirement and must receive approval from the Office of Residence Life and Housing. If the application is denied, the student will be subject to the residency requirement and will need to complete the appropriate application and contract for campus housing.

C. Students who have not been approved for release from the requirement and/or fail to submit an application and contract for campus housing will be charged for a standard double room and 140 Block meal plan until the terms of the residency requirement have been satisfied.

**Living Options**

Carroll University offers many on campus housing options including apartments, houses, and both traditional and suite style housing facilities to suit the needs of residential students. All campus housing includes basic cable TV service, high speed internet access, basic room furniture, mail delivery, and on site laundry facilities.
Welcome to the my meals Campus Dining program at Carroll University. All my meals plans feature:

- A guaranteed block of meals for the semester – you decide how many!
- The flexibility to use your meal plan at all dining locations in the Campus Center and at Au Bon Pain during regularly scheduled and posted transfer hours.
- Dining Dollars that can be used anytime and anywhere, including Second Cup, Au Bon Pain and the Campus Center.

The my meals program offers students a multitude of options and maximum flexibility. Simply choose the plan that best fits your schedule and dining habits. We hope you’ll agree that there is something for every appetite!

**Meal Plan Policies**

**A.** All Carroll students who are subject to the residency requirement are also required to participate in a Resident Meal Plan (Plans C, E, G or H). Students who have achieved junior standing (60 credits) by the beginning of the academic year and live in Frontier, Pioneer or Prairie halls may also select a Grand Avenue Block Plan (Plans T, U, V or W). Only students living in the Carroll Street, College Avenue and Hartwell Avenue Apartments are exempt from this policy.

**B.** Students may increase their meal plan at any time. The deadline to decrease or cancel a meal plan is one day prior to the first day of classes each semester as published in the University catalog and academic calendar.

**C.** Students who select a meal plan for fall semester will automatically be billed for the same plan for spring semester unless they make a change prior to the deadline.

**D.** Block meal plans offer a guaranteed number of meals per semester and may be used for guest meals. All meal plans include Dining Dollars and allow meal transfers during posted hours.

**E.** Each semester is 15 weeks in length and 18 meals will be served each week in the Pulse on Dining Main Dining Room.

**F.** Unused meals are not transferable from fall to spring semester. Fall semester meals may be used during Winter Session; spring semester meals may be used during Summer Session 1. Unused Dining Dollars will be transferred from fall to spring semester. Dining Dollars must be used by the end of Summer Session 1. Unused meal plans and dining dollars are not refundable.

**G.** Only currently enrolled Carroll students may participate in a meal plan. Students who withdraw or leave the University are no longer eligible to use their selected meal plan and will be held responsible for outstanding charges as published in the University catalog.
The Office of the Chaplain provides opportunities for spiritual growth primarily for students through worship services, campus newspaper articles, student organizations, and personal contact by appointment, drop-in, or e-mail correspondence. The Fellowship of Christian Athletes and Intervarsity Christian Fellowship are among the recognized student organizations on campus; students are welcome to form new organizations; and several other existing student organizations coordinate service projects that may be religious in nature (Habitat for Humanity, Circle K, Greek organizations). One large (seats 180) and one small (seats 18) chapel are regularly available on campus for individual or group gatherings. The Chaplain’s Office also provides local contact information for area congregations and community service agencies.
Student Activities

The Office of Student Activities enhances life on campus by providing students with social opportunities and numerous ways to get involved both on campus and in the community. There are many opportunities to get involved, including Student Senate, Greek life, orientation staff, and the campus radio station. Student Activities provides programs and services ranging from orientation to community service projects to camping equipment rentals, sponsorship of CU@Nite, the weekend programming series, and much more.

Carroll Outdoor Recreation Education (CORE)
CORE can help students backpack, paddle, or climb their way to adventure. CORE promotes safe, affordable, environmentally conscious outdoor recreation through trips, instruction, and equipment rental. This program brings to the Carroll community numerous opportunities to explore and develop as individuals, leaders, and citizens through involvement in the outdoors. In addition to offering trips, lectures, and clinics, CORE manages the “CORE store” where students, faculty, and staff can rent tents, coolers, snowshoes, and more.

Recreation
Carroll University is a member institution of the National Intramural Recreational Sports Association (NIRSA). The recreation program includes intramural sports, open recreation, group exercise classes, outdoor recreation activities, and cheerleading. Ganfield Gymnasium and Fitness Center and the Pioneer Hall Fitness Center host the cardio equipment, resistance machines and free weight areas. The intramural sport program consists of several different activities including flag football, softball, men’s and women’s basketball, indoor soccer, and sand volleyball.

Student Organizations
Student organizations play an active role in the life of the campus. There are over 50 recognized organizations on campus, including social fraternities and sororities, Student Senate, activities board, cultural diversity organizations, a Habitat for Humanity chapter, religiously affiliated groups, academically focused clubs, and many other groups. Student publications include a newspaper and literary magazine. WCCX is the campus radio station. A wide range of arts organizations is open to students, including some by audition.

Volunteer Center
Carroll’s Volunteer Center is dedicated to connecting Carroll to the larger community through service and volunteering by working with existing service learning programs at Carroll and creating new partnerships for Carroll within the surrounding communities. Students can participate in one-time volunteer events or ongoing weekly volunteer placements at sites throughout the area.
The specific rules and regulations of Carroll University, published in the current Carroll Student Handbook and available to all students on the University's Web site, inform students of their responsibilities as well as their rights. The additional expectations associated with enrollment in specific academic programs are published separately.

To view the handbook, click here.
Mission

The mission of the Library is to serve students by providing access to information, by maintaining an environment that promotes a culture of academic excellence, and by offering instruction that fosters scholarship, integrity, independent intellectual growth, and the sophisticated information skills necessary for lifelong learning.

Carroll's Library

Libraries today are service institutions. Therefore, the Carroll Library provides not only access to appropriate print, video, sound and electronic resources, but also to a range of services geared toward student success. In addition to the materials held in or accessible through the Carroll Library, the Library also provides access to materials held across the state, the nation and the world through a variety of online services, nearly all of which are available from off campus. Strong consortia relationships and InterLibrary Loan ensure the availability of supplemental materials to enrich study and research for Carroll students.

The Library's instruction program teaches subject-specific research methods, including how to evaluate web sites and other information resources. Library instruction begins in the Cultural Seminar (CCS) program and continues as students work on assignments that require them to deal with a world of rapidly proliferating information and delivery systems. Librarians also assist students with course assignments and provide research assistance in the Information Commons or by appointments with their liaison. The Library's liaison program pairs librarians with faculty in specific subject areas for the purposes of acquiring the best resources for Carroll students, keeping the collections current, and teaching research skills specific to that subject. Liaisons also provide students with specialized assistance for in-depth research projects.

The Library provides a safe, clean and comfortable environment with state-of-the-art technology and study spaces to accommodate a variety of study styles: quiet spaces, individual carrels, large tables, group rooms, hard chairs, soft chairs and a coffee shop. The Library is open 101 hours per week when class is in session during the fall and spring semesters. Hours are reduced during the summer, winter, or when classes are not in session.

Curriculum Materials Center (CMC)
The CMC, located on the main level of the Library, is dedicated to the needs of education students on campus. The CMC collection comprises of children's literature and curriculum materials appropriate for education levels K-12.

University Archives
The University Archives contains official records and publications of the institution, private papers, student and faculty publications, academic and curricula works, photographs, books, audio and video recordings and Carroll memorabilia that record and illustrate the history and life of the university. These materials provide historical information about the Trustees, the faculty, staff and student body over time. Items that are highly accessed, such as the student yearbooks and the Theatre Collection, have been digitized and are available online through the digital collections link on the Web site. New items are continually added to the digital collections site.

Special Collections
The Library's holdings include some unique, rare, out of print, and historic books which are all grouped as part of Special Collections. The materials in Special Collections include; Welsh Collection, Barclay Collection, Mother Goose Collection, Rufus and Charles King Collection, and Rare Books Collection. The subjects cover religious works, historical works on Scotland and Wales, classic literature, theatre, children's literature, and artistic works that date back as far as 1604. All materials are accessible to the Carroll Community and may be used in the Library. For assistance please contact the Archives Manager.

Please click here to see the Library's home page on the university's web site for more information regarding the Library's services and policies.
Public Safety

Our mission is to assist the Carroll community in creating a safe and secure environment for learning, living, and working. The Department of Public Safety maintains staffing 24 hours a day including personnel in the dispatch office, Public Safety Officers, and off duty Waukesha County Sheriff Deputies. Public Safety both produces and co-sponsors various events during the year to help enhance the knowledge of the community related to personal safety both on campus and off.

Carroll University provides an annual security report that includes statistics for the previous three calendar years concerning reported crimes that occurred on campus; in certain off campus buildings or property owned or controlled by Carroll University; and on public property within or immediately adjacent to, and accessible from, the campus. The report includes institutional policies concerning campus security, such as policies concerning alcohol and other drug use, crime prevention, the reporting of crimes, sexual assault, and other matters. The report also includes fire safety policies and statistics, emergency notification procedures, and protocols for missing persons.

The report is available in an electronic version by accessing the following website: http://www.carrollu.edu/campus/safety/pdfs/clearyact.pdf.

You can obtain a paper copy of this report by contacting the Public Safety Center located at 208 Wright Street, which is a half block east of Campus Center or by calling 262.524.7300.
Student Academic Resources

Allison Reeves Grabowski  Director of Academic Resources
Kristy Black  Project Manager
Torrie Boduch  Senior Career Services Advisor
Jenn Grimm  Supplemental Instruction Coordinator
Susan Nusser  Writing Center Director
Meg Rein  Learning Commons Manager
Kathleen Volk  Academic Support Program Manager
Deb Weber  Director of Career Services

Academic Resources, located on the lower level of the Carroll library, provides free academic support services for Carroll students through the Career Center and the Learning Commons.

Career Center

Learning Commons
Career Services

Career Services offers resume and cover letter assistance, help choosing a major, career assessment, career exploration, and searching for a job/internship.

**Online services include:**
- Pioneer Career Net: Students have access to internship and job postings, informational videos, career exploration resources, and event announcements.
- Career Connect: Students connect with alumni to build their professional network.
- Social Media: LinkedIn, Facebook, and Twitter

**Career Events:**
- Career Networking Fair
- WorkForce Career Fair
- Etiquette Dinner

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Learning Commons

Math Center
Math assistants hold weekly hours and help students as they prepare for quizzes and tests, complete assignments, and learn new concepts in their classes.

Subject Tutors
Subject tutors are available for many courses. Students can connect with a tutor during weekly drop-in hours or by completing a tutor request form.

Supplemental Instruction (SI)
Supplemental Instruction (SI) is a peer education program that targets historically difficult courses. By employing a variety of collaborative learning strategies and group work, SI offers multiple options for learning challenging material. SI sessions are held in the Learning Commons or in designated classrooms around campus.

Workshops
The Learning Commons offers numerous workshops throughout the year focusing on study skills, test taking strategies, and other special topics.

Writing Center
Writing assistants support students during any stage of the writing process including brainstorming, developing and organizing ideas, and revising final drafts.
Academic Organization

Office of Academic Affairs
Joanne Passaro, Provost

College of Humanities and Social Sciences
Charles Byler, Dean

Department of Communication and Sociology
Barbara King, chair
- Majors: Communication, Criminal Justice, Sociology

Department of English and Modern Languages
Deirdre Keenan, chair
- Majors: English, Professional Writing, Spanish
- Minors only: French, German

Department of History, Political Science and Religious Studies
Kimberly Redding, chair
- Majors: European Studies, Global Studies, History, Philosophy, Political Science/Economics, Political Science, Religious Studies
- Minor only: Medieval and Renaissance Studies, Philosophy

Department of Visual and Performing Arts
Philip Krejcarek, chair
- Majors: Art, Book Art, Graphic Communication, Music, Music Education, Photography, Theatre Arts
- Minor only: Web Design
- Graduate degree: Master of Science Graphic Communication

Department of Education
Kimberly White, chair
- Majors: Elementary Education, Elementary Educational Studies
- Minor only: Secondary Education
- Graduate degree: Master of Education

College of Natural Sciences, Health Sciences and Business
Jane Hopp, Dean

Department of Business, Accounting and Economics
Gregory Kuhlemeyer, chair
- Majors: Accounting, Business Administration, Organizational Leadership
- Minor only: Economics
- Graduate degree: Master of Business Administration

Department of Computational and Physical Sciences
Kevin McMahon, chair
- Minor only: Physics
- Graduate degree: Master of Software Engineering

Department of Health and Medicine
Monika Baldridge, chair
- Majors: Health Sciences, Health Sciences-Medical Sonography, Health Sciences-Radiological Technology, Pre-Medical Labortary Sciences, Physical and Health Education, Public Health, Sport and Recreation Management, Therapeutic Recreation Emphasis.
- Minor only: Hispanic Health and Human Services
- Graduate degree: Master of Science in Physician Assistant Studies

Department of Human Movement Sciences
Thomas Pahnke, chair
- Majors: Athletic Training, Exercise Science, Pre-Occupational Therapy, Pre-Physical Therapy
- Minor only: Sports Nutrition
- Graduate degrees: Doctor of Physical Therapy, Master of Science in Exercise Physiology

**Department of Life Sciences**

Denise Guastello (Animal Behavior, Psychology) and Michael Schuder (Animal Behavior, Biology and Environmental Sciences and Marine Sciences), coordinators

- Majors: Animal Behavior, Biology, Environmental Science, Marine Sciences, Psychology, 3+4 Biology/Doctor of Podiatry Emphasis

**Department of Nursing**

Angela Brindowski, chair

- Major: Nursing

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The corporate name of the University is Carroll University, Inc.

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Chair

James G. DeJong '73

Chair Emeritus

Pershing E. MacAllister '40

Vice Chair

Jose A. Olivieri '78

Treasurer

James M. Schneider '74

Secretary

Charmaine L. Ponkratz '77

President of the University

Douglas N. Hastad

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Deborah A. Block '74, Senior Pastor, Immanuel Presbyterian Church, Milwaukee, Wisconsin
JoAnne Brandes, Executive Vice President, General Counsel and CAO (retired), JohnsonDiversey, Racine, Wisconsin
Anthony W. Bryant, Chairman and Owner, Century Fence Company, Pewaukee, Wisconsin
Dorval R. Carter '79, Chief Counsel, Federal Transit Authority, Washington, D.C.
Reynolds R. Challoner '64, President, NEW Paradigm Advisors LLC, Sanibel, Florida/Green Bay, Wisconsin
James G. DeJong '73, Attorney at Law-President, O'Neil, Cannon, Hollman, DeJong, & Laing, S.C., Milwaukee, Wisconsin
Guy J. Di Spigno '69, President, Executive Synergies, Inc., Northbrook, Illinois
Howard L. Fuller '62, Distinguished Professor of Education, Marquette University, Milwaukee, Wisconsin
Timothy J. Hando ’86, Senior Vice President, Wealth Advisor, Certified Investment Management Analyst, The Hando Feldman Adams Group, Morgan Stanley Smith Barney, Potomac, Maryland
Russell W. Harland ’83, ProHealth Care Medical Associates, Co-Medical Director for Critical Services, and Carroll University, Director of Physician Assistant Program, Waukesha, Wisconsin
Douglas N. Hastad, President, Carroll University, Waukesha, Wisconsin
Lynda M. Johnson '80, Assistant Treasurer, Harley-Davidson, Milwaukee, Wisconsin
Pershing E. MacAllister '40, Chairman of the Board, MacAllister Machinery Company, Indianapolis, Indiana
Cindy L. Mayoras '09, Alpharetta, Georgia
Alice Crofts Morava '52, Vice President and CEO, Stuart W. Johnson & Co., Inc. Lake Geneva, Wisconsin
Terry M. Murphy, Executive Vice President and Chief Financial Officer (retired), A. O. Smith Corporation, Milwaukee, Wisconsin
Jose A. Olivieri '78, Partner, Michael Best & Friedrich LLP, Milwaukee, Wisconsin
Charmeine L. Ponkratz '77, Vice President Marketing (retired), Marshall & Isley Corporation, Green Bay, Wisconsin
Dennis G. Punches '58, President, Payback, L.P., Waukesha, Wisconsin
Alumni Representative

John A. Loppnow ’62, Insurance Agent, Robertson Ryan & Associates, Milwaukee, Wisconsin

Honorary Life Trustees

Charles W. Anderson ’59, Brookfield, Wisconsin
Robert V. Cramer, Louisville, Kentucky
Joan Hardy, Waukesha, Wisconsin
L.B. Hardy, Waukesha, Wisconsin
Lee Melville ’50, Waukesha, Wisconsin
Richard H. Miller, Milwaukee, Wisconsin

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<tr>
<th>Carroll Faculty 2013-14</th>
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<tr>
<td>Douglas N. Hastad, 2006</td>
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<tr>
<td>President</td>
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<td>B.A., Concordia College, Moorhead, MN.</td>
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<td>M.S., Washington State University</td>
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<td>Ed.D., Arizona State University</td>
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<tr>
<td>Joanne Passaro, 2007</td>
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<tr>
<td>Provost and Vice President for Academic Affairs</td>
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<tr>
<td>B.A., Ph.D., Duke University</td>
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**ABC**

Sandra Arntz, 2011
Lecturer in Psychology
B.S., Grand Valley State University
M.A., Ph.D., Northern Illinois University

Barbara A. Bahrke, 2012
Clinical Assistant Professor and
Clinical Coordinator of Physician Assistant Studies
B.S.M.T., M.P.A.S., Marquette University

Monika Baldridge, 2004
Associate Professor of Biology and Physician Assistant Studies
B.S., Marquette University
Ph.D., University of Wisconsin-Milwaukee

David Bazett Jones, 2012
Assistant Professor of Physical Therapy
B.S. University of Wisconsin - LaCrosse
M.S., Ball State University
Ph.D., University of Wisconsin - Milwaukee

Barbara J. Beck, 2010
Associate Professor of Public Health
B.A., College of St. Benedict
M.S., Colorado State University
Ph.D., University of Wisconsin-Milwaukee

Daniel Becker, 2006
Assistant Professor of Graphic Communication
B.A., University of Wisconsin-Eau Claire
M.A., DePaul University

Nancy Bennett, 2010
Electronic Resources/Systems Librarian
B.S., University of South Florida
M.L.I.S., University of Wisconsin-Milwaukee

Lynne L. Bernier, 1987
Associate Professor of Political Science
B.A., Carroll College
M.A., Fletcher School, Tufts University
Ph.D., University of Wisconsin-Milwaukee

B.J. Best, 2006
Assistant Professor of English
B.S., Drake University
M.F.A., Washington University

Fred Beuttler, 2011
Director of General Education
Assistant Professor of History
B.A., University of Illinois, Urbana
M.A., Trinity International University
Ph.D., University of Chicago

Jessica Boll, 2010
Assistant Professor of Spanish

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<th>Carroll Faculty 2013-14</th>
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<tr>
<td>Karie M. Ruesert Kobiske, 2004</td>
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<tr>
<td>Clinical Assistant Professor of Nursing</td>
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<td>B.S.N., Carroll College</td>
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<td>M.S.N., Marquette University</td>
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<td>Michael G. Konemann, 1984</td>
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<tr>
<td>Associate Professor of Computer Science</td>
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<tr>
<td>B.S., Carroll College</td>
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<td>M.S., Marquette University</td>
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<td>John T. Koshuta, 2010</td>
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<td>Lecturer in Health Science</td>
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<td>B.A., University of Wisconsin-Eau Claire</td>
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<td>B.S., University of Wisconsin-Oshkosh</td>
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<td>M.A., University of Alabama</td>
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<td>Katherine Kramer, 2000</td>
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<td>Assistant Professor of Education</td>
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<td>B.S., M.S., University of Wisconsin-Whitewater</td>
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<td>Philip L. Krejcerek, 1977</td>
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<td>Professor of Art</td>
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<td>B.S., University of Wisconsin-Oshkosh</td>
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<td>M.F.A., University of Wisconsin-Milwaukee</td>
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<td>Kerry Kretchmar, 2011</td>
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<td>Assistant Professor of Education</td>
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<td>B.A., New York University</td>
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<td>M.S., Pace University</td>
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<td>Ph.D., University of Wisconsin-Madison</td>
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<td>Jamie Lee Kryzkowski, 2008</td>
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<td>Clinical Assistant Professor of Exercise Science</td>
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<td>B.S., Northwest Nazarene University</td>
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<td>M.S.S., United States Sports Academy</td>
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<tr>
<td>Ph.D., Clayton College of Natural Health</td>
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<tr>
<td>Gregory A. Kuhlemeyer, 2000</td>
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<td>Professor of Business</td>
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<tr>
<td>B.S., Western Illinois University</td>
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<td>M.B.A., Ph.D., University of Tennessee- Knoxville</td>
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<td>Laurie A. Kunkel-Jordan, 2006</td>
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<tr>
<td>Clinical Assistant Professor of Nursing</td>
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<td>B.S.N., Alverno College</td>
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<td>M.S.N., Marquette University</td>
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<td>Jeffrey T. Kunz, 1981</td>
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<tr>
<td>Assistant Professor of Accounting</td>
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<td>B.S., St. Norbert College</td>
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<td>M.S., University of Wisconsin-Whitewater</td>
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**LMN**

Kelly J. LaBlanc, 2010
Lecturer of Environmental Science
B.S., University of Wisconsin-River Falls
M.S., University of Wisconsin-Madison
Ph.D., University of Cincinnati

Kristen A. Lampe, 2000
Professor of Mathematics
B.A., University of Dayton
M.A., Ph.D., Washington University in St. Louis

Brittany Larson, 2009
Learning Commons Librarian
B.A., Carroll University
M.L.I.S., University of Wisconsin- Milwaukee
<table>
<thead>
<tr>
<th>Name</th>
<th>Title, Degree, University</th>
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<tbody>
<tr>
<td>Matthias Bollmus</td>
<td>Instructor in Business, B.A., Carroll College</td>
</tr>
<tr>
<td>Amanda Bonikowske</td>
<td>Assistant Professor of Exercise Science, B.S., University of Wisconsin - Eau Claire</td>
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<tr>
<td>Roberto Brenes</td>
<td>Visiting Assistant Professor of Biology, B.S., Universidad DE Costa Rica</td>
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<tr>
<td>Angela Brindowski</td>
<td>Clinical Assistant Professor of Nursing, B.S.N., University of Wisconsin - Milwaukee</td>
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<tr>
<td>JoAnn Browne</td>
<td>Lecturer in Nursing, B.S.N., University of Phoenix</td>
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<tr>
<td>Charles A. Byler</td>
<td>Dean of the College of Humanities and Social Sciences, Ph.D., Yale University</td>
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<tr>
<td>James Burk</td>
<td>Visiting Professor of Mathematics, B.A., Harding University</td>
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<tr>
<td>Richard H. Coon</td>
<td>Associate Professor of Sociology, B.A., University of Wisconsin-La Crosse</td>
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<td>Amy A. Cropper</td>
<td>Associate Professor of Art, B.A., Whitman College</td>
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<td>Elena M. De Costa</td>
<td>Professor of History B.A., Whitman College</td>
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<td>Dennis M. Debrecht</td>
<td>Associate Professor of Economics, B.A., Benedictine College</td>
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<td>Sara Deprey</td>
<td>Ph.D., Iowa State University</td>
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<td>Jennifer L. Dobby</td>
<td>Lecturer in Theatre Arts, B.A., University of Illinois at Urbana- Champaign</td>
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<td>Rose Ann Donovan</td>
<td>Assistant Professor of Education, B.S., University of Wisconsin-Madison</td>
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<td>Brian P. Edlebeck</td>
<td>Clinical Assistant Professor of Exercise Science</td>
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</tbody>
</table>
B.S., University of Wisconsin-Stevens Point  
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Pascale F. Engelmajer, 2012  
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M.P.A.S., Marquette University

Pamela Pinahs-Schultz, 1980  
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**RST**

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Allison M. Reeves Grabowski, 2002  
Director of the Library Learning Commons  
B.A., University of Alabama  
M.A.Ed., University of Alabama at Birmingham  
M.L.I.S., University of Wisconsin- Milwaukee
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Institution(s)</th>
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<tr>
<td>Lisa Green, 2006</td>
<td>Clinical Assistant Professor of Nursing</td>
<td>B.S.N., Viterbo University, M.S.N., Cardinal Stritch University</td>
</tr>
<tr>
<td>James P. Grimshaw, 2004</td>
<td>The P.E. and Becky MacAllister Chair in Religious and Biblical Studies Associate Professor of Religion</td>
<td>B.S., Rose-Hulman Institute of Technology, Ph.D., Loyola University of Chicago</td>
</tr>
<tr>
<td>Denise D. Guastello, 1989</td>
<td>Associate Professor of Psychology</td>
<td>B.A., Northwestern University, M.S., Illinois Institute of Technology</td>
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<td>James P. Grimshaw, 2004</td>
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<td>Kevin S. Guilfoy, 2004</td>
<td>Associate Professor of Philosophy and Religious Studies</td>
<td>B.A., University of Vermont, M.A., Ph.D., University of Washington</td>
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<tr>
<td>Donnie R. Hale, 2012</td>
<td>Director of Pre-College Programs</td>
<td>B.S., Willamette University, M.Ed., Ed.D., Boise State University</td>
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<td>Jamie L. Hansen, 2010</td>
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<tr>
<td>Susan Hanson, 2009</td>
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<tr>
<td>Larry D. Harper, 1986</td>
<td>Professor of Music</td>
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<tr>
<td>Kimberly K. Hofkamp, 2005</td>
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<td>Scott Hendrix, 2007</td>
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<td>Michael D. Schuder, 1994</td>
<td>Chair in Chemistry</td>
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<td>Matthew Scheel, 2007</td>
<td>Assistant Professor of Biology</td>
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<td>Seth Houston</td>
<td>Visiting Lecturer in Music</td>
<td>B.A. Oberlin College</td>
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<td>Chenglie Hu</td>
<td>Professor of Computer Science</td>
<td>B.S., M.S., East China Normal University</td>
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<td>Jennifer Huck</td>
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<td>Rebecca Imes</td>
<td>Associate Professor of Communication</td>
<td>B.A., Nebraska Wesleyan University</td>
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<td>Gerald L. Isaacs</td>
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<td>Darrel A. Johnson</td>
<td>Lecturer in Mathematics</td>
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<td>Catherine E. Jorgens</td>
<td>Risk Manager</td>
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<td>Lara P. Karpenko</td>
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<td>M.Ed., University of California-Los Angeles</td>
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<td>Margaret D. Kasimatis</td>
<td>Assistant Professor of Psychology</td>
<td>B.A., St. Mary's College, Notre Dame</td>
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<td>Deirdre M. Keenan</td>
<td>The Mary Robertson Williams Chair in English Professor of English</td>
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<td>Lori Duin Kelly</td>
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<td>Bret Kelso</td>
<td>Lecturer of Engineering</td>
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<td>Barbara L. King</td>
<td>Associate Professor of Communication</td>
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<td>Dave Davidson</td>
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<td>Marie S. Schermer</td>
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<td>Kathleen A. Shields</td>
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<td>Karla J. Strand</td>
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<td>Bruce L. Strom</td>
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<td>John C. Symms</td>
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<td>Eric Thobaben</td>
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<td>Gail M. Voja</td>
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<td>B.A., St. Olaf College</td>
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<td>Ph.D., University of Minnesota</td>
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<td>Julie VonDerVellen</td>
<td>Lecturer in Graphic Communication</td>
<td>B.S., Edgewood College</td>
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<td>Edie M. White</td>
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<td>Tate Wilson</td>
<td>Lecturer of Physics</td>
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<td>Mary Ann Wisniewski</td>
<td>Professor of Business</td>
<td>B.A., Alverno College</td>
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<tr>
<td>James Zager</td>
<td>The Cordelia Pierce Hedges Chair in</td>
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<td>Theatre Arts</td>
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<td>Associate Professor of Theatre Arts</td>
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</table>
Natalya Zinkevich, 2013  
Visiting Lecturer in Health and Medicine  
M.S. Saint-Petersburg State  
Ph.D., Vavilov Institute of General Genetics

Keith J. Zukas, 2013  
Assistant Professor of Communication  
B.A., M.A., Ph.D., University of Wisconsin-Madison
Faculty Award Recipients

Recipients of the Benjamin F. Richason Jr. Faculty Award


Recipients of the Norman and Louise Allhiser Award for Teaching Excellence

- Emily S. Long (1997)       - Sara Deprey (2009)
-                       - John Garrison (2013)

Endowed Chairs

- The Edna M and Edgar A. Thronson Chair in Chemistry - Kevin McMahon
- The Mary Robertson Williams Chair in English - Lori Dunn Kelly and Deirdre M. Keenan
- The P.E. and Becky MacAllister Chair in Religious and Biblical Studies - James P. Grimshaw
- The Cordelia Pierce Hedges Chair in Theatre Arts - James Zager
Emeriti

Mark C. Aamot, 1974  
Professor Emeritus of Music

R. Merle Masonholder, 1980  
Associate Professor Emeritus of Physical Education

Judith C. Anderson, 1997  
Associate Professor Emeritus of Physical Therapy

David M. Molthen, 1970  
Professor Emeritus of Theatre Arts

Harry A. Auchter, 1953  
Associate Professor Emeritus of Physics

Merlene A. Moody, 1983  
Associate Professor Emeritus of Business Administration

Royanna Benjamin, 1946  
Registrar Emeritus

Richard J. O'Farrell, 1973  
Professor Emeritus of Mathematics

Robert G. Black, 1994  
Professor Emeritus of Spanish

Ralph F. Parsons, 1974  
Professor Emeritus of Psychology

David A. Block, 1988  
Associate Professor Emeritus of Environmental Science

Virginia M. Parsons, 1976  
Professor Emeritus of Psychology

John C. Clausz, 1979  
Professor Emeritus of Biology

Marceil V. Pultorak, 1970  
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O. Lamar Cope, 1969  
Professor Emeritus of Religion and Philosophy

Paul L. Rempe, 1969  
Associate Professor Emeritus of History

Robert V. Cramer, 1971  
President Emeritus

Paul A. Roys, 1961  
Professor Emeritus of Physics

Joseph M. Dailey, 1972  
Associate Professor Emeritus of Communication

Thomas F. Selle, 1983  
Associate Professor Emeritus of Art

Jack R. Dukes, 1970  
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Peter L. Settle, 1974  
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Russel C. Evans, 1969  
Librarian Emeritus

Lawrence A. Sinclair, 1958  
Professor Emeritus of Religious Studies

Frank S. Falcone, 1993  
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Claude H. Slusher, 1958  
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Timothy J. Fiedler, 1976  
Associate Professor Emeritus of Sociology

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Associate Professor Emeritus of Sociology

Rebecca A. Steffes, 1975  
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Linda G. Thompson, 1981  
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James E. Van Ess, 1969  
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Linda Hartig, 1997  
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Earl N. Hudson III, 1970  
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Professor Emeritus of English

Uldis E. Inveiss, 1963  
Professor Emeritus of Economics and Business Administration

Richard J. Watkins, 1976  
Professor Emeritus of Chemistry

Professor Emeritus of English

Sidney C. Jones, 1961  
Librarian Emeritus

William D. Welch Jr., 1987  
Professor Emeritus of Physics
<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gay G. Knutson</td>
<td>1982</td>
<td>Professor Emeritus of Education</td>
</tr>
<tr>
<td>Emily S. Long</td>
<td>1991</td>
<td>Associate Professor Emeritus of Education</td>
</tr>
<tr>
<td>Bruce A. MacIntyre</td>
<td>1968</td>
<td>Professor Emeritus of Biology</td>
</tr>
<tr>
<td>Mark W. Williams</td>
<td>1978</td>
<td>Associate Professor Emeritus of Business Administration</td>
</tr>
<tr>
<td>Thomas R. Williams</td>
<td>1966</td>
<td>Professor Emeritus of Philosophy</td>
</tr>
<tr>
<td>Manfred G. Wuerslin</td>
<td>1958</td>
<td>Associate Professor Emeritus of English</td>
</tr>
</tbody>
</table>

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### FALL Semester 2013

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 30</td>
<td>Friday</td>
<td>8 a.m - 2 p.m.</td>
<td>Freshman Move in Day</td>
</tr>
<tr>
<td>September 1</td>
<td>Sunday</td>
<td>10 a.m. - 2 p.m.</td>
<td>All returning students “Move in Day”</td>
</tr>
<tr>
<td>September 2</td>
<td>Monday</td>
<td></td>
<td>Labor Day</td>
</tr>
<tr>
<td>September 3</td>
<td>Tuesday</td>
<td>10 a.m. &amp; 5 p.m.</td>
<td>Orientation for new part-time and full-time transfer students</td>
</tr>
<tr>
<td>September 4</td>
<td>Wednesday</td>
<td></td>
<td>Opening Day convocation.</td>
</tr>
<tr>
<td>September 4</td>
<td>Wednesday</td>
<td></td>
<td>Last day to decrease or cancel meal plans.</td>
</tr>
<tr>
<td>September 5</td>
<td>Thursday</td>
<td>7 a.m.</td>
<td>Classes begin (New registrations and schedule changes must be done with add/drop cards)</td>
</tr>
<tr>
<td>September 12</td>
<td>Thursday</td>
<td></td>
<td>Last day to add classes. Last day to admit new students. <strong>Last day to change from FT to PT status OR to change from PT to FT status.</strong> FT students must be registered for 12 credits. <strong>WE DO NOT COUNT WAITLISTED COURSES.</strong></td>
</tr>
<tr>
<td>September 18</td>
<td>Wednesday</td>
<td></td>
<td>First-half semester classes: last day to select S/U grading or change from S/U to letter grading</td>
</tr>
<tr>
<td>October 1</td>
<td>Tuesday</td>
<td></td>
<td>Last day to select S/U grading or to change from S/U to letter grading. First-half-semester classes: last day to drop or change to audit.</td>
</tr>
<tr>
<td>October 7</td>
<td>Monday</td>
<td></td>
<td>Last day for part-time students not receiving Title IV aid to drop a class and receive a partial refund.</td>
</tr>
<tr>
<td>October 12</td>
<td>Saturday</td>
<td></td>
<td>Homecoming</td>
</tr>
<tr>
<td>October 15</td>
<td>Tuesday</td>
<td>9 a.m.</td>
<td>Mid-term grades due</td>
</tr>
<tr>
<td>October 18</td>
<td>Friday</td>
<td>5 p.m.</td>
<td>Mid-semester break begins. Campus housing remains open for mid-semester break.</td>
</tr>
<tr>
<td>October 23</td>
<td>Wednesday</td>
<td>7 a.m.</td>
<td>Classes resume</td>
</tr>
<tr>
<td>October 28</td>
<td>Monday</td>
<td></td>
<td><strong>Fall 2013: Last day to drop classes or to change to audit</strong></td>
</tr>
<tr>
<td>October 31</td>
<td>Thursday</td>
<td>9 a.m.</td>
<td>Registration begins for 2014 winter session</td>
</tr>
<tr>
<td>November 1</td>
<td>Friday</td>
<td>9 a.m.</td>
<td>Registration packets available <strong>ONLINE</strong> for all current students for spring 2014</td>
</tr>
<tr>
<td>November 1</td>
<td>Friday</td>
<td></td>
<td>Advising begins for full-time students for spring semester 2014. Deadline for submitting work to instructors for incompletes received the previous spring and summer.</td>
</tr>
<tr>
<td>November 5</td>
<td>Tuesday</td>
<td></td>
<td>Second-half-semester classes: last day to select S/U grading or change from S/U to letter grading</td>
</tr>
<tr>
<td>November 6</td>
<td>Wednesday</td>
<td></td>
<td>Incomplete grades lapse in “F” if no grade submitted from spring and summer</td>
</tr>
<tr>
<td>November 12</td>
<td>Tuesday</td>
<td></td>
<td>Registration begins for currently enrolled students for SP14</td>
</tr>
<tr>
<td>November 18</td>
<td>Monday</td>
<td></td>
<td>Second-half semester classes: last day to drop or change to audit</td>
</tr>
<tr>
<td>November 20</td>
<td>Wednesday</td>
<td></td>
<td>Registration begins for all new students for SP14</td>
</tr>
<tr>
<td>November 27</td>
<td>Wednesday</td>
<td>4 p.m.</td>
<td>Thanksgiving recess begins.</td>
</tr>
<tr>
<td>November 27</td>
<td>Wednesday</td>
<td>4 p.m.</td>
<td>Campus housing closes at 4 p.m.</td>
</tr>
<tr>
<td>December 1</td>
<td>Sunday</td>
<td>Noon</td>
<td>Campus housing opens to students</td>
</tr>
<tr>
<td>December 2</td>
<td>Monday</td>
<td>7 a.m.</td>
<td>Classes resume</td>
</tr>
<tr>
<td>December 11</td>
<td>Wednesday</td>
<td></td>
<td>Last day of classes</td>
</tr>
<tr>
<td>December 12</td>
<td>Thursday</td>
<td></td>
<td>Reading Day: No classes; final exams for Thursday evening classes</td>
</tr>
<tr>
<td>December 13-18</td>
<td>Fri. - Wed.</td>
<td></td>
<td>Final examinations</td>
</tr>
<tr>
<td>December 19</td>
<td>Thursday</td>
<td>Noon</td>
<td>Campus housing closes</td>
</tr>
<tr>
<td>December 20</td>
<td>Friday</td>
<td>9 a.m.</td>
<td>Final grades due</td>
</tr>
<tr>
<td>December 23</td>
<td>Monday</td>
<td></td>
<td>Last day to register for 1st session of online courses offered through the OCICU for SP14</td>
</tr>
</tbody>
</table>

### WINTER Session 2014

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1</td>
<td>Wednesday</td>
<td>Noon</td>
<td>Campus housing opens for winter session students and approved groups</td>
</tr>
<tr>
<td>January 2</td>
<td>Thursday</td>
<td>8 a.m.</td>
<td>Classes begin (New registrations and schedule changes must be done with add/drop cards)</td>
</tr>
<tr>
<td>Date</td>
<td>Day</td>
<td>Event Description</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>January 3</td>
<td>Friday</td>
<td>Last day to add</td>
<td></td>
</tr>
<tr>
<td>January 6</td>
<td>Monday</td>
<td>Last day to drop</td>
<td></td>
</tr>
<tr>
<td>January 20</td>
<td>Monday</td>
<td>Classes end</td>
<td></td>
</tr>
</tbody>
</table>

**SPRING Semester 2014**

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 7</td>
<td>Tuesday</td>
<td>First-half MBA classes begin.</td>
</tr>
<tr>
<td>January 12</td>
<td>Sunday</td>
<td>First session online courses: last day to drop</td>
</tr>
<tr>
<td>January 14</td>
<td>Tuesday</td>
<td>First-half MBA classes: last day to add</td>
</tr>
<tr>
<td>January 19</td>
<td>Sunday</td>
<td>Noon Campus Housing opens</td>
</tr>
<tr>
<td>January 20</td>
<td>Monday</td>
<td>10 a.m. &amp; 5 p.m. Orientation for new transfer students.</td>
</tr>
<tr>
<td>January 20</td>
<td>Monday</td>
<td>Last day to decrease or cancel meal plans.</td>
</tr>
<tr>
<td>January 21</td>
<td>Tuesday</td>
<td>7 a.m. Classes begin. (New registrations and schedule changes must be done with add/drop cards).</td>
</tr>
<tr>
<td>January 28</td>
<td>Tuesday</td>
<td>Last day to add classes. Last day to admit new students. Last day to change from FT to PT status OR to change from PT to FT status. FT students must be registered for 12 credits. WE DO NOT COUNT WAITLISTED COURSES.</td>
</tr>
<tr>
<td>February 4</td>
<td>Tuesday</td>
<td>First-half MBA courses: last day to drop or change to audit</td>
</tr>
<tr>
<td>February 5</td>
<td>Wednesday</td>
<td>11 a.m. Founder's Day Convocation</td>
</tr>
<tr>
<td>February 5</td>
<td>Wednesday</td>
<td>First-half semester classes: last day to select S/U grading or change from S/U to letter grading</td>
</tr>
<tr>
<td>February 11</td>
<td>Tuesday</td>
<td>Last day to turn in grade appeals to Academic Affairs for FA13 and WN14 semesters.</td>
</tr>
<tr>
<td>February 17</td>
<td>Monday</td>
<td>Second session online courses: last day to register</td>
</tr>
<tr>
<td>February 18</td>
<td>Tuesday</td>
<td>Last day to select S/U grading or to change from S/U to letter grading. First-half-semester classes: last day to drop or change to audit.</td>
</tr>
<tr>
<td>February 20</td>
<td>Thursday</td>
<td>9 a.m. Registration packets available ONLINE to all current students for FA14</td>
</tr>
<tr>
<td>February 20</td>
<td>Thursday</td>
<td>Advising begins for full-time students for FA14</td>
</tr>
<tr>
<td>February 24</td>
<td>Monday</td>
<td>Last day for part-time students not receiving Title IV aid to drop a class and receive a partial refund.</td>
</tr>
<tr>
<td>February 27</td>
<td>Thursday</td>
<td>First-half semester MBA courses end</td>
</tr>
<tr>
<td>March 2</td>
<td>Sunday</td>
<td>First session OCICU online courses end</td>
</tr>
<tr>
<td>March 3</td>
<td>Monday</td>
<td>Second session OCICU online courses begin</td>
</tr>
<tr>
<td>March 4</td>
<td>Tuesday</td>
<td>9 a.m. Registration begins for SU14</td>
</tr>
<tr>
<td>March 4</td>
<td>Tuesday</td>
<td>6 p.m. Second-half semester MBA courses begin</td>
</tr>
<tr>
<td>March 9</td>
<td>Sunday</td>
<td>Second session OCICU online courses: last day to drop</td>
</tr>
<tr>
<td>March 11</td>
<td>Tuesday</td>
<td>Second-half semester MBA courses: last day to add</td>
</tr>
<tr>
<td>March 11</td>
<td>Tuesday</td>
<td>Registration begins for current students for FA14 semester</td>
</tr>
<tr>
<td>March 11</td>
<td>Tuesday</td>
<td>9 a.m. Mid-term grades due</td>
</tr>
<tr>
<td>March 15</td>
<td>Saturday</td>
<td>4 p.m. Spring break begins.</td>
</tr>
<tr>
<td>March 15</td>
<td>Saturday</td>
<td>4 p.m. Campus housing closes</td>
</tr>
<tr>
<td>March 23</td>
<td>Sunday</td>
<td>Noon Campus housing opens</td>
</tr>
<tr>
<td>March 24</td>
<td>Monday</td>
<td>7 a.m. Classes resume</td>
</tr>
<tr>
<td>March 24</td>
<td>Monday</td>
<td>Registration begins for new students for FA14 semester</td>
</tr>
<tr>
<td>April 1</td>
<td>Tuesday</td>
<td>Second-half semester MBA courses: last day to drop or change to audit</td>
</tr>
<tr>
<td>April 2</td>
<td>Wednesday</td>
<td>SP14: Last day to drop or change to audit</td>
</tr>
<tr>
<td>April 2</td>
<td>Wednesday</td>
<td>Deadline for submitting work to instructors for incompletes received the previous fall and winter Second half-semester classes: last day to select S/U grading or change from S/U to letter grading.</td>
</tr>
<tr>
<td>April 9</td>
<td>Wednesday</td>
<td>Incomplete grades lapse in &quot;F&quot; if no grade submitted from fall and winter</td>
</tr>
<tr>
<td>April 15</td>
<td>Tuesday</td>
<td>Second-half-semester classes: last day to drop or change to audit</td>
</tr>
<tr>
<td>April 18</td>
<td>Friday</td>
<td>Good Friday - No Classes</td>
</tr>
<tr>
<td>April 23</td>
<td>Wednesday</td>
<td>Celebrate Carroll</td>
</tr>
<tr>
<td>April 30</td>
<td>Wednesday</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>May 1</td>
<td>Thursday</td>
<td>Reading Day: No daytime classes; final exams for Thursday evening and Tuesday/Thursday evening classes</td>
</tr>
<tr>
<td>May 1</td>
<td>Thursday</td>
<td>6 p.m. Pioneer Honors and Awards Ceremony</td>
</tr>
<tr>
<td>May 2-7</td>
<td>Fri. - Wed.</td>
<td>Final examinations</td>
</tr>
<tr>
<td>May 8</td>
<td>Thursday</td>
<td>1 p.m. Final grades due (for graduating seniors)</td>
</tr>
<tr>
<td>May 8</td>
<td>Thursday</td>
<td>Noon Campus Housing closes for students not participating in Commencement</td>
</tr>
<tr>
<td>May 11</td>
<td>Sunday</td>
<td>Baccalaureate and Commencement (UNDG and GRAD)</td>
</tr>
<tr>
<td>May 12</td>
<td>Monday</td>
<td>Noon Campus housing closes for students not participating in S114 classes.</td>
</tr>
</tbody>
</table>
### SUMMER Sessions 2014

#### Session I (May 8 - 30)

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 6</td>
<td>Tuesday</td>
<td>MBA Courses begin (Session One)</td>
</tr>
<tr>
<td>May 8</td>
<td>Thursday</td>
<td>S114 classes begin <em>(New registrations and schedule changes must be done with add/drop cards)</em>.</td>
</tr>
<tr>
<td>May 12</td>
<td>Monday</td>
<td>Last day to add (Non-MBA courses).</td>
</tr>
<tr>
<td>May 13</td>
<td>Tuesday</td>
<td>MBA courses Session One: last day to add.</td>
</tr>
<tr>
<td>May 14</td>
<td>Wednesday</td>
<td>Last day to select S/U grading or change from S/U to letter grading.</td>
</tr>
<tr>
<td>May 15</td>
<td>Thursday</td>
<td>Last day to drop or change to audit.</td>
</tr>
<tr>
<td>May 19</td>
<td>Monday</td>
<td>Physical Therapy summer courses begin.</td>
</tr>
<tr>
<td>May 26</td>
<td>Monday</td>
<td>Memorial Day - no classes.</td>
</tr>
<tr>
<td>May 30</td>
<td>Friday</td>
<td>S114 classes end (Need to watch individual course dates).</td>
</tr>
<tr>
<td>June 3</td>
<td>Tuesday</td>
<td>MBA courses S1: last day to drop or change to audit.</td>
</tr>
</tbody>
</table>

#### Session II (June 2 - July 14)

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2</td>
<td>Monday</td>
<td>S214 classes begin <em>(New registrations and schedule changes must be done with add/drop cards)</em>.</td>
</tr>
<tr>
<td>June 9</td>
<td>Monday</td>
<td>Last day to add (Non-MBA courses)</td>
</tr>
<tr>
<td>June 16</td>
<td>Friday</td>
<td>Last day to select S/U grading or change from S/U to letter grading.</td>
</tr>
<tr>
<td>June 23</td>
<td>Friday</td>
<td>Last day to drop or change to audit.</td>
</tr>
<tr>
<td>June 26</td>
<td>Thursday</td>
<td>MBA courses end: Session One</td>
</tr>
<tr>
<td>July 1</td>
<td>Tuesday</td>
<td>MBA courses begin: (Session Two)</td>
</tr>
<tr>
<td>July 4</td>
<td>Friday</td>
<td>4th of July Holiday - no classes.</td>
</tr>
<tr>
<td>July 8</td>
<td>Tuesday</td>
<td>MBA courses Session Two: last day to add.</td>
</tr>
<tr>
<td>July 14</td>
<td>Monday</td>
<td>S214 classes end (Need to watch individual course dates).</td>
</tr>
<tr>
<td>July 29</td>
<td>Tuesday</td>
<td>MBA courses Session Two: last day to drop or change to audit.</td>
</tr>
</tbody>
</table>

#### Session III (July 15 - August 27)

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 15</td>
<td>Tuesday</td>
<td>S314 classes begin <em>(New registrations and schedule changes must be done with add/drop cards)</em>.</td>
</tr>
<tr>
<td>July 22</td>
<td>Tuesday</td>
<td>Last day to add (non-MBA courses)</td>
</tr>
<tr>
<td>July 29</td>
<td>Tuesday</td>
<td>Last day to select S/U grading or change from S/U to letter grading.</td>
</tr>
<tr>
<td>August 5</td>
<td>Monday</td>
<td>Last day to drop or change to audit.</td>
</tr>
<tr>
<td>August 22</td>
<td>Friday</td>
<td>S314 classes end (Need to watch individual course dates)</td>
</tr>
<tr>
<td>August 27</td>
<td>Wednesday</td>
<td>MBA courses end: Session Two</td>
</tr>
</tbody>
</table>

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Accounting

- **ACC100: Personal Finance (2 hours)**
  The objective of the course is to provide the student with the necessary information and decision-making tools needed to manage his/her personal financial plan. For elective credit only. Open to all majors. (Fa)

- **ACC105: Introduction to Acct Basics (2 hours)**
  The course defines accounting information, explains why it is important and describes how it is used by decision-makers. It does not cover the details of bookkeeping. (Sp)

- **ACC205: Financial Accounting (4 hours)**
  A study of the accounting cycle and extensive coverage of various financial topics such as cash, receivables, inventory, liabilities, equity, plant/equipment, and financial statements. (Fa, Sp, Su)

- **ACC206: Managerial Accounting (4 hours)**
  Study of the accounting data that aids in management decision making. Topics covered include budgeting, break-even, costing methods, ratio analysis, cash flow, pricing, and inventory control. (Fa, Sp, Su)
  Prerequisite: ACC 205

- **ACC207: Intermediate Accounting I (4 hours)**
  Study of the development of accounting standards underlying financial statements. An in-depth review of the income statement and balance sheet. Recognition, measurement and reporting of cash, receivables, inventory, plant assets, intangibles, liabilities, revenue recognition and present value analysis. (Fa, Su)
  Prerequisite: ACC 205.

- **ACC208: Intermediate Accounting II (4 hours)**
  Recognition, measurement and reporting of stockholders' equity, earnings per share, cash flow, income tax allocation, pensions, leases, accounting changes, accounting errors and disclosure reporting. (Sp, Su)
  Prerequisite: ACC 207.

- **ACC305: Advanced Accounting I (4 hours)**
  A study of the principles, concepts, and procedures applied to mergers and consolidations, foreign exchange, governmental, non-profit organizations, estates and trusts, insolvency and partnerships. (305 Fa, 306 Sp) Prerequisite: ACC 208.

- **ACC306: Advanced Accounting II (4 hours)**
  A study of the principles, concepts, and procedures applied to mergers and consolidations, foreign exchange, governmental, non-profit organizations, estates and trusts, insolvency and partnerships. (305 Fa, 306 Sp) Prerequisite: ACC 208.

- **ACC310: Advanced Cost Accounting and Budgeting (4 hours)**
  Study of various costing methods and management tools to aid in the decision-making process. Topics covered are job costing, process costing, activity-based costing, standard costing, inventory planning/control, budgeting/responsibility accounting, variable/absorption costing, cost-volume-profit analysis, cost allocation, transfer pricing, capital budgeting and product/service pricing. (Fa) Prerequisite: ACC 205.

- **ACC324: Advanced Business Law (4 hours)**
  An advanced study of the current legal environment of businesses for accounting students taking the CPA exam or students interested in a career in law. (Sp) Prerequisite: BUS 290 or equivalent.

- **ACC375: Pre-internship Seminar-Capstone Course (2 hours)**
  This course introduces students to the skills and knowledge needed to successfully compete for internship opportunities. Students develop personal action plans, resumes, interview techniques, networking, critical thinking and self-assessment skills - all crucial preparation for the job market. Junior or senior standing. (Grading is on an S/U basis.) (Fa)

- **ACC405: Tax Accounting I (4 hours)**
  Federal and Wisconsin income tax laws and their application to individuals. (Fa) Prerequisite: ACC 205.

- **ACC406: Tax Accounting II (4 hours)**
  Federal income tax laws and their applications to partnerships, corporations, estates, trusts, and gift and inheritance taxes. (Sp) Prerequisite: ACC 405 or consent of instructor.

- **ACC407: Auditing - Capstone Course (4 hours)**
  The study of general audit procedures, preparation of working papers, various types of reports, professional ethics and legal responsibility. Student will be expected to successfully conduct and complete a comprehensive simulated financial audit project. (Fa) Prerequisites: Senior standing and ACC 305, 306 or consent of instructor.

- **ACC414: Accounting Theory - Capstone Crs (4 hours)**
  Comprehensive analysis of the theoretical structure underlying financial and managerial accounting topics. Students must integrate prior knowledge and demonstrate mastery of complex FASB/IFRS issues and updates. Case methodology, oral presentations and written summaries are used in the course. (Sp) Prerequisites: Senior standing and ACC 305, 306 or consent of the instructor.

- **ACC480: Internship in Accounting - Capstone Course (1 TO 12 hours)**
An opportunity for students to apply theories and concepts to actual work experience under the supervision of an external supervisor and the instructor. The purpose of the internship is to provide opportunities for students to improve managerial and leadership skills while adapting to the world of work. Consent of the instructor. Junior or senior standing. (Grading is on an S/U basis.) The course may be repeated for a maximum of 12 credits if the student has substantially different work experiences. 40 hours of work are needed for each credit.

- **ACC481: Internship Option - Course Substitution (1 TO 4 hours)**
  An additional 400 level course may be substituted for the internship when placement is not available. Senior standing and consent of the instructor. (Grading is on an S/U basis.)

- **ACC483: Internship-Prior Work Experience (1 TO 4 hours)**
  Prior entry-level accounting experience may be substituted for the internship. Senior standing and consent of the instructor. (Grading is on an S/U basis.) Meets ACC 375 and ACC 480 requirements.

- **ACC498: Independent Study in Accounting (1 TO 4 hours)**
  A course designed to widen the student's knowledge of accounting theory, develop the ability to study independently, and demonstrate aptitude in planning and production of original work. (Fa, Sp, Su) Prerequisite: Approval of the college dean and consent of instructor.
Actuarial Science

- **ASC301: Financial Mathematics (4 hours)**
  Workshop-style course that develops fundamental concepts of financial mathematics and how those concepts are applied in calculating present and accumulated values for various streams of cash flows as a basis for future use in reserving, valuation, pricing, asset/liability management, investment income, capital budgeting and valuing contingent cash flows. Additionally, the course provides an introduction to financial instruments, including derivatives, and the concept of no-arbitrage as it relates to financial mathematics. (Sp) Prerequisite: MAT 160.

- **ASC302: Probability (4 hours)**
  This course develops fundamental probability tools for quantitatively assessing risk. Topics include general probability, univariate probability distributions (including binomial, negative binomial, geometric, hypergeometric, Poisson, uniform, exponential, gamma, and normal), and multivariate probability distributions (including the bivariate normal). Application of these tools to problems encountered in actuarial science is emphasized. (Fa) Coreq: MAT 207. May not be taken for credit by those who have taken MAT 312.

- **ASC313: Time Series and Forecasting (2 hours)**
  Workshop-style course that develops fundamental concepts and skills in time series/forecasting. Topics include linear time series models; moving average; ARIMA models; estimation, data analysis and forecasting with time series models; Forecast errors and confidence intervals. This course meets VEE requirements for Time Series/Forecasting. Offered when there is sufficient student demand (at least seven students take the course) and when sufficient time is provided to secure staffing. Prerequisites: MAT 208, ECO 212, and ECO 225.

- **ASC380: Internship in Actuarial Science (4 TO 16 hours)**
  Professional work experience in the actuarial sciences under the supervision of faculty and professional actuaries. Course requirements will depend on the type of internship. S/U graded. (Fa, Wn, Sp, Su) Prerequisites: Junior or senior standing and approval of instructor are required prior to registration.

- **ASC401: Financial Economics (4 hours)**
  Workshop-style course that develops the theoretical basis of certain financial-economic models and the application of those models to insurance and other financial risks. Topics include interest rate models, rational valuation of derivatives securities, simulation, and risk management techniques. (Fa, odd years) Prerequisite: ASC 301 and ASC 302.

- **ASC402: Life Contingencies (4 hours)**
  Workshop-style course that develops the theoretical basis of life contingencies and the application of those models to insurance and other financial risks. Topics include survival models, Markov Chain models, life insurances and annuities, and Poisson processes. (Fa, even years) Prerequisite: ASC 301 and ASC 302.

- **ASC451: Financial Economics II (4 hours)**
  A continuation of ASC401, course develops the theoretical basis of financial-economic models and the application of those models to insurance and other financial risks. Topics include interest rate models, rational valuation of derivatives securities, simulation, and risk management techniques. (Sp, even years) Prerequisite: ASC 401.

- **ASC452: Life Contingencies II (4 hours)**
  A continuation of ASC402, course develops theoretical basis of life contingencies and the application of those models to insurance and other financial risks. Topics include survival models, Markov Chain models, life insurances and annuities, and Poisson processes. (Sp, odd years) Prerequisite: ASC 402.

- **ASC480: Internship in Actuarial Science (4 TO 16 hours)**
  Professional work experience in the actuarial sciences under the supervision of faculty and professional actuaries. Course requirements will depend on the type of internship. S/U graded. (Fa, Wn, Sp, Su) Prerequisites: Junior or senior standing and approval of instructor are required prior to registration.
Animal Behavior

- **ANB301: Theory and Practice of Animal Training (3 hours)**
  This course is structured to provide an experiential venue for learning to use the methods and techniques described by theories of animal training. Students will actively assume the role of trainer as they work with animals and within the environment of a large animal shelter, applying respondent (Pavlovian) and operant conditioning (instrumental learning) theory in activities germane to a career in animal behavior and training. The focus is on companion animal training and behavior analysis; however, methods and techniques used can be generalized to non-companion species. The course is taught at the Humane Animal Welfare Society in Waukesha.

- **ANB302: Winter Ecology of Wolf and Lynx (3 hours)**
  This course covers a broad range of topics related to wildlife. The focus will be the gray wolf, lynx and the white-tailed deer, and other MN predators, but all animals directly or indirectly associated with or affected by these predators or prey may be included. The course is field-oriented and includes opportunities for backcountry travel, wildlife observation and tracking, as well as an introduction to habitats, how wildlife respond to natural and artificial disturbance, and human factors. Additional topics include wildlife research techniques, data acquisition and analysis, as well as management practices. The course is taught at the Audubon Center of the North Woods in Sandstone, MN. Additional tuition is required and students provide their own transportation to the Audubon Center. (WN)

- **ANB380: Internship in Animal Behavior (2-4 hours)**
  The goal of this internship is to give you an opportunity to experience and better understand career opportunities in Animal Behavior, while also allowing you to pursue a particular area of interest in greater depth than can not typically be accomplished in more traditional course settings. (Fa, Sp, Su).
  Prerequisites: Junior standing and consent of instructor.
**Art**

- **ART103: Prehistoric to Renaissance - Art History Survey (4 hours)**
  General Education F1. A survey of painting, sculpture, architecture and other visual arts from approximately 15,000 BC through early Renaissance. Explores historical, philosophical and cultural influences on artistic practices in the development of civilizations. (Fa)

- **ART104: Renaissance to Early Modernism - Art History Survey (4 hours)**
  General Education F1. A survey of painting, sculpture, architecture and other visual arts from the 14th century through Impressionism (approximately 1880). Explores historical, philosophical and cultural influences on artistic practices in the development of western civilization. (Sp)

- **ART106: Drawing and Composition (4 hours)**
  General Education F1. An introduction to drawing with emphasis on developing observational skills using a limited variety of materials. (Required course fee) (Fa, Sp, Su)

- **ART107: Beginning Design 2D and 3D (4 hours)**
  A multi-imagery approach to solving design problems as related to fine and commercial art. (Required course fee) (Fa, Sp)

- **ART201: Painting I (4 hours)**
  General Education F2. An introduction to the study of oil painting with an emphasis on technique, color, composition using a variety of supports including stretched canvas, wood, and paper. Subject matter will focus on issues of space, place and the still life. (Required course fee) (Fa, Sp) Prerequisite: ART 106 or consent of instructor.

- **ART206: Intermediate and Life Drawing (4 hours)**
  This course continues development of composition ideas in drawing with an emphasis on drawing as a visual expression requiring thought, visual clarity and imagination. A minimum of one third of the course will be drawing from the nude model. (Required course fee) (Fa, Sp) Prerequisite: ART 106

- **ART209: Photography I (4 hours)**
  General Education F1. The student learns basic skills in photography plus darkroom procedures and directs this knowledge toward creative expression with strong emphasis on design and composition. Adjustable 35mm film camera required. (Required course fee) (Fa, Sp)

- **ART211: Gallery/Museum Experience (1 TO 2 hours)**
  Preparing gallery space, scheduling exhibitions and arranging and hanging shows. Working with the Carroll University permanent collection of Wisconsin artists gaining restoration experience in matting, framing and repairing. Enrollment recommended during semester of senior exhibition. May be repeated up to 4 credits. (Fa, Sp) Prerequisite: Art major/minor or consent of instructor.

- **ART212: Introduction to Book Art (4 hours)**
  This course will introduce students to the traditions and methods of the handmade book, as well as the expressive possibilities available with book art.

- **ART215: History of Photography (4 hours)**
  Students will study the origins and traditions of photography in both artistic and technological terms. The course will trace the evolution of photography from its beginnings in 1839 to the present. Through reading, writing, research, and oral assignments, students will learn the major figures in photography and examine important critical, cultural and social issues. Primary emphasis will be placed on cultural and aesthetic concerns of key figures in the history of photography. (Fa)

- **ART220: Sculpture I (4 hours)**
  An introduction to a variety of materials, shop equipment, and contemporary sculptors in order to expose students to the broad possibilities of sculptural expression. (Required course fee) (Sp) Prerequisite: ART 107.

- **ART223: Creative Arts for Children (2 hours)**
  Focus is on children's creative expression and integration of art with curricular needs in K-6 education. This course does not count toward an art major. (Required course fee) (Fa, Sp, Su, Wn) Prerequisite: EDU 203.

- **ART225: Ceramics I (4 hours)**
  General Education F1. A serious exploration of clay as an artistic medium. This class introduces the beginner to a variety of techniques with an emphasis on hand-building. (Required course fee) (Fa, Sp, Su)

- **ART230: Printmaking I (4 hours)**
  General Education F2. A study of drawing and composition applied to the making of multiples. The course introduces the media of relief serigraphy, and etching with some opportunity for the student to specialize. (Required course fee) (Fa) Prerequisites: ART 106 and ART 107 or consent of instructor.

- **ART235: Art Metals (4 hours)**
  This course covers some fundamentals of jewelry and metalsmithing including basic hand-tool knowledge fabrication techniques, soldering, stone setting and an introduction to the history of jewelry and contemporary metalwork. (Required course fee) (Fa, even years)

- **ART250: Electronic Imaging (4 hours)**
A study of the computer as a tool for the making and manipulation of images. This course will introduce students to Photoshop and Illustrator. Although this course includes graphic designing techniques on the computer, it emphasizes photography in an electronic context. (Fa, Sp)

- **ART258: Visual Communication (4 hours)**
  This course is designed to help students understand aesthetic issues in art and design. Students will become familiar with the field of visual communication. Students will develop skills communicating with text and image through a series of studio assignments requiring problem-solving, conceptualizing, and critical thinking. Course topics will focus on the history, culture, social and technological aspects of communicating visually along with the role of the maker in raising awareness and stimulating thought. Also offered as COM 258. (Fa) Prerequisite: GRC 106.

- **ART291: Special Topics in Art (2 TO 4 hours)**
  Study of a special topic in art that is not covered in regular course offerings. This could be a studio or art history based course. The topic will be announced before registration.

- **ART298: Independent Study (1 TO 4 hours)**
  Independent study of selected areas already covered by a studio course. (Required course fee) (Fa, Sp) Prerequisite: Approval of divisional dean and consent of instructor.

- **ART300: Early Modernism to Present-Art History Survey (4 hours)**
  A survey of painting, sculpture, architecture and other visual arts from Postimpressionism (approximately 1880's) to present. Explores historical, philosophical and cultural influences on artistic practices in the development of western civilization. (Sp) Prerequisite: Junior standing, ART 104 recommended.

- **ART301: Painting II (4 hours)**
  Intermediate level study of oil painting with an emphasis on self-expression and continued skill development. Subject matter will focus on abstract issues as well as introduction to narrative ideas. (Required course fee) (Sp) Prerequisites: ART 201 or consent of instructor.

- **ART306: Advanced and Life Drawing (4 hours)**
  A continuation of ART 202 with more thematic development. A minimum of one third of the course will be drawing from the nude model. Taught simultaneously with ART 206. (Required course fee) (Sp) Prerequisite: ART 206.

- **ART309: Photography II - Fine Art (4 hours)**
  General Education F2. Advanced photographic techniques in both black and white and color with further development of creative expression. Adjustable camera required. (Required course fee) (Sp) Prerequisite: ART 209.

- **ART310: Photography II - Commercial (4 hours)**
  Advanced photographic techniques in both black and white, color and digital with emphasis in commercial photography. Adjustable camera required. (Required course fee) (FA) Prerequisite: ART 209.

- **ART312: Video Art (4 hours)**
  This course provides an introduction to the basic practices of time-based media, including animation, with emphasis on narrative, planning of action, and sequencing of images. Now offered as GRC 330. (Fa)

- **ART313: Travel Journals-Italy (4 hours)**
  Students will read and discuss travel writing from the region of study as well as practice the writing and drawing skills necessary to record experiences and observations. As part of the course students will travel over Spring Break, or during May term, to the country of focus. Also offered as NCEP 313. (Sp, odd years) Prerequisite: Consent of instructor.

- **ART320: Sculpture II (4 hours)**
  This course is taught simultaneously with ART 220. Individually created problems in sculpture that focus on continued development of skills and on thematic development. (Required course fee) (Sp) Prerequisite: ART 220.

- **ART325: Ceramics II (4 hours)**
  Individually created problems in ceramics as well as advanced study in glazing and firing. (Required course fee) (Fa, odd years) Prerequisite: ART 225.

- **ART330: Printmaking II (4 hours)**
  This course is taught simultaneously with ART 230. Advanced study in graphics with opportunity for self-direction in a concentration on one or two media. (Required course fee) (Fa) Prerequisite: ART 230.

- **ART340: Advanced Media Studies (4 hours)**
  This course is designed so that students who have had the beginning and intermediate courses in a specific medium can continue their study in this area with specific focus. Students are expected to develop a body of work in a series. (Required course fee) (Sp) Prerequisites: The beginning and intermediate course in the same medium, or consent of the instructor. (Junior standing recommended)

- **ART353: Methods of Teaching Secondary Art (2 hours)**
  This course is not included in an art major or minor but is part of the professional education program. (Fa) Prerequisite: Admission to the Teacher Education Program.

- **ART391: Special Topics in Art (4 hours)**
Study of a special topic in art that is not covered in regular course offerings. This could be a studio or art history based course. The topic will be announced before registration.

- **ART398: Independent Study in Art (1 TO 4 hours)**
  Independent study of selected areas already covered by a studio course. (Required course fee) (Fa, Sp)
  Prerequisite: Approval of divisional dean and consent of instructor.

- **ART401: Painting III (4 hours)**
  This course continues development in painting technique from Painting II, focusing on experiments in composition, exploring painting as process, and contemporary painting issues. In this course you will be required to do research and create a series of paintings. (Required course fee) (Sp) Prerequisite: ART 301.

- **ART480: Internship in Art (1 TO 4 hours)**
  Supervised professional work experience. Written report required. Limited to two semesters (8 credits) which will apply toward degree. (Fa, Sp, Su) Prerequisite: Consent of instructor.

- **ART490: Capstone in Art (4 hours)**
  Preparation for senior exhibitions through regular critiques and research into contemporary art issues. Professional development in writing and speaking about art as well as portfolio preparation. (Fa)
  Prerequisite: Senior standing.
Athletic Training

- **ATH101: Athletic Training Seminar I (2 hours)**
  This course will provide an overview of basic athletic training theory and techniques that is useful for those involved with athletics and physical activity. The student will gain an understanding of basic anatomy and common injuries associated with physical activity. Other topic areas that will be addressed include: prevention and management of injury, emergency medical plans, blood borne pathogen precautions, nutritional issues, and legal matters and risk management. Overall, this course will introduce the student to the sports medicine team, their roles and responsibilities, and how they themselves are a contributing member of the sports medicine team. (Required course fee) (Sp)

- **ATH101L: Athletic Training Seminar I Lab**
  Laboratory component for ATH101.

- **ATH102: Athletic Training Seminar II (2 hours)**
  This course will provide students with basic skills and knowledge used in the athletic training profession. It will include discussions regarding the role of preventative techniques, emergency management plan, injury treatment methods, components of a pre-participation exam, and wound management techniques. Competencies for injury prevention will be taught including developing an emergency plan, vision screenings, wound management, advanced taping techniques, wrapping techniques, and taking vital signs. (Required course fee) (Fa)

- **ATH102L: Athletic Training Seminar II Laboratory**
  Laboratory component for ATH102.

- **ATH301: Assessment and Evaluation I (4 hours)**
  This course will provide students with the knowledge and skills for clinical and on-the-field musculoskeletal assessment and evaluation of the upper and lower extremities for physically active people. General topics for the course will include patient care, interviewing and history taking, determining subjective and objective findings, and applying assessment and evaluation skills for the upper and lower extremities. Specific injuries and conditions specific to each extremity will be discussed as well as emergency, management, referral and return to participation measures for the physically active. (Fa) Prerequisites: Professional phase of Athletic Training Program standing or consent of instructor.

- **ATH301L: Assessment and Evaluation I Laboratory**
  Laboratory component for ATH301.

- **ATH302: Assessment and Evaluation II (4 hours)**
  This course provides students with the knowledge and skills for assessment and evaluation of the trunk and thorax, general medical conditions for systemic illnesses including viruses and skin conditions. Topics for the course include patient care, patient interviewing skills, history taking, subjective and objective findings, and assessment and evaluation skills using problem solving/scientific methods. (Sp) Prerequisites: Professional phase of Athletic Training Program standing or consent of instructor.

- **ATH302L: Assessment and Evaluation II Laboratory**
  Laboratory component for ATH302.

- **ATH304: Therapeutic Modalities (4 hours)**
  This course applies assessment and evaluation skills to develop treatment plans and protocols for physically active people. Students will relate the findings of their assessment to determine treatment plans and goals. Students will gain knowledge and skills regarding the rationale for therapeutic modalities and their physiologic effects. Students will gain experience in the application of therapeutic modalities including cryotherapy, thermotherapy, diathermy, electrotherapy, ultrasound, traction, intermittent compression, EMG biofeedback, laser, continuous passive motion, and therapeutic massage. (Sp) Prerequisites: Professional phase of Athletic Training Program standing or consent of instructor.

- **ATH304L: Therapeutic Modalities Lab**
  Laboratory component for ATH304.

- **ATH311: Athletic Training Practicum I (1 hours)**
  Students will gain experience in the field of athletic training and be expected to apply and perform competencies previously taught in the curriculum. Students will gain experience working with high risk sports to include football, soccer, wrestling and basketball; equipment intensive sports including football at the youth, high school or university level; attend a surgical experience for the extremities and orthopedic round experience for the extremities. (Fa) Prerequisites: Professional phase of Athletic Training Program standing.

- **ATH312: Athletic Training Practicum II (1 hours)**
  Students will gain experience in the field of athletic training and be expected to apply and perform competencies previously taught in the curriculum. Students will gain experience working with upper/lower extremity sports to include baseball, softball, track, soccer, wrestling, and basketball; attend a surgical experience and orthopedic rounds for the spine; orthopedic treatment and rehabilitation experience; and general medicine experience. (Sp) Prerequisites: Professional phase of Athletic Training Program standing.

- **ATH303: Applied Exercise for Musculoskeletal Injuries (4 hours)**

- **ATH311L: Athletic Training Practicum I Lab**
  Laboratory component for ATH311.

- **ATH312L: Athletic Training Practicum II Lab**
  Laboratory component for ATH312.
The course will explore the foundation for rehabilitation and reconditioning of physically active populations. Pathology of tissue injury and repair will be discussed. Progressions for range of motion, strength, speed, power, neuromuscular control, proprioception and coordination, agility, cardiorespiratory endurance, and mobilization techniques will be explored. (Fa) Prerequisites: Professional phase of Athletic Training Program standing or consent of instructor.

- **ATH403L:** Applied Exercise for Musculoskeletal Injuries Laboratory
  Laboratory component for ATH403.

- **ATH405:** Admin of Athletic Training (2 hours)
  This course covers topics associated with the administration and management of an athletic training facility and staff. These topics will be covered through lecture, class discussion, group work, and assignments. Some of the topics that will be covered include: management theories and styles, human resources, finances, facility design, information management, insurance, legal aspects/risk management, ethics, pre-participation physicals, developing a referral system, drug testing programs, and organizational bodies that provide governance/guidance to the field of athletic training/health care. (Fa) Prerequisites: Professional phase of Athletic Training Program standing or consent of instructor.

- **ATH407:** Athletic Training Seminar III (2 hours)
  This course will provide an overview of the domains of athletic training and the implications that clinical proficiencies have in athletic training and their role in the day to day management of an athletic training facility. This will serve as a forum to discuss and review skills and topics prevalent to the entry-level athletic trainer. This course also assists the student in becoming knowledgeable in the BOC exam process. (Fa) Prerequisites: Professional phase of Athletic Training Program standing.

- **ATH411:** Athletic Training Practicum III (1 hours)
  Students will gain experience in the field of athletic training and be expected to apply and perform competencies previously taught in the curriculum. Students will gain experience working with fall/winter sports to include football, soccer, basketball, and cross country at the university and/or high school level; football game coverage; professional sports; outpatient rehabilitation clinic; health and fitness setting; industrial setting; general medicine; emergency settings. (Fa) Prerequisites: Professional phase of Athletic Training Program standing or consent of instructor.

- **ATH499:** Capstone-Internship in Athletic Training (14 hours)
  Students will gain experience in the field of athletic training and perform competencies and display knowledge expected of the entry-level certified athletic trainer outlined by the National Athletic Trainers Association. This internship experience is directly supervised by a certified athletic trainer or health care provider. Students will present a case study modeled after the Journal of Athletic Training's format for a case study and present to faculty and students. (Sp, Fa) Prerequisites: Professional phase of Athletic Training Program standing.
Biology

- **BIO100**: Introductory Human Biology (4 hours)
The basic principles and concepts of biology are presented in this course with an emphasis on human biology. Cellular function, genetic and developmental concerns, and physiological regulation are studied throughout the semester. Four hours of lecture/discussion and three hours laboratory. (Required course fee) (Sp, Su)

- **BIO100L**: Introductory Human Biology Laboratory
  Laboratory component for BIO100.

- **BIO112**: General Biology I (4 hours)
  General Education N1. This course investigates the origins and diversity of life and how organisms interact with each other and their environment. Students will learn how evolutionary principles provide the foundation for understanding life throughout Earth's history. Case studies and student research during laboratory will develop the ability of students to apply their knowledge of how organisms interact at different biological scales. This is the first course in the Biology major and is traditionally challenging for non-science majors. Four hours lecture/discussion and three hours laboratory. (Required course fee) (Fa)

- **BIO112L**: General Biology I Laboratory
  Laboratory component for BIO112.

- **BIO125**: General Biology II (4 hours)
  This course investigates the structure, function, and biochemistry of cells. Students will learn how evolutionary principles provide the foundation for understanding the cellular processes that support life. Case studies and student research during laboratory will develop the ability of students to apply their knowledge of how underlying cellular processes explain complex organismal functions. Four hours lecture/discussion and three hours laboratory. (Required course fee) (Sp) Prerequisite: BIO 120.

- **BIO125L**: General Biology II Laboratory
  Laboratory component for BIO125.

- **BIO130**: Introduction to Human Anatomy and Physiology I (4 hours)
  This is the first of two courses which present the unifying concepts of anatomy and physiology required for understanding the human body as a structural and functional unit. This course emphasizes the mechanisms that underlie the normal functions of cells, tissues, organs, and organ systems. This course includes the study of basic biochemistry and inheritance and the structure and function of the integumentary, skeletal, muscular, nervous and endocrine systems. Four hours lecture and three hours laboratory. (Required course fee) (Fa, Su)

- **BIO130L**: Intro to Human Anat and Phys I Lab
  Laboratory component for BIO130.

- **BIO131**: Human Genetics (4 hours)
  General Education N1. This course will introduce non-science majors to human genetics and the scientific way of knowing. Students will learn how DNA determines traits and how traits are inherited. Students will also learn how modern genetic technologies influence the products we buy, our health and, potentially, our genetic futures. The relationship between the scientific method and our understanding of human genetics will be stressed, and students will have the opportunity to propose and perform an experiment of their own design. Four hours lecture/discussion and three hours laboratory. (Required course fee) (Fa)

- **BIO131L**: Human Genetics Lab
  Laboratory component for BIO131.

- **BIO140**: Introduction to Human Anatomy and Physiology II (4 hours)
  This is the second of two courses that present the unifying concepts of anatomy and physiology required for understanding the human body as a structural and functional unit. This course includes the study of the structure and function of the cardiovascular, lymphatic, immune, respiratory, digestive, urinary and reproductive systems. A body systems approach is used to emphasize the interrelationships between structure and function of the gross and microscopic levels of organization of the human body. Four hours lecture and three hours laboratory. (Required course fee) (Sp, Su) Prerequisite: BIO 130 or equivalent is strongly recommended.

- **BIO140L**: Intro to Human Anat and Phys II Lab
  Laboratory component for BIO140.

- **BIO122**: Microbiology (4 hours)
  This course examines the fundamentals of microbiology (structure, metabolism, genetics, and growth) and surveys the microbial world. The interaction between microbe and host and the diseases caused by microbes is examined. Four hours of lecture/discussion and two two-hour laboratories. (Required course fee) (Fa, Sp, Su) Prerequisites: BIO 130; CHE 102 or concurrent registration; or instructor consent.

- **BIO122L**: Microbiology Laboratory
  Laboratory component for BIO122.

- **BIO220**: Genetics (4 hours)
This course investigates molecular, classical and population genetics. Students will learn how evolutionary principles are based on genetic processes. Case studies and student research during laboratory will develop the ability of students to apply their understanding of genetic mechanisms at different biological scales. Four hours lecture and three hours laboratory. (Required course fee) (Fa) Prerequisite: BIO 125.

- **BIO220L: Genetics Laboratory**
  Laboratory component for BIO220.

- **BIO225: Organismal Physiology (4 hours)**
  This course investigates the diverse form and function of plants and animals. Students will learn how evolutionary principles provide the foundation for understanding how organisms meet specific physiologic challenges. Case studies and student research during laboratory will develop the ability of students to apply their understanding of physiologic mechanisms in diverse organisms. Four hours lecture and three hours laboratory. (Required course fee) (Sp) Prerequisite: BIO 220.

- **BIO225L: Organismal Physiology Laboratory**
  Laboratory component for BIO225.

- **BIO271: Clinical Immunology (4 hours)**
  This course covers the theory and application of immunology. Students will learn about the development and function of the immune system including immune responses, antigen-antibody reactions, intercellular communication, and autoimmune and immunodeficiency disorders. The course will emphasize the principles and performance of protocols in cellular immunology, immunochemistry, and clinical serology. Four hours lecture and three hours laboratory. (Required course fee) (Fa, odd years) Prerequisites: BIO 140 and CHE 102.

- **BIO271L: Clinical Immunology Laboratory**
  Laboratory component for BIO271.

- **BIO312: Microbiology (4 hours)**
  Most microorganisms are beneficial to mankind; some microbes decompose and recycle nutrients in the environment and some microbes protect humans from other disease-causing microbes. This course will investigate the molecular and structural properties of a variety of microorganism such as bacteria, viruses, fungi and protozoans. Only a small percentage of microbes are pathogenic, but there are several microbial pathogens that impact human health. Although the human immune system is a powerful defense against microbes, most pathogenic microorganisms have evolved immune evasion strategies. Students will learn how the human immune system functions and explore the varied immune evasion strategies used by pathogens. (Sp) Prerequisite: BIO220 or instructor consent. Students may not count both BIO212 and BIO312 towards the biology major.

- **BIO312L: Microbiology Laboratory**
  Laboratory component for BIO312.

- **BIO319: Field Botany (4 hours)**
  This course emphasizes field identification of local plant species. Students will become proficient in the use of taxonomic keys, plant preservation, and the classification and ecology of plants. Daily field trips will be combined with lecture/discussion and laboratory activities. Because this is a field course, students should be prepared for moderately strenuous exercise in a variety of weather conditions. (Su, even years) Prerequisite: BIO 225 or ENV 201, or instructor consent.

- **BIO322: Comparative Vertebrate Zoology (4 hours)**
  This course examines the anatomical similarities and differences among seven vertebrate classes. Ontogeny and phylogeny of the vertebrates are related to structure and function. Adaptive changes vertebrates have undergone during evolution will be emphasized. Four hours lecture/discussion and three hours of laboratory. (Required course fee) (Fa) Prerequisite: BIO 225 or instructor consent.

- **BIO322L: Comparative Vertebrate Zoology Laboratory**
  Laboratory component for BIO322.

- **BIO324: Bioethics (4 hours)**
  General Education P1. This course explores contemporary topics in biomedical ethics through an understanding of foundational biological principles and multiple ethical perspectives. Students critically read, analyze, and discuss essays that contrast viewpoints on bioethical topics. Improvement of student writing is emphasized (Fa, Sp, Su) Prerequisite: Sophomore standing.

- **BIO332: Gene Manipulation and Genomics (4 hours)**
  This course introduces students to the fields of gene manipulation and genomics through an integrated laboratory/lecture/discussion approach. Students will gain hands-on experience with the basic methods, the biological basis for those methods, and a practical understanding of how they are applied in the fields of medicine, basic science research, environmental science, ethics, and law. (Required course fee) (Fa, even years) Prerequisite: BIO 220 or instructor consent.

- **BIO332L: Gene Manipulation and Genomics Laboratory**
  Laboratory component for BIO332.

- **BIO333: Experimental Methods in Field Biology (4 hours)**
This course will explore the diversity of methods used in field biology while further developing student understanding of ecological and evolutionary processes relevant to field biology. Course readings will draw heavily on primary literature. Four hours lecture/discussion and three hours laboratory. (Required course fee) (Fa) Prerequisite: BIO 225 or ENV 201, or instructor consent.

- **BIO333L: Experimental Methods in Field Biology Laboratory**
  Laboratory component for BIO333.

- **BIO350: Endocrinology (4 hours)**
  The structural and functional classification of hormones, principles of hormone action, and the regulation of body functions by the endocrine system are presented. Special emphasis is placed on species differences and evolutionary changes in some selected hormone systems as they relate to homeostasis. Small group discussions, clinical cases, research article presentations, and grant writing are included. (Sp) Prerequisite: BIO 225 or instructor consent.

- **BIO360: Aquatic Ecology (4 hours)**
  An advanced ecology course that builds upon the Biology core courses. This course explores the basic ecology of wetlands, lakes, and streams. Students will examine physical and chemical processes that are largely responsible for the biological responses evident in these different habitat types. The lecture component draws about half of its material from the textbook with the other half relying heavily upon peer-reviewed scientific literature. Laboratory activities (a three-hour laboratory is part of the course) further examine and reinforce ecological concepts derived from lecture and readings. (Required course fee) (Sp) Prerequisite: BIO 225 or ENV 201, or instructor consent.

- **BIO360L: Aquatic Ecology Laboratory**
  Laboratory component for BIO360.

- **BIO399: Capstone in Biological Sciences (4 hours)**
  This course allows students to synthesize their understanding of biology through exploration of contemporary issues in biology across multiple biological scales. Students will also explore case studies related to ethical practice in science and develop skills necessary to transition to future careers in biology. Four hours lecture/discussion, may be taught in a hybrid format. (Fa, Sp) Prerequisites: Junior standing; BIO 225.

- **BIO402: Human Anatomy (4 hours)**
  The microanatomy and gross anatomy of muscle, bone and cartilage and the integumentary, nervous, cardiovascular, lymphatic, respiratory, renal, digestive, endocrine, and reproductive systems are studied. Using multi-media software, male and female bodies are dissected from anterior, posterior, medial, lateral, and medial/lateral views and histologies, radiologies, cross-sections, and MRIs are linked to the anatomy. Models are also employed to study the structure of the human body. In addition, palpation laboratories are integrated into the course. (Required course fee) (Fa, Su) Prerequisites: Junior standing; BIO 225 or BIO 130 and 140; or instructor consent.

- **BIO402L: Human Anatomy Laboratory**
  Laboratory component for BIO402.

- **BIO403: Human Physiology (4 hours)**
  Fundamental concepts related to the normal function of the human body are presented. The normal functioning of the human body is discussed across gender, race, and life span. Basic pathophysiological concepts are introduced. Resources used include physiology laboratories, computer simulations, and videos. (Required course fee) (Sp, Su) Prerequisites: Junior standing; BIO 225 or BIO 130 and BIO 140; and CHE 110 or CHE 101 and CHE 102.

- **BIO403L: Human Physiology Laboratory**
  Laboratory component for BIO403.

- **BIO417: Behavioral Ecology (4 hours)**
  This course investigates the biological bases of animal behavior, focusing particularly on the evolution of social behavior in nonhuman animals. Theoretical foundations of the field as well as their practical applications are studied through lecture/discussion. Experience in experimental design and observation techniques are developed through studies of animal behavior. These experiences culminate in a final research project of the student's own design. Four hours lecture/discussion and three hours laboratory. (Required course fee) (Fa) Prerequisite: BIO 225 or instructor consent.

- **BIO417L: Behavioral Ecology Laboratory**
  Laboratory component for BIO417.

- **BIO452: Advanced Cell Biology (4 hours)**
  In this course, basic principles of cell physiology, molecular biology, biochemistry, and biophysics are studied in relation to the structure and function of cells and their organelles through an integrated laboratory/lecture/discussion approach. Four hours lecture/discussion and three hours laboratory. (Required course fee) (Fa) Prerequisite: BIO 225 or instructor consent.

- **BIO452L: Advanced Cell Biology Laboratory**
  Laboratory component for BIO452.
- **BIO460: Restoration Ecology (4 hours)**
  This interdisciplinary course introduces students to the philosophy, theory, and practice of restoration ecology. Students will develop skills in all aspects of restoration ecology, including different views of nature, conflict resolution, goal identification, the planning and evaluation of restoration projects, and grant writing. Community assembly theory serves as an overarching model for understanding the process of restoration. Four hours of lecture/discussion. (Sp, even yrs) Prerequisite: BIO 225 or ENV 201, or instructor consent.

- **BIO480: Internship in Biology (1 TO 4 hours)**
  This internship places students in industry, hospital, field, health agency, laboratory, school, or other professional settings to obtain on-the-job experience and develop skills relevant to future career opportunities. The BIO 480 Internship differs from the BIO 380 Internship because it incorporates application of research-based skills to the internship experience. Prerequisites: BIO 225 and instructor consent.

- **BIO485: Research in Biology (1 TO 4 hours)**
  This experience involves independent laboratory or field-based research of selected areas in biology under supervision of a faculty member. Students will develop sufficient mastery of their system of interest to allow them to acquire data appropriate for resolution of their specific problem. Prerequisite: Instructor consent.

- **BIO491: Special Topics in Biology (1 TO 4 hours)**
  This course is a study of a selected topic not covered in regular course offerings. Lecture and discussion. The topic will be announced prior to registration.

- **BIO498: Independent Study (1 TO 4 hours)**
  This experience involves independent study of selected areas in biology under supervision of a faculty member that generally does not involve laboratory work. Prerequisite: Approval of the department chair and instructor consent.
BUS101: Introduction to Business (4 hours)
This course is designed to define and describe business-related terminology and concepts and expose students to the various subjects covered in the business world. Topics covered include the global perspective of business; environmental issues; current business practices; marketing, management, finance, accounting, information systems, and the impact of the Internet on business. (Fa, Sp, Su)

BUS200: Personal Financial Management (4 hours)
Broad coverage of personal financial decisions including financial planning, tax planning, managing savings and other liquid accounts, buying a house, use of credit, insurance, managing investments and saving for retirement. In the course, each student develops an effective personal financial plan. (Fa, Su)

BUS204: Start-Ups and New Venture Planning (4 hours)
Students study entrepreneurial behavior, self-assess their entrepreneurial potential, learn how to identify new venture opportunities (not ideas), become a founder and/or organize a founder team, design the firm's organizational structure, write an effective business plan, present their plan to prospective investors, and manage the start-up phase of a new venture. (Fa) Prerequisite: BUS 101.

BUS250: Culture and Diversity in Organizations (4 hours)
General Education S1. This course aids in understanding the complexities of diversity and cultural differences, increasingly important components for success in organizations. It examines the elements of managing and understanding diversity in foreign environments where cultural difference is the norm for international business. The course looks at diversity at home and abroad in an attempt to better understand, appreciate, and value the variety of differences. (Fa, Sp, Su)

BUS260: Ethics in Business, Govt, and Society (4 hours)
General Education P1. An interdisciplinary course that deals with the nature and scope of business/government relationships. The emphasis is on ethical and social issues affecting society's stakeholder groups (consumers, owners, employees, communities and environmentalists) and the challenges for business in the future. It encourages comparative analysis of business ethics with the moral standards of the world community. (Fa, Sp, Su)

BUS290: Principles of Business Law (4 hours)
A study of the legal environment including the nature and sources of law, court systems, litigation, and alternative dispute resolution; constitutional and administrative law, tort law and product liability, contract law, agency law; business organizations; business ethics and social responsibility; international law; and selected topics of government regulation of business including antitrust law, employment law, environment law, and securities regulation. (If not completed within the past five years, no credit will be granted. The student has the option of retaking the course for credit or taking an examination for credit to show mastery of the current subject matter.) (Fa, Sp, Su) Prerequisite: sophomore standing.

BUS291: Special Topics (1 TO 4 hours)
A study of selected processes, developments, problems or issues in business administration or economics that are not covered in other courses. Changing topics may be drawn from any area of business administration. Courses may be repeated for credit with changed topics.

BUS301: Principles of Marketing (4 hours)
The marketing process is analyzed as part of our socio-economic system that anticipates and satisfies consumer needs, adjusts to demand and sales, and procurement of goods and services. Topics include the marketing concept, new product development, channels of distribution, pricing, promotion and Internet marketing. (Fa, Sp, Su) Prerequisite: BUS101.

BUS302: Principles of Management (4 hours)
Examines the theory, techniques, and applications of management systems. Planning, organizing, leading, and controlling are issues addressed. Topics include environmental influences, organization design and structure, motivation, total quality management, ethics, production and international management. Emphasis is on learning through application. (Fa, Sp, Su) Prerequisite: BUS101.

BUS304: Principles of Finance (4 hours)
An analysis of the three functional and interrelated areas of finance: (1) financial institutions and markets, (2) corporate financial management, and (3) the investment management environment. The purpose of this course is to give all business students an expansive as well as applied understanding of the role of finance in business. Greater emphasis is placed on corporate financial management. (Fa, Sp, Su) Prerequisites: CMP114, BUS101, ACC206 or ACC310, ECO124, and ECO225.

BUS305: Principles of Operations Management (4 hours)
This course provides a survey of the operations function within a variety of enterprises and an understanding of how the design, operation and control of systems can most effectively provide goods and services. Topics include operations strategy, process selection, quality management and control, supply chain management, forecasting, scheduling, inventory planning and control, and lean systems. (Fa, Sp, Su) Prerequisites: BUS101, CMP114 and junior standing.

**BUS310: Employment and Labor Law (4 hours)**
A study of labor law as it affects labor relations and the work environment. Legal areas covered include federal legislation, judicial rulings and federal agency guidelines as they pertain to human resource decisions. A portion of the semester is spent on labor negotiations. The National Labor Relations Act is studied in detail. (Sp - offered only in the evening). Prerequisite: junior standing.

**BUS315: Organization Behavior (4 hours)**
An experiential approach to current theory, research, and practices regarding variables that influence behavior in complex organizations. Emphasis is placed on self-managed work teams, total quality management, motivation, development, change and other models relevant to the human condition in organizations. (Fa, Sp) Prerequisite: BUS 302.

**BUS320: Promotion Management (4 hours)**
Development and control of the managerial structure for the elements involved in the marketing promotion function. Areas of concern are the relationship between the customer's needs and behavior, the corporation's approach to promotion, and the analysis of organizational structure alternatives in the marketing promotional area. An integrated marketing perspective is utilized. (Sp) Prerequisite: BUS 301.

**BUS327: Business-to-Business Marketing (4 hours)**
Analysis of the problems of marketing industrial goods. Particular attention given to acquiring market information, marketing planning, methods of distribution, pricing, and the promotional challenges of industrial marketing. Personal selling techniques and sales management are also covered. (Sp) Prerequisite: BUS 301.

**BUS340: Entrepreneurial Finance (4 hours)**
Financing Start-ups and the Growing Firm Students learn about financial statements, performance measures and the forms of financing a start-up, including personal sources, community banks, asset-backed borrowing, and U.S. Small Business Administration (SBA) loans. These financing needs change and evolve as the firm grows and will include bridge financing, angel investors, mezzanine financing, leveraged buyouts (LBOs), limited partnerships, franchising, mergers, acquisitions, private equity investors and initial public offerings (IPOs). (Sp) Prerequisites: ACC 205, BUS 204 and junior standing.

**BUS341: Applied Risk Management (4 hours)**
An introductory course covering the basics of business risk management. This course provides an overview of the nature, process, and methods of dealing with risk. Students study traditional insurance contracts, as well as all other forms of transference (non-insurance), as risk management tools in the business world. (Sp) Prerequisite: BUS 304.

**BUS342: Investment Management (4 hours)**
A study of financial instruments, the markets in which they trade, and their use in developing basic portfolios. A key emphasis of this course involves the valuation decision process of fundamental analysis and its application towards portfolio management. In addition, topics such as investing risks, efficient markets, and the use of fixed income securities in portfolio management are examined. (Fa) Prerequisite: BUS 304.

**BUS344: Mgmnt of Financial Institutions (4 hours)**
A study of the decision making process of depository financial intermediaries such as commercial banks, credit unions, insurance companies, and savings and loan associations. A primary emphasis is on commercial bank management. Topics covered in the course are related to asset and liability management, capital formation, bank regulation, interest rate risks, and other banking innovations and functions. (Fa) Prerequisite: BUS 304.

**BUS356: Applied Financial Management (4 hours)**
A case-study format that applies the principles and models of financial management to current business problems. All students are expected to be involved in detailed discussions of the case issues on a daily basis. In addition, ethical, moral, and social issues are addressed, where appropriate, with topics related to working capital management, capital budgeting, dividend, capital structure, financing decisions, and firm valuation. Computer technologies are used extensively to analyze issues related to case studies and the presentation of those results. (Sp) Prerequisites: BUS 304.

**BUS360: Career Management (4 hours)**
This course provides students with the tools necessary to succeed in their future careers. Students develop their business writing and communication skills as well as prepare a career action plan and resume. Networking, interviewing techniques, team work, critical thinking and self-assessment skills are also addressed as students prepare for entering the job market upon graduation. (Fa, Sp) (Course fee required) Prerequisite: Sophomore standing.
**BUS361: International Business (4 hours)**
Every person has three roles in a global economy: consumer, worker, and citizen. International Business provides a foundation for becoming informed about the global business environment. Important topics in this course include economic, cultural and political factors that affect international business. Students gain an understanding and appreciation for a diverse society. Business structures, trade relations, international financial transactions, legal agreements, and global entrepreneurship are highlighted. The course focuses on the challenges of managing global organizations. (Fa) Prerequisite: BUS 101. It is also recommended that BUS 301-305 be completed.

**BUS435: Marketing Research (4 hours)**
Study of the research process as an aid to data analysis in marketing management. Emphasis on the planning of research and the gathering, quantitative analysis, and interpretation of information with emphasis on net based research and primary data collection. (Fa) Prerequisites: BUS 301, ECO 212 and senior standing.

**BUS446: Applied Portfolio Management (4 hours)**
The application of investment theories and practices towards the effective creation and management of portfolios. The course covers key topics ranging from modern portfolio theory, fixed-income and equity portfolio management, the use of derivative securities, and risk management. Students are required to create and maintain hypothetical portfolios for specific institutional client purposes. (Sp, odd years) Prerequisites: BUS 304 and BUS 342.

**BUS475: Managing Growth in Entrepreneurial Companies - Venture Development (4 hours)**
Venture Development Students learn how the nature and challenge of an entrepreneurial business changes as it moves beyond the start-up phase. The primary task during the growth phase is to build an organizational structure capable of managing growth and ensuring that the organization can sustain growth as the competitive environment changes. (Fa) Prerequisites: BUS 340 and senior standing.

**BUS479: Consulting Management (4 hours)**
An integrative course intended to give students the opportunity to solve actual management problems in organizations. Class members form teams and establish a 'work world' symbiotic relationship with a local business firm while acting as consultants to the assigned client. Total quality management and a team approach are emphasized. (Fa, Sp) Prerequisites: BUS 302 and senior standing.

**BUS480: Internship in Business (1 TO 12 hours)**
An opportunity for students to apply theories and concepts to actual work experiences under the supervision of an external supervisor and the instructor. The purpose of the internship is to provide opportunities for students to improve managerial and leadership skills while adapting to the world of work. Students may substitute equivalent work experience or complete a work project with prior written approval of the instructor. (Fa, Sp, Su) Prerequisites: Sophomore standing and approval of the instructor. The course may be repeated for a maximum of 12 credits given the student has substantially different work experiences. 40 hours of work are needed for each credit. Minimum of 4 credits is required for the BUS major. Open to all majors. S/U graded.

**BUS483: Internship-Prior Work Experience (1 TO 4 hours)**
Sufficient prior managerial experience may be substituted for the internship. Prerequisites: Senior standing and approval of the Director of Internships.

**BUS485: Organizational Strategy and Social Entrepreneurship (4 hours)**
The student learns how to develop the organizational vision, its mission, goals, strategies, tactics and action plans. The course includes discussion on innovative, value driven organizations that include civic missions or social purposes. (Sp) Prerequisites: BUS 475 and senior standing.

**BUS496: Business Policy (4 hours)**
A study of the process of decision-making and the development of business policies and strategies through the use of a business simulation game in a team-building environment. (Fa, Sp) Prerequisites: BUS 301, 302, 304 or 340, 305, senior standing or consent of instructor.

**BUS498: Independent Study in Business (1 TO 4 hours)**
A course of study designed to widen the student's knowledge of business, organizational, and system theory. This develops the ability to study independently and demonstrate aptitude in the planning and production of original work. (Fa, Sp, Su) Prerequisites: Junior/Senior standing respectively, approval of the divisional dean and consent of instructor.
Chemistry

- **CHE098: Intro to Chemistry - non-credit**
  A course designed to provide students with an introduction to the fundamental mathematics and chemistry necessary for CHE 101 or CHE 109. This is an appropriate starting point for students who need a review of high school chemistry. (Su)

- **CHE101: General Chemistry (4 hours)**
  General Education N1. A health science oriented survey course that introduces the basic concepts of inorganic and organic chemistry. Specific topics include: atomic theory, nuclear chemistry, compounds, chemical reactions, energy and organic functional groups. Four hours of lecture/discussion and one two-hour laboratory. (Required course fee) (Fa, Sp) Prerequisite: CHE 098 or demonstrated proficiency in high school chemistry and algebra.

- **CHE101L: General Chemistry - Laboratory**
  Laboratory component for CHE101.

- **CHE102: Biological Chemistry (4 hours)**
  A survey of organic chemistry and biochemistry that considers the structure and function of biomolecules (carbohydrates, lipids, proteins and nucleic acids) and their metabolism. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Sp, Su) Prerequisite: CHE 101/101L with a grade of C or better.

- **CHE102L: Biological Chemistry-Laboratory**
  Laboratory component for CHE102.

- **CHE104: Forensic Science (4 hours)**
  General Education N1. A course that focuses on the application of scientific principles to the analysis of forensic data. The analysis and interpretation of physical, chemical, and biological tests is discussed utilizing a firm grounding in basic science. The laboratory utilizes simulated crime data and includes both basic and instrumental analyses. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Sp)

- **CHE104L: Forensic Science Laboratory**
  Laboratory component for CHE104.

- **CHE106: Drug Discovery (4 hours)**
  General Education N1. A general survey of drug design and development of pharmaceuticals. This course examines the methods used in drug discovery. Topics include: the role of the FDA, clinical trials, drug action, and the pharmaceutical industry. Various sources of new drugs will be explored and several case studies will be discussed. Laboratory work will introduce students to methods and instrumentation used to develop new drugs. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Fa)

- **CHE106L: Drug Discovery Laboratory**
  Laboratory component for CHE106.

- **CHE109: Principles of Chemistry I (4 hours)**
  An introduction to the basic concepts of modern inorganic chemistry. The topics in this course include units and measurements, stoichiometry, behavior of gases, liquids, and solids, atomic structure, the periodic table, chemical bonding and thermodynamics. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Fa, Su)

- **CHE109L: Principles of Chemistry I - Lab**
  Laboratory component for CHE109.

- **CHE110: Principles of Chemistry II (4 hours)**
  A continuing discussion of modern chemistry with a focus on quantitative analysis of chemical problems. Topics include kinetics, equilibrium, acid-base theory, and oxidation-reduction reactions. Modern instrumentation is utilized in the laboratory. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Sp, Su) Prerequisite: CHE 109/109L.

- **CHE110L: Principles of Chemistry II - Lab**
  Laboratory component for CHE110.

- **CHE201: Analytical Chemistry (4 hours)**
  This course introduces students to the theory and practice of chemical analysis. The principles of titrimetric, spectroscopic, chromatographic and electrochemical methods are examined in terms of chemical equilibrium theory. Topics discussed include ionic equilibrium, gravimetric analysis, solubility/precipitation, acid-base titrations, complexation, potentiometry, UV-visible and atomic absorption spectrophotometry, and gas and liquid chromatography. Laboratory experiments are designed to illustrate the chemical principles discussed in class and to provide hands-on experience with modern analytical methods and instrumentation. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Fa) Prerequisite: CHE 110/110L.

- **CHE201L: Analytic Chemistry Laboratory**
  Laboratory component for CHE201.
• **CHE203: Organic Chemistry I (4 hours)**
  An introduction to the study of carbon and its compounds. Emphasis is placed on the simpler aliphatic and aromatic compounds, and functional groups. The course examines the underlying chemical principles and the mechanistic nature of organic reactions. Associated laboratory work is devoted to chemical and physical properties, as well as synthetic techniques. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Fa, Su) Prerequisite: CHE 110/110L.

• **CHE203L: Organic Chemistry I Laboratory**
  Laboratory component for CHE203.

• **CHE204: Organic Chemistry II (4 hours)**
  A continuation of Chemistry 203. Major emphasis is placed upon carbonyl chemistry. The use of spectroscopic techniques is explored. The latter part of the course is devoted to the study of carbonyl compounds and modern synthetic strategies. Laboratory work consists of synthetic techniques, chromatography, and structural analysis. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Sp, Su) Prerequisite: CHE 203/203L.

• **CHE204L: Organic Chemistry II Laboratory**
  Laboratory component for CHE204.

• **CHE208: Nutrition (3 hours)**
  This course investigates the biochemistry of food, that is, the chemical structures and functions of the six classes of nutrients: carbohydrates, lipids, proteins, vitamins, minerals, and water. The study of these nutrients will be extended to human physiological requirements, energy balance, food sources and labeling, and deficiency symptoms. Students will be expected to apply their nutrition knowledge to their own lives (or a patient’s life) to assess dietary adequacy and compatibility with optimal health. Three hours of lecture/discussion. (Fa, Sp) Prerequisite: CHE 102/102L and BIO 140/140L.

• **CHE302: Advanced Inorganic Chemistry (4 hours)**
  This course emphasizes structure, bonding, reactivity, and periodicity of inorganic compounds. The laboratory includes the preparation of metal and non-metal compounds and their characterization by chemical and physical methods. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Sp, odd years) Prerequisite: CHE 204/204L, and 303/303L or 304/304L.

• **CHE302L: Advanced Inorganic Chemistry Laboratory**
  Laboratory component for CHE302.

• **CHE303: Quantum Mechanics and Spectroscopy (4 hours)**
  Thorough introduction to the principles of physical chemistry providing the theoretical basis of quantum chemistry and atomic and molecular spectroscopy. Laboratory experiments incorporate modern instrumental design and data analysis. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Sp) Prerequisite: MAT 160, PHY 204/204L and CHE 110/110L.

• **CHE303L: Quantum Mechanics and Spectroscopy Laboratory**
  Laboratory component for CHE303.

• **CHE304: Thermodynamics and Kinetics (4 hours)**
  Study of reaction kinetics and the thermodynamic treatment of equilibrium in chemical systems. Topics include kinetic theory of gases, classical and statistical thermodynamics, phase equilibria, reaction rates and mechanisms. The laboratory relies on original student experimental design and data analysis of physical measurements that yield quantitative results of chemical interest. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Fa, even years) Prerequisite: MAT 161, PHY 204/204L and CHE 110/110L.

• **CHE304L: Thermodynamics and Kinetics Lab**
  Laboratory component for CHE304.

• **CHE306: Synthesis and Structure (4 hours)**
  The course will consider advanced topics in organic chemistry including selected topics from advanced spectroscopy, reaction mechanisms, synthetic methodology and photochemistry. Emphasis will be on reading, understanding, and orally presenting articles from the original literature. Four hours of lecture/discussion. (Fa, odd years) Prerequisite: CHE 204/204L.

• **CHE308: Biochemistry I (4 hours)**
  The course investigates the properties of buffers and the related chemistry of amino acids, the structure and function of proteins including an intensive look at hemoglobin, and the structure of lipids and carbohydrates. The course also focuses on the kinetics, thermodynamics, and mechanisms of enzymatic reactions, the structure of nucleic acids, and the regulation of nucleotide biosynthesis. The laboratory serves to strengthen the understanding of these topics and includes the purification and/or characterization of several classes of biomolecules. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Fa, Sp) Prerequisite: CHE 203/203L.

• **CHE308L: Biochemistry I Laboratory**
  Laboratory component for CHE308.

• **CHE309: Biochemistry II (4 hours)**
The course focuses on the investigation of basic topics in metabolism, including bioenergetics, carbohydrate metabolism, and lipid metabolism. Additional topics include the biosynthesis of amino acids, nucleotides, and heme. Four hours of lecture/discussion. (Sp) Prerequisites: CHE 204/204L and 308/308L.

- **CHE310: Advanced Forensic Science (4 hours)**
  An advanced course in forensic science designed for, but not limited to, those hoping to pursue careers in criminalistics. Some of the topics will have been addressed in the survey class CHE104 but will now be discussed in greater detail. There will be an emphasis placed on the use of primary literature. (Required course fee) Prerequisites: CHE 104/104L and CHE 204/204L. 310L. Advanced Forensic Science Laboratory

- **CHE 310L: Advanced Forensic Science Laboratory**

- **CHE390: Projects in Chemistry (1 TO 4 hours)**
  Students work on a research project under the direction of a faculty member. It is highly advisable for every student to participate in research projects during their educational experience. Course credit is assigned on the basis of one credit per 40 hours of laboratory work. (Required course fee) (Fa, Sp) Prerequisite: Approval of the program chair and the consent of the instructor.

- **CHE391: Special Topics in Chemistry (1 TO 4 hours)**
  This course is a study of a selected chemical topic not covered in other courses. Lecture and discussion. The topic will be announced prior to registration.

- **CHE391L: Special Topics lab**
  Laboratory component for CHE391.

- **CHE401: Advanced Chemical Analysis and Instrumentation (4 hours)**
  This course will complete the student's introduction to modern chemical analysis and instrumentation. The theory and applications of chromatography and separation science will be emphasized, to include gas and liquid chromatographic instrumentation. The laboratory focuses on configuring, operating, and maintaining instruments while conducting quantitative and qualitative analyses. The course will also serve to initiate student research projects that are completed and presented in CHE 402. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Sp) Prerequisites: CHE 201/201L.

- **CHE401L: Advanced Chemical Analysis and Instrumentation Laboratory**
  Laboratory component CHE401.

- **CHE402: Capstone - Modern Chemistry (4 hours)**
  This capstone course will involve the implementation and completion of a research project proposed and approved in CHE 401. The research project will involve the development of an experimental plan, the use of integrative laboratory analysis using a wide range of equipment and instrumentation, the collection, analysis, and interpretation of data, and the presentation of results in written and oral formats. The course will also formally review current trends in chemical research and the future of the chemical enterprise. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Fa) Prerequisite: CHE 401/401L or consent of instructor.

- **CHE402L: Capstone - Modern Chemistry Laboratory**
  Laboratory component for CHE402.

- **CHE480: Internship in Chemistry (1 TO 4 hours)**
  A cooperative arrangement with industries or governmental organizations that provides students with 'real world' experiences in chemistry. The student must spend time at the company working on a specific project. The student must also be involved in answering some educational questions regarding industrial chemistry. This experience is strongly recommended for students who will be seeking an industrial position after graduation. Plans should be discussed with the instructor during the junior year. (Fa, Sp, Su) Prerequisite: Senior standing and consent of the instructor.
Communication

- **COM101: Principles of Communication (4 hours)**
  General Education S1. Introduction to human communication process. Application of principles in relational, public and mass media contexts. (Fa, Sp)

- **COM111: Debate and Forensic Activities (1 hours)**
  (Fa) Prerequisite: Consent of instructor.

- **COM137: Newswriting and Reporting (4 hours)**
  Basic writing and reporting for newspapers, magazines, the Internet, and other media. (Fa, Sp)

- **COM150: Research Methodology (4 hours)**
  Study of the principles of experimental, survey, textual and naturalistic methodologies. (Fa, Sp)

- **COM200: Interpersonal Communication (4 hours)**
  Study of dyadic relationships. Topics include intimacy, uncertainty, disclosure, identity, competence, transactional paradigms and goals. (Fa)

- **COM202: Small Group Communication (4 hours)**
  Study of small group process, models and theories. Participation in casual, cathartic, therapeutic, learning and decision-making groups. (Fa, even years)

- **COM203: Advertising (4 hours)**
  Examines the components of an advertising campaign. Includes units on persuasion, market research, target analysis, creative strategy and media planning. (Fa)

- **COM207: Intercultural Communication (4 hours)**
  General Education S1. Identifies parameters which affect communication across cultures. English 170 is recommended prior to enrollment. (Fa, Sp)

- **COM208: Introduction to Public Relations (4 hours)**
  Examines theory, scope, techniques, and influence of public relations in society. Includes units on public opinion, message preparation, media selection, and ethics. (Sp)

- **COM227: Technical Writing in Organizations (4 hours)**
  Provides understanding of principles related to audience adaptation, format, style, research, and writing in various organizational settings. (Fa)

- **COM230: Organizational Communication (4 hours)**
  Examines theoretical history, structures, functions, systems, analysis and management of communication processes in complex organizations. (Fa, odd years)

- **COM237: Advanced Newswriting and Reporting (4 hours)**
  Expands on existing skills, enabling students to research and write more specialized news stories for print and online media. The class will emphasize computer-assisted reporting, interviewing techniques, development of story ideas and self-editing. (Sp) Prerequisite: COM 137 or similar experience.

- **COM241: Communication and Conflict (4 hours)**
  Study of interpersonal conflict processes. Emphasis on application of theory; analysis of ongoing conflict and management. (Sp)

- **COM246: Video Production (4 hours)**
  Intensive experience in the process of television field production; focuses on single camera, field/remote production techniques. (Fa, odd years)

- **COM250: Society and Mass Media (4 hours)**
  Surveys the history and influence of print, radio, film and television in society. Examines the political theories that relate to government control over the media. (Sp)

- **COM254: Photojournalism (4 hours)**
  An introduction to digital photography with an emphasis on photography for print and online media. Required course fee. (Fa, odd years)

- **COM275: Feature Writing (4 hours)**
  Planning and writing feature stories for newspapers and magazines. (Fa, even years) Prerequisite: COM 137 or similar experience with the consent of instructor.

- **COM278: Broadcast News Reporting (4 hours)**
  Principles and techniques of broadcast news reporting, writing and editing. (Sp, odd years) Prerequisite: COM 137 or similar experience with the consent of instructor.

- **COM290: Intro to Health Communication (4 hours)**
  General Education S1. Explore concepts and theories of communication and health. Examine interpersonal issues including clinician-patient, family, and social support as well as topics of mass communication including health communication campaigns and how the news/entertainment media present and affect health information. (Sp)

- **COM290H: Intro to Health Communication (4 hours)**
  Explore concepts and theories of communication and health. Examine interpersonal issues including clinician-patient, family, and social support as well as topics of mass communication including health
communication campaigns and how the news/entertainment media present and affect health information. (Sp, odd years)

- **COM291: Topics in Communication (1 TO 4 hours)**
  Intensive investigation of special subject matter not covered in regular course offerings. Students may take more than one of these topics courses. Prerequisite (for 300-level): Junior standing or consent of instructor.

- **COM296: Research in Communication (1 TO 4 hours)**
  Supervised research of significant problem area within communication field. Prerequisites: Senior standing, approval of the divisional dean and consent of instructor.

- **COM298: Indep Study in Communication (1 TO 4 hours)**
  Prerequisite: Junior or senior standing, approval of the divisional dean and consent of instructor.

- **COM317: Communication Criticism (4 hours)**
  This course introduces students to the theory and practice of communication criticism. Students will apply a variety of methods to the analysis of rhetorical artifacts and develop proficiency in argumentative writing. (Sp) Prerequisite: Junior standing or consent of instructor.

- **COM319: Communication Theory (4 hours)**
  General Education S2. Exploration of human communication theories including interpersonal, intercultural, group, persuasive, and mediated communication. Develops a working knowledge of communication theories and considers relationships between various theoretical positions. (Fa) Prerequisite: Junior standing or consent of instructor.

- **COM350: Communication Law (4 hours)**
  Examines First Amendment communication freedoms. Considers dissent, association, academic freedom, obscenity, defamation, privacy, copyright, news gathering, electronic media regulation and other topics. Uses moot-court format. (Fa) Prerequisite: Junior standing or consent of instructor.

- **COM370: Communication Technology and Society (4 hours)**
  Considers personal, ethical, legal, social and other impacts of communicating in an information-technical based society. (Sp) Prerequisite: Junior standing or consent of instructor.

- **COM380: Internship in Communication (1 TO 4 hours)**
  Student intern experience. Prerequisite: Junior or senior standing; communication major and approval of adviser required prior to registration. S/U graded.

- **COM383: Prior Work Experience in Comm (1 TO 4 hours)**
  Professional work experience can substitute for required internship. S/U graded.

- **COM391: Topics in Communication (4 hours)**
  Intensive investigation of special subject matter not covered in regular course offerings. Students may take more than one of these topics courses. Prerequisite (for 300-level): Junior standing or consent of instructor.

- **COM396: Research in Communication (1 TO 4 hours)**
  Supervised research of significant problem area within communication field. Prerequisites: Senior standing, approval of the divisional dean and consent of instructor.

- **COM398: Indep Study in Communication (1 TO 4 hours)**
  Prerequisite: Junior or senior standing, approval of the divisional dean and consent of instructor.

- **COM480: Internship in Communication (1 TO 4 hours)**
  Student intern experience. Prerequisite: Junior or senior standing; communication major and approval of adviser required prior to registration. S/U graded.

- **COM483: Prior Work Experience in Comm (1 TO 4 hours)**
  Professional work experience can substitute for required internship. S/U graded.

- **COM499: Senior Capstone Seminar (4 hours)**
  Participation in advanced research and work-oriented experiences. (Fa) Prerequisite: Senior standing and a grade of C or better in COM 150 or consent of instructor. Professional printing of capstone poster required.
Computational Science

- **CMP112: Computational Thinking I (4 hours)**
  Introduces students to elementary statistical methods and intermediate-level uses of Excel spreadsheets with a focus on data analysis, organization, visualization, and interpretation. Students will be exposed to some essential elements of computational thinking. They will solve problems with the statistical and software tools they’ve learned by developing simple algorithms and using elementary mathematical models. The topics may include, but are not limited to descriptive statistics, 1 and 2-parameter tests (e.g., 2 independent sample t-tests) as well as correlation and regression. Probabilistic models will be used to simulate stochastic processes and develop concepts in algorithmic thinking and mathematical modeling. (Fa, Sp, Su) Prerequisite: MAT 101.

- **CMP113: Computational Thinking II (4 hours)**
  This course introduces students to the discipline of Computer Science by maintaining a balance between computing breadth and computational thinking depth. First, it serves to expose the students to the field of computing via topics such as the Internet and Web, computer networks, computer architecture, data bases, algorithms, and the history of computing. Second, it provides some depth in two areas that play important roles in fostering computational thinking - database design and programming. Third, students will gain hands-on experience in using Microsoft Access database application software, JavaScript, Scratch visual programming environment, and Microsoft Expression Web development environment. (Fa, Sp, Su) Prerequisite: CMP 112.

- **CMP114: Computational Thinking II - Statistical Analysis Emphasis (4 hours)**
  This course will continue developing computational skills, but with heavy focus on statistics. Statistical analyses to be covered will include: 1-way and 2-way ANOVA, multiple regression, and chi-square tests. Some experimental design issues will be discussed. As in course I, analyses will be done using a spreadsheet and/or statistical software, but will also include some scripting. Sections of the course may be taught for specific majors, e.g., we will offer sections of CMP 114 with a business emphasis, using an appropriate text. (Fa, Sp, Su) Prerequisite: CMP 112.

- **CMP330: Computational Techniques for Life and Behavioral Sciences (4 hours)**
  By way of a variety of examples from Life and Behavioral Sciences, students will develop data analysis, algorithmic design, and mathematical modeling skills. Possible examples are Neural Cluster Simulations, Macroeconomic Simulations, Population Dynamics, Bioinformatics, Disease Transmission Modeling, Simulating Gene Expression, and/or Bone Remodeling Models. Techniques used will include Neural Networks Models, Agent-Based Models, Differential Equations, Cellular Automata, Compartmental Models, and Stochastic Models. (Sp, even (starting 2014)) Prerequisites: CMP 113 or CMP 114, CSC 111 or CSC 112, and MAT 140 or MAT 160.

- **CMP340: Computational Techniques for Physical Sciences (4 hours)**
  By way of a variety of examples from the Physical Sciences, students will develop data analysis, algorithmic design, and mathematical modeling skills. Possible examples are Fluid Dynamics, ROTMOKE Magnetic Anisotropy, Mossbauer Spectroscopy, Molecular Modeling, Contaminant Models for Soil and/or Water, Stellar-structure models, or various Chaotic Systems. Techniques used will include Data Analyses, Differential Equations and Finite-Difference Simulations, Cellular Automata, Compartmental Models, and Stochastic Models. (Sp, odd (starting 2015)) Prerequisites: CMP 113 or CMP 114, CSC 111 or CSC 112, and MAT 140 or MAT 160.
Computer Science

- **CSC107: Problem Solving Using Information Technology (2 hours)**
  This course provides a foundation in problem-solving skills using information technology. Students will use Microsoft Excel software to solve 'real-world' problems. (Fa, Wn, Sp, Su)

- **CSC109: Technological Productivity (2 hours)**
  This course uses Microsoft Windows and the Office suite of application software as a foundation for personal and organizational productivity. Students will be presented with an overview of computing specifics at Carroll University, and when/how to take advantage of the tools available in the Office applications (Word, Access, PowerPoint). Note that Microsoft Excel is currently the focus of the CSC 107 course. (Fa, Wn, Sp, Su)

- **CSC110: Problem Solving through Programming (4 hours)**
  This course is designed as a first-semester foundation course for those students planning to major or minor in computer science and for others with an interest in the area. The course is about developing problem solving and structured programming skills, using the computer as a tool for solving problems. It covers the development of computer programs while focusing on the use of Dijkstra's structural programming principles with sequence, iteration, selection, and top-down structural program decomposition at its core. (Fa, Sp)

- **CSC111: Introduction to JAVA (4 hours)**
  This course studies the Java programming language, which is used to promote the student's understanding of object-oriented concepts (classes, methods, abstraction, inheritance, polymorphism, and encapsulation) in conjunction with algorithm design, style, debugging and testing. (Sp) Prerequisite: CSC 110.

- **CSC112: Advanced Programming with C# (4 hours)**
  The course has essentially the same objectives as for CSC 111 but uses the programming language C#. The course is designed to be a continuation of CSC 110, in which more advanced programming concepts, constructs, and problem solving skills are addressed. Topics include, but are not limited to, object-orientation, inheritance, polymorphism, exception handling, event-driven programming, files and streams, and collections. Fundamentals of the .NET framework may also be covered.

- **CSC211: Database Web Creation and Networks (4 hours)**
  The primary objectives of this course are to develop database skills using Microsoft Access and Web development skills using HTML and Microsoft Web-authoring software Expression Web. E-commerce business problems will be solved using a web front end and database back end. A secondary objective is an introduction to networks concentrating on Ethernet and TCP/IP. Also covered is understanding the internals of personal computers to aid their purchase for home or organizational use. This course also continues the discussion on ethical use of technology. (Fa, Sp, Su) Prerequisite: CSC 107 or CSC 109.

- **CSC220: Information Systems (4 hours)**
  This course will provide the student with an understanding of the fundamental aspects of Information Systems. The student will be exposed to the various types of information systems found in a business environment; encompassing operational, tactical and strategic systems. The student will also learn of the developmental processes involved in creating, implementing and securing an information system. This class was formerly the two-credit CSC 201 and will meet this requirement from previous catalogs. (Fa, Sp, Su)

- **CSC226: Data Structures using JAVA (4 hours)**
  This course focuses on the object-oriented paradigm, with particular reference to the design and implementation of data structures such as: stacks, queues, linked lists, and trees. Java collections framework and searching algorithms are also introduced. The course builds on the concepts introduced in CSC 111 to allow students to use and write their own classes and objects. (Fa) Prerequisite: CSC 111 or equivalent.

- **CSC271: Computer Organization (2 hours)**
  This course is intended as a foundation in the installation, maintenance and support of PCs and their components. Terminology and fundamentals of the hardware, software and networks integrated with an Intel processor is to be mastered. Simulated experience with PCs and their components is the foundation of this class. (Sp, even years) Prerequisite: CSC 211.

- **CSC272: Computer Architecture (2 hours)**
  This course is the study of technology and its advancement, specifically, computer architecture. Computer architecture is the study of the structure and operation of digital computers. This study will concentrate on the acquisition, processing, storage and output of data, as well as the connection and interaction between computers. (Sp, even years) Prerequisite: CSC 271.

- **CSC303: Network Protocols (4 hours)**
  This course provides a unified view (both theoretical and applied) of the broad field of data communications and networking. Topics: data transmission, data encoding, data link control, multiplexing, circuit switching, packet switching, radio and satellite networks, local area networks (LANs), wide area networks, and protocols. Networking trends for the future will be covered. (Fa) Prerequisite: CSC 211.
- **CSC307: Operating Systems and Web Master Fundamentals-Unix/Linux Apache (4 hours)**
  This class covers the elements and design of Win32 and UNIX/Linux operating systems, the fundamentals of system administration, and the installation, configuration and maintenance of the Microsoft IIS and Apache Web Servers. Problems such as concurrency, communication, and security will be addressed. (Fa) Prerequisite: CSC 211.

- **CSC319: World Wide Web Programming (4 hours)**
  This hands-on course introduces the development of dynamic Web sites. It focuses on Web programming fundamentals and mastery of one of the current server-side technologies. (Fa) Prerequisite: CSC 211 and either CSC 111 or CSC 112.

- **CSC320: Programming Using C++ (4 hours)**
  This course assumes the student has had programming experience in some other language, and wishes to learn the C/C++ environment. It focuses on the object-oriented paradigm in the language C++, real-time programming, and provides an introduction to creating Windows Applications using Microsoft Visual Studio .NET. Prerequisite: CSC 110 or equivalent.

- **CSC323: Programming Languages (4 hours)**
  The objective of this course is to develop in students an understanding of the design and uses of different kinds of programming languages. Several programming languages will be examined including C, C++, Ada, and Lisp/Scheme. Issues considered include: the formal specification of programming language syntax, language design, translator design, and run time behavior of programs. Representatives of various kinds of languages such as assembly level, object-oriented, functional, logical, etc., are examined and students have the opportunity to solve problems in these languages. In addition, students may focus on a particular language of their choice to gain deeper understanding of its design issues. (Sp, odd years) Prerequisite: CSC 226.

- **CSC341: Software Design and Development (4 hours)**
  This course presents a formal approach to state-of-the-art techniques in software design and development, and the means for students to apply the techniques. Formal models for capturing requirements for object-oriented and procedural designs are presented and used in the course. Other topics include Unified Modeling Language, Design Patterns, and various design principles and guidelines. (Sp) Prerequisites: CSC 226.

- **CSC351: Database Design and Implementation (4 hours)**
  The emphasis in this course is on the design and construction of databases as tools in business. Concepts covered include entity-relationship modeling, normalization, and efficient table design. Programming with SQL is stressed using a professional Database Management System. The role of databases in Web applications is particularly considered. (Fa) Prerequisites: CSC 111 or CSC 112 and CSC 211.

- **CSC352: Advanced Business Web Applications (4 hours)**
  Students learn how to build web-based business applications by using the technologies introduced in CSC 319 and the skills they have developed. Students develop Web-based applications linking Web sites to back-end databases while also learning how to build distributed, component-based web applications. Web services issues will also be discussed. Applications that scale are stressed in the context of performance, business goals, security, and other relevant topics. The current Web software development principles and methodologies are also stressed. (Sp) Prerequisite: CSC 319 and CSC 351.

- **CSC353: Mobile Application Development (4 hours)**
  Mobile devices (primarily tablets and smart-phones) are used by millions for purposes requiring mobile applications. This includes using the devices to access remote information and a myriad of job-related and recreational uses. The number of apps currently available for distribution at the App-Stores for the most popular mobile platforms is in excess of one million, and growing rapidly. This course will cover developing applications using the current most popular mobile platforms, (e.g., as of 2013 this might include Google Android, Apple iOS, Window 8). This will allow for compare/contrast discussions. Differences between desktop computing and mobile computing will be covered. Development tools for mobile apps will be discussed. (Fa, odd years) Prerequisite: CSC319 or equivalent.

- **CSC390: Workshop in Computer Science (4 hours)**
  Information Technology Prerequisite: Approval of the divisional dean and consent of instructor.

- **CSC391: Special Studies/Topics (1 TO 4 hours)**
  This course offers a study of a selected topic not covered in regular curriculum with lectures and/or discussions. The topic will be announced prior to registration. Prerequisite: Consent of instructor.

- **CSC392: Seminar (4 hours)**
  This is an advanced course of study involving individual research. Discussion of this research takes place through informal group participation. Prerequisite: Approval of the divisional dean and consent of instructor.

- **CSC396: Research in Computer Science (4 hours)**
Information Technology Advanced research is designed to permit individual students or groups of students to undertake special projects related to their educational interests and goals. Prerequisite: Approval of the divisional dean and consent of instructor.

- **CSC398: Independent Study (1 TO 4 hours)**
  Independent study is designed to offer a study of selected areas under the supervision of one or more faculty. Four credits maximum applied toward degree. Prerequisite: Approval of divisional dean and consent of instructor.

- **CSC401: Advanced Network Protocols and Programming (4 hours)**
The course will discuss advanced protocols that exist in the Internet today. This class will also cover network programming using sockets. This will let students study the Internet in depth in terms of software architectures and implementation. As programming exercises, students will implement client-server models as they exist in the Internet. (Fa, odd years) Prerequisite: CSC 303.

- **CSC402: Fundamentals of Network Security Design and Implementation (4 hours)**
  This course provides students with an in-depth look at the security risks and threats to an organization's electronic assets, and an overview of components used in an enterprise security infrastructure. Topics will include the theoretical background necessary to understand the various types of risks, as well as practical techniques to securing an enterprise network. The integration of the different components will be studied in detail. Skills covered are intended for IT professionals who work in a typically complex computing environment of a medium to large company. (Sp, odd years) Prerequisite: CSC 303.

- **CSC409: Information Technology Mgmt in an E-Commerce World (4 hours)**
The emphasis of this class is on the management of information technology within an organization and the use of information technology from a strategic, tactical and operational perspective. The current trends towards e-business and e-commerce are integrated throughout. The class is concerned with the management issues surrounding information technology today. Topics include technology trends, IT planning and strategy, management of end-user computing, network management, asset protection, ethical considerations, in-house or outsourcing the hosting of aWeb site, choosing a suitable host, Web site privacy issues/statements, and people management skills. (Sp, odd years) Prerequisite: Junior standing.

- **CSC410: Artificial Intelligence (4 hours)**
  This course provides an introduction to the basic theoretical concepts of artificial intelligence, emphasizing the role of AI techniques for game programming. (Sp, odd years) Prerequisite: CSC 111.

- **CSC436: Theory of Computation (4 hours)**
  This course is concerned with the theory of computers, i.e., the forming of several abstract mathematical models that describe computers and similar machines and their capabilities. Topics covered include: Finite Automata, Pushdown Automata, Turing machines, the Chomsky Hierarchy and P and NP problems. Prerequisite: CSC 226 and MAT 205.

- **CSC437: Computer Graphics (4 hours)**
  For those students who wish to understand how graphics are used and created. The computer graphics fundamentals, transformations of objects, shape modeling, 3-D viewing, rendering for realism, and curve and surface design are studied. Prerequisite: CSC 226.

- **CSC440: Software Engineering (4 hours)**
  This course presents state-of-the-art techniques in software design and development. Topics will include the software engineering lifecycle and current approaches to software development management, including formal methods, software metrics, agile methodologies and other innovative techniques. In addition the course will cover version control, software maintenance and quality assurance. A semester-long software development experience is provided. (Fa) Prerequisite: CSC 341.

- **CSC450: Projects-Computer Science Majors (4 hours)**
  This course requires students to work on a real-world project, and is a very demanding course open only to majors in their senior year. The course allows students to select, design, code, document and formally present a substantial project of their own choosing. Students should coordinate with an instructor of their choice to provide guidance and receive consent prior to registration. (Sp, Su) Prerequisites: Completion of ALL required CSC prefix coursework.

- **CSC451: Projects for Information Technology Majors (4 hours)**
  This course requires students to work on a real-world project of their own choosing, and is a very demanding course open only to majors in their senior year. The project allows students to use the knowledge gained in the coursework to produce a substantial product in the area of information technology by going through the entire development lifecycle. Students should coordinate with an instructor of their choice to provide guidance and receive consent prior to registration. (Sp, Su) Prerequisites: Completion of ALL required IT coursework.

- **CSC455: Projects-Computer Science Minors (4 hours)**
  This course gives the student a real world experience in a computer-related project and is designed for minors only. (Sp, Su) Prerequisites: Completion of ALL other minor requirements.

- **CSC480: Internship in Computer Science (1 TO 12 hours)**
The course provides professional work experience in computer science or information technology under the supervision of faculty and industry personnel. Written report is required at the end of internship. S/U graded. (Fa, Sp, Su) Prerequisites: Junior or senior standing and consent of instructor required prior to registration. The course may be repeated for a maximum of 12 credits, but each repetition requires a substantially different work experience. 40 hours of work is needed for each credit.

- **CSC490: Workshop in Computer Science (4 hours)**
  Information Technology Prerequisite: Approval of the divisional dean and consent of instructor.

- **CSC491: Special Studies/Topics (1 TO 4 hours)**
  This course offers a study of a selected topic not covered in regular curriculum with lectures and/or discussions. The topic will be announced prior to registration. Prerequisite: Consent of instructor.

- **CSC492: Seminar (4 hours)**
  This is an advanced course of study involving individual research. Discussion of this research takes place through informal group participation. Prerequisite: Approval of the divisional dean and consent of instructor.

- **CSC496: Research in Computer Science (4 hours)**
  Information Technology Advanced research is designed to permit individual students or groups of students to undertake special projects related to their educational interests and goals. Prerequisite: Approval of the divisional dean and consent of instructor.

- **CSC498: Independent Study (1 TO 4 hours)**
  Independent study is designed to offer a study of selected areas under the supervision of one or more faculty. Four credits maximum applied toward degree. Prerequisite: Approval of divisional dean and consent of instructor.
Cross Cultural Experiences

- **CCS300: Cross Cultural Experience (2 hours)**
- **CCS400H: Global Perspectives Colloquium (2 hours)**

In the Global Perspectives Colloquium, advanced students (usually seniors) from multiple disciplines engage in critical reading and discussion. Students reflect on their distribution courses and cross-cultural experiences while also refining their writing skills. (Fa, Sp)
Economics

- **ECO105: History of Economic Thought (4 hours)**
  A survey of major schools of economics and trends in economic thought from the time of mercantilism to the present. Emphasis is on the ideas and writings of Smith, Malthus, Ricardo, Marx, Keynes, and selected contemporary economists such as Galbraith and Friedman. (Fa)

- **ECO110: Introduction to Economics (4 hours)**
  This is a survey course designed to give the student a basic understanding of microeconomics and macroeconomics. The course provides an overview of the important topics of these two broad fields of economics. This course is open to non-business majors or to anyone interested in a basic understanding of economics. This course cannot be taken after a student has completed both ECO 124 and ECO 225. (Sp)

- **ECO124: Principles of Economics I - Microeconomics (4 hours)**
  General Education S1. An intensive analysis of the microeconomics theory that explains the market's determination of prices, resource allocation, and distribution of goods and services. (Fa, Sp, Su)

- **ECO225: Principles of Economics II - Macroeconomics (4 hours)**
  General Education S1. An intensive analysis of the macroeconomic theory that explains the aggregate behavior of our economy and its public and private policy implications. (Fa, Sp, Su) Prerequisites: sophomore standing.

- **ECO306: Microeconomic Theory (4 hours)**
  An examination of modern price theory with specific emphasis on consumer demand, production and cost, the firm and market organization, and theory of distribution. (Fa) Prerequisite: ECO 124.

- **ECO307: Macroeconomic Theory (4 hours)**
  A study of the analytical core and the central issues of the measurement and determination of the level of national income, fluctuations, and growth. Fiscal and monetary policy effects on unemployment and inflation are examined. (Sp) Prerequisite: ECO 225.

- **ECO343: Money and Banking (4 hours)**
  The nature of money, the behavior of commercial banks, and the function of the Federal Reserve System are examined. The role of money in the economy is analyzed within the framework of the classical, Keynesian, and monetarist theories of the demand for money. (Fa)

- **ECO363: International Economics (4 hours)**
  A survey of the global economy, with emphasis on international trade theory, international finance, monetary markets, commercial policies, economic integration, and major international institutions. (Sp) Prerequisite: ECO 124 or ECO 225.

- **PPE101: Introduction to Philosophy, Politics, and Economics (4 hours)**
  General Education S1. A discussion-based interdisciplinary course exploring the interrelated nature of fundamental ideas and methods used by philosophers, political scientists, and economists to study important socio-economic issues such as globalization, freedom and markets, citizenship and political power, and others. (Sp)

- **PPE499: Capstone in Philosophy, Politics, and Economics (4 hours)**
  The capstone course will have 4 components. 1) A major research paper: Each capstone student will propose and write a research paper on a topic approved by the capstone instructor. 2) Oral defense: each student will present and defend his or her research project to a panel of faculty in the major and other capstone students. 3) Comprehensive exam: each student will take an exam created by faculty in the major to test their mastery of the broad content of the major. 4) Transition plan: Students will be assisted in preparing a transition plan to career or graduate school as described in the capstone experience guidelines. Prerequisite: Senior standing as a PPE major. (Sp)
Education

- **EDU100: Introduction to Education (2 hours)**
  An overview that will introduce the students to topics related to the teaching profession in general and the Carroll University Teacher Education Program specifically. The Program's Guiding Principles and Wisconsin Teacher Standards will be introduced in this course. The qualities needed to be an effective educator will be explored and students will analyze their personal suitability to be a teacher. Open only to second semester freshmen and upper class members, or with the consent of the instructor. A background and criminal history check will be conducted which must be deemed satisfactory. (Required fee) (Fa, Wn, Sp, Su)

- **EDU203: Educational Psychology (4 hours)**
  This course examines how children, early adolescents, and adolescents develop and learn, with particular emphasis upon the classroom. Students will engage in the study of principles and theories of cognitive, social, emotional, moral and physical development, complex cognitive processes, memory, constructivism, motivation, and the creation of a positive learning environment. Concurrent enrollment in EDU 210 is strongly suggested. (Fa, Sp, Su) Prerequisite: EDU 100.

- **EDU209: Education in a Intercultural Context (4 hours)**
  This course develops students’ capacities for intercultural communication to work with diverse learners. Students further their understanding of educational practices, policy, and theory in order to become more effective intercultural communicators and teaching professionals in a global society. They also engage in exploration and analysis of complex issues associated with multiculturalism, equity, discrimination, prejudice, privilege, ethnicity, race, class, religion, sexual orientation, gender, and linguistic diversity, which are critical in the development of a professional educator. Developing and demonstrating approaches and methods to meet the needs of diverse students are critical components. Another required component of this course is a ten to twenty hour experience in an approved multicultural setting. This requirement may be met through a service learning assignment. (Fa, Sp, Su) Prerequisite: EDU 100.

- **EDU210: Field Experience in Educ I (1 hours)**
  A pre-student teaching practicum in an assigned classroom in an area school. Grade level or subject is determined by the student's certification intentions. Throughout the semester, students complete a minimum of 40 student contact clock hours in the assigned classroom. This is achieved by attending a minimum of ten (10) full school days. Seminars accompany experiences in the school. Students must attend all seminars to receive course credit. An urban placement, determined by the Education Placement Coordinator is required in either EDU 210 or EDU 311. Students are responsible for their own transportation to urban (and other) placements not within walking distance of campus. S/U graded. (Fa, Wn, Sp, Su) Prerequisites: EDU 100. Completion of or concurrent enrollment in EDU 203 and satisfactory results of a T.B. test and background and criminal history check are required.

- **EDU215: Intercultural Immersion Field Experience I (2 hours)**
  The purpose of this course is to provide participating students with an intercultural and/or international classroom experience as part of their teacher education. The Carroll University field experience program is designed to promote reflective practices commensurate with the Education Department’s Guiding Principles and Wisconsin Model Standards through reflection, reading and seminar discussion. Students will gain a concentrated pre-student teaching practicum based on teacher certification intentions while being immersed in the domestic urban or international experience they choose to complete. Seminars will be held prior to, on-site and post-experience. (Wn, Su) S/U graded. Prerequisites: EDU 100. Completion of or concurrent enrollment in EDU 203 and consent of instructor. Additional requirements are subject to specific placement.

- **EDU246: Development, Observation and Assessment in Early Childhood (4 hours)**
  The study of principles and theories of child development from birth to age eight in cognitive, affective, psychomotor, social, and language domains. Cross-cultural perspectives of development are considered. Includes strategies for observation and its uses both as a curriculum guide and as an assessment tool. Offers an overview of other forms of assessment, including criterion-referenced and standardized tests. Students use developmentally appropriate assessment tools. (Fa) Prerequisite: EDU 203.

- **EDU248: Early Childhood Education: Home, School, and Community Relationships (4 hours)**
  Focuses on developing an understanding and acceptance of the diversity of contemporary families and the range of strengths that they can contribute to the education process. Developmental skills in communicating with, working with, and educating parents, families, advisory groups, community resource agencies, pupil services, and support staff. Surveys early childhood program alternatives. Explores daycare administration and policy issues, nutrition and safety. Examines home and classroom behavior management strategies appropriate for young children. (Fa, Sp) Prerequisite: EDU 203.

- **EDU249: Development, Observation, and Assessment of Young Children with Exceptional Needs (4 hours)**
  This introductory course provides principles and theories of child development from birth to age eight in cognitive, affective, psychomotor, social and language domains. The course will provide the core theoretical and practical background knowledge necessary to assess and observe early childhood students
and early childhood students with exceptional educational needs. Students will develop strategies for using observation as a curriculum guide and as an assessment tool. An overview of educational assessment and diagnosis of individuals with disabling conditions will be provided. Emphasis will be placed upon testing for IEP development and teaching. Cross-cultural perspectives of development are explored. (Fa, Sp)

- **EDU250: Collaboration and Inclusion (4 hours)**
  This course is designed to expand and deepen students' knowledge, understanding and skills to increase the effectiveness of interactions with education professionals, community agencies, and families for the purpose of supporting students with disabilities. The readings, activities, projects, and class interactions will build capacities for participants to gain personal, professional, family and systemic perspectives to increase the quality of intra-and interpersonal skills. The class is structured to provide each learner the opportunity to initiate, analyze, activate and evaluate their learning within the context of the content. This course will assist students in developing their understanding of the Education Department's guiding principles specifically, Cultural Sensitivity and Reflection, and Wisconsin Model Standards for teaching (Standards 3, 9 and 10)(Fa).

- **EDU261: Educ of the Exceptional Child (4 hours)**
  Introduction to special education and teaching students with exceptional needs. This course provides an overview of legal issues, identification and assessment of students with special needs. Emphasis is placed on teaching strategies used to educate students who have diverse learning and behavioral needs. (Fa, Sp, Su) Prerequisite: EDU 203.

- **EDU301: Democracy, Schools, and Society (4 hours)**
  The study of social, political, philosophic, and historical issues and antecedents of K-12 schooling and curriculum. Consideration of traditional, alternative, and innovative approaches to curriculum. Study of social concerns affecting the schools; the organization, administration, and financing of schools; alternative schooling; the world of work and the future of education. (Fa, Sp, Su) Prerequisite: EDU 203.

- **EDU304: Methods in Middle/Secondary Schools (4 hours)**
  This course facilitates the study of teaching, learning and motivational theories and practices specifically for the middle school and high school learner. Explores strategies for curriculum development, implementation and evaluation. Prerequisites: EDU 203 and admission to the TEP. Concurrent enrollment in EDU 311 is suggested. This course is required for MC-EA licensure.

- **EDU306: Literacy in Middle/Secondary School Content Areas (2 TO 3 hours)**
  This course explores literacy theories and practices for the middle and high school learner. Emphasizes literacy in content specific areas. Examines research based strategies for literacy instruction, assessment and differentiation. (K-12 specialists in art, music and physical education register for 2 credits. All other secondary students, including Spanish and theatre arts, register for 3 credits. Includes a school practicum). (Fa, Sp)

- **EDU311: Field Experience in Education II (1 hours)**
  A pre-student teaching practicum in an assigned classroom in an area school. Grade level or subject is determined by the student's certification intentions. Throughout the semester, students complete a minimum of 40 student contact clock hours in the assigned classroom. This is achieved by attending a minimum of ten (10) full school days. Seminars accompany experiences in the school. Students must attend all seminars to receive course credit. The 311 field experience is distinguished from the 210 experience by an added measure of student responsibility for active involvement in classrooms. Seminars will emphasize preparation for and discussion of the added involvement. An urban placement, determined by the Education Placement Coordinator, is required in either EDU 210 or EDU 311. Students are responsible for their own transportation to urban (and other) placements not within walking distance of campus. This experience must be completed at Carroll. S/U graded. (Fa, Wn, Sp, Su) Prerequisites: Successful completion of EDU 210, completion of or concurrent enrollment in a methods course, satisfactory results of a T.B. test, a background and criminal history check and admission to the TEP are required.

- **EDU312: Field Experience-Adaptive Educ (1 hours)**
  A pre-student teaching practicum in a non-categorical special education setting where children are also in inclusive classrooms. Students work between four and six hours per week for a semester total of 40 clock hours. Monthly seminars accompany experiences in the school. This course is to be taken in the final semester of course work for the adaptive education minor. (Fa) Prerequisites: EDU 100, 203, 210, 261, 330, 332, 334, 336, 338, satisfactory results of a T.B. test, a criminal history and background check, and admission to the TEP. (Fa, Sp)

- **EDU315: Intercultural Immersion Field Experience II (2 hours)**
  The purpose of this course is to provide participating students with an intercultural and/or international classroom experience as part of their teacher education. The Carroll University field experience program is designed to promote reflective practices commensurate with the Education Department's Guiding Principles and Wisconsin Model Standards through reflection, reading and seminar discussion. Students will gain a concentrated pre-student teaching practicum based on teacher certification intentions while being
impressed in the domestic urban or international experience they choose to complete. Seminars will be held prior to, on-site and post-experience. (Wn, Su) S/U graded. Prerequisites: Successful completion of EDU 210 or EDU 215, completion of or concurrent enrollment in a methods course and admission to TEP are required. Additional requirements are subject to specific placement.

- **EDU321: Social Studies in the Elementary /Middle School (3 hours)**
  This course is an examination of the objectives and techniques of teaching social studies in the elementary/middle school. Instruction includes the study of curriculum materials, methods, assessment and evaluation. Students are challenged to develop lessons and use instructional strategies that help prepare children for active citizenship in a democratic and multicultural society. (Fa, Sp, Su-occasionally) Prerequisites: EDU 203, 209, and admission to the TEP.

- **EDU323: Literacy 1: Early Childhood - Middle Childhood (4 hours)**
  This course examines literacy in the social, intercultural and educational context. Emphasizes using children's literature to create the reading and language arts curriculum through a balanced literacy approach. Using the Common Core Standards as the framework, this comprehensive literacy program has students explore and incorporate effective instructional and assessment strategies to develop literacy in early childhood and middle childhood learners. (Fa, Sp) A 10 hour tutoring practicum in an elementary school is required. Tutoring hours will be either before or after school hours. Prerequisites: EDU 203, 209 and admission to TEP.

- **EDU324: Literacy II: Middle Childhood - Early Adolescence (4 hours)**
  This course examines literacy in the social, intercultural and educational context. Emphasizes using children's and early adolescent literature to create the reading and language arts curriculum through a balanced literacy approach. Using the Common Core Standards as the framework, this comprehensive literacy program has students explore, incorporate, and implement effective instructional and assessment strategies to develop literacy in middle childhood and early adolescent learners. (Fa, Sp) A semester-long practicum in an elementary school is required. Tutoring hours will be either before or after school hours. Prerequisites: EDU 323 and admission to TEP.

- **EDU326: Mathematics in the Elementary/ Middle School (3 hours)**
  Students will develop ways to initiate, implement, and institutionalize an elementary/ middle school math curriculum based on NCTM standards and student appropriate/ effective assessments. Emphasis will be on active learning and constructivism and their implications to mathematics instruction, as well as incorporating manipulatives, technology, literature (integrated curriculum) into problem-based lesson planning. Fieldwork required. (Fa, Sp, Su-occasionally) Prerequisites: EDU 203, MAT 201, and admission to the TEP.

- **EDU327: Science Methods in the Elementary/Middle School (3 hours)**
  This course is designed to develop competencies in selecting methods and resources for teaching elementary and middle level science. All strands of science including environmental education will be explored. Students will gain knowledge and skills to successfully develop science lessons appropriate for various grade levels based on state and national academic standards. An emphasis is placed on effective instructional strategies, assessment and the relationship of science to all other subject areas. An outreach project requires an additional ten hours to facilitate science learning for K-8 students. (Fa, Sp, Su) Prerequisites: EDU 203, 209, admission to the TEP. Completion of ENV 120 is recommended and additional lab science (N2 or elective in BIO/CHE/PHYS) is recommended.

- **EDU330: Introduction to Diagnostic Assessment of Students with Exceptional Needs (4 hours)**
  This introductory course provides core theoretical and practical background necessary to evaluate students having exceptional educational needs. An overview of educational assessment and diagnosis of individuals with disabling conditions will be provided. Emphasis will be placed upon testing for IEP development and teaching. (Fa) Prerequisites: EDU 261, 209 and admission to the TEP.

- **EDU332: Instructional Strategies for an Inclusive Classroom (4 hours)**
  This course is designed to facilitate the education student's knowledge, skills and disposition to increase the effectiveness of teaching for the inclusion of children with special needs in the classroom. This will include content, strategies, and structuring the environment to make inclusion a viable experience for the special needs student. Classroom management will also be explored as it relates to the special needs of the students. (Fa, Sp) Prerequisites: EDU 261 and admission to the TEP.

- **EDU334: Language Development and Disorders of the Exceptional Child (4 hours)**
  This course is designed to present background information about normal language development as a foundation for evaluating speech and language disorders in children. Emphasis will be placed on current techniques for the identification of language disorders in school-age children as well as methods for enhancing their language skills. (Sp) Prerequisites: EDU 261 and admission to the TEP.

- **EDU336: Collaborating with Families of Students with Disabilities (3 hours)**
  This course is designed to facilitate the education student's knowledge, skills and disposition to increase the effectiveness of interactions with parents and community agencies for the purpose of serving children in the context of a learning environment. (Sp) Prerequisites: EDU 261 and admission to the TEP.
- **EDU338: Career Development and Vocational Education for Students with Exceptional Needs (3 hours)**
  This course will explore effective practices for assisting individuals with disabilities in making successful transitions between grade levels and from school to post-secondary training and/or employment. Emphasis will be placed on career development, assessment, self-advocacy and self-determination. (Sp, Su occasionally) Prerequisites: EDU 261 and admission to the TEP.

- **EDU341: Integrated Curriculum in Early Childhood I - Physical and Logico-Mathematical Knowledge (4 hours)**
  Focuses on facilitating the development of physical and logico-mathematical knowledge in young children based on their developmental and cultural characteristics. Considers curricular areas of science, physical education, mathematics, and the creative arts, and their integration. Presents models for curriculum planning, instructional strategies, and assessment including inquiry, project approaches, direct instruction, constructivism, center based learning, and experiential learning. Explores the use of technology in curriculum delivery. Examines children's interests and readiness as opportunities to employ emergent curriculum and incidental teaching. (Fa, Sp) Prerequisites: EDU 246 and admission to the TEP.

- **EDU342: Integrated Curriculum in Early Childhood II: Social & Socially Constructed Knowledge (4 hours)**
  Focuses on facilitating the development of social and socially constructed knowledge in young children based on their developmental and cultural characteristics. Considers curricular areas of social studies, environmental education, literacy (reading, language arts, children's literature), and affective/social behavior, and their integration. Examines epistemological issues of curriculum construction and decision making: What knowledge is of most worth? Who decides? Whose purposes does it serve? Includes perspectives on hidden curriculum, integrated curriculum, and lived experience curriculum. Explores the use of technology in curriculum delivery. Provides experiences in curriculum development and assessment. (Fa, Sp) Prerequisites: EDU 246, 248, 341, and admission to the TEP.

- **EDU347: Seminar in Contemporary Issues in Early Childhood Education (4 hours)**
  A study of current issues, and historical and philosophical perspectives on classroom practice and on social and educational policy affecting young children. Includes examination of developmentally appropriate practice, culturally responsive pedagogy, readiness, the nature and practice of play in the curriculum, technology in the early childhood classroom, and school to work issues. (Fa, Sp) Prerequisites: EDU 246, 248, 341, and admission to the TEP.

- **EDU349: Curriculum Development in Special Education/Special Education Methods (4 hours)**
  This course builds the foundation for development of developmentally appropriate curriculum based upon child development, learning theory, and research for all children birth through age eight, including those with developmental delays and disabilities. Students study effective teaching strategies, learn how to adapt curriculum for individual differences, study the organization of curriculum and instruction for special education students with a focus on literacy, socio-emotional, and social studies areas. This course also explores child find strategies, informed referral networks, evaluation team responsibilities, individualized family service plans, individualized education program processes, and pertinent state and federal laws, regulations, and policies. (Fa)

- **EDU353: Special Methods in Teaching Secondary School Subjects (2 hours)**
  Daytime clinical experiences in a secondary school required. Examination of models of learning and instruction in specific subject-matter areas, including 25 hours of clinical field work to directly apply methodology while working with high school students. Special emphasis upon selection, use, and preparation of equipment, materials, teaching aids, and other resources especially designed for the various areas. Attention given to evaluating pupil progress, working with pupil services, the use of media in schools, educational research in curriculum development and evaluation. Required in student's certifiable major and minor. (Fa) Prerequisite: EDU 203, 304 or concurrent enrollment, 306 or permission from the Department Chair, and admission to the TEP.

- **EDU355: Special Methods in Teaching Elementary and Secondary Subjects - Modern Languages (3 hours)**
  Application of general principles and methods to specific subject-matter areas. Special emphasis upon selection, use, and preparation of equipment, materials, teaching aids, and other resources especially designed for the various resource areas. Examination of models of learning and instruction in specific subject-matter areas, including 25 hours of clinical field work to directly apply methodology while working with high school students. Attention given to evaluating pupil progress, working with pupil services, the use of media in schools, educational research in curriculum development and evaluation. Required for all Modern Language majors and minors. (Fa) Prerequisites: EDU 203, 304 or concurrent enrollment, 306 or permission from the Department Chair, and admission to the TEP. (MC-EA minors do not complete EDU 306 or 25 hours of clinical field work.)

- **EDU370: Special Education Curriculum Methods I: Literacy & Social Studies: MC-EA (4 hours)**
  This course teaches students the fundamentals of implementing research-based instructional strategies in the area of Literacy and Social Studies for students ages six through thirteen with a range of disabilities. Emphasis is on understanding students' needs as identified through the balanced assessment and progress monitoring processes. Students study effective teaching strategies, learn how to adapt curriculum for
individual differences, and study the organization of curriculum and instruction for students with disabilities. Students learn multiple strategies to develop reading and writing skills utilizing current research-based and technology methods. (Fa, Sp)

- **EDU371: Special Education Curriculum Methods II: Mathematics & Science: MC-EA (4 hours)**
  This course teaches students the fundamentals of implementing research-based instructional strategies in the areas of Mathematics and Science for students ages six through thirteen with a range of disabilities. Emphasis is on understanding students' needs as identified through the balanced assessment and progress monitoring processes. Students study effective teaching strategies, learn how to adapt curriculum for individual differences, and study the organization of curriculum and instruction for students with disabilities. Students learn multiple strategies to develop mathematical and scientific skills and thinking utilizing current research-based and technology methods. (Fa, Sp)

- **EDU398: Independent Study in Education (1 TO 4 hours)**
  Extensive study of an approved subject area, or problem in education, in which the student has a special interest or need. (Fa, Sp, Su) Approval of divisional dean and consent of instructor.

- **EDU400: Capstone in Elementary Educational Studies (4 hours)**
  A research seminar and practicum culmination of the academic and experiential work of the Elementary Educational Studies major. Students complete a major project that explores the Education Program's Guiding Principles in connection with gateways to educational employment outside of PK-12 schools. Individual practicum placements are made to capitalize on student interests. Placements are normally 8-12 weeks long. Open only to Elementary Educational Studies majors. Prerequisites: Senior Standing. (Fa, Sp)

- **EDU409: Secondary and K-12 Student Teaching (6 hours)**
  A supervised practicum in which students engage in planned teaching and various other duties as designated by the cooperating teacher. Placement is limited to schools that are within 30 miles of Carroll. Placement within walking distance of Carroll cannot be guaranteed; therefore, students must have transportation. Student teaching is considered a full load; no other courses should be added. Because of state requirements several weeks will be added to the Carroll semester to coincide with school district semesters. Fall student teachers will begin in August and teach into January. Spring student teachers will begin in January and teach after Carroll's graduation ceremony. (Fa, Sp) Prerequisites: Successful completion of appropriate PRAXIS II Content Knowledge Exam(s), and/or ACTFL Language Test, admission to the student teaching program, education faculty approval, satisfactory physical exam, TB test, and criminal history and background check.

- **EDU410: Secondary and K-12 Student Teaching (6 hours)**
  A supervised practicum in which students engage in planned teaching and various other duties as designated by the cooperating teacher. Placement is limited to schools that are within 30 miles of Carroll. Placement within walking distance of Carroll cannot be guaranteed; therefore, students must have transportation. Student teaching is considered a full load; no other courses should be added. Because of state requirements several weeks will be added to the Carroll semester to coincide with school district semesters. Fall student teachers will begin in August and teach into January. Spring student teachers will begin in January and teach after Carroll's graduation ceremony. (Fa, Sp) Prerequisites: Successful completion of appropriate PRAXIS II Content Knowledge Exam(s), and/or ACTFL Language Test, admission to the student teaching program, education faculty approval, satisfactory physical exam, TB test, and criminal history and background check.

- **EDU419: Early Childhood/Elementary Student Teaching (6 hours)**
  A supervised practicum in which students engage in planned teaching and various other duties as designated by the cooperating teacher. Placement is limited to schools that are within 30 miles of Carroll. Placement within walking distance of Carroll cannot be guaranteed; therefore, students must have transportation. Student teaching is considered a full load; no other courses should be added. Because of state requirements several weeks will be added to the Carroll semester to coincide with school district semesters. Fall student teachers will begin in August and teach into January. Spring student teachers will begin in January and teach after Carroll's May graduation ceremony. (Fa, Sp) Prerequisites: Successful completion of appropriate PRAXIS II Content Knowledge Exam(s), Foundations of Reading Test, and ACTFL Language Test for Modern Language minors, admission to the student teaching program, education faculty approval, satisfactory physical exam, T.B. test, and background and criminal history check.

- **EDU420: Early Childhood/Elementary Student Teaching (6 hours)**
  A supervised practicum in which students engage in planned teaching and various other duties as designated by the cooperating teacher. Placement is limited to schools that are within 30 miles of Carroll. Placement within walking distance of Carroll cannot be guaranteed; therefore, students must have transportation. Student teaching is considered a full load; no other courses should be added. Because of state requirements several weeks will be added to the Carroll semester to coincide with school district semesters. Fall student teachers will begin in August and teach into January. Spring student teachers will begin in January and teach after Carroll's May graduation ceremony. (Fa, Sp) Prerequisites: Successful completion of appropriate PRAXIS II Content Knowledge Exam(s), Foundations of Reading Test, and ACTFL
Language Test for Modern Language minors, admission to the student teaching program, education faculty approval, satisfactory physical exam, T.B. test, and background and criminal history check.

- **EDU422: Special Student Teaching Practicum (1 TO 5 hours)**
  A practicum for the licensed student who is extending teaching certification beyond his/her present license. University supervised student teaching at the level(s) and/or subject for which additional certification is desired. A portfolio and demonstrated proficiency in the Wisconsin Teacher Standards is also required. (Fa, Sp) Prerequisites: Successful completion of appropriate PRAXIS II Content Knowledge Exam(s), and/or ACTFL Language Test, and/or Foundations of Reading Test, successful background and criminal history check, and education faculty approval.

- **EDU423: Special Education Student Teaching (6 hours)**
  The student teaching experience is an intensive, comprehensive requirement that provides students with a culminating opportunity to apply theory, methods and skills learned throughout their teacher preparation in a school setting, working under the direction and guidance of a master classroom teacher. A university supervisor is responsible for observing and evaluating the student teacher throughout the classroom teaching assignments. Successful completion of one full semester of student teaching is required for professional licensure. Due to state requirements, several weeks will be added to the Carroll semester to coincide with school district semesters. Fall student teachers will begin in August and teach into January.
Engineering

- **GEN100: Engineering Seminar I (1 hours)**
  New engineering students will be given opportunities to develop and improve problem solving, computer literacy and study skills to maximize their chances for success in their university careers and prepare them for subsequent engineering courses. Topics include: making the transition from high school to university; time management; exploration of the engineering disciplines, learning styles, introduction to computer skills including spreadsheets, word processing and presentation software; engineering ethics; introduction to engineering methods. (Fa)

- **GEN101: Engineering Seminar II (1 hours)**
  New engineering students are given opportunities to explore the engineering programs through interdisciplinary projects. Emphasis will be placed on written and oral communication skills, data collection and analysis, computer application skills and group work. (Required course fee) (Sp) Prerequisite: GEN 100.

- **GEN105: Engineering Graphics (4 hours)**
  Problems relative to points, line's laws, work-energy methods, linear and angular momentum. (Fa, even years) Prerequisite: PHY 203, and MAT 207 or concurrent registration in MAT 207.

- **GEN210: Statics and Dynamics (4 hours)**
  Principles of statics and dynamics with applications in engineering. Topics include force/movement vectors, resultants, distributed loads, internal forces in beams, properties of areas, moments of inertia and the laws of friction, kinematics and kinetics of particles, rigid bodies in translation, rotation and general plane motion, Newton's laws, work-energy methods, linear and angular momentum. (Sp 2010) Prerequisite: PHY 203, and MAT 207 or concurrent registration in MAT 207.

- **GEN310: Strengths of Materials (4 hours)**
  Simple stress and strain; design and investigation of joints, beams, torsion members and columns; evaluation of shear, moment, slope and deflection of beams and combined stresses. (Sp, odd years) Prerequisite: GEN 210.

- **GEN380: Engineering Internship (4 hours)**

- **GEN320: Advanced Circuits and Electronics (2 hours)**
  Expanding on topics covered in PHY 204 and 301, analog circuits are treated in greater detail, including steady-state AC circuits, transfer functions, transient current dynamics, circuit analysis, phasors, follower circuits, and operational and transistor amplifiers. Additional analog topics include diodes, transistors (bipolar junction and field effect), elementary amplifier circuits, transistor limitations, comparators, and oscillators. Lectures and laboratories are expanded to include digital electronics, electronic devices and applications. Digital topics include digital circuits, digital logic, flip flops, counter, memory, A/D and D/A conversion. Additional topics may include arithmetic units and microprocessors. (Fa 2010) Prerequisite: PHY 301.

- **GEN320L: Advanced Circuits and Electronics Laboratory**
  Laboratory component for GEN320.
- **ENG140: Introductory Language Skills for Liberal Arts (4 hours)**
  An intensive review of the basic skills required by a Liberal Arts education - reading, writing and critical thinking. May not be counted toward an English major or minor. (Enrollment by assignment only.) (Fa, Su)

- **ENG162: Science Fiction and Gender (4 hours)**
  General Education H1. In this course, students will interrogate science fiction's role in exploring cultural constructions of gender. In addition, this course will acquaint students with the questions and critical conversations that shape both the study of science fiction and the study of gender. ENG 170 is recommended prior to enrollment. (Sp, Su)

- **ENG164: American Indian Literature and Spirituality (4 hours)**
  General Education P1. An introduction to the study of American Indian literature and cultures, representing select geographical locations, through literature, film, and primary sources. *Students will examine the importance of storytelling in reflecting, maintaining, and shaping tribal cultures, identities, histories, and traditions. *Course texts will represent a selection of geographically diverse American Indian cultures that will always include a Great Lakes Indian tribe to promote understanding of local cultural diversity. (Sp)

- **ENG165: Writing the Body: Cultural Explorations of Race, Gender and Class (4 hours)**
  General Education H1. This course explores how different cultures write meaning onto bodies, the mechanisms used to write those meanings, and the impact those meanings have on the bodies so inscribed. In general, this course looks at how culture uses the body as a site for enacting cultural practice and understanding. (Fa)

- **ENG170: Writing Seminar (4 hours)**
  Required for all first year students. Through critical reading - and with special attention to language, audience, purpose and structures - students develop effective approaches to writing. May not be counted toward an English major or minor. (Fa, Sp, Su)

- **ENG170H: Writing Seminar (4 hours)**
  Required for all first year honors program students. Students develop effective approaches to writing to an advanced degree. May not be counted toward an English major or minor. (Sp)

- **ENG190: Intro to Creative Writing - Imagination and Rhetoric (4 hours)**
  In this workshop, students will learn the conventions of three major genres of creative writing - fiction, non-fiction and poetry - as they develop their own process of creating these texts. This course is designed as an ideal introduction to creative writing and the workshop format for those students who are curious about, yet perhaps unfamiliar with, the area. (Fa)

- **ENG206: Fiction Writing (4 hours)**
  General Education F1. By studying master works of short fiction selected from contemporary authors and by participating in writing workshops, students will work to develop and refine their skills of writing fiction. (Sp)

- **ENG207: Poetry Writing (4 hours)**
  General Education F1. In this workshop, students will learn the conventions of poetry writing by studying master works of poetry and writing their own poems. (Fa)

- **ENG208: Creative Nonfiction Writing - The Documentary Impulse (4 hours)**
  General Education F1. The Documentary Impulse Students in this workshop will read and analyze a range of nonfiction texts, including literary journalism, documentary film, personal essay, and literary memoir, and examine the impulse to document the truth that underlies nonfiction. Students in the course will produce both analytical work about the genre as well as their own, original nonfiction pieces. (Sp)

- **ENG210: African American Literature (4 hours)**
  General Education H1. Students will read and respond to a variety of African-American literature - novels, poems, plays, autobiographies, short stories, and commentaries. The goal is that students will be able to write thoughtfully about the ethics and aesthetics of these works, and will more fully appreciate and understand the relationship between literature, history, and cultural values. ENG 170 is recommended prior to enrollment. (Fa, even years)

- **ENG211: Intro Literary Study I - Poetry (4 hours)**
  General Education H1. By examining numerous classic and contemporary examples, students will consider how poems are constructed to achieve their meanings. Numerous poetic elements and forms of analysis will be defined and discussed, and students will have the opportunity to analyze poetry in discussions and in writing. (Fa)

- **ENG212: Intro to Literary Study II - Short Fiction & Drama (4 hours)**
  General Education H1. This course teaches students to originate questions about literature and to formulate strategies to answer those questions. In addition to reading a wide variety of authors, students will have practice with using various methods of literary analysis. (Sp)

- **ENG214: Global Film Theory and Criticism (4 hours)**
Global Film Theory and Criticism (Fall) This course will help develop a critical vocabulary for analyzing and writing about film in a global context. This course will supplement film viewings with reading, discussion, and writing activities to improve student's ability to craft arguments based in evidence.

- **ENG219: Introduction to Linguistics (4 hours)**
  Students develop their own view on language policy, both in the classroom and in public arenas. Beginning with language production, students will piece together the fascinating story of human language development. In papers, discussions, and presentations, students will investigate social, psychological, and historical implications of language study. (Fa, even years)

- **ENG226: Africa: Literature and Culture of Its Many Nations (4 hours)**
  General Education H2. This course is designed to develop an awareness and understanding of the varied voices contained in contemporary African literature. In addition to examining these works as artistic productions, the course situates the narratives within the historical and political circumstances that give rise to them. ENG 170 is recommended prior to enrollment. (Fa, odd years)

- **ENG240: British Literature I - Medieval to 1700 (4 hours)**
  Course content focuses on major movements, authors, and texts in English Literature, beginning with the works of early Anglo-Saxon writers and continuing through the 17th century. (Fa)

- **ENG241: British Literature II - 1700 to Contemporary (4 hours)**
  Course content focuses on major movements, authors, and texts in English Literature, beginning with the works of the late 18th century and continuing through the present day. (Sp)

- **ENG242: American Literature: One Nation, Many Voices (4 hours)**
  This course looks at the ways America's original narrative, which was initially dominated by an exclusively Puritan perspective, has evolved, and continues to evolve, in response to historical events and an every changing cast of characters. (Sp even years)

- **ENG243: American Literature II - 1865 to Contemporary (4 hours)**
  Course content focuses on major movements, authors, and texts in American Literature from the end of the Civil War to the present day. (Sp)

- **ENG255: Postcolonial Literature and Theory (4 hours)**
  General Education P1. Literature of indigenous world cultures (non-Western-Eurocentric literature), to consider relationships between place and cultural identity, constructions of cultural difference, relationships between cultures, and operations of domination and resistance. The course also looks at the roles writers play in establishing or reestablishing cultural identity and addresses issues of ethics and morality in crossing cultures. (Fa, Sp, Su) (255H: Fa, odd years)

- **ENG255H: Postcolonial Literature and Theory (4 hours)**
  General Education P1. Literature of indigenous world cultures (non-Western-Eurocentric literature), to consider relationships between place and cultural identity, constructions of cultural difference, relationships between cultures, and operations of domination and resistance. The course also looks at the roles writers play in establishing or reestablishing cultural identity and addresses issues of ethics and morality in crossing cultures. (Fa, Sp, Su) (255H: Fa, odd years)

- **ENG298: Independent Study in English (1 TO 4 hours)**
  Prerequisites: Junior standing, approval of the divisional dean and consent of the instructor.

- **ENG299: Introduction to Medical Humanities (4 hours)**
  General Education H2. This course looks at the ways in which narratives surrounding illness become constructed. In addition to comparing the patient and physician perspectives, the course looks at ways in which perception of illness reflects both historical and cultural understandings.

- **ENG300: Great Authors (4 hours)**
  General Education H2. Intensive study of a body of work by an author deemed 'great' by scholars and critics. This study will include relevant critical and biographical readings and discussion of what, ultimately, makes the author 'great.' ENG 170 is recommended prior to enrollment. (Fa, odd years) Prerequisite: Junior standing or consent of the instructor.

- **ENG301: Chaucer (4 hours)**
  General Education H2. Intensive reading of the works of Geoffrey Chaucer, with special focus on the ways in which he both operated within and transcended the artistic conventions of his period. (Sp, odd years) Prerequisite: Junior standing or consent of the instructor.

- **ENG303: Milton and Moral Choice - His Age and Ours (4 hours)**
  General Education P2. Study of John Milton's poetry and prose, supplemented by other seventeenth century writers, concentrating on issues of the nature of Good and Evil, Moral Choice, Free Will, Guilt and Innocence, Gender, Desire, War, and Censorship. Discussion focuses on how these issues represent some of the most pressing anxieties of Milton's time and our own. (Fa, even years) Prerequisite: Junior standing or consent of the instructor.

- **ENG304: Shakespeare: From Stage to Screen (4 hours)**
General Education H2. Intensive study of representative histories, comedies, tragedies and late plays, with a focus on understanding their historical contexts as well as how the plays have been adapted in recent films. (Sp, even years) Prerequisite: Junior standing or consent of the instructor.

- **ENG305: Advanced Exposition and the Rhetorical Tradition (4 hours)**
  General Education H2. Rhetorical Tradition Students will read and analyze rhetorical texts ranging from Classical authors like Aristotle, to Modern and Postmodern theorists like Burke and Foucault. Theories learned from these texts will be used to examine historically important American speeches. (Fa, odd years)

- **ENG306: Advanced Fiction (4 hours)**
  Students in this workshop will focus more specifically on the foundational skills they studied in ENG 206. Readings will focus on understanding and analyzing the conventions of fiction, such as dialog, narration, theme, language and character, and using that knowledge to write and revise short stories. (Fa, even years) Prerequisite: ENG 206.

- **ENG309: Romantic and Victorian Literature (4 hours)**
  Students will read major writers of the nineteenth century in their historical context with emphasis on major poetry and prose, including the novel, in relation to literary and cultural history. (Sp, even years) Prerequisite: Junior standing or consent of the instructor.

- **ENG312: Modernism (4 hours)**
  Students read major works of the modern and postmodern periods in relation to prevailing cultural constructions of self, art, and the nature of reality. Students will also consider the causes and consequences of the widening gulf between highbrow literature and popular fiction. (Fa, odd years) Prerequisite: Junior standing or consent of the instructor.

- **ENG323: Renaissance English Literature (4 hours)**
  Verse, prose and drama of the Early Modern Period, including works by Behn, Donne, Herbert, Jonson, Marlowe, Marvell, Milton, Spenser, Sidney and others. The course studies sixteenth and seventeenth century literary traditions as they reflect and construct culture, as well as the ways the Early Modern Period anticipates and resists issues such as power, gender, love and faith in our time. (Sp, even years) Prerequisite: Junior standing or consent of the instructor.

- **ENG326: Age of Exuberance-Restoration and 18th Cent British Literature (4 hours)**
  A study of the artistic and moral values of the important writers of literature from 1660-1800. Themes of the course include: the evolving attitudes toward the emotions, reason, and the imagination; the ideas of order and control; the art and effect of comedy; the impact of the new science and the emerging middle class; the changing definitions of man and nature. (Sp, odd years) Prerequisite: Junior standing or consent of the instructor.

- **ENG380: Internship in English (2 TO 4 hours)**
  Work experience under professional supervision with opportunities to observe and question. Written report required. Only four credits may be applied toward completion of the major. Recommended as 10th course in the major. Prerequisite: Consent of the instructor.

- **ENG497: Guided Senior Thesis (2 hours)**
  The thesis will be completed under the guidance of a selected faculty member. Students will create a unified thesis of revised and polished work that will be used for final assessment. Prerequisites: ENG 496 and consent of the instructor. (Sp)

- **ENG499: English Major Capstone-Advanced Literature Seminar (4 hours)**
  In the capstone, students are expected to demonstrate mastery of the five English Program Learning outcomes. Course will be conducted as an advanced literature seminar and students will read primary as well as secondary materials in order to understand and insert themselves into a contemporary critical discussion. At the end of the seminar, students will submit a senior thesis project which demonstrates
scholarly research, critical engagement and literary analysis. (Fa) Prerequisite: Senior standing as an English major.
Environmental Science

- **ENV105: Earth Science (4 hours)**
  General Education N1. Introduction to the basic concepts in earth science, including the description, analysis, and interpretation of the major components of the earth's natural environment. The first part of the course focuses on the structure and processes of the atmosphere, along with resulting global patterns of climate. The second part of the course introduces map use and earth material identification and emphasizes the formation and distribution of the earth's landforms. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Fa, Sp)

- **ENV105L: Earth Science Laboratory**
  Laboratory component for ENV105.

- **ENV1120: Conservation and Environmental Improvement (4 hours)**
  General Education N1. A study of global natural resources and methods used in their conservation. The course includes the basic concepts of ecological biology including interactions between the living and the non-living elements of the environment, concepts of energy transformation in physical and biological systems, the nature of the Earth's ecosystems, and the implications of continued growth of the human population. Emphasis is placed on human environmental concerns and methods to be used to study and alleviate human environmental problems. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Fa, Sp, Su)

- **ENV1120L: Conservation and Environmental Improvement Laboratory**
  Laboratory component for ENV1120.

- **ENV1120H: Conservation and Environmental Improvement (4 hours)**
  General Education N1. This course investigates the science behind environmental issues ranging from waste management to conservation biology to water quality to renewable and nonrenewable energy. Through lectures, discussions, field trips, and laboratory investigations, we explore environmental problems and their potential solutions. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Sp, even years)

- **ENV1120HL: Conservation and Environmental Improvement Laboratory**
  Laboratory component for ENV1120H.

- **ENV1138: Cultural Geography (4 hours)**
  General Education S1. Emphasizes the spatial variations among human groups by describing and analyzing ways in which cultural phenomena such as language, religion, politics, agriculture, urbanization, and ethnicity vary from place to place over the face of the earth. Attention is given to how these phenomena are revealed in various cultural landscapes which are defined by different cultural groups occupying different places. (Sp)

- **ENV1160: World Regional Geography (4 hours)**
  General Education S1. An introduction to basic geographic concepts concerning spatial relationships between human populations and their natural environments. Investigates the role of regional geography in analyzing the cultural and physical characteristics of the earth. Surveys the landscapes of Europe, the former Soviet Union, the Middle East, Asia, Africa, and the Americas. (Fa)

- **ENV201: Problem Solving in Environmental Systems (4 hours)**
  This course takes an inquiry-based approach to address current and future environmental issues (water, energy, biodiversity loss, climate change, agriculture/aquaculture) through a project-based problem solving approach. Environmental issues will be explored through their scientific as well as sociological, economic, and political contexts. Students will be expected to examine environmental issues through compiling information from a variety of sources - textbook, internet, popular literature, and peer-reviewed publications. The course is a pre-requisite for some upper-level biology courses and will cover critical thinking skills required in upper-level Biology and Environmental Science courses. (Fa) Prerequisite: BIO 120 and sophomore standing, or consent of instructor.

- **ENV215: Natural Hazards (2 hours)**
  A survey of key natural hazards affecting the global environment today, including severe storms, floods, drought, volcanoes, earthquakes, erosional processes, fire, and climate change. Human perception of and response to these hazards will be considered. (Wn, Su)

- **ENV220: Weather and Climate (4 hours)**
  The first part of this course involves a survey of the physical processes and disturbances of the atmosphere, featuring common daily weather phenomena as well as selected hazardous storms. The second part investigates various controlling factors that influence the distribution of long-term global climate patterns. Emphasis is also placed on the influences of climate on surface vegetation, soils, water resources, health and human comfort, and economic activity. Historic climate change theories and contemporary global issues are both addressed. Laboratory exercises supplement lecture topics and emphasize local atmospheric observations and forecasts as well as regional climate data analyses. (Required course fee) (Sp) Prerequisite: ENV 105 or consent of the instructor.

- **ENV220L: Weather and Climate Laboratory**
Laboratory component for ENV220.

- **ENV222: Environmental Sustainability (4 hours)**
  General Education N2. Environmental sustainability is a very broad area of study that is generally focused on prudent use of the earth's resources in the production of goods and services that humans need and want in such a way as to ensure the well-being of future generations and the earth. This lecture and lab course will be designed to give students the conceptual knowledge and practical skills to assess the sustainability of environmental systems in light of human resource consumption practices. Prerequisite: ENV105 or ENV120.

- **ENV223: Geologic Landscape of N America (4 hours)**
  The major landform regions of the U.S. and Canada are examined with respect to their geologic structures, origins, stages of development, and defined spatial patterns. Course exercises supplement lecture topics through the use of topographic maps, geologic maps, aerial photographs and related local field trips. (Fa, odd years) Prerequisite: ENV 105 or consent of the instructor.

- **ENV252: Contemporary Issues in Geog and the Environment (2 hours)**
  This course highlights various contemporary issues relating to the global environment with a focus on the distributional patterns of environmental problems such as natural resource depletion, food production, overpopulation, energy use, water pollution, and global climate change. This course may be used with a prior university biology laboratory course to satisfy the environmental science requirement for teachers. (Wn, Su)

- **ENV253: Mapping and Remote Sensing (4 hours)**
  This course explores a number of tools and techniques used by environmental geographers to assess the patterns, distributions, and characteristics of various earth surface features, such as aerial photo and satellite image interpretation, geologic and topographic map interpretation, spatial data acquisition and analysis, and field mapping. It also introduces students to modern methods of remote sensing, including the applied use of color infrared, thermal infrared, microwave, radar and multispectral imagery in the study of landforms, agriculture, forestry, water resources, weather and urban planning. (Required course fee) (Fa)

- **ENV255: Environmental Resource-Wisconsin (4 hours)**
  This course investigates the spatial patterns of Wisconsin's varied physical and cultural landscapes, including such topics as climate, natural vegetation, geologic landforms, water resources, agriculture, and historic settlement patterns. (Su, even years)

- **ENV267: Geographic Information Systems (4 hours)**
  General Education N2. Geographic information systems (GIS) are a specialized computer program used widely at all levels of the scientific, business, government, and educational communities to examine data that are distributed on the Earth's surface. Through lecture, students will learn the theory behind and the terminology associated with GIS and spatial data. Through exercises, students will learn techniques to create, collect, manage, analyze, and present data to address environmental and other issues through hands-on use of the industry standard ESRI ArcGIS software. Students will also create and present their own GIS based research project. (Required course fee) (Sp)

- **ENV290: Workshop-Environmental Science (2 TO 4 hours)**
  Topical workshops, field studies, or short courses are established in various areas of interest as recognized/needed by the program. For example, under this listing, the program offers a 'Cultural and Environmental Geography of Alaska' field study during May term (odd years), which is also offered for NCEP credit.

- **ENV292: Environmental Ethics (4 hours)**
  General Education P1. This course addresses historic philosophical and religious perspectives concerning the natural environment, including contemporary ethical responses to such global concerns as resource stewardship and management, technological change and impact, ecological diversity and sustainability, environmental politics and economics, energy use, population growth, and overconsumption. An emphasis will be placed on global resource challenges and social issues related to resource utilization. (Sp)

- **ENV325: Soils and Hydrology (4 hours)**
  This course addresses various technical aspects of global soil and water resources, how we utilize and impact the quality and quantity of these vital resources, and how we manage and conserve them for future generations. Topics include soil classification, soil physics, soil chemistry, soil fertility, water chemistry, hydrology, and sediment and contaminant transport. Four hours of lecture/discussion and one three-hour laboratory. (Required course fee) (Fa) Prerequisites: CHE 109, CHE 110.

- **ENV349: Environmental Planning and Policy (4 hours)**
  An introduction to the nature of environmental planning, including various laws and policies designed to guide regional growth. The course examines the basic concepts and problems underlying the design and planning of environmentally desirable and appropriate land uses. Students will become familiar with federal, state, and municipal policies that influence and regulate environmental planning. Special emphasis
is placed on assessing growth and development within watersheds, mapping and inventorying regional land-use changes, and identifying critical environmental impacts. (Fa) Prerequisite: ENV 105.

- **ENV380: Internship in Environmental Sci (2 TO 4 hours)**
  Prerequisite: Junior or senior standing and consent of major adviser. 480. Work-Oriented Internship 2-4 credits*** Prerequisite: Junior or senior standing and consent of major adviser. 491. Special Topics in Environmental Science 1-4 credits*** This course is a study of a selected topic not covered in regular course offerings. Lecture and discussion. Offered as needed. The topic will be announced prior to registration. A course fee may apply.

- **ENV391: Topics in Environmental Science (1 TO 4 hours)**
  This course is a study of a selected topic not covered in regular course offerings. Lecture and discussion. Offered as needed. The topic will be announced prior to registration. A course fee may apply.

- **ENV396: Research-Environmental Science (2 TO 4 hours)**
  Prerequisite: Junior or senior standing and consent of major adviser.

- **ENV398: Independ Study-Environmental Sci (1 TO 4 hours)**
  Prerequisite: Junior or senior standing, approval of the divisional dean and consent of the instructor.

- **ENV455: Watershed Management (4 hours)**
  This course examines the interaction of abiotic, biotic, and social components in the management of a drainage basin's terrestrial and aquatic resources. Through the examination of global watershed management literature and related case studies, students will actively engage in the development of a watershed management plan. Class projects will focus on selected Wisconsin, upper Midwest, and Great Lakes watersheds. (Fa) Prerequisites: ENV 201, plus junior or senior standing. ENV 267 recommended.

- **ENV480: Work-Oriented Internship (2 TO 4 hours)**
  Prerequisite: Junior or senior standing and consent of major adviser.

- **ENV491: Topics in Environmental Science (1 TO 4 hours)**

- **ENV496: Research in Environmental Sci (2 TO 4 hours)**
  Prerequisite: Junior or senior standing and consent of major adviser. (Course fee required)

- **ENV498: Independent Study in Envir Science (1 TO 4 hours)**
  Prerequisite: Junior or senior standing, approval of the divisional dean and consent of the instructor.

- **ENV499: Capstone Seminar in Environmental Assessment (2 hours)**
  Examines some of the key tools and techniques used to effectively analyze and assess the impact of various human activities on environmental quality, and provides a capstone research/field experience in environmental science. Individual projects involve an environmental impact assessment or resource management plan. Contemporary issues and career opportunities in environmental management and monitoring are also addressed. (Required course fee) (Sp) Prerequisites: Environmental major status and senior standing.
European Studies

- **EUS391: Topics in European Studies (4 hours)**
  This advanced course uses a comparative approach to explore contemporary topics impacting the European experience. A single theme (immigration, education, the arts, etc.) provides a common thread throughout the semester, while guided research in students' cultures and languages of study lead to a greater depth of understanding.

- **EUS400: European Studies Capstone (4 hours)**
  Intended to facilitate students' transition from university into the professional world, the Capstone requires a cross-disciplinary project dealing with some historical, social, scientific, political and/or artistic aspect of European thought. The project demonstrates a proficiency in at least two European languages and cultures, as well as a mature understanding of a topic relevant to those cultures/countries. A concrete transition plan to graduate study or career of choice is also required.
Exercise Science

- **ESC100: Introduction to Exercise Science (2 hours)**
  Your session seems to be in use. If you have other pages on this site open, please wait for those pages to finish loading and then try again. Otherwise, return to the login to start a new session.

- **ESC201: Sports Nutrition (4 hours)**
  Your session seems to be in use. If you have other pages on this site open, please wait for those pages to finish loading and then try again. Otherwise, return to the login to start a new session.

- **ESC202: Advanced Sports Nutrition (4 hours)**
  Your session seems to be in use. If you have other pages on this site open, please wait for those pages to finish loading and then try again. Otherwise, return to the login to start a new session.

- **ESC210: Exercise Testing & Prescription (3 hours)**
  This course examines the evaluation of fitness levels and the components of fitness applicable to the development of exercise programs. Exposure to exercise prescription is also included in this course. (Required course fee) (Fa, Sp) Prerequisites: BIO 130 or consent of instructor.

- **ESC215: Group Exercise Workshop (2 hours)**
  This course is designed to develop proficiency in teaching skills specific to group exercise instruction for apparently healthy populations. The course focus is on the standards of basic exercise guidelines, choreography and design, instructional technique and cueing, exercise supervision, and overall presentation and performance. Supporting topics include kinesiology, nutrition, and legal implications. These standards are aligned with those of the American College of Sports Medicine. (Required course fee) (Fa, Sp)

- **ESC280: Exercise Physiology (4 hours)**
  Students explore the functions and the underlying scientific mechanisms of the body's physiological systems. The course will examine the acute response and chronic adaptations to cardiorespiratory and muscular conditioning. The students will also explore proper exercise prescription to enhance health and physical performance. (Required course fee) (Fa, Sp) Prerequisites: BIO130 and BIO140 or equivalent.

- **ESC280L: Exercise Physiology Lab**
  Laboratory component for ESC280.

- **ESC300: Nutrition and Health (4 hours)**
  This course investigates the functions of the six classes of nutrients: carbohydrates, lipids, proteins, vitamins, minerals, and water. The study of these nutrients will be extended to human physiological requirements, energy balance, food sources, labeling and safety, and deficiency symptoms. Students will examine healthy nutrition through the life cycle involving selected cultural groups, diet and physical activity as well as designated diseases. Students will be expected to apply their nutrition knowledge to their own lives along with a client/patient's life to assess dietary adequacy and compatibility with optimal health. (Fa, Sp) Prerequisites: CHE102, BIO130, and BIO140.

- **ESC302: Exercise in Health & Disease (3 hours)**
  This course examines and applies the principles of exercise prescription for normal and special cases. Development of exercise strategies for the apparently healthy, elderly, obese, hypertensive, and cardiac patients are discussed. In addition, exercise considerations for diabetes, asthma, arthritis, osteoporosis and pregnancy are explored. (Sp) Prerequisites: ESC 210 or consent of instructor.

- **ESC303: Nutrition Assessment and Prescription (3 hours)**
  This course is designed to give the student knowledge and tools to assess the current diet and exercise habits of an athlete. Students will be able to use the assessment results to prescribe an eating plan. (Wn) Prerequisites: ESC 201.

- **ESC304: Nutrition and Fitness for Special Populations (3 hours)**
  The objective of this course is to apply the principles of sports nutrition to improve the health and functionality of special populations, including athletes with eating disorders. (Su I) Prerequisites: ESC 210 and ESC 303.

- **ESC305: Supplements for Sports Performance (2 hours)**
  The goal of this course is to provide the student with information on both safe and harmful supplementation for athletes. Specifically, the students will understand the proposed mechanism of action of a supplement, learn to evaluate the claim of effectiveness and evaluate its potential as an ergogenic aid. (Wn)

- **ESC315: Exercise Science Practicum I (1 hours)**
  This course provides students with an opportunity to observe and apply skills learned in exercise science and recreational management programs under the direction and supervision of the Exercise Science faculty. (Required course fee) (Fa, Wn, Sp, Su I) Prerequisites: ESC 210 for exercise science students, junior standing, current Professional Rescuer CPR & First Aid certification. (Course Fee Required) (Grading is on an S/U basis.)

- **ESC320: Exercise Testing and Prescription (4 hours)**
This course provides students with the knowledge, skills, and abilities (KSA's) to appropriately select, perform and interpret preparticipation screenings, pre-exercise evaluations, commonly used field and laboratory exercise tests, basics of exercise prescription, and metabolic assessment for apparently healthy populations across the lifespan. (Required course fee) (Fa, Sp) Prerequisites: ESC280 or equivalent.

- **ESC320L**: Exercise Testing & Prescription Lab
  Laboratory component for ESC320.

- **ESC322**: Kinesiology (4 hours)
  This course explores the underlying mechanisms of human movement (anatomical and mechanical). Biomechanical terminology and principles are introduced. Students examine the laws of nature which govern movement, and how they can be applied to human movement in a manner designed to enhance performance. The course also explores the roles and functions of the nervous and musculoskeletal systems in human movement and performance and the manner in which they work individually and collectively during movement. Four hours of lecture/discussion and two hours of laboratory per week. (Required course fee) (Fa, Sp) Prerequisites: ESC280 or equivalent.

- **ESC322L**: Kinesiology Lab
  Laboratory component for ESC322.

- **ESC324**: Exercise Science Laboratory (2 hours)
  This course further develops knowledge, skills, and abilities that exercise professionals need to possess in order to function competently in commercial, corporate, and clinical health and fitness settings. (Required course fee) (Wn, Sp) Prerequisites: HSC 303, HSC 322.

- **ESC3390**: Strength & Conditioning Theory Across the Lifespan (4 hours)
  This course is intended to prepare future professionals to apply scientifically sound principles to strength and conditioning programs. Students will study strength, speed, cardiovascular, and flexibility training through the use of concepts learned in physiology, anatomy, kinesiology, and psychology. Students will learn appropriate exercise program design, safe exercise technique, and the ways to assess physical improvement in clients. (Required course fee) (Fa, Sp) Prerequisites: ESC280 and ESC320 or equivalent.

- **ESC3390L**: Strength and Conditioning Theory Across the Lifespan Lab
  Laboratory component for ESC390.

- **ESC3391**: Strength & Conditioning for Sport (2 hours)
  This course presents advanced strength training and conditioning theory and practice. Designed primarily for students that may be involved in strength and conditioning for athletes at any age, the course explores periodization models and their utilization, mastery and analysis of explosive lifts, plyometric programming, speed and agility drills and programming, facility design, and ergogenic aids. (Required course fee) (Wn) Prerequisites: HSC 303, HSC 322, HSC 110 or permission from instructor.

- **ESC3400**: Exercise Prescription for Special Populations (4 hours)
  This is an advanced course in clinical exercise testing and prescription that will focus on the applicable assessment techniques, treatment procedures, exercise prescription, and patient education for individuals with cardiovascular, pulmonary, metabolic, musculoskeletal and neuromuscular diseases. This course will also examine common special needs such as cognitive, psychological and sensory disorders. The course is designed to provide the student with a basic understanding of the pathophysiology and exercise responses in these special populations. (Required course fee) (Fa, Sp) Prerequisites: ESC320 or equivalent.

- **ESC3421**: Exercise and Sport Psychology (4 hours)
  This course examines the psychosocial foundation of exercise and sport to include the application of research findings as they apply to performance in exercise and sport settings, such as personality/character, confidence, motivation, arousal regulation, team dynamics, goal setting, self-destructive behavior and psychological skills training. (Fa, SP)

- **ESC3435**: Exercise Science Practicum II (1 hours)
  This course provides students with an opportunity to develop practical, hands-on skills and experiences in exercise science and recreation management under the direction and supervision of the Exercise Science faculty. (Required course fee) (Fa,Wn, Sp, Su I) Prerequisites: ESC 315, current Professional Rescuer CPR and First Aid certification. (Course Fee Required) (Grading is on an S/U basis.)

- **ESC3440**: Lifetime Weight Management and Behavior Change (4 hours)
  This course focuses on the various components of and strategies for successful weight management. The role of diet, physical activity, and behavior modification, as well as the physiological, sociological and psychological aspects of weight management will be discussed. Students will complete lifestyle, physical activity and nutritional analyses, and design weight management programs to include tailored physical activity plans. Students will also participate in client-centered physical activity and nutritional counseling. (Sp) Prerequisites: PSY101, ESC300, and ESC320 or equivalent.

- **ESC3460**: Practicum (4 hours)
  This course provides students with an opportunity to observe and apply skills learned within the clinical or strength and conditioning tracks in the exercise science program under the direction and supervision of Exercise Science faculty. The course is also designed to prepare students for appropriate professional
organization certification exams and for post-graduate study in exercise science or other health related disciplines such as medicine, physical therapy, cardiac rehab, occupational therapy and physician assistant. (Required course fee) (Fa) Prerequisites: ESC440.

- **ESC480: Internship (12 hours)**
  This course is an opportunity for students to apply theories and concepts to actual work experiences under the direction of the capstone advisor and the site supervisor. The purpose of the internship is to provide opportunities to improve skills, reach goals, and adapt to the world of work. (Fa, Sp, Su) Prerequisites: Senior standing, major requirements completed, current Professional Rescuer CPR and First Aid certification, and approval of the instructor.
Fine Arts

- **FAR105: Introduction to World Dance (4 hours)**
  General Education F1. Examination of movements in dance within the context of world cultures. This course will include the analysis and practice of dance techniques from various cultures.

- **FAR120: Introduction to Fine Arts Administration (4 hours)**
  An introduction to the theory and practice of arts administration. The course offers historical perspective for the position of the arts in the economy, education, and public policy in the United States and shares a basic framework for developing organizational vision, planning methods, fundraising, marketing approaches and fiscal management. Students are introduced to local arts organizations, their goals and challenges. (Sp, even years) Prerequisite: BUS 101.

- **FAR221: Legal Issues in the Fine Arts (4 hours)**
  This course explores some of the pressing legal issues related to the arts in contemporary society, including intellectual property law (particularly copyright), employment law, contract law, agency law, licensing and cyber-law, as well as nonprofit status, management and funding. Legal issues related to emerging media are considered, as are the broader ethical responsibilities of artists and arts organizations. (Fa, even year)

- **FAR230: Book History (4 hours)**
  History of the printed book explores the history of communication through manuscript and printed format. From Egyptian papyrus scrolls in 1370 BC to Asian folded books in 930 AD to Johannes Gutenberg’s 15th century 42-line Bible, this course examines the critical moments in communication and book design, typography, color use, and construction. (Sp, odd years)
French

- **FRE101: Elementary French I (4 hours)**
  A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the French language. Introduction to French cultures, politics, history, and literature through texts in English or in English translation from French. Conducted primarily in French. (101-Fa; 102-Sp)

- **FRE102: Elementary French II (4 hours)**
  A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the French language. Introduction to French cultures, politics, history, and literature through texts in English or in English translation from French. Conducted primarily in French. (101-Fa; 102-Sp)

- **FRE201: Intermediate French I (4 hours)**
  A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the French language. Introduction to French cultures, politics, history, and literature through texts in English or in English translation from French. Conducted in French. (201-Fa; 202-Sp)
  Prerequisites: FRE 102 for FRE 201, FRE 201 for FRE 202 or equivalent.

- **FRE202: Intermediate French II (4 hours)**
  A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the French language. Introduction to French cultures, politics, history, and literature through texts in English or in English translation from French. Conducted in French. (201-Fa; 202-Sp)
  Prerequisites: FRE 102 for FRE 201, FRE 201 for FRE 202 or equivalent.

- **FRE298: Independent Studies in French (2 TO 4 hours)**
  Prerequisites: Junior standing and written consent of instructor required for registration. Written proposals of projects must have the prior approval of the divisional dean and consent of the instructor prior to registration. (Fa, Sp)

- **FRE301: Conversation & Composition (4 hours)**
  General Education H1. Emphasis on active use of the language, and functional grammar review, including interaction in social and general conversations, vocabulary building, syntactic structures and sentence patterns. Constant focus on pronunciation and diction, with introduction to basic phonetic and linguistic principles. Reading of literary and cultural texts. Discussions of contemporary topics. Conducted in French. (Fa) Prerequisites: FRE 202 or equivalent.

- **FRE307: French Civilization (4 hours)**
  General Education H2. Acquaints students with the major events of French history, including the various artistic, cultural and social elements which have contributed to making France what it is today, in order to better understand the French, their customs and their lifestyle. Oral and written reports. Conducted in French. (Sp, alt. years) Prerequisite: FRE 301 or consent of instructor.

- **FRE318: Topics in French and Francophone Literatures (4 hours)**
  This course is designed to address questions of culture, history, politics, art and thought through the study of French language/literature. Students will discuss, analyze and develop their own critical approach and ideas around the texts in class and through oral, written and research reports and papers. Topics are drawn from the literature of French-speaking Europe, Africa, and the Caribbean. Conducted in French. May be repeated with change of topic. (Sp, alt. years) Prerequisites: FRE 301 or consent of the instructor.

- **FRE398: Independent Studies in French (2 TO 4 hours)**
  Prerequisites: Junior standing and written consent of instructor required for registration. Written proposals of projects must have the prior approval of the divisional dean and consent of the instructor prior to registration. (Fa, Sp)
German

- **GER101: Elementary German I (4 hours)**
  A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the German language. Introduction to Germanic cultures, politics, history, and literature through texts in English or in English translation from German. Conducted primarily in German. (101-Fa; 102-Sp) Prerequisite for GER 102: a grade of C or better in GER 101 or consent of the instructor.

- **GER102: Elementary German II (4 hours)**
  A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the German language. Introduction to Germanic cultures, politics, history, and literature through texts in English or in English translation from German. Conducted primarily in German. (101-Fa; 102-Sp) Prerequisite for GER 102: a grade of C or better in GER 101 or consent of the instructor.

- **GER201: Intermediate German I (4 hours)**
  Continued practice in comprehension, speaking, reading, and writing. Review of and elaboration in grammatical structures, composition, and vocabulary building serve as aids in the development of conversational ability. Growth in reading skills and cultural enrichment produced through readings on contemporary German life. Conducted in German. (201-Fa; 202-Sp) Prerequisites: a grade of C or better in GER 102 or consent of the instructor for GER 201; a grade of C or better in GER 201 or equivalent or consent of the instructor for GER 202.

- **GER202: Intermediate German II (4 hours)**
  Continued practice in comprehension, speaking, reading, and writing. Review of and elaboration in grammatical structures, composition, and vocabulary building serve as aids in the development of conversational ability. Growth in reading skills and cultural enrichment produced through readings on contemporary German life. Conducted in German. (201-Fa; 202-Sp) Prerequisites: a grade of C or better in GER 102 or consent of the instructor for GER 201; a grade of C or better in GER 201 or equivalent or consent of the instructor for GER 202.

- **GER298: Independent Studies in German (2 TO 4 hours)**
  Prerequisites: Junior standing and consent of instructor. Written proposals of projects must have the prior approval of the divisional dean and consent of the instructor prior to registration. (Fa, Sp)

- **GER301: Conversation & Composition (4 hours)**
  General Education H1. An advanced German language course, which provides continued practice in conversation and composition with emphasis on new vocabulary. This course includes functional grammar review. Readings and discussions of literary as well as non-literary texts introduce students to more complex topics in German life, history, and culture. Reinforcement of basic phonetic elements and syntax to further refine pronunciation and composition. Conducted in German. (Fa) Prerequisites: a grade of C or better in GER 202 or equivalent or consent of the instructor.

- **GER318: Topics in German Culture and Literature (4 hours)**
  General Education H2. This course surveys specific time periods and/or movements in German cultural history, including art, architecture, music, and literature. Students develop their ideas and improve their written and spoken communication skills through essays, oral reports, and a research paper. May be repeated with change of topic. Conducted in German. (Sp) Prerequisites: a grade of C or better in GER 301 or consent of instructor.

- **GER398: Independent Studies in German (1 TO 4 hours)**
  Prerequisites: Junior standing and consent of instructor. Written proposals of projects must have the prior approval of the divisional dean and consent of the instructor prior to registration. (Fa, Sp)

- **GER401: Advanced Conversation (2 hours)**
  Guided discussions on a variety of topics enhance vocabulary building. Opportunities for both formal oral presentation and informal conversation promote practice, skill and confidence. Grammar is reinforced through practice centering on a particular voice, tense, and/or theme.

- **GER498: Independent Directed Study (2 TO 4 hours)**
  Reading in a specific area of German literature, culture, or history. Weekly conferences conducted in German. Eight credits maximum will apply toward the degree. (Fa, Sp) Prerequisites: Junior standing and consent of instructor. Written proposals of projects must have the prior approval of the divisional dean and consent of the the instructor prior to registration.
Graphic Communication

- **GRC101: Web and Digital Tools for the 21st Century Learner (2 hours)**
  This course is aimed at the innovator, both the novice and the adventurous, in web or digital communication, creation and collaboration. We will focus on a variety of tools (i.e., web-based applications) available on the Internet that will not only aid you in organizing and completing homework and projects, but also provide you tools for lifelong learning. (Fa, Sp)

- **GRC106: Intro-Communication Technology (2 hours)**
  This class provides an introduction to numerous computer applications (Adobe Creative Suite) used within the field of digital communication. Special emphasis will be placed on desktop publishing software, history of graphic design, inter-environment communications, graphics formats and file handling software. (Fa, Sp)

- **GRC150: Digital Toolbox - Photoshop/ Illustrator 1 (4 hours)**
  This course introduces Graphic Communication students to the professional design tools used by current design industry. Students will learn the differences between the raster and vector applications and the uses of each, how to access/utilize various color systems (print and web), and prepare files for final production within print, web, and multimedia. (Fa, Sp)

- **GRC200: Color and Typography (4 hours)**
  Color and Typography will explore, in detail, two of the four primary elements in digital media: the implementation of color and use of typography. Use of additive, subtractive and Pantone colors will comprise the color portion of the course; examination into word/letterforms, typefaces, and comprehension studies will comprise the typography portion of the course. (Sp) Prerequisite: GRC 150.

- **GRC210: History of Graphic Design (2 hours)**
  The history of Graphic Design begins with cave markings from approximately 200,000 years ago and continues through to today’s digital technology processes. Students will investigate specific periods in graphic design history, explore historic methods in communication, and be introduced to the global influences in graphic design. (Fa)

- **GRC230: Digital Photography (4 hours)**
  Digital Photography is designed to develop a student's skills in digital photography and its uses within print and digital presentations. Throughout the course of the semester, students will learn the differences between film and digital cameras, digital photo editing techniques, aesthetic qualities of photography, and the tools associated with digital photography. Students will learn to digitally capture images among a variety of photographic situations. Students will also learn how to prepare images for print and onscreen presentation. ($67 course fee) (Fa, Sp)

- **GRC290: Digital Toolbox - Photoshop/ Illustrator 2 (4 hours)**
  Students will build upon their skill set acquired in Digital Toolbox Photoshop and Illustrator I. Students will explore animation, web image development, paths and shapes creation, print file preparation, automation, and execution into other digital vehicles. Students will create a variety of projects that emphasize the importance of communication and audience. Prerequisite: GRC 150 for GRC Majors; ART 250 for Art Majors. (Sp)

- **GRC295: 3-D Digital Design (4 hours)**
  3D Digital Design affords students the opportunity to create realistic environments, characters, and objects using state-of-the-art software. Students will learn to model, paint, sculpt, render and animate for environmental design, package design, gaming, product design, and industrial design. (Fa)

- **GRC320: Intro to Multimedia Production (4 hours)**
  This course is designed as a Graphic Communication course, emphasizing artistic production using web development software (Adobe Dreamweaver), including, but not limited to: animation, digital video, and creating multimedia presentations and artworks. Multimedia, for the purposes of this course, means utilizing more than one of the following media elements: sound, images, text, video, animation, and/or interactivity, in all projects. Emphasis will be on the marriage of sound design, sophisticated content and visual interest. (Fa) Prerequisite: ART 250, GRC 106, or GRC 150.

- **GRC330: Digital Video I (4 hours)**
  Students will learn how to use storyboarding techniques to develop short video project, videotape indoor and outdoor scripted scenes, edit digital video using iMovie, enhance audio, upload video to their own websites, and create DVDs/VCDs. Students will learn to identify scenes and still images that work best in a video project. Students will develop short video projects for specific and general audiences alike. (Fa)

- **GRC340: Digital Video II (4 hours)**
  Students will utilize skill sets learned in Digital Video 1 to create two documentaries utilizing Final Cut Pro Studio 2 (the industry standard in video production). Students will learn the elements of defining and writing storyboards and develop scene scripting for two one-hour documentaries that address public issues. Students will learn interviewing techniques, hone video production skills, and learn the latest trends/techniques in producing social awareness videos. (Sp)

- **GRC350: Digital Video III (4 hours)**
Digital Video III will continue the path outlined for a student's understanding of producing works for personal and commercial video work. Students will learn how to develop short and long video projects, develop greater skill in editing techniques (audio and video), work in detail with lighting (available and supplemental), and be introduced to special effects through Adobe After Effects including work with green screen capabilities. In addition to the video projects, students will produce one written essay. (Fa)

**GRC355: Digital Video IV (4 hours)**

Digital Video IV culminates in the production of one original 30-minute video (documentary, comedy, fiction, drama, historical, horror, science fiction). Students will work in pairs to produce the video. The result will be an exhibition in Waukesha, and will be open to the public. Additionally, students will work with theater majors as talent to complete this project. The overall learning objective if this course is to (1) demonstrate an understanding of the complexity, depth, and structure of producing a long video project, (2) produce an original screenplay for a long video project, (3) secure a dynamic working relationship with talent and team members, (4) exhibit and establish professional relationship with cinema professionals video screening, (5) oversee and create advertising and marketing materials for the long video project, (6) create and continually update a blog about the experience. (Sp) Prerequisite: GRC 330, GRC 340, GRC 350.

**GRC360: Digital Flash Gaming (4 hours)**

Students will utilize skills learned in GRC 320 to create Adobe Flash games for creative marketing application and entertainment. In addition to creating flash games, students will learn how to upload files for general audience use. Students will be assigned specific marketing projects for their Adobe Flash games for use across a wide variety of digital vehicles. Other Flash projects may be assigned during the semester to expand the student's understanding of techniques and objectives. (Sp)

**GRC391: Special Studies/Topics (1 TO 4 hours)**

Study of a selected topic not covered in the regular curriculum. The topic will be announced prior to the beginning of the semester. Four credits maximum will apply toward degree. Prerequisite: Consent of instructor.

**GRC450: Capstone-Projects for Graphic Communication Majors (4 hours)**

A seminar intended to consolidate and expand your experience and education as well as a foundation for continued research as you prepare to enter your chosen field. (Sp) Prerequisites: All program requirements completed.

**GRC480: Internship-Graphic Communication (1 TO 12 hours)**

Students must complete a minimum of four credits (120 hours) of internship work while at Carroll University. The internship course involves professional work experience in your field under the supervision of faculty and industry personnel. Course is repeatable to a maximum of 12 credits. Each four credits should have substantially different learning experiences. 120 hours of internship work experience is expected for every 4 credit hours attempted. (Fa, Sp, Su) Prerequisites: Junior or senior standing and director approval. Grading is S/U.

**GRC491: Special Studies/Topics (1 TO 4 hours)**

Study of a selected topic not covered in the regular curriculum. The topic will be announced prior to the beginning of the semester. Four credits maximum will apply toward degree. Prerequisite: Consent of instructor.

**Courses Offered at Waukesha County Technical College**

**GRC110: Print Media/Digital Publishing I (3 hours)**

Study offset lithography, flexography, and digital printing. Compare and contrast the advantages and disadvantages of the printing methods of gravure, and screen-printing. Produce single, two- and four-color printed pieces. Acquire knowledge relating to CTP, the PMS system, screens, halftones, print careers, print economics and the four-color process.

**GRC120: Print Media II (3 hours)**

Print single and multicolored projects using primarily Heidelberg Printmaster GTO2 color 20-inch presses. Study the common elements of all presses the feeder, registration, printing, and delivery systems. Learn basic press maintenance and problem solving, pressroom chemistry, and safety. Become familiar with paper of various kinds, weights, textures, and sizes, as well as various types of ink. Prerequisites: GRC 106.

**GRC121: Digital Illustration (3 hours)**

Enhance ability to draw on the computer with Adobe Illustrator. Learn how to apply various filters and colors to objects; create masks around objects; use the transformation tools (rotate, scale, reflect, shear, blend); create compounds and make special dashed lines to create many special effects. Prerequisites: ART 250 and GRC 106.

**GRC122: Post Press/Distribution (3 hours)**

Explore current and emerging technologies for binding, finishing, and distributing printed materials. Learn the basic operations of commercial bindery and finishing equipment.
- **GRC130: Print Media III (3 hours)**
  Use a computerized press console to set up and operate a Heidelberg SM742 color perfecting press. Reproduce high quality line and halftone copy in multiple colors on a Komori Sprint 262 color, a Heidelberg Printmaster GTO 525 color and other two-color presses. Discuss flexographic printing and platemaking.

- **GRC135: Digital Workflows (3 hours)**
  Study computer integrated manufacturing technologies as applied to commercial printing production problems. Discuss preflighting, trapping, and imposition. Learn to properly prepare and analyze digital files for output to eliminate problems that can occur during the printing production process.
  Prerequisites: 204121 Digital Illustration and 204131 ImageEditing/Photoshop.

- **GRC140: Print Materials and Estimating (3 hours)**
  Examine the scope and functions of printing estimating. Estimate, cost, and price various printing services. Discuss topics including computers for production and management, developing a cost estimating system, estimating paper, ink electronic prepress, press and finishing operations, and marketing and management issues. Analyze various operations within the printing industry.
  Prerequisites: 204139 Digital Workflows.

- **GRC141: Production Coordination/Customer Service (3 hours)**
  Customer Service Explore the commercial printing manufacturing process. Examine the role and function of the customer service representative, electronic workflows, and time requirements for production of commercially printed products that are within budget. Prerequisites: 204122 Post Press/Distribution, 204130 Print Media.

- **GRC142: Color Management (3 hours)**
  Combine math, physics, and chemistry concepts with measurement and statistical process control methods to appraise, control, and improve color reproduction. Learn to use and work with densitometers, spectrodensitometers, spectrophotometers, tone reproduction control software, and color measurement software.
Health Sciences

- **HSC101: Intro to Health Care Skills (1 hours)**
  The purpose of this course is to provide the knowledge and skills that are necessary to become First Aid and Professional Rescuer CPR/AED (Automated External Defibrillator) certified in accordance with the American Red Cross. These skills include the ability to call for help, to help sustain life, reduce pain, and minimize the consequences of injury or sudden illness until advanced medical care arrives. Students will also be trained on policies and standards regarding blood borne pathogens and occupational exposure in accordance with the Occupational Safety and Health Administration (OSHA) guidelines. (Required course fee) (Fa, Wn, Sp)

- **HSC103: Personal and Community Health (4 hours)**
  Studies the dynamics of health in modern life with special emphasis on health concepts relevant to personal and community living. (Fa, Sp)

- **HSC105: Group Exercise Instruction (1 hours)**
  This course provides training for the entry-level Group Exercise instructor. This course will cover basic cardiorespiratory physiology, aerobic program design and group exercise class development using activity and application to develop instructional skills. (Required course fee) (Fa, Sp)

- **HSC105L: Group Exercise Instruction Lab**
  Laboratory component for HSC105.

- **HSC110: Basic Weight Training Instruction (1 hours)**
  This course provides training for the entry-level resistance-training instructor, introducing basic strength training techniques, basic training principles, functional anatomy, and exposure to a variety of forms of resistance training. Students learn to apply basic physiology, biomechanics, weight room safety, and basic program design. (Required course fee) (Sp)

- **HSC110L: Basic Weight Training Instruction Laboratory**
  Laboratory component for HSC110.

- **HSC120: Fundamental Motor Development (4 hours)**
  Introductory course exploring the growth and development of basic motor skills from infancy to adulthood and changes which occur in skills with advanced age. This course will also explore different learning theories and variables associated with mastering motor skills. (Required course fee) (Sp) Prerequisites: BIO 130.

- **HSC130: Health Careers Exploration (2 hours)**
  This course will help students to explore the various health care professions. There is a great deal of interest in health care careers, and there is a need for workers in all health care fields. Certain professions such as doctor and nurse are well known among the general population. Others may be unknown or not understood well, yet may be valuable options for the student to explore as a possible health care career opportunity. Those students who are sure of their majors in a health care area may want to know more about the function of other individuals on the health care team. Information regarding resume writing and job searching will also be presented. A variety of methods including lecture, discussion, presentations, a job shadow/interview experience, and writing assignments will be employed. (Fa, Sp)

- **HSC290: Cultural Influences in Hispanic Health Care (2 hours)**
  This course will focus on the impact of cultural influences in Hispanic populations as people make health care decisions. The learning objectives will be based on the need for students to obtain an understanding of Hispanic culture as it affects the clinician/patient relationship. The topics covered will enhance the effectiveness of the students to develop better research questions and to be able to anticipate the most appropriate ways of interacting with Hispanic populations. This course will be taught in English as a main language but also will introduce students to bilingual terminology. (Fa)

- **HSC300: Pharmacology (3 hours)**
  Addresses pharmacology for the licensed athletic trainer and nurse. Students explore basic knowledge about major drug groups, physiological effects of pharmacotherapeutic agents, utilization of pharmacotherapeutic agents, and storage, dispensing, and tracking protocols for pharmacotherapeutic agents. (Fa, Sp) Prerequisites: CHE 101/102 or higher, BIO 103/104 or 130/140 or higher.

- **HSC303: Exercise Physiology (4 hours)**
  Students explore the functions and the underlying mechanisms of action of the body's physiological systems, their acute response to physical activity, and their adaptation to chronic physical activity. This course also explores means by which physical performance can be enhanced. (Fa) Prerequisite: BIO 130 and 140.

- **HSC322: Kinesiology (4 hours)**
  The anatomical and mechanical bases of normal human movement are studied in this course. Biomechanical terminology and principles are introduced. Students examine the laws of nature that govern movement and how they can be applied to human movement in a manner designed to enhance performance. The course also explores the roles and functions of the nervous and musculoskeletal systems...
in human movement and performance and the manner in which they work individually and collectively during movement. (Fa) Prerequisite: BIO 130 and 140.

- **HSC310: Cardiovascular Anatomy (1 hours)**
  This course focuses on structure, function and pathology of the cardiovascular system. Mechanisms of function of the cardiovascular system will be discussed. Cardiac structures and identification will be covered.

- **HSC311: Cardiovascular Physiology (2 hours)**
  This course is designed to put into practice basic and advanced cardiovascular physiology concepts. The course will include the conduction system, circulation system, ECG pattern recognition and intracardiac pressures. CV physiology will also explore the heart at the cellular level. Student will learn about the cardiac action potential, coupling and uncoupling of myocardial sarcomeres and preload/afterload concepts. This course will include cardiac heart sounds and other clinical clues used in conjunction with echocardiographic evidence to determine a cardiac diagnosis.

- **HSC312: Doppler Principles (1 hours)**
  The objective of this course is to provide the necessary skills and knowledge to perform a complete cardiac Doppler examination. The course will cover the introduction to cardiac Doppler assessment, Doppler hemodynamics, and color flow imaging. The student will learn how to perform Doppler assessment and quantification of severity of valvular stenosis and regurgitation. Students will also learn how to provide information for both systolic and diastolic Doppler assessments.

- **HSC313: Adult Echocardiography - Cardiomyopathy (2 hours)**
  This course focuses on the necessary knowledge and assessment of adult cardiomyopathies. Students will learn how to perform a comprehensive assessment of hypertrophic, restrictive, dilated, arrhythmogenic and unclassified cardiomyopathies. Students will learn the necessary 2D imaging and Doppler hemodynamics assessments to complete a full comprehensive examination.

- **HSC314: Adult Echocardiography - Valvular Disease (3 hours)**
  This course focuses on the necessary knowledge and assessment of adult valvular heart disease. Students will learn how to perform a comprehensive valvular heart assessment. This course will include an introduction to valvular disease, echocardiographic assessment of the aortic, mitral, tricuspid and pulmonary valve using 2D, M-mode, Doppler and color flow imaging. The course will also cover surgical valvular interventions and interrogation of both pre-op and post-op complete echocardiographic hemodynamic assessments.

- **HSC315: Adult Echocardiography - Advanced Pathologies (3 hours)**
  The focus of this course is to provide the basic knowledge of major cardiac pathophysiology that students will encounter while practicing echocardiography. This course will cover systemic and pulmonary hypertension, infiltrative heart disease, cardiac tumors and masses, pericardial disease, cardiac diseases related to systemic illness, and diseases of the great vessels. Students will learn how to complete a comprehensive 2D and Doppler assessment of these major cardiac diseases.

- **HSC316: Embryology of the Heart (2 hours)**
  This course will discuss cardiovascular development as it relates to various types of congenital heart disease.

- **HSC317: Special Procedures in Echocardiography (3 hours)**
  This course focuses on the necessary knowledge and role of cardiac sonographers in special cardiac imaging procedures. Students will learn the fundamentals as well as the basic techniques of transesophageal imaging, contrast echocardiography, cardiac resynchronization therapy, pacemaker optimization setting, strain rate, twist/torsion, three-dimensional (3D) and pericardiocentesis imaging.

- **HSC318: Pediatric Echocardiography I (3 hours)**
  This course will introduce the student echocardiographer to various types of congenital heart disease. The types of congenital heart disease to be discussed in this course are; atrial septal defect (ASD), ventricular septal defect (VSD), patent ductus arteriosus (PDA), transposition of the great arteries (TGA), double outlet right ventricle (DORV) and double outlet left ventricle.

- **HSC319: Stress Echo Cardiography (3 hours)**
  The intent of this course is to focus on preparing the student for coronary artery disease and stress echocardiography testing. Students will become competent in coronary artery distribution and anomalies. Student will actively participate in numerous stress echocardiographic examinations during this rotation.

- **HSC320: Pediatric Echocardiography II (3 hours)**
  This course will discuss the role of ultrasound in evaluating the pediatric heart and complex congenital heart disease. Types of CHD to be discussed in this course include inflow lesions, review of conotruncal anomalies, outflow lesions, cardiac chamber anomalies, abnormal vascular communications, cardiomyopathies, and post-operative evaluation of repair of congenital heart disease.

- **HSC350: Introduction to Radiologic Science and Healthcare (2 hours)**
  This 16 week two-credit course is designed as an introduction to provide an overview of the foundations in radiography and the practitioner’s role in the health care delivery system. Principles, practices and policies
of the health care organizations are examined and discussed in addition to professional responsibilities of the radiographer. Course content will include an introduction to basic concepts of body mechanics, vital signs, EKG, infection control and medical emergencies. CPR certification will be completed. Evaluation will be on the basis of critical thinking questions, a patient care paper, unit tests and a final exam.

- **HSC351: Seminar in Radiography I (3 hours)**
  This is a three-credit course; content is designed to provide the basic concepts of patient care, including consideration for the diversity, physical and psychological needs of the patient and family. In addition the course will provide the intern with advanced knowledge of aseptic and sterile techniques, venipuncture, pharmacology and medical ethics and law. Evaluation will be on the basis of quizzes, unit tests, and a final exam.

- **HSC352: Radiation Protection (2 hours)**
  This is a two-credit course. Content is designed to present an overview of the principles of radiation protection including the responsibilities of the radiographer for patients, personnel and the public. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations are incorporated. Course includes all aspects of radiation protection, dose limiting recommendations, detection duties and the cardinal principles of protection. Evaluation is on the basis of quizzes, unit tests and a final exam.

- **HSC353: Medical Terminology (2 hours)**
  This is a two-credit course. This will be a self-study unit. Interns will be required to complete all tests on the intranet. All assignments must be completed by the end of the second semester. Course work includes medical suffixes and prefixes, word-roots, and combining forms. Evaluation will be based on unit tests.

- **HSC354: Principles of Imaging I (2 hours)**
  This is a two-credit course; content is designed to provide an overview of basic mathematics, an introduction to x-ray production, exposure factors, the control panel, beam restriction, filters, computed radiography, grids and radiographic quality. Evaluation will be based quizzes, unit exams and a final exam.

- **HSC355: Principles of Imaging II (3 hours)**
  This is a three-credit course; content is design to provide an knowledge on radiographic film, screens and film processing, radiographic quality, special imaging equipment. Evaluation will be based on quizzes, unit exams and a final exam.

- **HSC356: Imaging Procedures I (5 hours)**
  This is a five-credit course utilizing lectures, demonstrations and laboratory practice. Items to be covered include radiographic anatomy and procedures and of the upper and lower extremities, chest, abdomen, and barium studies. Pediatric imaging for each procedure will be discussed. The interns will identify radiographic anatomy, assess radiographic images for accurateness and identify evaluation criteria for a variety of procedures. This course integrates knowledge and skills from several didactic units. Evaluation will be based on quizzes, unit tests and a final exam.

- **HSC357: Imaging Procedures II (5 hours)**
  This is a five-credit course, utilizing lectures, demonstrations and laboratory practice. Radiographic anatomy and procedures for the bony thorax, vertebral column, and iodinated studies will be covered. Pediatric imaging for each procedure will be discussed. The pharmacology of contrast media will be introduced. The intern will identify radiographic anatomy, assess radiographic images for accurateness and identify evaluation criteria for a variety of procedures. This course integrates knowledge and skills from several didactic units. Evaluation will be based on quizzes, unit tests and a final exam.

- **HSC358: Imaging Procedures III (3 hours)**
  This is a three-credit course, utilizing lectures, demonstrations and laboratory practice. Radiographic anatomy and procedures for the cranium, facial bones will be discussed. Pediatric imaging for each procedure will be discussed. The interns will identify radiographic anatomy, assess radiographic images for accurateness and identify evaluation criteria for a variety of procedures. Historical exams and special fluoroscopic imaging will also be presented. This course integrates knowledge and skills from several didactic units. Evaluation will be based on quizzes, unit tests and a final exam.

- **HSC359: Radiography Clinical Educ I (3 hours)**
  The clinical education is broken down into six semesters. There are a required number of competencies the intern must complete by the end of the 6th semester. Evaluation of the intern’s positioning skills, equipment manipulation, and use of radiation protection, patient care and knowledge of image production is conducted by the Clinical Instructors, Clinical Coordinator, Program Director and qualified staff technologists. The breakdown of clinical credit is as follows: Semester I HSC 359 3 credits Semester II HSC 360 3 credits Semester III HSC 361 4 credits Semester IV HSC 459 3 credits Semester V HSC 460 3 credits Semester VI HSC 461 4 credits

- **HSC360: Radiography Clinical Educ II (3 hours)**
  The clinical education is broken down into six semesters. There are a required number of competencies the intern must complete by the end of the 6th semester. Evaluation of the intern's positioning skills, equipment manipulation, and use of radiation protection, patient care and knowledge of image production
is conducted by the Clinical Instructors, Clinical Coordinator, Program Director and qualified staff technologists. The breakdown of clinical credit is as follows: Semester I HSC 359 3 credits Semester II HSC 360 3 credits Semester III HSC 361 4 credits Semester IV HSC 459 3 credits Semester V HSC 460 3 credits Semester VI HSC 461 4 credits

- **HSC361: Radiography Clinical Educ III (4 hours)**
  The clinical education is broken down into six semesters. There are a required number of competencies the intern must complete by the end of the 6th semester. Evaluation of the intern's positioning skills, equipment manipulation, and use of radiation protection, patient care and knowledge of image production is conducted by the Clinical Instructors, Clinical Coordinator, Program Director and qualified staff technologists. The breakdown of clinical credit is as follows: Semester I HSC 359 3 credits Semester II HSC 360 3 credits Semester III HSC 361 4 credits Semester IV HSC 459 3 credits Semester V HSC 460 3 credits Semester VI HSC 461 4 credits

- **HSC370: Introduction to Diagnostic Medical Sonography (3 hours)**
  This course encompasses the first four (4) weeks of training. Course content includes emphasis on personal adaptation skills, nursing skills and staff development issues. An introduction to basic sonographic terminology, techniques, ultrasound physics, scanning techniques and abdominal sonography form the framework for future study. Lectures are correlated with scan lab demonstration and practice. The student handbook policies and procedures are emphasized.

- **HSC371: Abdominal Sonography I (3 hours)**
  This course focuses on the normal gross, cross-sectional, relational and sonographic anatomy of the upper abdomen to include blood vessels, liver, gall bladder, biliary system and pancreas. Physiology, pathology and related laboratory values are emphasized and correlated with sonographic findings. Lectures are correlated with scan lab demonstration and practice for each organ system.

- **HSC372: Abdominal Sonography II (3 hours)**
  This course focuses on the normal gross, cross-sectional, relational and sonographic anatomy of the upper abdomen to include kidneys, spleen, adrenal glands and retroperitoneum. Physiology, pathology, and related laboratory values are emphasized and correlated with sonographic findings. The use and importance of color and spectral Doppler will be emphasized. Each student must formally present one case study during this semester. Lectures are correlated with scan lab demonstration and practice for each organ system.

- **HSC373: Clinical Education I (3 hours)**
  The clinical component of our program allows students to rotate through all aspects of general and vascular sonography. Students progress in competence and ability on an individual basis and within the guidelines set forth by program faculty. A total of 19 competencies must be achieved during the duration of the program. This course focuses on an introduction to sonographic scanning, beginning abdominal technique and development of clinical skills. Sonographic technique is also practiced during routinely scheduled scan lab sessions, which are conducted by the program faculty.

- **HSC374: Clinical Education II (3 hours)**
  The clinical component of our program allows students to rotate through all aspects of general and vascular sonography. Student's progress in competence and ability on an individual basis and within the guidelines set forth by program faculty. A total of 19 competencies must be achieved during the duration of the program. This course will focus on the mastery of abdominal and pelvis/transvaginal scanning, and development of obstetrical scanning skills. Sonographic technique is also practiced during routinely scheduled scan lab sessions, which are conducted by the program faculty.

- **HSC375: Clinical Education III (3 hours)**
  The clinical component of our program allows students to rotate through all aspects of general and vascular sonography. Student's progress in competence and ability on an individual basis and within the guidelines set forth by program faculty. A total of 19 competencies must be achieved during the duration of the program. This course focuses on the refinement of abdominal, pelvic, obstetrical and small parts scanning skills. Sonographic technique is also practiced during routinely scheduled scan lab sessions, which are conducted by the program faculty.

- **HSC376: OB/GYN Sonography I (3 hours)**
  This course focuses on the normal gross, cross-sectional, relational and sonographic anatomy of the non-gravid female pelvis. Physiology, pathology and related laboratory values are emphasized and correlated with sonographic findings. Lectures are correlated with scan lab demonstration and practice.

- **HSC377: OB/GYN Sonography II (3 hours)**
  This course focuses on the gravid uterus and developing fetus. Normal gross, cross-sectional, relational and sonographic anatomy will be discussed. Gestational dating methods, measurements, fetal and maternal health, placenta and multiple pregnancies are considered. Physiology, pathology and related laboratory values are emphasized and correlated with sonographic findings. Lectures are correlated with practical clinical experience.

- **HSC378: OB/GYN Sonography III (3 hours)**
This course encompasses the disease states and toxins affecting both the developing fetus and the mother. Abnormal fetal development, anatomy and anomalies are emphasized. Lectures are correlated with practical clinical experience. Each student must formally present one case study during this semester.

- **HSC379: Specialized Sonography (2 hours)**
  This course focuses on the normal, cross-sectional, relational and sonographic anatomy of neonatal cranial anatomy, musculoskeletal imaging and small parts, to include, breast, thyroid and testicles (including male pelvic anatomy and prostate). Physiology, pathology and related laboratory values are emphasized and correlated with sonographic findings. Pathologic findings encountered during the Neurosonography exam will be correlated with possible causative etiologies. Each student must formally present one case study during this semester. Lectures are correlated with scan lab demonstration and practice.

- **HSC380: Sonography Principles & Instrumentation (3 hours)**
  This course focuses on mathematical principals, the characteristics of sound and the mechanism of sonographic image production and display. Potential biological effects and safety are discussed together with the practical application of physical concepts.

- **HSC391: Topics in Health Science (2 TO 4 hours)**
- **HSC401: Health Science Capstone (2 to 4 hours)**
  FOR TWO CREDITS: The capstone course emphasizes knowledge integration, demonstrating development of life-long skills and enduring values, and training for effective transition from school to career. *Students complete a substantial major project that integrated the Carroll University General Education Program with coursework specific to the BS in Health Science major. This project is presented to appropriate faculty and community. Concepts of critical inquiry and reflective thinking in physical therapy or an approved health science topic are introduced. FOR FOUR CREDITS: The capstone course emphasizes knowledge integration, demonstrating development of life-long skills and enduring values, and training for effective transition from school to career. The course consists of two components. * First, students complete a substantial major project that integrated the Carroll University General Education Program with coursework specific to the BS in Health Science major. This project is presented to appropriate faculty and community. Concepts of critical inquiry and reflective thinking in physical therapy or an approved health science topic are introduced. * Second, students participate in activities to facilitate the intentional transition from undergraduate study to post-baccalaureate careers.

- **HSC402: Human Anatomy (4 hours)**
  The microanatomy and gross anatomy of muscle, bone and cartilage and the integumentary, nervous, cardiovascular, lymphatic, respiratory, renal, digestive, endocrine, and reproductive systems are studied. Using multi-media software, male and female bodies are dissected from anterior, posterior, medial, lateral, and medial/lateral views and histologies, radiologies, cross-sections, and MRIs are linked to the anatomy. Models are also employed to study the structure of the human body. In addition, palpation laboratories are integrated into the course. (Required course fee) (Fa) Prerequisites: Junior Standing, BIO 130/140 or BIO 150/160 and 221.

- **HSC402L: Human Anatomy Laboratory**
  Laboratory component for HSC402.

- **HSC403: Human Physiology (4 hours)**
  Fundamental concepts related to the normal function of the human body are presented. The normal functioning of the human body is discussed across gender, race, and life span. Basic pathophysiological concepts are introduced. Resources used include physiology laboratories, computer simulations, and videos. (Required course fee) (Sp) Prerequisites: Junior standing, BIO 130/140 or BIO 150/160, CHE 110 or a C or better in CHE 101 and 102.

- **HSC403L: Human Physiology Laboratory**
  Laboratory component for HSC403.

- **HSC404: Seminar in OB/GYN (3 hours)**
  This course will discuss the role of ultrasound in evaluating the fetal heart and introduce the student to a broad spectrum of congenital heart disease. This course will cover embryology of the heart along with the fetal echocardiography exam and protocols.

- **HSC405: Vascular Sonography III (3 hours)**
  This course focuses on the normal and abnormal gross, relational, cross-sectional and sonographic anatomy of the vascular system to include the abdominal vasculature, organ transplants, and penile Doppler. Mechanisms of disease, unique to the vascular system, as well as the relationship between cardiovascular disease and the health of other organ systems will be discussed. Correlation of laboratory findings and etiologies of disease will be covered. Advanced scanning techniques will be discussed. A short correlation of statistical data and vascular testing will be covered. Lectures are correlated with scan lab demonstration and practice for each system.

- **HSC433: Introduction to Neurosonography (3 hours)**
This course focuses on the normal gross, cross-sectional, relational and sonographic anatomy of the neonatal brain and spine. Pathologic findings encountered during the neurosonography exam will be correlated with possible causative etiologies. Physiology, pathology and related laboratory values are emphasized and correlated with sonographic findings. Lectures are correlated with scan lab demonstration and practice.

- **HSC434: Abdominal Sonography III (2 hours)**
  This course focuses on the anatomy, physiology, pathology and pathophysiology seen during interventional / intraoperative procedures and pediatric specialty exams. Students will become familiar with the clinical symptoms, lab values and specific ultrasound protocols for normal and abnormal cases. Lectures are correlated with scan lab demonstration and practice for each.

- **HSC435: Introduction to Musculoskeletal Imaging (1 hours)**
  This course focuses on the introduction of normal gross, cross-sectional, relational and sonographic anatomy of the musculoskeletal system and pediatric hip imaging. Pathologic findings encountered during these exams will be correlated with possible causative etiologies. Physiology and pathology are emphasized and correlated with sonographic findings. Lectures are correlated with scan lab demonstration and practice.

- **HSC438: Radiographic Physics I (2 hours)**
  This is a two-credit course. Course content is designed to establish basic knowledge of atomic structure and terminology. Also presented are the nature and characteristics of radiation, x-ray production and the fundamentals of photon interactions with matter. Introduction will include magnetism, electricity, and electromagnetism. Evaluation will be on the basis of unit tests and a final exam.

- **HSC439: Radiographic Physics II (2 hours)**
  This is a two-credit course. Content is designed to establish knowledge in tube and generator circuitry. Also presented are the nature and characteristics of radiation, x-ray production and the fundamentals of photon interactions with matter. Evaluation will be on the basis of quizzes, unit tests and a final exam.

- **HSC440: Digital Imaging (3 hours)**
  This is a three-credit course; content is designed to impart an understanding of the components, principles and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition display, archiving and retrieval are discussed. Guidelines for selection of exposure factors and evaluating images within a digital system assist interns to bridge between film-based and digital imaging systems. Evaluation will be on the basis of quizzes, unit tests, and a final examination.

- **HSC441: Seminar in Radiography II (2 hours)**
  This is a two-credit course; content is designed to provide the intern the ability to evaluate all aspects of the imaging system from processor to generator. The intern will perform basic equipment tests, identify and trouble shoot equipment problems. Lecture on quality control and quality assurance procedures within a radiology department will be covered. Evaluation will be on the basis of the accuracy and timeliness of laboratory procedures, unit tests and a final exam.

- **HSC442: Cross Sectional Anatomy (3 hours)**
  This is a three-credit course designed to give the intern basic knowledge of cross-sectional anatomy at a minimum of the head and neck, thorax and abdomen. Evaluation will be on the basis of quizzes, unit tests and a final exam. Instruction incorporates CT and MR images.

- **HSC443: Independent Study (2 hours)**
  Interns will be assigned a written research project that will include an oral presentation, video display or a scientific exhibit. This project will be assigned two credits. This will enable the intern to develop critical thinking, research and writing skills along with an appreciation for professional development. Evaluation will be on the basis of research organization, completeness and presentation. The intern will select a topic of their choice. Successful completion of the independent study is a graduation requirement.

- **HSC444: Imaging Procedures IV (2 hours)**
  This is a two-credit course. Topics to be covered include Special Orthopedic positioning, special gastrointestinal positioning, interventional procedures, basic principles of CT and MRI imaging. Evaluation will be on the basis of quizzes, tests and a final exam.

- **HSC445: Radiographic Pathology (2 hours)**
  This is a two credit course; content is designed to introduce concepts related to disease and etiological considerations with emphasis on radiographic appearance of disease and impact on exposure factor selection. Evaluation will be on the basis of quizzes, tests and a final exam.

- **HSC446: Radiation Biology (2 hours)**
  This is a two-credit course; content is designed to provide an overview of the principles of the interaction of radiation with living systems. Radiation effects on molecules, cells, tissues and the body as a whole are presented. Factors affecting biologic response are presented, including acute and chronic effects of radiation. Evaluation is on the basis of quizzes, unit exams and a final exam.
The clinical education is broken down into six semesters. There are a required number of competencies the intern must complete by the end of the 6th semester. Evaluation of the intern’s positioning skills, equipment manipulation, and use of radiation protection, patient care and knowledge of image production is conducted by the Clinical Instructors, Clinical Coordinator, Program Director and qualified staff technologists. The breakdown of clinical credit is as follows: Semester I HSC 359 2 credits Semester II HSC 360 3 credits Semester III HSC 361 4 credits Semester IV HSC 459 3 credits Semester V HSC 460 3 credits Semester VI HSC 461 4 credits

- **HSC460: Radiography Clinical Educ V (3 hours)**
  The clinical education is broken down into six semesters. There are a required number of competencies the intern must complete by the end of the 6th semester. Evaluation of the intern's positioning skills, equipment manipulation, and use of radiation protection, patient care and knowledge of image production is conducted by the Clinical Instructors, Clinical Coordinator, Program Director and qualified staff technologists. The breakdown of clinical credit is as follows: Semester I HSC 359 2 credits Semester II HSC 360 3 credits Semester III HSC 361 4 credits Semester IV HSC 459 3 credits Semester V HSC 460 3 credits Semester VI HSC 461 4 credits

- **HSC461: Radiography Clinical Educ VI (4 hours)**
  This is a two-credit course that serves as an overview of the entire program. This course will prepare the intern for the American Registry of Radiologic Technologists. Course will also include study of the evolution of modern health care systems and professional organizations in Radiology. Evaluation will be on the basis of mock registry examinations.

- **HSC470: Vascular Sonography I (3 hours)**
  This course focuses on the normal gross, relational, cross-sectional and sonographic anatomy of the vascular system to include carotids, lower extremity venous and upper extremity venous. Mechanisms of disease, unique to the vascular system, as well as the relationship between cardiovascular disease and the health of other organ systems will be discussed. Correlation of laboratory findings and etiologies of disease will be covered. Doppler principles and vascular hemodynamics are presented. Various vascular scanning techniques will be discussed. Lectures are correlated with scan lab demonstration and practice for each system.

- **HSC471: Vascular Sonography II (3 hours)**
  This course focuses on the normal gross, relational, cross-sectional and sonographic anatomy of the vascular system to include upper and lower extremity arterial, visceral vascular, organ transplants, and penile Doppler. Mechanisms of disease, unique to the vascular system, as well as the relationship between cardiovascular disease and the health of other organ systems will be discussed. Correlation of laboratory findings and etiologies of disease will be covered. Advanced scanning techniques will be discussed. A short correlation of statistical data and vascular testing will be covered. Lectures are correlated with scan lab demonstration and practice for each system.

- **HSC472: Seminar in Professional Development (3 hours)**
  This course focuses on content review and preparation for the sonography boards. This course will provide the student with the opportunity to improve test-taking skills in preparation for the examination of the American Registry for Diagnostic Medical Sonography. Job-hunting, interview skills and resume writing will provide the student with skills needed when seeking employment. An overview of professional behavior and standards will be reviewed at this time. Student participation during this course is mandatory.

- **HSC473: Clinical Education IV (4 hours)**
  The clinical component of our program allows students to rotate through all aspects of general and vascular sonography. Student’s progress in competence and ability on an individual basis and within the guidelines set forth by program faculty. A total of 19 competencies must be achieved during the duration of the program. The focus of this course is vascular sonographic procedures as well as the mastery of abdominal, pelvic, obstetrical and small parts scanning skills. Sonographic technique is also practiced during routinely scheduled scan lab sessions, which are conducted by the program faculty.

- **HSC474: Clinical Education V (5 hours)**
  The clinical component of our program allows students to rotate through all aspects of general and vascular sonography. Student’s progress in competence and ability on an individual basis and within the guidelines set forth by program faculty. A total of 19 competencies must be achieved during the duration of the program. This course focuses on the mastery of all previously learned concentrations. Scan labs are
no longer administered. Students should demonstrate the ability to perform at a level that does not require direct supervision.
History

- **HIS103: Roots of the Western World (4 hours)**
  General Education H1. This survey course traces the Western experience from our classical heritage to the French Revolution. It examines the major political, social, economic and religious institutions which worked to shape the world we live in today. (Fa, Sp)

- **HIS104: Europe and the Modern World (4 hours)**
  General Education H1. This survey course complements HIS 103 by exploring ideas and events that have shaped European society and Europe's relations with other parts of the world since the French Revolution. (Fa, Sp)

- **HIS105: America to 1877 (4 hours)**
  General Education H1. A survey of American History from settlement through the Civil War and Reconstruction. (Fa, Sp)

- **HIS106: America since 1877 (4 hours)**
  General Education H1. A study of the American experience since Reconstruction. (Fa, Sp)

- **HIS106H: America Since 1877 (4 hours)**
  A study of the American experience since Reconstruction, which focuses primarily on stimulating critical thinking and historical inquiry. The course draws upon extensive primary sources to explore a series of historical questions about recent American history and culture. (Fa, odd years) Prerequisite: Honors student or permission of instructor.

- **HIS107: Understanding the Premodern World (4 hours)**
  General Education H1. An examination of global societies prior to 1500 with an emphasis on the non-western world, this course considers their development individually and in contact with one another, as well as their contributions to the making of the early modern world system. (Fa)

- **HIS108: Understanding Our Contemporary World (4 hours)**
  General Education H1. An examination of non-western societies from 1500, their development, their responses to the West, and their contributions to the making of the modern world. (Sp)

- **HIS110: History of Modern China (4 hours)**
  This course examines Chinese history and culture with an emphasis on the 19th and 20th centuries. Specific attention is given to China's reformers and revolutionaries and their attempts to transform Chinese political, economic, and social institutions. (Sp, even years)

- **HIS112: Intro to Latin America History (4 hours)**
  General Education H1. This survey of Latin America from preconquest to the present focuses on the historical roots of contemporary issues in Latin America such as poverty, race relations, cultural mixing, and international relations. The class draws in part on Latin American literature, arts, and cinema to facilitate this investigation. ENG 170 is recommended prior to enrollment.(Sp)

- **HIS200: Workshop for Historians (4 hours)**
  This course prepares students for independent research in 300 level courses, the capstone, and beyond. Students discuss and apply tools, methods and interpretative approaches used in historical research. Students should plan to take this during their sophomore year, before enrolling in 300-level history courses. (Sp)

- **HIS203: The American Civil War (4 hours)**
  Examines the multiple origins of the American Civil War and the two cultures swept up in the conflict. Traces the political, social, diplomatic and military history of the war years. Prerequisite: HIS 105 or permission of the department chair.

- **HIS210: Hist-American Foreign Relations (4 hours)**
  An overview of the foreign relations of the United States from colonial times to the present, with an emphasis on the period since 1900. The course examines the ways in which economic developments, domestic concerns, and cultural attitudes have helped shape the foreign policies of the United States. (Sp, even years)

- **HIS213: Women in American History (4 hours)**
  General Education H2. This course investigates the history of women in the United States from the colonial era to the present, with particular emphasis on the ways in which race and class have shaped women's experiences. (Fa, even years)

- **HIS215: American Encounters: Natives, Africans, and Europeans in the Americas, 1350-1750 (4 hours)**
  General Education H2. This course examines the complex interactions between indigenous peoples, European colonizers and African peoples in the Spanish, Portuguese, French and British American colonial worlds. The course begins with examination of the pre-Columbian native cultures and then traces the development colonial society with particular emphasis on the cultural exchanges that occurred between these disparate peoples and the role of labor, religion, and popular resistance in that history. (Fa, odd years)

- **HIS216: Philosophy and History of Science (4 hours)**
General Education H1. A study of the historical and philosophical foundations of science. The class will discuss the nature, purpose and methodologies of scientific inquiry starting with Aristotelian science and tracing the development to the modern period. The class will also discuss the nature of scientific proof, the evaluation of evidence, and the formation and evaluation of scientific theories. (Fa, odd years)

- **HIS224H: The World Since 1945 (4 hours)**
  A discussion-based study of themes and conflicts that have shaped global society since the end of World War II. Students use primary documents, autobiographies, oral histories and other sources of their own choosing to examine the Cold War, the developing world, genocide and other topics. (Fa, even years) Prerequisite: Honors student or permission of instructor.

- **HIS225H: Medieval Europe, China, and the Islamic Crescent (4 hours)**
  General Education H1. A study of the period before the development of European hegemony, focusing on contact between these three overlapping world cultural zones. In this course we examine the way in which economic, cultural, and intellectual interchanges affected the development of the civilizations under consideration as well as laying the foundation for future global interaction. (Sp, even years) Prerequisite: Honors student; history majors and minors may be admitted by prior consent of the instructor.

- **HIS227: Tudor-Stuart England (4 hours)**
  A study of English life during a period of dramatic change. From 1485 to the Glorious Revolution of 1688, England was remarkably transformed by the triumph of Protestantism, capitalism, parliamentary government and successful expansion overseas. (Fa, odd years)

- **HIS254: Topics in Medieval European History (4 hours)**
  General Education H2. This reading seminar topically examines Western Europe during the Middle Ages. The period from 500 to 1500 is studied for its own sake as well as for its contributions to the making of the modern world. (Fa, even years)

- **HIS280: Internship in History (2 TO 4 hours)**
  An opportunity for majors to earn elective credit for work experiences related to history. Examples of potential internships include: research work at local historical societies, museum experience at OldWorldWisconsin, work in public history, in non-profit organizations, or with various government agencies. Other work-oriented experiences may be designed by the student with the approval of the instructor. Internship credits will apply toward the degree but not toward the history major. The work is S/U graded, requires the consent of the instructor, and has a prerequisite of junior or senior standing. (Fa, Sp, Su)

- **HIS291: Topics in History (2 TO 4 hours)**
  Intensive investigations of special subject matter. Recent topics include: World War II: Experiences and Legacies; America in the 1960s; Native American history; Central Europe; and Medieval Magic. Topics courses may be offered also at the 300 research course level. Students may take more than one of these topic courses. (Fa, Sp) Prerequisite (for 300-level): Junior standing or consent of the instructor.

- **HIS298: Independent Study in History (2 TO 4 hours)**
  Generally permitted only in areas where the student has some background. (Fa, Sp) Prerequisite: Approval of the divisional dean and consent of the instructor.

- **HIS301: The Forging of a Nation - The Colonial and Revolutionary Experience in North America (4 hours)**
  This course investigates the transformation of the English colonies in North America from the first encounters in the 1580s through the American Revolution, with particular emphasis on the social, political, and religious institutions that emerged out of the encounters between English colonists, Native Americans, and Africans. (Sp, even years) Prerequisite: Junior standing or consent of the instructor.

- **HIS305: Recent America (4 hours)**
  This course examines the history of the United States since the end of World War II to the present. It explores in particular the important social, political, and cultural developments of the period. (Sp, odd years) Prerequisite: Junior standing or consent of the instructor.

- **HIS316: Renaissance and Reformation Europe (4 hours)**
  This is a research-oriented course focusing on important changes occurring in Europe from the last quarter of the fourteenth century to the mid seventeenth century. The period was one of educational, cultural, and religious change and reform. We will explore topics through the reading of primary and secondary sources, culminating in a research project focused on primary sources. (Sp, even years, but NOT 2014)

- **HIS318: American Indian History (4 hours)**
  This course examines the history of the indigenous peoples of North America from prehistory to the present. Major themes will include the relationship between native peoples and the environment, the effect of contact on native cultures, the relationship among native tribes and between natives and the state, the place of the ‘Indian’ in popular culture, and the changing status and identity of American Indians in American society (Sp, odd years)

- **HIS329: The German Experience (4 hours)**
  A research-oriented course examining modern German history. Emphasis is placed on the process of unification, the Nazi era, the GDR and reunification. Also offered as POL 329. (Fa, odd years) Prerequisite:
Junior standing or consent of the instructor. Students planning to take HIS 329 for their German language minor must contact the instructor (in the semester before they enroll in HIS 329) to develop a plan for adapting coursework to incorporate and demonstrate appropriate use of the language.

- **HIS391: Topics in History (4 hours)**
  Intensive investigations of special subject matter. Recent topics include: World War II: Experiences and Legacies; America in the 1960s; Native American history; and Medieval Magic. Topics courses may be offered also at the 300 research course level. Students may take more than one of these topic courses. (Fa, Sp) Prerequisite (for 300-level): Junior standing or consent of the instructor.

- **HIS398: Independent Study in History (2 TO 4 hours)**
  Generally permitted only in areas where the student has some background. (Fa, Sp) Prerequisite: Approval of the divisional dean and consent of the instructor.

- **HIS495: Kennan Seminar (1 hours)**
  This course provides our Kennan Scholars with the opportunity to discuss historical literature with history faculty in a small group setting. (Fa, Sp) Prerequisite: Open only to Kennan Scholars.

- **HIS499: Capstone - Senior Seminar for Historians (4 hours)**
  This course requires students to produce a high-quality research paper based largely on primary sources and to formally present their work before other students and the history faculty. Students will also complete a portfolio including a representative sample of their previous written work in history courses, and prepare an intentional plan for their transition from Carroll to a career and/or further education. (Fa) Prerequisites: HIS 200 and one 300-level research course.
Interdisciplinary Studies

- **IDS200: Interdisciplinary Studies (2 hours)**
  The purpose of the career exploration and preparation course is to provide students with the tools necessary to succeed in their future careers by providing an innovative teaching and learning environment capable of maximizing student understanding knowledge, diversity and lifelong skills needed by graduates for effective adaptability, problem solving, and competitive excellence in a dynamic and complex world.
Mathematics

- **MAT098: Pre-Algebra (4 hours)**
  Intended for students who need an intensive review of high school Algebra I, content includes basic arithmetic, algebra, and geometry with an emphasis on study skills. Credits earned in this course do not count toward the 128 credits needed for graduation. (Fa) Pre-requisites: placement recommendation.

- **MAT101: Intermediate Algebra (4 hours)**
  Building on MAT 098 skills, this course is equivalent to high school Algebra II. Topics include number systems, theory of equations and inequalities, introduction to functions and their graphs, applications of algebra. This course is the prerequisite to MAT 104, 106, 112 and 130. (Fa, Sp, Su) Prerequisites: one year of high school algebra and one year of high school geometry or MAT 098 or placement recommendation.

- **MAT104: Foundations of Elementary Mathematics I (4 hours)**
  An introduction to problem solving, sets, number theory, numeration systems, and the structure of the real number system. Course material will be presented in a manner consistent with the NCTM Principles and Standards for School Mathematics. Recommended for education students only. (Fa, Sp, Su) Prerequisite: MAT 101 or placement recommendation.

- **MAT106: Mathematics for the Liberal Arts (4 hours)**
  This elementary course in contemporary mathematics introduces the Bachelor of Arts student to the usefulness of mathematics. Real current-day problems are presented along with some of the mathematics techniques which have been used to solve them. Problems discussed will involve such topics as 'the traveling salesman problem,' exponential growth, voting systems, analysis of arguments and fractal geometry. (Fa, Sp, Su) Prerequisites: MAT 101 or placement recommendation.

- **MAT130: Elementary Functions (4 hours)**
  A study of rational, radical, exponential, logarithmic, and trigonometric functions designed to prepare students for MAT 140 or 160 (Fa, Sp, Su) Prerequisites: MAT 101 or placement recommendation.

- **MAT140: Calculus and Its Applications (4 hours)**
  A compact version of Calculus I, II stressing problem-solving techniques and applications. Designed for students who need only one semester of calculus. Numerous examples are presented from accounting, biology, business, economics, and other fields. (Fa, Sp, Su) Prerequisite: MAT 130 or placement recommendation. May not be taken for credit by those who have completed MAT 160.

- **MAT160: Calculus I (4 hours)**
  A brief review of inequalities, functions and plane analytic geometry; limits and continuity; the derivative and the differential; applications of differentiation; L'Hospital's Rule; introduction to the Riemann integral. Includes differentiation of logarithmic and exponential functions, and indeterminate forms. History of selected topics is studied. Four hours of lecture and one hour of laboratory/recitation. (Fa, Sp) Prerequisite: MAT 130 or placement recommendation.

- **MAT160L: Calculus I - Laboratory**
  Laboratory component for MAT160.

- **MAT161: Calculus II (4 hours)**
  Applications of the Riemann integral; calculus of the natural logarithm and exponential functions; formal techniques of integration; improper integrals; series and sequences. History of selected topics is studied. Four hours of lecture and one hour of laboratory/recitation. (Fa, Sp) Prerequisite: MAT 160 or placement recommendation.

- **MAT161L: Calculus II - Laboratory**
  Laboratory component for MAT161.

- **MAT201: Foundations of Elementary Mathematics II (4 hours)**
  A study of introductory geometry, measurement, algebra, coordinate and transformation geometry, statistics and probability. Students will also be introduced to geometry computer software. Designed for the elementary education major. (Fa, Sp) Prerequisite: MAT 104.

- **MAT205: Discrete Mathematics (4 hours)**
  A study of set theory, propositional calculus, algorithms, relations, functions, combinatorics, recursion, discrete graphs, trees, automata. Intended for Computer Science majors only. (Sp) Prerequisites: CSC 226, MAT 140 or 160. May not be taken for credit by those who have completed MAT 206.

- **MAT206: Transition to Adv Mathematics (4 hours)**
  An introduction to fundamental concepts, structures and style of mathematics. Core topics are logic, sets, mathematical induction, relations, functions and graph theory. Special topics may include number theory, cardinality, or the construction of the real numbers. Special emphasis will be placed on developing and communicating mathematical arguments. (Fa) Prerequisites: MAT 140 or 160. May not be taken for credit by those who have completed MAT 205.

- **MAT207: Calculus III (4 hours)**
  Vectors in the plane and in space, solid analytic geometry; calculus of functions of two variables; partial derivatives; divergence and gradient; multiple integrals, vector fields, line integrals, and surface integrals,
Green's Theorem, Stoke's Theorem, Divergence Theorem. History of selected topics is studied. (Fa)
Prerequisite: MAT 161 or placement recommendation.

- **MAT208: Linear Algebra (4 hours)**
  Vector spaces; linear transformations and matrices; systems of linear equations; applications. (Sp)
  Prerequisite: MAT 161 or 206.

- **MAT215: Engineering Mathematics I (4 hours)**
  An introduction probability and statistics as applied in engineering. Topics to be covered include descriptive statistics, probability distributions, confidence intervals, hypothesis testing, quality control, acceptance sampling, goodness of fit, nonparametric tests, and regression. May be used toward the mathematics minor, but not the mathematics major. (Fall, odd years) Prerequisite: MAT207, or concurrent registration in MAT207.

- **MAT216: Engineering Mathematics II (4 hours)**
  An introduction linear algebra and differential equations as applied in engineering. Topics to be covered include matrix algebra, linear independence and span, eigenvalues and eigenvectors, first-order ODE's, linear ODE's, series solutions, numerical methods, and Laplace Transforms. May be used toward the mathematics minor, but not the mathematics major. (Fall, even years) Prerequisite: MAT207, or concurrent registration in MAT207.

- **MAT250: Mathematics Seminar (4 hours)**
  Mathematics Seminar topics vary by year. The course meets concurrent with MAT 350 and MAT 450, the Capstone Experience. The course is designed to give students exposure to the Capstone Experience and to give all mathematics students the opportunity to increase their breadth of study. (Sp) Prerequisite: MAT 206 or instructor approval.

- **MAT305: Modern Geometry (4 hours)**
  A study of elementary geometry from an advanced standpoint; includes distance and congruence axioms, parallelism, incidence and order, and non-Euclidean geometries. History of selected topics is studied. (Sp) Prerequisite: MAT 206.

- **MAT309: Differential Equations (4 hours)**
  An introduction to the theory and solution of ordinary differential equations and their applications; power series solution; introduction to numerical methods; and other topics. Prerequisites: MAT 161.

- **MAT312: Theory of Probability & Statistics (4 hours)**
  An introduction to the mathematical theory of probability and statistics. Topics include: sample spaces; probability distribution functions; regression and correlation; hypothesis testing. History of selected topics is studied. (Sp, even years) Prerequisite: MAT 207. May not be taken for credit by those who have completed ASC 302.

- **MAT320: Abstract Algebra (4 hours)**
  An introduction to modern abstract algebra to include topics in the theory of groups, rings and fields. Required of all mathematics majors. History of selected topics is studied. (Fa, odd years) Prerequisites: MAT 206 and 208.

- **MAT324: Numerical Analysis (4 hours)**
  Introduction to the numerical methods and algorithms fundamental to mathematical and scientific analysis. Error analysis and efficient programming techniques are stressed. Includes solving equations, linear and nonlinear systems, curve fitting, function approximation, interpolation, differentiation, integration and numerical solutions to differential equations. (Fa, odd years) Prerequisites: MAT 161 and 208, CSC 110.

- **MAT330: Mathematics Seminar (4 hours)**
  Mathematics Seminar topics vary by year. The course meets concurrent with MAT 350 and MAT 450, the Capstone Experience. The course is designed to give students exposure to the Capstone Experience and to give all mathematics students the opportunity to increase their breadth of study. (Sp) Prerequisite: MAT 206 or instructor approval.

- **MAT391: Adv Topics in Mathematics (2 TO 4 hours)**
  These courses are designed to meet the special needs of students who have completed the prescribed courses for a major and wish to extend their study in specific areas. Students planning on graduate study should take courses in topology and other appropriate topics. Students interested in actuarial science should arrange for additional study in probability and statistics. Courses in applied mathematics can also be arranged. These courses may not be taken in lieu of courses specified for the major or minor. (Fa, Sp, Su with instructor consent) Prerequisites: Junior or senior standing, approval of the divisional dean and consent of the instructor.

- **MAT409: Mathematical Analysis (4 hours)**
  The study of theory and applications of analysis on the real line. Limits; continuity; differentiation; sequences and series of functions; integration. (Fa, even years) Prerequisites: MAT 206 and 207.

- **MAT450: Mathematics Senior Capstone (2 TO 4 hours)**
All majors will complete a mathematics-related project. Projects may involve original or expository research in applied mathematics, pure mathematics, or mathematics education. Applied mathematics projects may involve mathematical consultancy work for area businesses. (Sp) Prerequisite: 80 credit hours completed.

- **MAT491: Adv Topics in Mathematics (2 TO 4 hours)**

These courses are designed to meet the special needs of students who have completed the prescribed courses for a major and wish to extend their study in specific areas. Students planning on graduate study should take courses in topology and other appropriate topics. Students interested in actuarial science should arrange for additional study in probability and statistics. Courses in applied mathematics can also be arranged. These courses may not be taken in lieu of courses specified for the major or minor. (Fa, Sp, Su with instructor consent) Prerequisites: Junior or senior standing, approval of the divisional dean and consent of the instructor.
Modern Languages

- **CHI101: Elementary Chinese I (4 hours)**
  Chinese 101 is a beginning course designed to introduce the student to the basic skills of understanding, speaking, reading, and writing Mandarin Chinese. It provides an introduction to Chinese culture, politics, history, and literature through texts in English or in English translated from Chinese. (FA)

- **FRE101: Elementary French I (4 hours)**
  A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the French language. Introduction to French cultures, politics, history, and literature through texts in English or in English translation from French. Conducted primarily in French. (101-Fa; 102-Sp)

- **FRE102: Elementary French II (4 hours)**
  A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the French language. Introduction to French cultures, politics, history, and literature through texts in English or in English translation from French. Conducted primarily in French. (101-Fa; 102-Sp)

- **FRE201: Intermediate French I (4 hours)**
  A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the French language. Introduction to French cultures, politics, history, and literature through texts in English or in English translation from French. Conducted in French. (201-Fa; 202-Sp) Prerequisites: FRE 102 for FRE 201, FRE 201 for FRE 202 or equivalent.

- **FRE202: Intermediate French II (4 hours)**
  A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the French language. Introduction to French cultures, politics, history, and literature through texts in English or in English translation from French. Conducted in French. (201-Fa; 202-Sp) Prerequisites: FRE 102 for FRE 201, FRE 201 for FRE 202 or equivalent.

- **FRE298: Independent Studies in French (2 TO 4 hours)**
  Prerequisites: Junior standing and written consent of instructor required for registration. Written proposals of projects must have the prior approval of the divisional dean and consent of the instructor prior to registration. (Fa, Sp)

- **FRE301: Conversation & Composition (4 hours)**
  General Education H1. Emphasis on active use of the language, and functional grammar review, including interaction in social and general conversations, vocabulary building, syntactic structures and sentence patterns. Constant focus on pronunciation and diction, with introduction to basic phonetic and linguistic principles. Reading of literary and cultural texts. Discussions of contemporary topics. Conducted in French. (Fa) Prerequisites: FRE 202 or equivalent.

- **FRE307: French Civilization (4 hours)**
  General Education H2. Acquaints students with the major events of French history, including the various artistic, cultural and social elements which have contributed to making France what it is today, in order to better understand the French, their customs and their lifestyle. Oral and written reports. Conducted in French. (Sp, alt. years) Prerequisite: FRE 301 or consent of instructor.

- **FRE318: Topics in French and Francophone Literatures (4 hours)**
  This course is designed to address questions of culture, history, politics, art and thought through the study of French language/literature. Students will discuss, analyze and develop their own critical approach and ideas around the texts in class and through oral, written and research reports and papers. Topics are drawn from the literature of French-speaking Europe, Africa, and the Caribbean. Conducted in French. May be repeated with change of topic. (Sp, alt. years) Prerequisites: FRE 301 or consent of the instructor.

- **FRE398: Independent Studies in French (2 TO 4 hours)**
  Prerequisites: Junior standing and written consent of instructor required for registration. Written proposals of projects must have the prior approval of the divisional dean and consent of the instructor prior to registration. (Fa, Sp)

- **GER101: Elementary German I (4 hours)**
  A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the German language. Introduction to Germanic cultures, politics, history, and literature through texts in English or in English translation from German. Conducted primarily in German. (101-Fa; 102-Sp) Prerequisite for GER 102: a grade of C or better in GER 101 or consent of the instructor.

- **GER102: Elementary German II (4 hours)**
  A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the German language. Introduction to Germanic cultures, politics, history, and literature through texts in English or in English translation from German. Conducted primarily in German. (101-Fa; 102-Sp) Prerequisite for GER 102: a grade of C or better in GER 101 or consent of the instructor.

- **GER201: Intermediate German I (4 hours)**
Continued practice in comprehension, speaking, reading, and writing. Review of and elaboration in grammatical structures, composition, and vocabulary building serve as aids in the development of conversational ability. Growth in reading skills and cultural enrichment produced through readings on contemporary German life. Conducted in German. (201-Fa; 202-Sp) Prerequisites: a grade of C or better in GER 102 or consent of the instructor for GER 201; a grade of C or better in GER 201 or equivalent or consent of the instructor for GER 202.

- **GER202: Intermediate German II (4 hours)**

  Continued practice in comprehension, speaking, reading, and writing. Review of and elaboration in grammatical structures, composition, and vocabulary building serve as aids in the development of conversational ability. Growth in reading skills and cultural enrichment produced through readings on contemporary German life. Conducted in German. (201-Fa; 202-Sp) Prerequisites: a grade of C or better in GER 102 or consent of the instructor for GER 201; a grade of C or better in GER 201 or equivalent or consent of the instructor for GER 202.

- **GER298: Independent Studies in German (2 TO 4 hours)**

  Prerequisites: Junior standing and consent of instructor. Written proposals of projects must have the prior approval of the divisional dean and consent of the instructor prior to registration. (Fa, Sp)

- **GER301: Conversation & Composition (4 hours)**

  General Education H1. An advanced German language course, which provides continued practice in conversation and composition with emphasis on new vocabulary. This course includes functional grammar review. Readings and discussions of literary as well as non-literary texts introduce students to more complex topics in German life, history, and culture. Reinforcement of basic phonetic elements and syntax to further refine pronunciation and composition. Conducted in German. (Fa) Prerequisites: a grade of C or better in GER 202 or equivalent or consent of the instructor.

- **GER318: Topics in German Culture and Literature (4 hours)**

  General Education H2. This course surveys specific time periods and/or movements in German cultural history, including art, architecture, music, and literature. Students develop their ideas and improve their written and spoken communication skills through essays, oral reports, and a research paper. May be repeated with change of topic. Conducted in German. (Sp) Prerequisites: a grade of C or better in GER 301 or consent of instructor.

- **GER398: Independent Studies in German (1 TO 4 hours)**

  Prerequisites: Junior standing and consent of instructor. Written proposals of projects must have the prior approval of the divisional dean and consent of the instructor prior to registration. (Fa, Sp)

- **GER401: Advanced Conversation (2 hours)**

  Guided discussions on a variety of topics enhance vocabulary building. Opportunities for both formal oral presentation and informal conversation promote practice, skill and confidence. Grammar is reinforced through practice centering on a particular voice, tense, and/or theme.

- **GER498: Independent Directed Study (2 TO 4 hours)**

  Reading in a specific area of German literature, culture, or history. Weekly conferences conducted in German. Eight credits maximum will apply toward the degree. (Fa, Sp) Prerequisites: Junior standing and consent of instructor. Written proposals of projects must have the prior approval of the divisional dean and consent of the the instructor prior to registration.

- **SPA101: Elementary Spanish I (4 hours)**

  A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the Spanish language. Introduction to Hispanic cultures, politics, history, and literature through texts in English or in English translation from Spanish. Weekly out-of-class discussion sections. Conducted primarily in Spanish. (101-Fa, 102-Fa, Sp)

- **SPA102: Elementary Spanish II (4 hours)**

  A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the Spanish language. Introduction to Hispanic cultures, politics, history, and literature through texts in English or in English translation from Spanish. Weekly out-of-class discussion sections. Conducted primarily in Spanish. (101-Fa, 102-Fa, Sp)

- **SPA201: Intermediate Spanish I (4 hours)**

  Review of basic phonetic elements and syntax as an aid to improvement and expansion of good pronunciation and composition. Introduction to Hispanic cultures. Weekly out-of-class discussion sections. Conducted in Spanish. (SP201-Fa; SP202-Sp) Prerequisites: SPA 102 or consent of the instructor.

- **SPA202: Intermediate Spanish II (4 hours)**

  Review of basic phonetic elements and syntax as an aid to improvement and expansion of good pronunciation and composition. Introduction to Hispanic cultures. Weekly out-of-class discussion sections. Conducted in Spanish. (SP201-Fa; SP202-Sp) Prerequisites: SPA 201 or consent of the instructor.

- **SPA290: Spanish for Health and Human Services (2 hours)**

  Focus on health and human service vocabulary, language skills for professional communication, and cross-cultural awareness in order to communicate effectively, both formally and informally. Students participate
in hands-on, experiential learning opportunities in the community. Conducted in Spanish. (Sp)
Prerequisites: SPA 202 or consent of instructor.

- **SPA298: Independent Studies in Spanish (4 hours)**
  Prerequisites: Junior standing and written consent of instructor required for registration. Written proposals of projects must have the prior approval of the divisional dean and consent of the instructor prior to registration. (Fa, Sp)

- **SPA301: Conversation and Composition I (4 hours)**
  General Education H1. Practice in conversation and composition with emphasis on new and technical vocabulary. Functional grammar review. Reading, discussion and interpretation of more challenging literary texts. Reinforcement of basic linguistic elements such as phonetics and syntax as an aid to further refinement of the four language skills. Conducted in Spanish. (Fa) Prerequisites: SPA 202 or consent of instructor.

- **SPA302: Conversation & Composition II (4 hours)**
  This course strengthens skills already learned in Spanish courses by integrating elements of print journalism interviewing, writing and editing. It also expands the cultural knowledge of the students by focusing on their writing on themes of cultural relevance. Conducted in Spanish. (Sp) Prerequisite: SPA 301 or consent of instructor.

- **SPA305: Spanish for the Professions (4 hours)**
  This course introduces students to the vocabulary and discourse appropriate to the professions. It develops communicative skills for professional situations (speaking, listening, comprehension, reading, writing, translation, interpretation, and computer skills) and provides cultural and cross-cultural awareness. Students prepare oral and written reports. Conducted in Spanish. (Sp) Prerequisites: SPA 301 or consent of instructor.

- **SPA307: Latin American Civilization (4 hours)**
  General Education H2. Lectures and discussion on Latin American cultural history and trends, particularly as they relate to the arts, political thought, and economics. Conducted in Spanish. (Fa, odd years) Prerequisites: SPA 302 or consent of instructor.

- **SPA308: Hispanic Civilization (4 hours)**
  General Education H2. Lectures and discussion on Hispanic cultural trends, particularly as they relate to the arts, political thought, and economic conditions. Topics will focus on social movements in Spain or Spain's impact on Latin America, the Caribbean, and the United States. Conducted in Spanish. (Fa, odd years) Prerequisites: SPA 307 or 308, or consent of instructor.

- **SPA318: Topics in Hispanic Cultures, Literature, History, Politics (4 hours)**
  General Education H2. Focuses on a particular aspect of Hispanic culture, literature, history, or politics. Students analyze and discuss literary and/or historical and (socio)political texts. Includes topics on Spain, Latin America, and/or the Caribbean. Conducted in Spanish. May be repeated with change of topic. (Sp) Prerequisites: SPA 307 or 308, or consent of instructor.

- **SPA398: Independent Studies in Spanish (2 TO 4 hours)**
  Prerequisites: Junior standing and written consent of instructor required for registration. Written proposals of projects must have the prior approval of the divisional dean and consent of the instructor prior to registration. (Fa, Sp)

- **SPA401: Advanced Conversation (2 hours)**
  A panorama of customs, life styles, attitudes, and cultural achievements of the Spanish speaking peoples today. Emphasis on informal conversation with individual interests and projects encouraged. Includes oral and written reports as well as grammar and syntax review. Conducted in Spanish. (Sp) Prerequisite: SPA 307 or 308, or consent of instructor. (May be taken twice.)

- **SPA480: Internship/Capstone Internship in Spanish (2 TO 4 hours)**
  Applications of foreign language and culture using language skills in professional settings. This course may also serve as a culminating capstone experience. Facilitates transition from university to career or graduate school through the creation of a resume and portfolio, as well as experience with employment interviews and/or submission of application to graduate school. S/U graded. (Fa, Sp) Prerequisites: SPA 307 or 308, 318 and senior standing.

- **SPA498: Indep Directed/Capstone Study (2 TO 4 hours)**
  Intensive reading in a specific area of Spanish or Spanish-American literature or culture. Weekly conference conducted in Spanish. Eight credits maximum may apply toward degree. This course may also serve as a culminating capstone experience for seniors. Facilitates transition from university to career or graduate school through the creation of a resume and portfolio, as well as experience with employment interviews and/or submission of application to graduate school. Written proposals of projects must have the prior approval of the divisional dean and consent of the instructor prior to registration. (Fa, Sp) Prerequisites: SPA 307 or 308, 318.
Music

- **MUS105: Class Piano I (1 hours)**
  Fundamental piano skills to establish basic piano proficiency. May be taken a maximum of four semesters. (Does not count toward major or minor.) *106, 107 and 108 need consent of instructor. (105 & 107-Fa; 106 & 108-Sp)

- **MUS106: Class Piano II (1 hours)**
  Fundamental piano skills to establish basic piano proficiency. May be taken a maximum of four semesters. (Does not count toward major or minor.) *106, 107 and 108 need consent of instructor. (105 & 107-Fa; 106 & 108-Sp)

- **MUS107: Class Piano III (1 hours)**
  Fundamental piano skills to establish basic piano proficiency. May be taken a maximum of four semesters. (Does not count toward major or minor.) *106, 107 and 108 need consent of instructor. (105 & 107-Fa; 106 & 108-Sp)

- **MUS108: Class Piano IV (1 hours)**
  Fundamental piano skills to establish basic piano proficiency. May be taken a maximum of four semesters. (Does not count toward major or minor.) *106, 107 and 108 need consent of instructor. (105 & 107-Fa; 106 & 108-Sp)

- **MUS110: Music Fundamentals and Technology (3 hours)**
  Basic written, aural, and performance skills involving music fundamentals: pitch notation, common clefs, major and minor scales, common-practice rhythms and meters, intervals, simple diatonic melody, motive, triads and seventh chords, figured-bass notation, Roman-numeral notation, and harmonic cadences. Music technology commonly used by professional musicians: Music-notation software, MIDI setups, MIDI scoring, basic recording setups and techniques, audio-file editing and mastering, and audio-file formats (music technology). Course prepares students for MUS 111 and MUS 113. (Fa)

- **MUS111: Music Theory I (3 hours)**
  Study of the basic fundamentals of music, including rhythm and meter, keys, scales, intervals and triads. (Sp) Pre-requisite: MUS 110 or by exam.

- **MUS112: Music Theory II (3 hours)**
  Study of basic partwriting, development of theoretical and analytical skills. (Fa) Prerequisite: MUS 111.

- **MUS113: Aural Skills I (1 hours)**
  These courses complement the Music Theory sequence: 113 corresponds to MUS 111; 114 corresponds to MUS 112; 213 corresponds to MUS 211; and 214 corresponds to MUS 212. The goal of these courses is to develop the aural skills necessary for success in the performing or teaching fields of music. The writing of dictated rhythms, melodies, and harmonies, and the sight-singing of rhythms and melodies are the central activities of each course. Prerequisites and corequisites: the corresponding Music Theory course is a corequisite or prerequisite for each Aural Skills course, and the Aural Skills courses must be taken in numerical order. Pre-requisite: MUS 110. Co-requisite: Music Theory I, II, III or MUS 212.

- **MUS114: Aural Skills II (1 hours)**
  These courses complement the Music Theory sequence: 113 corresponds to MUS 111; 114 corresponds to MUS 112; 213 corresponds to MUS 211; and 214 corresponds to MUS 212. The goal of these courses is to develop the aural skills necessary for success in the performing or teaching fields of music. The writing of dictated rhythms, melodies, and harmonies, and the sight-singing of rhythms and melodies are the central activities of each course. Prerequisites and corequisites: the corresponding Music Theory course is a corequisite or prerequisite for each Aural Skills course, and the Aural Skills courses must be taken in numerical order. Pre-requisite: MUS 110. Co-requisite: Music Theory I, II, III or MUS 212.

- **MUS117: Class Voice (1 hours)**
  Class lessons to learn basic vocal skills. May be taken a maximum of two semesters. (Fa, even years)

- **MUS120: Introduction to the Music Industry (4 hours)**
  This course introduces students to the most prominent career tracks in the music industry. Students learn business skills and knowledge essential for establishing a professional music career within a variety of business related fields, including arts management, recording industry, retail business, and arts organizations. (Sp, even years)

- **MUS140: Foundations of Music Education (2 hours)**
  The purpose of this course in Music Education is to introduce students to the profession in a way that will give them focus and motivation in the rest of their academic work. By understanding the role that music will play in the transformation of education in the future, students will become clear about why they are undertaking the curriculum of music study designed to result in mastery of the discipline. Students will gain a working knowledge of the Department of Public Instruction’s Wisconsin Model Standards for Teacher Development and Licensure as well as the K-12 Standards in Music. Particular emphasis will be given to the role of schools within the society, curriculum development, assessment strategies, pedagogy, financial and legal aspects of schooling and governance in the public schools. (Sp)

- **MUS141: Workshop - Intro to Education**
This one-day (8-hour) workshop is designed to introduce students to the philosophy and requirements of the Carroll University Teacher Education Program and the Wisconsin Department of Public Instruction (DPI). The Workshop provides students with a working knowledge of the Wisconsin Model Standards for Teacher Development and Licensure and the Guiding Principles of Carroll University's Education Department. It also introduces students to topics that connect schooling and society including the social context of schooling and teaching, curriculum, financial and legal aspects of schooling, and governance in schools. It also promotes self-reflection, critical thinking and the development of a teaching philosophy.

- **MUS151: History of Jazz (4 hours)**
  General Education F1. Origins and evolution of jazz to the present, emphasizing various performance styles and improvisational techniques. (Sp, even years)

- **MUS156: Listening to Classical Music (4 hours)**
  General Education F1. This course is intended as an introductory course and focuses on the development of perceptive listening skills and a broad understanding of Western concert literature. (Fa)

- **MUS157: Beethoven (4 hours)**
  Designed for the general student, the course examines the life, stylistic development and importance of Beethoven within the context of the times in which he lived. (Sp, odd years)

- **MUS158: Rock Music - Roots and History (4 hours)**
  General Education F1. Designed for the general student, the objective of this course is to understand the origins, development, and significance of one of the most popular musical forms in the modern world. (Sp)

- **MUS161: Violin (1 TO 2 hours)**
  (Fa, Sp)

- **MUS162: Viola (1 TO 2 hours)**
  (Fa, Sp)

- **MUS163: Cello (1 TO 2 hours)**
  (Fa, Sp)

- **MUS164: Bass (1 TO 2 hours)**
  (Fa, Sp)

- **MUS165: Guitar (1 TO 2 hours)**
  (Fa, Sp)

- **MUS166: Harp (1 TO 2 hours)**

- **MUS167: Piano (1 TO 2 hours)**
  (Fa, Sp)

- **MUS168: Organ (1 TO 2 hours)**
  (Fa, Sp)

- **MUS169: Voice (1 TO 2 hours)**
  (Fa, Sp)

- **MUS170: Flute (1 TO 2 hours)**
  (Fa, Sp)

- **MUS171: Oboe (1 TO 2 hours)**
  (Fa, Sp)

- **MUS172: Clarinet (1 TO 2 hours)**
  (Fa, Sp)

- **MUS173: Bassoon (1 TO 2 hours)**
  (Fa, Sp)

- **MUS174: Saxophone (1 TO 2 hours)**
  (Fa, Sp)

- **MUS175: Horn (1 TO 2 hours)**
  (Fa, Sp)

- **MUS176: Trumpet (1 TO 2 hours)**
  (Fa, Sp)

- **MUS177: Trombone (1 TO 2 hours)**
  (Fa, Sp)

- **MUS178: Tuba (1 TO 2 hours)**
  (Fa, Sp)

- **MUS179: Percussion (1 TO 2 hours)**
  (Fa, Sp)

- **MUS185: Concert Choir (1 hours)**
  General Education F1. Prerequisite: Placement audition and approval of conductor. (Fa, Sp)

- **MUS186: Vocal Collective (1 hours)**
  Prerequisite: Placement audition and approval of conductor. (Fa, Sp)
- MUS187: Women's Ensemble (1 hours)
  Prerequisite: Placement audition and approval of conductor. (Fa, Sp)
- MUS188: Wind Symphony (1 hours)
  General Education F1. Prerequisite: Placement audition and approval of conductor. (Fa, Sp)
- MUS189: Jazz Ensemble (1 hours)
  Prerequisite: Placement audition and approval of conductor. (Fa, Sp)
- MUS190: Chamber Music (1 hours)
  Section A-Brass, Section B-Strings, Section C-Flute Choir, Section D-Woodwinds, Section E-Piano, Section F-Handbell Choir. Prerequisite: Placement audition and approval of conductor. Prerequisite: Permission of conductor. (Fa, Sp)
- MUS192: The Carroll Chorale (1 hours)
  Prerequisite: Permission of the conductor. (Fa, Sp)
- MUS193: Choral Union (1 hours)
  Prerequisite: Placement audition and approval of music faculty. (Fa, Sp)
- MUS194: Waukesha Area Symphonic Band (1 hours)
  Prerequisite: Permission of the conductor (Fa, Sp)
- MUS211: Music Theory III (3 hours)
  A continuation of MUS 112, this course presents chromatic harmony with particular emphasis on how it is used by composers in selected music literature. (Sp) Prerequisite: MUS 112. Prerequisite: MUS 112 and passing competency exam.
- MUS212: Form and Analysis (3 hours)
  This course involves detailed harmonic and formal analysis of representative works from the Baroque through the present. (Fa) Prerequisites: MUS 211 or consent of instructor.
- MUS213: Aural Skills III (1 hours)
  These courses complement the Music Theory sequence: 113 corresponds to MUS 111; 114 corresponds to MUS 112; 213 corresponds to MUS 211; and 214 corresponds to MUS 212. The goal of these courses is to develop the aural skills necessary for success in the performing or teaching fields of music. The writing of dictated rhythms, melodies, and harmonies, and the sight-singing of rhythms and melodies are the central activities of each course. Prerequisites and corequisites: the corresponding Music Theory course is a corequisite or prerequisite for each Aural Skills course, and the Aural Skills courses must be taken in numerical order. Pre-requisite: MUS 110. Co-requisite: Music Theory I, II, III or MUS 212.
- MUS214: Aural Skills IV (1 hours)
  These courses complement the Music Theory sequence: 113 corresponds to MUS 111; 114 corresponds to MUS 112; 213 corresponds to MUS 211; and 214 corresponds to MUS 212. The goal of these courses is to develop the aural skills necessary for success in the performing or teaching fields of music. The writing of dictated rhythms, melodies, and harmonies, and the sight-singing of rhythms and melodies are the central activities of each course. Prerequisites and corequisites: the corresponding Music Theory course is a corequisite or prerequisite for each Aural Skills course, and the Aural Skills courses must be taken in numerical order. Pre-requisite: MUS 110. Co-requisite: Music Theory I, II, III or MUS 212.
- MUS231H: Fin de Siecle - Birth of the Modern Age in Paris and Vienna (4 hours)
  This interdisciplinary honors course traces the fine arts between 1885 and 1914. While concentrating on music and visual arts, the course also presents an intellectual, literary, and social portrait of Europe. (Sp, even years)
- MUS241: Workshop - Education in a Multicultural Context
  This one-day (8-hour) workshop is designed to satisfy the current DPI requirements for education in cultural diversity for K-12 certification in the state of Wisconsin. The Workshop on Education in a Multicultural Context provides students with an overview of multicultural education as it stands within our current society and educational system. It specifically focuses on how issues of race, ethnicity and gender impact choices made in the classroom. The workshop engages students in critical thinking about the theoretical, conceptual, and political opinions that fuel and influence the debate over multicultural education. (Sp, odd years)
- MUS251: String Methods (1 hours)
  Development of basic performance skills, maintenance methods, and materials for the teaching of strings in the public schools. Violin, viola, cello, and bass will be covered. (Every third year beginning in Fa10)
- MUS252: Percussion Methods (1 hours)
  Development of basic performance skills, maintenance methods, and materials for the teaching of percussion in the public schools. Snare and bass drums, timpani, drum set, all mallet instruments and auxiliary percussion will be covered. (Every third year beginning in Sp11)
- MUS253: Woodwind Methods I (1 hours)
  This course is designed to provide students with the skills necessary to teach the woodwind instruments in large and small group settings in the public schools. Students will learn to perform on each of the major woodwind instruments. Woodwind Methods I will cover flute and the single reed instruments (clarinet and
saxophone) whereas Woodwind Methods II will cover the more complicated double reed instruments (bassoon and oboe). Instruments will be provided for students’ use during the course. (253-every third year beginning in Fa11; 254-every third year beginning in Sp12)

- **MUS254: Woodwind Methods II (1 hours)**
  This course is designed to provide students with the skills necessary to teach the woodwind instruments in large and small group settings in the public schools. Students will learn to perform on each of the major woodwind instruments. Woodwind Methods I will cover flute and the single reed instruments (clarinet and saxophone) whereas Woodwind Methods II will cover the more complicated double reed instruments (bassoon and oboe). Instruments will be provided for students’ use during the course. (253-every third year beginning in Fa11; 254-every third year beginning in Sp12)

- **MUS255: Brass Methods I (1 hours)**
  This two-course sequence is designed to provide students with the skills necessary to teach the brass instruments in large and small group settings in the public schools. Students will learn to perform on each of the major brass instruments. Brass Methods I will cover the high brass (trumpet and horn) whereas Brass Methods II will cover the lower brass (trombone, euphonium and tuba). Instruments will be provided for students’ use during the course. (255-every third year beginning in Fa12; 256-every third year beginning in Sp13)

- **MUS256: Brass Methods II (1 hours)**
  This two-course sequence is designed to provide students with the skills necessary to teach the brass instruments in large and small group settings in the public schools. Students will learn to perform on each of the major brass instruments. Brass Methods I will cover the high brass (trumpet and horn) whereas Brass Methods II will cover the lower brass (trombone, euphonium and tuba). Instruments will be provided for students’ use during the course. (255-every third year beginning in Fa12; 256-every third year beginning in Sp13)

- **MUS291: Topics in Music (2 TO 4 hours)**
- **MUS298: Independent Study in Music (1 TO 4 hours)**
Prerequisite: Junior standing, approval of the divisional dean and consent of instructor.

- **MUS303: Conducting I (2 hours)**
  Fundamentals of conducting including baton technique, score reading and rehearsal procedures. (Sp, even years) Prerequisite: MUS 211 and MUS 213.

- **MUS304: Conducting II - Choral (2 hours)**
  (Fa, even years) Prerequisite: MUS 303.

- **MUS305: Conducting II - Instrumental (2 hours)**
  (Fa, even years) Prerequisite: MUS 303.

- **MUS307: Practical Keyboard Harmony (1 hours)**
  Practical keyboard facility, including harmonic progressions, modulation, figured bass realization, transposition and score reading. (Fa) Prerequisite: MUS 211.

- **MUS311: Music History I - Early Music through the Baroque Period (4 hours)**
  Surveys Western music from Antiquity through the Baroque period, with particular emphasis on music literature and identification of stylistic characteristics of each period. (Fa, even years) Ability to read music required.

- **MUS312: Music History II - The Classic and Romantic Periods (4 hours)**
  Designed for the music major as well as the general student, this course traces the development of Western music from the Classical period through the Romantic period (1750-1900). Ability to read music required. (Sp, odd years) Prerequisite: ENG 170.

- **MUS313: Music History III - The 20th Century (2 hours)**
  This course continues with the study of music history begun in MUS 311 and 312, concentrating on 20th century style characteristics, major composers, 'isms,' forms, techniques, terminology, and actual music from 1900 until the present. Study of the social, philosophical, and political background against which all this music unfolded will also be a focus of the course. (Fa, odd years) Ability to read music required.

- **MUS323: Diction – German and English (1 hours)**
  Develops a basic understanding of the International Phonetic Alphabet as applied to the mastery of foreign language pronunciation for singing. 323 is English and German diction and is a prerequisite for MUS 324; 324 is French and Italian diction. (323-Fa, even years; 324-Sp, odd years)

- **MUS324: Diction – French and Italian (1 hours)**
  Develops a basic understanding of the International Phonetic Alphabet as applied to the mastery of foreign language pronunciation for singing. 323 is English and German diction and is a prerequisite for MUS 324; 324 is French and Italian diction. (323-Fa, even years; 324-Sp, odd years)

- **MUS350: Materials/Techniques Elem Music (2 hours)**
  Fundamental music skills, methods and materials for the elementary classroom teacher. (Fa, Sp, Su)

- **MUS353: Choral Methods and Literature (4 hours)**
Organization and administration of choral music curricula. Observation and participation in the classroom. Investigation of historical and contemporary philosophies of choral music education. (Fa, odd years) Prerequisite: Admission to the Teacher Education Program.

- **MUS354: General Music in the Schools (2 hours)**
  Organization and administration of general music curricula in grades K-12. Survey and application of European and American trends in teaching methodology and materials. Observation and participation in the classroom. (Sp, odd years) Prerequisite: Admission to the Teacher Education Program.

- **MUS357: Choral Literature & Performance Practice (2 hours)**
  This course provides students with broad knowledge of representative repertoire for all levels and sizes of ensembles from the 5th-grade choir to the professional ensemble. The course will introduce students to a viable philosophy of music and establish why the choice of quality repertoire in educational settings is of critical importance to the success of music teaching. Traditional interpretations of core repertoire will be studied through various recordings. (Sp, odd years) Prerequisite: MUS 211.

- **MUS358: Wind Literature and Performance Practice (2 hours)**
  This course provides students with broad knowledge of representative repertoire for all levels and sizes of ensembles from the 5th-grade band to the professional wind ensemble. The course will introduce students to a viable philosophy of music and establish why the choice of quality repertoire in educational settings is of critical importance to the success of music teaching. Traditional interpretations of core repertoire will be studied through various recordings. (Sp, odd years) Prerequisite: MUS 211.

- **MUS359: Orff/Kodaly Methods (4 hours)**
  This is a course designed to increase each student's knowledge and understanding of music teaching materials, methodologies, and techniques of teaching general music at the elementary school level using the methodologies of Orff and Kodaly. Systems of teaching developed by others, such as Dalcroze, will be studied and put into practice as well. (Fa, odd years) Prerequisite: MUS 354.

- **MUS366: Voice Pedagogy (2 hours)**
  The study of voice production and how to recognize and solve vocal problems. Students have the opportunity to teach voice lessons under the guidance of the instructor. (Fa, odd years)

- **MUS391: Topics in Music (2 TO 4 hours)**
  Prerequisite: Junior standing, approval of the divisional dean and consent of instructor.

- **MUS398: Independent Study in Music (1 TO 4 hours)**
  Prerequisite: Junior standing, approval of the divisional dean and consent of instructor.

- **MUS430: Vocal Literature (2 hours)**
  A study of literature available for the voice, including the art song and oratorio and operatic literature beginning with the Baroque period. (Sp, even years) Prerequisite: MUS 211.

- **MUS470: Junior Recital (1 hours)**
  This course is taken in conjunction with applied lessons in the semester in which the student is presenting a junior (470) or senior (471) recital, resulting in an applied lesson worth three credits for those semesters. Additional rehearsals outside of regular lessons are required. An applied music fee will be charged in addition to full tuition for this course.

- **MUS471: Senior Recital (1 hours)**
  This course is taken in conjunction with applied lessons in the semester in which the student is presenting a junior (470) or senior (471) recital, resulting in an applied lesson worth three credits for those semesters. Additional rehearsals outside of regular lessons are required. An applied music fee will be charged in addition to full tuition for this course.

- **MUS480: Capstone - Music Business (3 TO 4 hours)**
  The capstone course for the music business major. This course is usually taken at a business or arts organization.

- **MUS497: Capstone - Music Performance Emphasis (2 hours)**
  During the semester in which the senior recital is presented, students will enroll in 497 in lieu of the regular Applied Music number. Students will work with the applied teacher in the presentation of a public recital. This will include research and the development of the ability to communicate clearly in written program notes. Further, demonstration of a high level of mastery of the voice/instrument is expected. Corequisite: MUS 471. Prerequisite: senior standing. Regular applied music fee will be charged. Periodic group meetings with all capstone students are required.

- **MUS499: Capstone - Liberal Arts Emphasis (2 hours)**
  During the semester in which the senior recital is presented, students will enroll in 499 in lieu of the regular Applied Music number. Students will work with the applied teacher in the presentation of a public recital. This will include research and the development of the ability to communicate clearly in written program notes. Further, demonstration of a high level of mastery of the voice/instrument is expected.
Corequisite: MUS 471. Prerequisite: senior standing. Regular applied music fee will be charged. Periodic group meetings with all capstone students are required.
New Cultural Experiences Program

- **NCE207: Practicing Intercultural Communication in Thailand (4 hours)**
  This course is designed to provide students the opportunity to study and have firsthand experience in
  Thailand. Students will have a better understanding of the region's culture, history, geography and environment. We visit St. Petersburg and Moscow in Russia and Kokshetau, Kazakhstan and their surrounding regions. We study the interrelationship of historical events, cultural characteristics and environmental quality. We will be working with St. Petersburg University, Moscow State University, Kokshetau State University, the Peace Corps, and the Waukesha Area Sister City Association. (Sp, Travel in May)

- **NCE302: Russia & Central Asia - History, Environment, and Geography Halfway Around the World (4 hours)**
  This course focuses on the relationship between historical events, cultural characteristics and environmental quality. Students will visit St. Petersburg and Moscow in Russia and Kokshetau, Kazakhstan and their surrounding regions. We study the interrelationship of historical events, cultural characteristics and environmental quality. We will be working with St. Petersburg University, Moscow State University, Kokshetau State University, the Peace Corps, and the Waukesha Area Sister City Association. (Sp, Travel in May)

- **NCE305: Reefs, Rainforests and Ruins of Belize (4 hours)**
  This course focuses on tropical reef biology and rainforest ecology. Students are introduced to these topics in the fall followed by a three-week winterim experience in Belize. While in Belize, students explore the world’s second largest barrier reef and trek through a tropical rainforest to observe bullet trees, howler monkeys and exotic birds. While at these sites, students design and perform investigative experiments to gain an understanding of the scientific method. In addition, students experience the ancient Mayan civilization visiting the ruins at Lamanai, Caracol and Tikal. This course meets the LSP I or LSP II requirement. (Fa, Travel in January)

- **NCE309: Germany, Poland and Hungary (4 hours)**
  This course examines personal and communal treatment of 'the other' in Eastern Europe, where recent
  history has left not only deep scars, but also a strong commitment to social justice and tolerance. Guided
  by visits to historical sites, guest speakers, one-on-one conversations and individual observations,
  students examine how questions of tolerance and intolerance have shaped and still inform Eastern
  European culture and society. (Sp, Travel in May)

- **NCE312: China - Its Modern Reality (4 hours)**
  This course examines Chinese culture with an emphasis on the roles China currently plays on the
  international stage. Specific attention is given to China's reform that has brought about great changes
  taking place in its economy and the social lives of the people. Important current issues in semi-capitalism,
  U.S. business outsourcing and internationalism in education will be stressed. (Sp, Travel in May)

- **NCE313: Revising Italy - Travel Writing in the Italian Tradition (4 hours)**
  In this course, students will spend the semester exploring readings in the tradition of the Italian travel
  narrative, including classic works by authors such as Twain and James, as well as more contemporary
  examples. Students will work to practice their own skills in writing travel essays, and at the completion of
  the semester-study portion of the course, we will travel to Italy for approximately three weeks and explore
  several distinct regions of the country (city, country and sea) and reflect on how our experiences there
  have been shaped by the major authors we have read during the semester. At the completion of the off-
  campus portion of the course, students will produce their own major travel essay.

- **NCE315: Australia - The Land and the People Down Under (4 hours)**
  This course explores the geographic and demographic forces that have shaped Australia by focusing on the
  amazing geographic diversity and how the peoples of Australia have left their mark on contemporary
  culture. The course will review the economic, political, religious, environmental and social realities of
  Australia and its neighboring Oceanic Islands. (Sp, Travel in May)

- **NCE316: Multicultural South Africa (4 hours)**
  This course builds on the material covered in the prerequisite course. A truly interdisciplinary experience,
  the course incorporates discussions of politics, history, economics and language in an attempt to
  understand the nature of power, particularly as it is exercised within the context of racial and ethnic
  oppression of indigenous peoples. (Sp, Travel in May) Prerequisite: ENG 225, South Africa: Culture &
  History of the Rainbow Nation.

- **NCE317: The Cultural and Environmental Geography of Alaska (4 hours)**
  The purpose of this academic field study is to explore the environmental resources and cultural heritage of
  America's final frontier. Spring coursework will ground students in an understanding of Alaska's history,
  physical landscape, Native American heritage, and current natural resource base. The three-week May
  itinerary will include cultural activities in Sitka, Fairbanks and Anchorage involving Tlingit, Athabascan and
  Inuit Indian groups, plus environmental field investigations that include Denali National Park and the
  historic Yukon mining region. (Sp, Travel in May)

- **NCE318: Mexico - Culture, Health and Human Services (4 hours)**
  This course has been designed for students who are interested in careers where they will work in health or
  human service settings that serve Hispanic populations. Using Mexico as a central focus, students will gain
  an understanding of Mexican and Mexican-American culture and customs. In May students will study in
  Cuernavaca, Mexico, where they will live with families, participate in seminars related to health, social
services, migration, medical anthropology and politics. Intensive language classes are optional for those with near-native fluency. (Sp, Travel in May)

- **NCE319: Research in Art-Art and Culture of the Ancient and Modern Maya (4 hours)**
  In this course, students will spend the first half of the spring semester at Carroll studying ancient Mayan history, culture and art/architecture. Over spring break, students will spend 10 days in Mexico exploring the world they have studied. Upon return to Carroll, the second half of the semester will involve developing written and artistic projects that reflect what they have learned on campus and abroad. (Sp, Travel over Spring Break)

- **NCE320: Paris - Art and Culture (4 hours)**
  This course traces the civilization and culture of France through the centuries, beginning with the Gallo-Roman times and progressing to the present. While in Paris, students will experience first-hand the wealth of art and architecture which Paris has to offer. Students will be introduced to various artistic movements born in France and will investigate how history is reflected by the many monuments in the City of Light. Previous knowledge of French is not required. (Fa, Travel in Winter)

- **NCE321: Contemporary Germany - Its Culture, Economy, and Politics (4 hours)**
- **NCE322: The Historical Evolution of Culture, Trade and Economics within the British Isles (4 hours)**
- **NCE323: Travel Journals - Italy (4 hours)**
- **NCE324: Identity, Culture and the European Union (4 hours)**
- **NCE325: Politics and Theatre in the UK and USA (4 hours)**
  In depth look into the interrelationship of Politics and Theatre in the dynamic defining and redefining of the British culture. Students will explore plays and politics from three distinct periods: Elizabethan, Victorian, and Modern England and counterpoint them with study of American responses and innovations during the same eras. Travel to London during will include visits to the New Globe Theatre, the National Theatre, Stratford on Avon, Parliament, the Victoria & Albert Museum, and the British Imperial War Rooms. Travel to Chicago to explore US correlations will take place during the semester.

- **NCE341: Health Care in Guatemala (4 hours)**
  This course provides an introduction to the field of international health, using Guatemala as a focus of study. After an overview of the geography, history, and culture of Guatemala, there will be an emphasis on understanding factors that impact illness and injury, data assessment, and the development of meaningful solutions to identified problems. The semester long course will serve as preparation for a practicum experience in Guatemala. During the two week immersion in Guatemala, students will tour health care facilities in eastern Guatemala, Mayan, and colonial historical sites, and cultural points of interest. Students will also assist with mobile clinics in several villages and present a health education lecture. (Sp) Prerequisites: Junior standing, NRS 233.
Nursing

- **NRS100: Health Care and Nursing (4 hours)**
  This is the first course in the nursing major. It is designed to acquaint the student with three broad areas that encompass the professional nursing role. Students acquire a foundational ability to use appropriate professional language including the terms and abbreviations that are necessary for professional communication. The process of nursing is studies from the context in which the program is offered, including consideration of global, regional and institutional needs and expectations of the practicing nursing professional. (Fa, Sp) Prerequisite: Admission to the nursing program or approval by nursing faculty.

- **NRS100L: Health Care and Nursing Laboratory**
  Laboratory component for NRS100.

- **NRS230: Health Assessment (4 hours)**
  The foundational concepts, scientific basis and theoretical constructs of effective therapeutic communication, interviewing, health history, and physical assessment across the life span are presented. Laboratory practice is designed to produce the cognitive and psychomotor skills necessary to conduct a systematic and accurate assessment of an individual's health status. The ability to collect, organize, document and analyze health history and physical assessment data, as well as the ability to recognize and promote adaptive human responses are the expected outcomes of this course. (Fa, Sp) Prerequisite: Admission to the Nursing Program, BIO 130, NRS 100 and Pre or Co-requisite: NRS 100.

- **NRS230L: Health Assessment Laboratory**
  Laboratory component for NRS230.

- **NRS233: Foundations of Nursing Practice (4 hours)**
  This course is an introduction to the scientific basis and theoretical foundations of professional nursing practice. Nursing theory is incorporated with nursing process to enable the student to identify basic health responses and intervene appropriately at the foundational level of care. The student learns to use a systematic framework to implement the nursing process and begins to recognize and apply nursing research to practice. A continued development of an attitude of inquiry is expected. (Fa, Sp) Prerequisite: BIO 130, BIO 140, NRS 230. Concurrent with NRS 234.

- **NRS234: Foundations - Practicum (2 hours)**
  This course focuses on the application and integration of the nursing process to promote physical wellness. Simulated and actual client-care experiences provide an opportunity for student development and practice in the roles of professional nursing that assist the individual to regain or maintain an optima health state. Therapeutic interventions relate to fundamental needs across the life span are addressed and a basic skill level is expected as an outcome of the course. S/U graded. (Fa, Sp) Prerequisite: BIO 130, BIO 140, NRS 230. Concurrent with NRS 233.

- **NRS236: Human Pathophysiologic Responses (4 hours)**
  This course is focused on the alterations in cell, tissue and system mechanisms that manifest as health problems throughout the life span and prevent or limit individuals from making adaptive responses. Although the focus of the course is on the systemic pathophysiology of the individual, the response of the family are acknowledged as inseparable from the health state of a family member. (Fa, Sp) Prerequisite: NRS 230, BIO 130, BIO 140, CHE 101, CHE 102.

- **NRS300: Critical Inquiry in Nursing Research (2 hours)**
  This course examines the concepts and the process of research. A systematic and critical inquiry into published nursing research and an understanding of its practice application(s) provide the course emphasis. (Fa, Sp) Prerequisite: Admission to the nursing program, NRS 100, 230, 233, 236.

- **NRS310: Mental Health Nursing Care (3 hours)**
  This course focuses upon the theoretical principles of psychiatric/mental health nursing and on practical foundations for assessing, planning, intervening, and evaluating within psychiatric/mental health situations to promote health. The course examines measures for identifying, supporting and fostering the abilities of individuals, families, groups, and communities to cope and assist mentally unhealthy individuals to higher levels of function and quality of life. (Fa) Prerequisites: NRS 233, NRS234, NRS236, PSY 221.

- **NRS310L: Mental Health Nursing Care Laboratory**
  Laboratory component for NRS310.

- **NRS312: Family Centered Obstetric Nursing Care (2 hours)**
  This course focuses on the specialized health care needs of the childbearing family. The health response of the family unit is emphasized as essential to the promotion and maintenance of health of mother and child. Students develop the necessary knowledge base and learn the importance of collaboration with others of the health care delivery team to provide care and teaching for pregnancy, delivery, and newborn nursing. (Fa, Sp). Prerequisites: NRS 233, 234, 236, BIO 212. Pre-requisite or Co-requisite: PSY 221. Do not take concurrently with NRS 320.

- **NRS316: Introduction to Medical Surgical Nursing (4 hours)**
This course is designed to provide the student with an understanding of the effects of selected physiologic problems on adults in inpatient care settings and the relevant nursing interventions to care for those problems. The content explores ways to promote physical and emotional health in the ill individual, across the adult lifespan, through a partnership with the patient and the patient's support system. (Sp).

Prerequisites: NRS 233, 234, 236, 310, HSC 300. Pre-requisite or Co-requisite: NRS 300. Concurrent with 317.

- **NRS317: Medical Surgical Nursing Practicum (5 hours)**
  This course is designed to provide the student with an understanding of the effects of selected physiologic problems on adults in inpatient care settings and the relevant nursing interventions to care for those problems. The content explores ways to promote physical and emotional health in the ill individual, across the adult lifespan, through a partnership with the patient and the patient's support system. (Fa, Sp).
  Prerequisites: NRS 233, 234, 236, 310, HSC 300. Pre-requisite or Co-requisite: NRS 300. Concurrent with 316.

- **NRS320: Family Centered Pediatric Nursing Care (2 hours)**
  The course focuses on the specialized health care needs of the child in the family. The course provides the necessary knowledge base to maintain optimal health in the pediatric population through developmentally and culturally competent care of the acute and chronic illness and through the promotion of wellness behaviors in the child and family. (Fa, Sp).
  Prerequisites: NRS 233, 234, 236, BIO 212. Pre-requisite or Co-requisite: PSY 221. Do not enroll concurrently with NRS 312.

- **NRS391: Special Topics in Nursing (2-4 hours)**

- **NRS415: Community Health Practicum (2 hours)**
  This course is designed to provide nursing student with opportunities to apply the theoretical principles of community health nursing in the clinical setting. Care is focused on aggregate populations and families across the lifespan in a variety of community settings. (Fa) Pre-requisites: NRS 300, 312, 316, 317, 320. Concurrent with NRS 416.

- **NRS416: Community Health Nursing Care (3 hours)**
  This course provides a body of knowledge that allows the student to view the community as a complex system of forces. Community systems have the potential for controlling community/aggregate health issues and problems. Students focus on the community as client, and learn to assess and analyze data from community systems in order to plan community nursing interventions for primary, secondary and tertiary prevention strategies. (Fa). Prerequisites: NRS 300, 312, 316, 317, 320. Concurrent with NRS 415.

- **NRS417: Advanced Medical Surgical Nursing (3 hours)**
  This course is designed to provide the student with an understanding of the effects of multiple diagnoses on adults in various clinical contexts (e.g. ER, ICU, sub-acute, community). The content explores ways to prioritize problems and interventions, use practice guidelines and outcome indicators in planning and implementing nursing care to ill individuals, across the adult lifespan with a focus on older adults. Integrated in all modules is discussion related to ethical issues, cultural awareness and diversity along with supporting theories and models. (Fa) Prerequisites: NRS 310, 316, 317. Concurrent with NRS 419.

- **NRS419: Advanced Medical Surgical Practicum (5 hours)**
  This course continues and expands, in practice, the concepts of patient care introduced in the medical surgical nursing theory courses. The practicum and laboratory experiences focus on implementing the nursing process and skills with ill individuals from diverse populations and developmental levels in a variety of medical/surgical in-patient settings. (Fa) Prerequisites: NRS 300, 312, 316, 317. Concurrent with NRS 417.

- **NRS429: Health Policy and Administration (3 hours)**
  This course provides an opportunity for the student to synthesize knowledge from all previous coursework and clinical experiences. This interdisciplinary course allows students to work together to understand regional, national, and global health care policy. The course presents leadership concepts and management skills as a basis for implementing change at the policy level. (Sp). Prerequisites: NRS 415, 416, 417, 419. Concurrent with NRS 431.

- **NRS431: Capstone (4 hours)**
  The course provides an opportunity for the student to synthesize knowledge from all previous course work and clinical experiences. The student will be provided with the opportunity to practice professionally through delegation of tasks, supervision of nonprofessional staff, and management of patient groups. Students will provide direct patient care for clients and families with complex health needs. Capstone students will apply critical and creative thinking skills to synthesize and integrate nursing knowledge into an oral and/or written presentation of a project. (Sp). Prerequisites: NRS 415, 416, 417, 419. Concurrent with NRS 432.

- **NRS432: Professional Practice Preparation (1 hours)**
  The professional practice lab experience provides opportunities for students to identify strengths and areas for improvement in their professional nursing skills. Along with faculty support, students are provided simulation experience, study group work, group review sessions, and professional practice experiences.
that will strengthen nursing knowledge and build confidence to practice as a nurse. (Sp). Prerequisites: NRS 415, 416, 417, 419. Concurrent with NRS 431.

- **NRS498: Independent Study in Nursing (1 TO 4 hours)**
  Prerequisite: Approval of the divisional dean and consent of the chair of nursing and instructor.
Organizational Leadership

- **LEA190: Leadership and Personal Effectiveness (4 hours)**
  General Education S1. Personal leadership represents a passionate desire to take charge of your life and is characterized by the strong values that become your moral compass, providing direction to your actions and behaviors. In this class, you will develop strategies to increase your individual effectiveness as you discover your unique purpose and initiate a personal vision to guide your life, and learn principle-centered approaches for solving problems, how to be a more effective communicator and listener, time management skills, how to set and achieve challenging goals and principles that help you adapt to change. (Fa, Sp)

- **LEA302: Leadership-Theory and Practice (4 hours)**
  General Education S2. This course facilitates development of the student's capacity to become an effective leader in a business, public/government organization, or nonprofit agency. Through an examination of various approaches to leadership, students identify key principles, competencies, and qualities characteristic of effective leaders and integrate these concepts into a personal leadership style. (Fa, Sp)

- **LEA375: Nonprofit Leadership (4 hours)**
  This course provides students with comprehensive knowledge about nonprofit leadership. The course covers areas essential to effective leadership in today's nonprofit organizations, including director and board responsibilities, fund development, financial accountability, legislation, human resources, and volunteer management. While the course draws from theoretical and analytical perspectives that shape the nonprofit sector, emphasis is placed on the practical application of strategic competencies needed to lead nonprofit organizations. (Sp)

- **LEA390: Contemporary Issues and Perspectives in Leadership (4 hours)**
  This course focuses on compelling issues and perspectives in leadership theory and practice. It is intended to present students with some of the most recent and innovative perspectives about leadership, beginning with a focus on individual adults as followers, moving to a continually broadening focus on teams, gender and leadership, leadership in community organizations, leadership in political and international contexts, and transformational leadership. Prerequisite: LEA 302. (Fa)

- **LEA480: Leadership Internship (1 TO 12 hours)**
  This course provides an opportunity to apply leadership theories and concepts to actual work experiences under the supervision of an external supervisor and the Director of the Organizational Leadership program. The internship provides opportunities for the students to improve leadership skills while adapting to the world of work. (Fa, Sp, Su) Prerequisites: Sophomore standing required, junior standing recommended, and approval of the instructor. The course may be repeated for a maximum of 12 credits if the student has substantially different work experiences. Minimum of 4 credits is required. 40 hours of work are needed for each credit. (S/U)

- **LEA499: Leading Change (4 hours)**
  This course integrates prior academic experiences and provides students with an experimental, comprehensive approach to leadership. The processes of developing a vision, strategic thinking and planning, communicating the vision, empowering employees, and appreciating differences are applied and utilized within an actual organizational setting as a means of integrating academic knowledge with leadership skills. Prerequisites: LEA 190, LEA 302, LEA 375, LEA 390. (Sp)
Philosophy

- **PHI101: Introduction to Philosophy (4 hours)**
  General Education P1. A historical introduction to the major fields of Western philosophy including logic, metaphysics, epistemology, and ethics. This course helps students better understand the world by studying significant interpretations of self, the world, and morality that have been offered by thinkers, past and present. (Fa, Sp)

- **PHI105: Introduction to Logic (4 hours)**
  General Education P1. A study of the principles and methods of logical reasoning. The class will focus primarily on formal mathematical deductive logic but will also include principles of inductive logic and Aristotelian syllogistic logic. (Fa)

- **PHI206: Ethics (4 hours)**
  General Education P1. An introductory investigation of alternative systems for determining and justifying ethical values. The course explores both theories of conduct (What should I do?) and theories of character (Who should I be?) through an exploration of the contemporary significance of theorists such as Aristotle, Kant, and Mill. (Fa, Sp, Su)

- **PHI206H: Ethics (4 hours)**
  General Education P1. An introductory investigation of alternative systems for determining and justifying ethical values. The course explores both theories of conduct (What should I do?) and theories of character (Who should I be?) through an exploration of the contemporary significance of theorists such as Aristotle, Kant, and Mill. (Sp, odd years)

- **PHI207: History and Philosophy of Science (4 hours)**
  General Education P1. A study of the philosophical foundations of science. The class will discuss the nature, purpose and methodologies of scientific inquiry starting with Aristotelian science and tracing the development to the modern period. The class will also discuss the nature of scientific proof, the evaluation of evidence for scientific claims, and the formation and evaluation of scientific theories. (Fa, odd years)

- **PHI298: Independent Study in Philosophy (1 TO 4 hours)**
  Qualified students will undertake an independent study project. Prerequisites: Junior or senior standing, approval of the divisional dean and consent of instructor.

- **PHI308: Philosophy of Religion (4 hours)**
  General Education P2. This is an advanced introduction to the main issues in the philosophy of religion. Topics that may be covered are the rationality of religious belief, cognitive experience of the divine, the compossibility of divine attributes, the efficacy of prayer, the problem of evil, and other issues that arise in philosophical theology. Also offered as REL 308. (Sp, odd years)

- **PHI320: Ancient and Mediaeval Philosophy (4 hours)**
  General Education P2. An advanced survey of philosophical thought from the Pre-Socratics to Late Scholasticism. The course will trace the development of western philosophical thought and the seminal ideas of western civilization as found in the work of the leading thinkers of the ancient and mediaeval world. (Fa, even years)

- **PHI321: Modern and Contemporary Philosophy (4 hours)**
  General Education P2. An advanced survey of philosophical thought from the modern period beginning with Descartes through key 20th century and current philosophers. The course will trace the development of western philosophical thought and the seminal ideas of western civilization as found in the work of the leading thinkers since approximately 1600. (Sp, even years)

- **PHI398: Independent Study in Philosophy (1 TO 4 hours)**
  Qualified students will undertake an independent study project. Prerequisites: Junior or senior standing, approval of the divisional dean and consent of instructor.

- **PPE101: Introduction to Philosophy, Politics, and Economics (4 hours)**
  General Education S1. A discussion-based interdisciplinary course exploring the interrelated nature of fundamental ideas and methods used by philosophers, political scientists, and economists to study important socio-economic issues such as globalization, freedom and markets, citizenship and political power, and others. (Sp)

- **PPE499: Capstone in Philosophy, Politics, and Economics (4 hours)**
  The capstone course will have 4 components. 1) A major research paper: Each capstone student will propose and write a research paper on a topic approved by the capstone instructor. 2) Oral defense: each student will present and defend his or her research project to a panel of faculty in the major and other capstone students. 3) Comprehensive exam: each student will take an exam created by faculty in the major to test their mastery of the broad content of the major. 4) Transition plan: Students will be assisted in preparing a transition plan to career or graduate school as described in the capstone experience guidelines. Prerequisite: Senior standing as a PPE major. (Sp)
Physical and Health Education

- **HED201: Nutrition (2 hours)**
  Basic principles of nutrition are covered as well as current problems and topics regarding both personal and world nutrition today. Designed for the public school teacher, the community health educator or those in related fields. (Fa)

- **HED202: Drugs, Society and Human Behavior (2 hours)**
  This course is directed at introducing social, psychological, pharmacological and cultural aspects of drug use, misuse and abuse. In addition, the methods, materials and theories of drug abuse prevention in the school and community are introduced. (Wn)

- **HED203: Consumerism in Health (2 hours)**
  The aim of this course is to identify content, resources, materials and instructional strategies for providing consumer education to various populations. (SuI)

- **HED204: Human Sexuality (2 hours)**
  This course reviews current information on health and human sexuality. Emphasis is given to cognitive and affective components of human sexuality. Major issues and topics in human sexuality are covered with particular attention to gender as it affects these issues. (Sp)

- **HED323: School Health Programs (4 hours)**
  Studies the importance of well-organized and planned school health programs with special emphasis on the importance of health to the school. Graduate credit available. (Sp) Prerequisite: HSC 103.

- **HED353: Special Methods in Teaching Health Education (4 hours)**
  Applications of general principles and methods of teaching health education. Special emphasis upon selection, use, and preparation of equipment, materials, teaching aids, and other resources especially designed for the health education setting (Pre-K-12). (Sp) Prerequisites: HED 323 and HSC 103.

- **PED101: Dance (1 hours)**
  Theory and methods of teaching age appropriate rhythms and dance activities for students in grades K-12. Emphasis is on skill progressions, teaching techniques and assessment methods. (Required course fee) (Fa)

- **PED102: Basic and Intermediate Swim (2 hours)**
  This course is open to Physical Education majors only. Emphasis is placed on the improvement of the individual student's swimming skill. Course content ranges from the non-swimmer level through American Red Cross intermediate skill level. Physical education teaching majors and minors are required to enroll in this class unless they hold one of the following American Red Cross certifications: Water Safety Instructor or Lifeguard Training. (Sp)

- **PED103: Philosophy, Principles & History of Physical Education/Athletics (3 hours)**
  Physical and Health Education/Athletics This course gives the student a broad historical, philosophical, and futuristic view of the physical education/athletics field. Principles of physical education/athletics are also introduced with emphasis on curricular development and design. (Required course fee) (Sp)

- **PED208: Organization and Administration of Physical Activities/Athletics (2 hours)**
  In this course, students study the organization and administration of physical education/fitness and athletic programs. Course content addresses organizational issues at various levels of administration K-12 through adult. (Fa)

- **PED214: Teaching Outdoor Activities in Physical Education (2 hours)**
  This course is designed to offer undergraduate students an in-depth experience with various outdoor skills for orienteering, outdoor survival, canoeing, mountain (wall) climbing, all season camping, safety outdoors, outdoor fitness (trail running, backpacking, hiking, mountain biking) and ropes course. (Required course fee) (Fa)

- **PED310: Elementary Physical Education Activities (3 hours)**
  In this course, students study basic movement patterns in games of lower and higher organization as well as tumbling and individual activities. Fitness activities are incorporated throughout as well as early childhood assessment. (Required course fee) (Fa)

- **PED311: Team Sports and Officiating (3 hours)**
  This course gives students a background in the history, rules, equipment, values and the fundamental skills and techniques necessary to participate in and enjoy team sports. Officiating techniques in team sports are also included. Prerequisite: Concurrent with PED 312. (Required course fee) (Sp)

- **PED311L: Team Sports and Officiating Laboratory**
  Laboratory component for PED311.

- **PED312: Individual/Dual and Lifetime Activities (3 hours)**
  This course gives students a background in the history, rules, equipment, values and the fundamental skills and techniques necessary to participate in and enjoy individual and lifetime activities. Prerequisite: Concurrent with PED 311. (Required course fee) (Sp)

- **PED312L: Individual/Dual and Lifetime Activities Laboratory**
  Laboratory component for PED312.
- **PED324: Physical Education Laboratory (2 hours)**
  This course further develops knowledge, skills, and abilities that exercise professionals must possess in order to function competently in the Pre-K-12 educational setting. HSC 303 and HSC 322 taken concurrently. (Required course fee) (Fa)

- **PED328: Elem Phy Ed Activities and Health Education (3 hours)**
  The course is specifically designed for elementary education majors to introduce both the content and techniques for delivering appropriate school health and physical education programs at the K-9 level. Content reflects Wisconsin's Model for Academic Standards for Physical Education and Health. (Required course fee) (Fa, Sp, Su)

- **PED353: Capstone: Special Methods in Teaching Physical Education (4 hours)**
  Applications of general principles and methods of teaching physical education are presented in this course. Special emphasis is placed upon selection, use and preparation of equipment, materials, teaching aids and other resources especially designed for the physical education setting (Pre-K-12). Prerequisites: Successful completion of the PPST, admission to TEP or instructors permission and junior standing (Required course fee) (Sp)

- **PED391: Special Problems and Research (4 hours)**
  Prerequisite: Approval of the divisional dean and consent of instructor.

- **PED398: Special Studies in Physical Educ (1 TO 3 hours)**
  Prerequisite: Approval of the divisional dean and consent of instructor.

- **PED411: Adapted Physical Education (4 hours)**
  This course introduces the student to skills, knowledge, and competencies necessary to evaluate, plan and organize educational and recreational activities for students with exceptional educational needs. A laboratory experience with students is also required. (Required course fee) (Fa)

- **PED412: Assessment/Program Evaluation in Adapted Physical Education (2 hours)**
  This course introduces the core theoretical and practical background necessary to assess and evaluate the motor development and physical fitness needs of persons with disabilities. Students are able to administer various psychomotor assessment tools and apply the results in the design of an individualized motor program. (Required course fee) (Sp) Prerequisites: HSC 120, PED 411. Co-requisite: PED 414.

- **PED414: Field Experience in Adapted P.E. (1 hours)**
  This experience provides the student with an opportunity to work with students in an adapted physical education setting under the supervision of a Wisconsin 860 licensed physical education teacher. Attendance at a monthly seminar and a minimum of 40 clock hours must be spent at early childhood, elementary, and secondary levels. (Sp) Prerequisites: 411. Co-requisite: PED 412.

- **PED421: Psycho-Social Aspects of Physical Activity (4 hours)**
  This course presents an introduction to basic issues and current research in the psychology and sociology of American sport, physical activity, rehabilitation and leisure. Specific emphasis is placed on the social and psychological factors affecting an individual's performance in motor activities. (Fa/Sp)
Physical Therapy

- **PTH400: Foundations of Professional Practice (4 hours)**
  Fundamental concepts related to professionalism and the roles and responsibilities of the physical therapist are introduced. Emphasis is placed on professional practice expectations (communication, diversity, professional behavior, critical inquiry and clinical decision making, education, and professional development) and practice management expectations (prevention/wellness/health promotion, management of health care delivery administration, consultation, and social responsibilities). The health care delivery system including cost, quality, and access and the policies and legislation which drive these forces are introduced. The vital roles physical therapists contribute to the overall health care delivery system are introduced. (Fa)

- **PTH401: Clinical Research I (4 hours)**
  The concepts of critical inquiry and evidenced-based practice in physical therapy are introduced. The components and processes of qualitative and quantitative research in physical therapy are emphasized. Students access and analyze a variety of health care and physical therapy literature. (Sp)

- **PTH404: Biomechanics I (4 hours)**
  This course integrates anatomy with mechanical principles to study and understand the causes and effects of forces acting on and produced by biological systems. Connective tissue properties and their relation to function and adaptation are discussed. The interactions of skeletal muscle, tendon, and general properties of human joints are analyzed in the context of normal human movement. (Fa)

- **PTH404L: Biomechanics I Laboratory**
  Laboratory component for PTH404.

- **PTH405: Neuroscience (4 hours)**
  This course introduces the central nervous system and its connections to mind and behavior. Anatomy and physiology, as well as nervous system development, learning, memory, emotions, sensation and perception, health, neuropsychological diseases and disorders will be emphasized in lecture. Laboratory experiences will apply course content to clinical examination procedures of the motor, sensory, cognitive and behavioral systems. (Sp)

- **PTH405L: Neuroscience Laboratory**
  Laboratory component for PTH405.

- **PTH406: Exercise Physiology I (4 hours)**
  The fundamental principles of exercise physiology are explored. The anatomical, physiological, biochemical, and psychological effects of exercise in healthy untrained and trained individuals are studied. The effects of exercise on the human body are discussed across gender, race, and life span. Exercise performance under different environmental conditions is also presented. Cardiovascular endurance and skeletal muscle force generating assessment and training techniques are performed. Resources used to study the effects of exercise on the human body include exercise physiology laboratories, computer simulations, and observations. (Fa) Prerequisite: Entry-Level Physical Therapy Program Standing.

- **PTH406L: Exercise Physiology I Laboratory**
  Laboratory component for PTH406.

- **PTH407: Human Learning and Behavior (4 hours)**
  The basic principles of human learning and behavior are explored across gender, culture, and life span. An emphasis is placed on classical and instrumental learning, the concepts of motor learning, and on information processing approaches to learning. The experimental bases for these areas of learning will be stressed throughout. Specific applications of basic research will be made to behavioral medicine, physical therapy, education, behavior modification, and behavior dysfunction. (Fa)

- **PTH414: Biomechanics II (4 hours)**
  This course applies concepts introduced in PTH 404 to joint specific and whole-body kinesiology. Musculoskeletal structure and function as they relate to the production of normal human movement are explored using a variety of analysis techniques. Palpation, joint goniometry, and manual muscle testing clinical skills are introduced and practiced. The course integrates concepts of postural, balance, and human locomotion, including gait analysis. (Sp)

- **PTH414L: Biomechanics II Laboratory**
  Laboratory component for PTH414.

- **PTH416: Exercise Physiology II (4 hours)**
  This course is the second in a serious of two exercise physiology courses where the investigation of fundamental exercise physiology principles are advanced. This course focuses on the acquisition of more complex exercise physiology concepts and their application as well as integration and critical analysis of fundamental exercise physiology content, acquired previously. The effects of exercise, decreased use, exercise testing and exercise prescription are explored and applied to individuals of varying gender, age and across the life span. The role of exercise in wellness and primary prevention programs is addressed. (Sp) Prerequisite: Entry-Level Physical Therapy Program Standing.
Physics

- **PHY101: Introductory Physics I (4 hours)**
  The first course of a non-calculus based two-course sequence in the basic principles of physics covering the general areas of mechanics, thermal physics and fluids. The mathematical proficiency expected for this course is algebra and introductory trigonometry. This course satisfies the physics requirement for some majors, and pre-health professional requirements. Four hours of lecture/discussion and two hours of laboratory per week. (Credit cannot be received for both 101 and 203.) (Required course fee) (Sp, Su) Prerequisite: MAT 101 or higher.

- **PHY101L: Introductory Physics Laboratory**
  Laboratory component for PHY101.

- **PHY102: Introductory Physics II (4 hours)**
  The second course of a non-calculus based two-course sequence in the basic principles of physics covering the general areas of wave motion (oscillations, waves and sound), light and optics, and electromagnetism. The mathematical proficiency expected for this course is algebra and introductory trigonometry. This course satisfies the physics requirement for some majors, and pre-health professional requirements. Four hours of lecture/discussion and two hours of laboratory per week. (Credit cannot be received for both 102 and 204.) (Required course fee) (Fa, Su) Prerequisite: PHY 101. Instructor consent is necessary for enrollment in 102 without completion of 101.

- **PHY102L: Introductory Physics Laboratory**

- **PHY105: Astronomy (4 hours)**
  General Education N1. The course includes the study of the motions and structures of the earth, the moon, the sun, planets, stars and galaxies, and consideration of cosmological theories. The laboratory includes telescopic observational astronomy. Labs are scheduled for twice a week but only meet once a week on average for three hours. (Required course fee) (Fa, Sp, Su) Prerequisites: Satisfaction of the mathematics competency requirement for graduation.

- **PHY105L: Astronomy Laboratory**
  Laboratory component for PHY105.

- **PHY203: General Physics I (4 hours)**
  The first course of a calculus level two-course sequence in the basic principles of physics covering the general areas of mechanics, fluids and wave motion. This course satisfies the physics requirement for some majors, and pre-health professional requirements. Four hours of lecture/discussion and three hours of laboratory per week. (Credit cannot be received for both 101 and 203.) (Required course fee) (Sp) Prerequisites: MAT 160.

- **PHY203L: General Physics Laboratory**
  Laboratory component for PHY203.

- **PHY204: General Physics II (4 hours)**
  The second course of a calculus level two-course sequence in the basic principles of physics covering the general areas of heat, light, electricity and circuits, and magnetism. This course satisfies the physics requirement for some majors, and pre-health professional requirements. Four hours of lecture/discussion and three hours of laboratory per week. (Credit cannot be received for both 102 and 204.) (Required course fee) (Fa) Prerequisites: MAT 160 and 161. Instructor consent is necessary for enrollment in 204 without the successful completion of 203.

- **PHY204L: General Physics Laboratory**
  Laboratory component for PHY204.

- **PHY301: Electricity and Magnetism (4 hours)**
  Physical principles underlying modeling of charges and currents, including circuit elements and fundamentals of analog electrical circuits are explored through lecture and laboratory. Topics will include the following: Maxwell’s equations, electric and magnetic fields in vacuum and in matter, potentials and the uniqueness theorem, current and voltage sources, resistors, Ohm's Law, Kirchhoff’s Laws, Thevenin and Norton theorems. Four hours of lecture/discussion and three hours of laboratory per week. (Required course fee) (Sp, even years) Prerequisites: PHY 204, MAT 207.

- **PHY301L: Electricity and Magnetism Laboratory**
  Laboratory component for PHY301.

- **PHY303: Modern Physics (4 hours)**
  A course in the basic principles of modern physics treating the general subjects of atomic and nuclear physics, relativity, cosmology and quantum physics. Four hours of lecture/discussion and three hours of laboratory per week. (Required course fee) (Sp, odd years) Prerequisites: PHY 204 or 102 and MAT 160 and 161.

- **PHY303L: Modern Physics Laboratory**

- **PHY304: Classical Mechanics (4 hours)**
An intermediate course in mechanics including vector calculus, conservation laws of mechanics, and dynamics of a particle and of a rigid body. Four hours of lecture/discussion and three hours of laboratory per week. (Required course fee) (Sp, odd years) Prerequisites: PHY 204 or 102 and MAT 160 and 161.

- **PHY304L: Classical Mechanics Laboratory**  
  Laboratory component for PHY304.

- **PHY320: Thermodynamics (4 hours)**  
  An introduction to the basic concepts of thermodynamics, including temperature, thermal expansion, heat flow, calorimetry, the First and Second Laws of Thermodynamics, statistical mechanics and fundamental theories of phase transitions, topics on gas, vapor, combined power cycles, refrigeration cycles, gas mixtures, and gas-vapor mixtures. Engineering applications will be emphasized alongside theoretical fundamentals. (Sp, even years) Prerequisites: PHY 204, MAT 207.

- **PHY380: Engineering Internship (4 hours)**  
  A work-oriented experience in applied physics. This is to be planned in advance with a physics faculty member. It does not count toward a minor in physics. S/U graded.

- **PHY396: Special Problems and Research (4 hours)**  
  Prerequisite: Approval of the divisional dean and consent of instructor. (Required course fee)

- **PHY398: Independent Study in Physics (1 TO 4 hours)**  
  Prerequisites: Junior standing, approval of divisional dean and consent of the instructor.

- **PHY450: Advanced Experimental Physics (4 hours)**  
  In this advanced physics lab course, students design and complete a research project, discuss general physics topics and physics research, as well as attend seminars by physics and engineering professionals. Preparation for employment and professional skills development are emphasized. The course meets for 5 hours per week. (Required course fee.) (Fa even years) Prerequisites: PHY 301 or PHY 303.

- **PHY450L: Advanced Experimental Physics Laboratory**  
  Laboratory component for PHY450.

- **PHY480: Work-Oriented Experience (4 hours)**  
  A work-oriented experience in applied physics. This is to be planned in advance with a physics faculty member. It does not count toward a minor in physics. S/U graded.

- **PHY496: Special Problems and Research (4 hours)**  
  Prerequisite: Approval of the divisional dean and consent of instructor. (Required course fee)
Political Science and Global Studies

- **POL103: Politics of the World’s Nations (4 hours)**
  General Education S1. A survey of political systems that introduces students to fundamental concepts and their applications in many nations. The course examines public institutions (legislatures, executives, courts) and political processes (voting, policy-making). (Sp, Su)

- **POL141: Intro to American Politics (4 hours)**
  General Education S1. A broad survey of American national politics. Political Science majors should take this course before taking any other course in politics. (Fa, Sp, Su)

- **POL155: Contemporary Global Politics (4 hours)**
  General Education S1. This course provides an analysis of the dynamics of global politics and focuses on two general themes: 1) global conflict and cooperation and 2) the global political economy. Topics include state and non-state actors, the role of power and morality, the types and causes of war, foreign policy decision-making, just war tradition, humanitarian intervention, the democratic peace theory, global financial institutions, trade and international monetary policy, and the role of multinational corporations. (Fa)

- **POL200: Social Science Inquiry (4 hours)**
  This course is designed to introduce students to the application of quantitative and qualitative research methods within social science disciplines. Students will also be introduced to SPSS statistical software. The course will culminate with students developing and presenting their own empirical research design proposals. The content in this course is intended to assist students in the preparation of upper-level seminar research papers including Capstone. (Fa) Prerequisite: sophomore standing or above.

- **POL269: The American Congress (4 hours)**
  This course explains the operations and assesses the effectiveness of the contemporary Congress. Students will examine the United States Congress from an institutional perspective. We will also explore the behavior of members of Congress and their quest for office. (Fa, even years)

- **POL275: Political Theory (4 hours)**
  General Education P1. A broad survey of the concerns, problems and achievements of recent political thought. Topics include democratic theory, African-American political thought, Feminist political theory, and post modernism. (Fa) Prerequisite: sophomore standing or permission of instructor.

- **POL276: Democracy, Globalization, and International Governance (4 hours)**
  General Education P1. This course provides an overview of the concerns, problems, and achievements of recent occidental political thought in addressing normative issues emerging from globalization and its impact on democratic governance. (Sp) Prerequisite: sophomore standing or permission of instructor.

- **POL280: Politics and Culture (4 hours)**
  This course explores the intersection of politics and high, low, and popular culture. The emphasis during the course of the semester will be to analyze the way in which culture and politics each influence each other. (Fa, odd years)

- **POL285: International Conflict and Security (4 hours)**
  General Education S2. The course introduces students to causes and consequences of war and conflict in the international system. The course covers the nature of security and insecurity in the international system and the various ways in which actors (states, IOs, groups and individuals) seek to prevent and mitigate the outbreak of conflict. Among the topics covered include the threat posed by the proliferation of weapons of mass destruction, terrorism, asymmetrical conflict, ethnic conflict, human security, and the challenges these problems present to the international system, states, and individuals. Prerequisite POL155. FA even years.

- **POL291: Topics in Politics (2 TO 4 hours)**
  Focused study of a topic of special concern to political scientists. Changing topics may be draw from any area of politics. Course may be repeated for credit. Two-credit Topics in Politics courses may not be counted toward a political science or global studies major or minor.

- **POL298: Independent Study in Politics (1 TO 4 hours)**
  (Fa, Sp, Su) Prerequisite: Junior standing, approval of divisional dean and consent of instructor.

- **POL301: Politics of Developed Nations (4 hours)**
  General Education S2. A comparative treatment of political systems in several advanced democratic nations. The course focuses on the policy problems that governments of developed countries face as they attempt to regulate 'post-industrial' economies and societies. (Fa, odd years) Prerequisite: POL 103 or consent of instructor.

- **POL303: Politics of Developing Nations (4 hours)**
  General Education S2. Through an examination of the political systems in a number of non-western countries in Africa, Latin America, Asia and the Middle East, this course studies the problems of political development in an environment of domestic and international challenges. (Fa, even years) Prerequisite: POL 103 or consent of instructor.

- **POL321: International Law (4 hours)**
General Education S2. This course covers the historical development, sources, principles, enactment and enforcement of international laws. Attention will be paid to the expansion of the field from its traditional focus on states to the inclusion of non-state actors such as International Organizations, Non-Governmental Organizations and individuals. Specific topics include: war and conflict, human rights, and environmental law. Readings and discussions review relevant decisions from both U.S. and international courts, utilizing the case method approach widely used in law schools. (Sp, even years)

- **POL329: The German Experience (4 hours)**
  A research-oriented course examining modern German history. Emphasis is placed on the process of unification, the Nazi era, the GDR and reunification. (Fa, odd years) Prerequisite: Junior standing or consent of the instructor. Students planning to take POL 329 for their German language minor must contact the instructor (in the semester before they enroll in POL 329) to develop a plan for adapting coursework to incorporate and demonstrate appropriate use of the language.

- **POL332: Public Policy (4 hours)**
  This course focuses on the formulation, implementation and evaluation of public policy. Emphasis is given to the variety of ways public goals are pursued by governments, especially within the United States. The class will explore a number of different policy areas as case studies. (Sp, odd years)

- **POL335: Public Administration (4 hours)**
  A broad survey of the whole area of administrative politics and processes at the national, state and local levels while focusing on the work of public agencies and nonprofit organizations in implementing public policy. (Sp, odd years)

- **POL336: The American Presidency (4 hours)**
  This course examines the origins, growth, and complexity of the American presidency. The constitutional role and historical developments of the Chief Executive will be considered in relationship to the meaning of democratic government, the separation of powers, and the expansion of public administration during the 20th century.

- **POL344: Constitutional Law and Politics (4 hours)**
  A study of the interpretation of the United States Constitution by the Supreme Court; the role of politics on judicial interpretations and their influence in American government and society. (Fa, even years)

- **POL381: Internship in Politics (4 TO 12 hours)**
  Prerequisites: Senior standing and at least a 2.5 grade point average in courses in the major. S/U graded. (Fa, Sp, Su)

- **POL382: Internship in Global Studies (4 hours)**
  Prerequisites: Senior standing and at least a 2.5 grade point average in courses in the major. S/U graded. (Fa, Sp, Su)

- **POL391: Topics in Politics (4 hours)**
  Focused study of a topic of special concern to political scientists. Changing topics may be drawn from any area of politics. Course may be repeated for credit. Two-credit Topics in Politics courses may not be counted toward a political science or global studies major or minor.

- **POL398: Independent Study in Politics (1 TO 4 hours)**
  (Fa, Sp, Su) Prerequisite: Junior standing, approval of divisional dean and consent of instructor.

- **POL399: Capstone in Political Science and Global Studies (4 hours)**
  The political science/global studies capstone asks majors in these disciplines to formally demonstrate and integrate their substantive knowledge of political science or global studies through a significant research project, which they present in a public forum. The capstone also engages students in the process of transitioning from undergraduate life to advanced study or the workforce. Students develop transition plans and are encouraged to assess how their experiences at Carroll have prepared them for the next steps in life - both professional and personal. (Sp)

- **PPE101: Introduction to Philosophy, Politics, and Economics (4 hours)**
  General Education S1. A discussion-based interdisciplinary course exploring the interrelated nature of fundamental ideas and methods used by philosophers, political scientists, and economists to study important socio-economic issues such as globalization, freedom and markets, citizenship and political power, and others. (Sp)

- **PPE499: Capstone in Philosophy, Politics, and Economics (4 hours)**
  The capstone course will have 4 components. 1) A major research paper: Each capstone student will propose and write a research paper on a topic approved by the capstone instructor. 2) Oral defense: each student will present and defend his or her research project to a panel of faculty in the major and other capstone students. 3) Comprehensive exam: each student will take an exam created by faculty in the major to test their mastery of the broad content of the major. 4) Transition plan: Students will be assisted in preparing a transition plan to career or graduate school as described in the capstone experience guidelines. Prerequisite: Senior standing as a PPE major. (Sp)
Psychology

- **PSY101: Introductory Psychology (4 hours)**
  General Education S1. An introduction to the science of behavior and mental processes. Emphasis is placed upon methods of inquiry utilized in the social sciences. These methods will be used to investigate psychological questions regarding topics such as perception and consciousness, learning, memory and thinking, biological and developmental processes, motivation and emotion, personality, social determinants of behavior, and mental health. (Fa, Sp, Su)

- **PSY201: Abnormal Psychology (4 hours)**
  A study of major and minor psychological disorders. Consideration of classification issues and theoretical perspectives precedes an examination of research on genetic, biobehavioral and psychosocial determinants of stress reactions and psychological disorders. Consideration is also given to healthy adjustment and coping strategies as well as prevention and therapy options. (Fa, Su) Prerequisite: PSY 101.

- **PSY205: Statistics and Experimental Design (4 hours)**
  Required for the psychology major and highly recommended for many others, this course teaches the data analysis procedures most widely used by researchers in the social and behavioral sciences. Instructional emphasis will be on learning which statistic to use, how to perform the data analyses and how best to communicate one's results. Students will gain extensive experience collecting, analyzing, thinking about and using statistical data. Computations will be done both by calculator and by computer. Four hours of lecture-discussion and one two-hour laboratory. (Lab fee required) (Fa, Sp, Su) Prerequisite: PSY 101 and at least sophomore standing or special permission from the instructor.

- **PSY205L: Statistics and Experimental Design Lab**
  Laboratory component for PSY205.

- **PSY206: Developmental Psychology (4 hours)**
  A study of the theories, research, and issues related to physical, intellectual, social and emotional development. Slight emphasis on children, including observational strategies for behavioral assessment of infants and children, are included. Credit cannot be received for both 206 and 221. (Sp) Prerequisite: PSY 101.

- **PSY210: The Science of Sleep (2 hours)**
  This course will introduce students to the subject of sleep. There is a large body of information about circadian rhythms and the biological clock, what constitutes normal sleep, the myriad of sleep disorders, and the costs to society of sleep deprived individuals. Special emphasis will be placed on the lack of sleep some professionals routinely accrue, including medical doctors, airline pilots, truck drivers, as well as shift workers. Basic polysomnography (brain waves, breathing, heart rate and movement recorded during a sleep study) will also be covered. A variety of methods including lecture, movies, group work and discussion will be employed. (Wn)

- **PSY211: Industrial and Organizational Psychology (4 hours)**
  The psychological study of factors related to people at work. Employee selection methods such as testing and interviewing, performance evaluations, job descriptions, statistical validation and decision techniques, motivation, leadership, satisfaction, job redesign and organizational development are examined. (Fa, Su odd) Prerequisite: PSY 101

- **PSY221: Life-Span Psychology (4 hours)**
  General Education S2. A comprehensive course with an applied emphasis which examines individual development throughout life. Topics such as genetic inheritance, intellectual change and social adjustment are viewed as processes that extend from the neonatal period through very old age. Credit cannot be received for both 206 and 221. (Sp) (Fa, Sp, Su) Prerequisite: PSY 101.

- **PSY228: Consumer Behavior (4 hours)**
  An applied psychology course focusing upon the behavior of the individual consumer. Concepts derived from perception, motivation, personality, learning and cognition are developed in the analysis of consumer decision-making. Theory and research in social media and on-line advertising is discussed. (Sp, Su even) Prerequisite: PSY 101.

- **PSY240: Biopsychology (4 hours)**
  This course examines the biological substrates of the mind and behavior. Foundational to the course is an understanding of the electrochemical processing that occurs in and between neurons, with relevant applications to drug use, emotions, learning, memory, sleep, consciousness, sensory systems, evolution, and psychiatric disorders. (Sp) Prerequisite: PSY 101. Credit cannot be received for PSY 240 and PTH 405.

- **PSY260: Health Psychology (4 hours)**
  Based on the research of clinical, experimental social and health psychologists, this course examines how psychological, social, and biological factors affect health and illness. Topics include coping with stress and pain, psychoneuroimmunology, and living with chronic illness, such as diabetes, cardiovascular disease, or cancer. Emphasis is also placed on effective patient-clinician communication and on the modification of health-related behaviors. (Sp, Su) Prerequisite: PSY 101.

- **PSY303: Experimental Social Psychology (4 hours)**
This course reviews and critically examines the research findings of experimental social psychologists. Among the topics explored are attitude change, prejudice, conformity, altruism, aggression and group dynamics. Instructional emphasis will be on developing ideas for further needed social psychological research. (Fa) Prerequisite: PSY 101 and 205.

**PSY306: Psychological Testing and Assessment (4 hours)**
This course gives students a strong foundation in the technical and methodological principles of test construction and in the social and ethical implications of psychological testing. Students will learn criteria for selecting and critically evaluating tests. In addition, students will actually take and study in depth a number of widely used tests of personality, occupational interests, intelligence and values. (Course fee required) (Sp) Prerequisite: PSY 101 and 205.

**PSY307: Experimental Psychology (4 hours)**
A research methods course in experimental science. Knowledge gained from PSY 205 is combined with laboratory exercises in physical control and measurement of variables. A class component covers experimental and quasi-experimental research methods. In addition, students conduct an individual experimental project and learn how to write research reports. Four hours of lecture/discussion and one three-hour laboratory. (Lab fee required ) (Fa, Sp, Su) Prerequisite: PSY 101 and 205.

**PSY307L: Experimental Psychology Lab**
Laboratory component for PSY307.

**PSY314: Learning and Animal Behavior (4 hours)**
A systematic survey of basic principles of learning and behavior in animals including humans. In the context of evolutionary psychology, attention is directed toward Pavlovian and instrumental conditioning, behavioral approaches to learning, species specific concerns, and motivation. Basic research is related to applied efforts in behavior modification and educational technologies. (Fa, Sp) Prerequisite: PSY 101. Credit cannot be received for both 314 and PTH 407.

**PSY316: Thinking, Problem Solving, and Cognition (4 hours)**
A study of human intelligence. This course focuses upon cognitive processes and structures involved in perception, memory, critical thinking, problem-solving and creativity. Applications to effective study and reading comprehension are also examined. (Sp) Prerequisite: PSY 101.

**PSY317: Adult Development & Aging (2 hours)**
This course provides an introduction into the concept that adult development and aging is just one part of the life span. A person's chronological age as well as his or her life experiences are important considerations in understanding the person as a whole. A discussion of research methods used in adult development research will also be examined (e.g., age effects, cohort effects, and time-of-measurement). Normal development is emphasized; however, special human circumstances are also explored.

**PSY321: Personality - Theory and Assessment (4 hours)**
The personality theories of Freud, Jung, Erikson, Rogers, Cattell and others are examined using both textbook treatments and original works of the psychologists. Biological contributions to personality are also discussed. Various psychological assessments are used to help students examine aspects of their own personalities. (Course fee required) (Fa) Prerequisite: PSY 101.

**PSY391: Special Studies in Psychology (2 hours)**
One-time courses, offered as announced. Topics vary. (Fa, Sp, Su) Prerequisite: PSY 101.

**PSY398: Independent Study in Psychology (1 TO 4 hours)**
(Fa, Sp, Su) Prerequisites: PSY 101, Junior standing, approval of divisional dean and consent of instructor.

**PSY401: Behavioral Neuroscience (4 hours)**
Building on the introduction to the brain provided in PSY 240, this course examines deeper principles of brain function. Understanding the brain at a deep level requires studying and manipulating models grounded in principles of brain function. In this course, students will systematically explore neural network models of learning, attention, memory, language, and higher-level cognition in an integrated lecture-lab format. (Lab fee required) (Fa) Prerequisite: PSY 101 and PSY 240, or consent of instructor.

**PSY401L: Behavioral Neuroscience Laboratory**
Laboratory component for PSY401.

**PSY403: Capstone-Historical and Modern Viewpoints of Psychology (4 hours)**
This capstone course prepares the psychology senior for a career in or related to the major. It also integrates traditional subject matter of perception, learning, social and developmental processes, as well as intelligence, motivation and personality. Historical roots, contemporary issues, as well as career opportunities, form the bases of class activities. Each student also completes career and major project portfolios. (Course fee required) (Fa)

**PSY414: Research Methods in Behavior Analysis (2 hours)**
This laboratory course will introduce students to behavior analytic research methods. Specifically, students will learn behavior recording techniques, methods of establishing interobserver agreement, and experimental methods for studying behavior change at the individual-level. By the end of the semester,
students will design, carry-out, and write-up original research using nonhuman-animal subjects (Sp)
Prerequisites: PSY 101 and 314.

- **PSY480: Internship in Psychology (2 TO 4 hours)**
  Provides majors contemplating a career in psychology or in related areas with supervised field experience.
  S/U graded. (Fa, Sp, Su) Prerequisite: PSY 101, Junior standing and consent of instructor.

- **PSY492: Research Seminar (4 hours)**
  This course is required for those psychology majors who are in the university-wide honors program and is
  recommended for all psychology majors. Students conduct systematic empirical research in the context of
  a seminar directed and coordinated by a faculty member. Seminar discussion is focused upon a current
  topic and is largely confined to asking researchable questions, exploring the feasibility of student-
  generated research proposals and evaluating student research reports. (Fa, Sp) (Lab fee required)
  Prerequisite: PSY 101, 205 and 307.
Public Health

- **PBH101: Introduction to Public Health (4 hours)**
  General Education S1. This course is designed to expose students to core topics in the area of public health. The course will examine varying health, environmental, and behavioral influences on the health of the public in the United States. The course will challenge students to think critically at the varying nature of public health and current events. Students will evaluate case studies and be provided with a basic didactic background. The course will be team taught and/or will include multiple guest speakers who can address the breadth of topics in this area. (Fa, Sp)

- **PBH102: Global Health (4 hours)**
  General Education S1. This course will introduce students to the main concepts of the public health field and the critical links between public health and social and economic development. Students will get an overview of various factors, including social, economic, and political issues on the health of individuals and of communities. The course will also introduce students to key concerns regarding nutrition, reproductive health, infectious diseases, and chronic diseases. The course will cover key concepts but be very practical in orientation. The course will be global in coverage but with an important focus on the developing world and on the health of the poor. (Fa, Sp)

- **PBH210: Public Health for Communities (4 hours)**
  This course is designed to provide students in public health with a broad-based overview of public policies, service delivery systems, and family-centered approaches to public health. Prerequisites: PBH 101, PBH 102. (Fa)

- **PBH211: Public Health Field Experience (2 hours)**
  This course will provide students with an opportunity to observe public health professionals under the direction and supervision of the Public Health faculty. Students will be placed at an on- or off-campus organization to apply, and further develop, core public health competencies. Depending on the placement site, students will have the opportunity to assist with a variety of activities, including health promotion and education, program development and assessment, and disease surveillance. (Course fee required) Prerequisites: PBH 101, PBH 102, PBH 210. (Sp) (Required course fee)

- **PBH302: Environmental and Occupational Health (2 hours)**
  This course is designed to introduce environmental and occupational health issues and key concepts related to environmental risk and policy. The specific topics covered during this course include air and water quality, food safety, vector-borne diseases, and pesticides. The goal of the course is to provide students with basic knowledge of environmental and occupational health as it applies to the principles of public health practice from individual, organizational and political perspectives. Prerequisite PBH 101, 102. (Fa)

- **PBH312: Public Health Policy and Administration (4 hours)**
  This course is about making public policy in public health and in health care: what it is, who makes it, and how and when it is made successfully. The course aims (1) to highlight several selected critical public policy issues and (2) to build skills in critical, reflective thinking that will help the student in making decisions about, or advocating for, policies that reflect individual and societal values. In the study of public policy, there are two broad theoretical models for explaining the policy making process. One is the rational model that emphasizes economic analysis and rational decision making. The other model is based in political science. This course is built on the political science model and emphasizes the political context in which public policy is always developed. Prerequisites: PBH 101, PBH 102. (Sp)

- **PBH324: Program Development, Assessment, and Evaluation in Public Health (4 hours)**
  This course presents methods for the identification of population-based needs for public health intervention, development of programs to meet those needs, and evaluation of the effectiveness of these public health interventions. The course integrates several knowledge and skill areas including: research methods, epidemiology, biostatistics, proposal writing, budget planning, project management, and program evaluation. Prerequisites: PBH 101, PBH 102, PBH 210. (Sp)

- **PBH421: Epidemiology (4 hours)**
  Modern epidemiology, as a science applicable to investigations of disease and other outcomes, policy assessment, and population science, evolved during the last half of the 20th century. Epidemiologic methods focused on application of statistical theory, use of survey methods, and information technology implementation. Epidemiology also broadened its scope to include concepts of causation applicable to non-communicable disease and other health determinants, including social and behavior factors. Applications to intervention efficacy, effectiveness, and safety, testing and decision-making methods, and policy analysis applicable to social concerns recently have been integrated into epidemiology teaching and research. Prerequisites: CMP 112, PBH 101, PBH 102, PBH 210. (Fa)

- **PBH480: Public Health Internship (6-12 hours)**
  Students are given the opportunity to apply public health theories and concepts to actual work experiences under the supervision of an external and capstone supervisor. This course is a part- or full-time internship with an affiliated organization or facility actively engaged in the field of public health. The purpose of the
internship program is to enhance and develop personal growth in public health disciplinary knowledge, ethical behaviors, career development, interpersonal skills, problem solving abilities, and personal responsibility. Further, it is intended to complement and reinforce the academic goals of the institution. Prerequisite: completion of major requirements, 2.75 gpa in the major and consent from program faculty required. Course fee required)(Fa,Sp,Su)
- **Recreation Management**
  - **REC203: Therapeutic Recreation Process** (3 hours)
    Study of Therapeutic Recreation (TR) process including the values and underpinning of practice, and the inter-relationships between TR, health care and human service professionals. Counts as a repeat of TherRec 390 with same topic. Course taught completely online.
  - **REC300: Therapeutic Recreation Assessment and Documentation** (4 hours)
    Students will study and explore the practice of assessment and documentation in the field of therapeutic recreation. (Sp) Prerequisite: none.
  - **REC308: Therapeutic Recreation in Physical Rehabilitation and Behavioral Health** (4 hours)
    This course will focus on the study of therapeutic recreation services for individuals with physical disabilities and behavioral health disorders. (Fa) Prerequisite: none.
  - **REC310: Facilitation Techniques in Therapeutic Recreation** (4 hours)
    The study of various facilitation techniques used in the field of therapeutic recreation. Specific emphasis will be placed on leisure education. (Sp) Prerequisite: none.
  - **REC400: Issues and Trends in Therapeutic Recreation** (3 hours)
    Examination of the most current trends and issues in the field of TR. (Su) Prerequisite: REC 308 or consent of instructor.
  - **REC480: Internship-Recreation Management** (12 hours)
    The purpose of this course is to enhance and develop personal growth in recreation management knowledge, ethical behaviors, career development, interpersonal skills, problem solving abilities, and personal responsibilities through participation in an internship at a recreation facility. During a 15-week internship, students will spend 30 hours/per week (450 total hours) developing, implementing, and administering recreation and outdoor adventure programs in a university affiliated recreation program. During the 15-week internship, students participating in the internship will come together for seminars. (Su, Fa) Prerequisites: REC 405 and 410.
Religion

- **REL102: Introduction to the Hebrew Bible (4 hours)**
  General Education P1. An introduction to the history, literature, and interpretation of the Hebrew Bible/Old Testament. The course includes a study of the historical and cultural traditions of the ancient Israelites and the use of archaeological, historical, and literary methods in studying the Hebrew Bible literature. (Fa, Sp)

- **REL103: Intro to the New Testament (4 hours)**
  General Education P1. An introduction to the history, literature, and interpretation of the New Testament. The course includes the study of the Jewish and Greco-Roman historical backgrounds of Jesus and the earliest church and the use of historical, sociological, and literary methods to examine the New Testament writings. (Fa, Sp)

- **REL106: Understanding Religion (4 hours)**
  General Education P1. We can describe religion; we can compare our own experiences with one another; we can watch other people when they are being 'religious'; we can see films, listen to music, look at advertising and watch news reports to discover where religion shows up, but what does it take to actually define religion? To begin the task of defining religion in this course, we will consider what religious people do, including: creating rituals, reading sacred texts, making sacred spaces, using special language, behaving ethically and sometimes behaving violently. We will look at ideas and practices across religious traditions but this is not a course in religions of the world. Rather, it is an introduction to the big ideas and common practices that help define what religion is. (Fa, Sp)

- **REL200: Religions of the Contemporary World (4 hours)**
  General Education P1. This course is a survey of religions practiced around the world today, including 'world' religions like Hinduism, Judaism, Buddhism, Christianity, Islam, Taoism, and Confucianism, but also touching on native and folk religions, Baha’i, Sikhism, and others. The approach is interdisciplinary, addressing historical development in addition to central beliefs and practices of a wide range of religions. Students will leave with a better sense of the variety of religious thought and practice, and of the importance of historical context in the formation and development of religions. The course also prepares the student for further study of particular religious traditions. (Fa, Sp)

- **REL201: Jesus of Nazareth (4 hours)**
  General Education P1. A study of Jesus in his first-century historical context as a Jew and in the different literary contexts of the New Testament (e.g. the Gospels, Paul, Revelation). The course will also include an examination of how Jesus is interpreted in today's global context (e.g. Africa, Latin America, Asia, and North America). (Fa)

- **REL202: Religious Traditions in America (4 hours)**
  General Education P1. A variety of religious traditions has played and continues to play important roles in our communities, small and large. This course focuses on the origins of contemporary religious traditions in the US, their basic beliefs, and their impact on life. The course may include presentations by local representatives of traditional faiths as well as more recent developments, and may involve visits for participants’ exposure to new religious experiences. (Sp)

- **REL210: Suffering and Hope (4 hours)**
  General Education P1. An in-depth examination of the theme of suffering and hope through a survey of foundational primary texts and contemporary theologies in different cultural and religious traditions. Students will learn several major perspectives on suffering and hope, explore assumptions that are made regarding suffering, and examine the ethical implications of the different views of suffering. ENG 170 recommended prior to enrollment. (Fa, odd years)

- **REL215: Women in Religion (4 hours)**
  General Education P1. A reading of world religions through the lens of women's experience. In studying religions such as Hinduism, Islam, Buddhism, Christianity, and Native American traditions, we will not only discuss the essential teachings of the religion but we will consider how women have changed those teachings and the backlash against them for it. (Fa, even years)

- **REL230: Foundations of Christianity (4 hours)**
  General Education P1. This course examines Christian teachings about God, Christ, and Salvation developed from100 to 1650 C. E. The study of the concepts, practices, and experiences of this formative period of Christianity is background for a critical understanding of Christianity in our times. (Fa)

- **REL231: Christianity in the Modern World (4 hours)**
  General Education P1. How has Christianity been involved in the life of the modern world from 1650 to the present? We will consider how Christians rethought their faith commitments while science and philosophy challenged their traditional assumptions. We will also examine recent Christian theological and ethical responses to such topics as gender and sexuality, environmental concerns, poverty, global conflicts, and the relationships among religions. (Sp)

- **REL291: Topics in Religious Studies (4 hours)**
A study of a selected topic in religious studies that is not covered in regular course offerings. Different topics in the fields of Bible, theology, history, ethics and current issues in culture and religion will be offered.

- **REL298: Independent Study in Religious Studies (1 TO 4 hours)**
  A course for students who are interested in working with a faculty member on a specific area of study. (Fa, Sp) Prerequisites: Junior standing, approval of divisional dean and consent of instructor.

- **REL306: Asian Religions (4 hours)**
  General Education P2. In this course, students will explore the sacred literature, practices and cultures of Islam, Buddhism, Hinduism, Jainism, Sikhism, Confucianism, Taoism, and the religions of Japan. (Fa, odd years) Prerequisite: Sophomore standing or consent of the instructor.

- **REL308: Philosophy of Religion (4 hours)**
  This is an advanced introduction to the main issues in the philosophy of religion. Topics that may be covered are the rationality of religious belief, cognitive experience of the divine, the compossibility of divine attributes, the efficacy of prayer, the problem of evil, and other issues that arise in philosophical theology. Also offered as PHI 308. (Sp, odd years)

- **REL310: Powers, Politics, and Pluralism in Biblical Interpretation (4 hours)**
  This class examines how the Bible has been interpreted to support certain positions regarding politics, class, race, gender, and sexual orientation. The class will explore how the Bible has been interpreted in global contexts and will focus in particular on how those in the United States have read and lived out the Bible through history. Topics may include slavery, roles of women, politics, same-sex relations, class relations, postcolonialism, anti-Semitism, end-time beliefs, and religious cults. (Sp, odd years)

- **REL316: Judaism, Christianity, and Islam (4 hours)**
  In this course students will explore the foundational texts, histories, beliefs, and practices of the three western monotheistic religions: Judaism, Christianity and Islam. An emphasis will be placed on learning each of the three traditions on their own as well as the variety of perspectives expressed within each tradition. A comparative study on several topics will also be included. Contemporary issues and conflicts involving these traditions will be explored. (Sp, even years)

- **REL362: New Testament Greek Tutorial (2 hours)**
  Independent study with instructor. Specifically offered for those planning to attend graduate school in religious studies. Does not count toward major or minor. S/U graded. (Offered when requested)

- **REL364: Hebrew Tutorial (2 hours)**
  Independent study with instructor. Specifically offered for those planning to attend graduate school in religious studies. Does not count toward major or minor. S/U graded. (Offered when requested)

- **REL380: Internship in Religious Studies (1 TO 4 hours)**
  An opportunity for students to work for local churches, social service agencies or other appropriate institutions under faculty supervision. The program provides practical experience supported by study and reading. The student may choose to participate in the program for a semester or a year. The work is S/U graded. Prerequisite: Consent of the instructor.

- **REL391: Topics in Religious Studies (4 hours)**
  A study of a selected topic in religious studies that is not covered in regular course offerings. Different topics in the fields of Bible, theology, history, ethics and current issues in culture and religion will be offered.

- **REL398: Independent Study in Religious Studies (1 TO 4 hours)**
  A course for students who are interested in working with a faculty member on a specific area of study. (Fa, Sp) Prerequisites: Junior standing, approval of divisional dean and consent of instructor.

- **REL480: Internship in Religious Studies (1 TO 4 hours)**
  An opportunity for students to work for local churches, social service agencies or other appropriate institutions under faculty supervision. The program provides practical experience supported by study and reading. The student may choose to participate in the program for a semester or a year. The work is S/U graded. Prerequisite: Consent of the instructor.

- **REL499: Capstone: Senior Seminar (4 hours)**
  Seniors research and write a substantial research paper which demonstrates their competency in religious studies and their ability to incorporate general education skills. Students will also give an oral presentation of the paper to faculty and interested students. As part of the seminar, students are required to complete an intentional plan for their transition from undergraduate school to a career and/or to graduate/professional school. Prerequisite: Senior standing.
Sociology and Criminal Justice

- **SOC101: Introduction to Sociology (4 hours)**
  General Education S1. An introduction to sociological concepts, explanations, and research findings to enable students to better understand the society in which they live and their place in that society. Topics include: culture, inequality, social relationships, deviance, membership in groups and social institutions such as education, religion and the family. (Fa, Sp)

- **SOC102: Sociology of Social Problems (4 hours)**
  General Education S1. A survey and analysis of major problem areas in contemporary American society, including areas such as drug use and abuse, family issues, poverty, crime, delinquency, environmental issues and war. (Fa, Sp)

- **SOC102H: Sociology of Social Problems (4 hours)**
  A survey and analysis of major problem areas in contemporary American society, including areas such as drug use and abuse, family issues, poverty, crime, delinquency, environmental issues and war. (Fa, odd years)

- **SOC103: Introduction to Criminal Justice (4 hours)**
  A survey of the history, structure, functions and operations of the primary components in the criminal justice system in the United States including law enforcement, courts and corrections. Includes an analysis of current issues such as discretion, sentencing practices, disparities in sentencing, and alternatives to incarceration. May not be counted toward a sociology major or minor. (Fa, Sp)

- **SOC110: Cultural Anthropology (4 hours)**
  General Education S1. The study of literate and nonliterate cultures from throughout the world using basic anthropological concepts. Explores descriptive data from a variety of cultures and the general patterns that exist across cultures. Includes topics such as culture, language, subsistence, stratification, family, kinship, descent, religion, social control and cultural change. (Fa, Sp, Su) ENG 170 is recommended prior to enrollment.

- **SOC202: Society and Ecology (4 hours)**
  This course examines the relationships between the cultural and structural patterns of society and the ecosystem. The course focuses on a critical examination of contemporary social systems and their relationships to the natural environment. It investigates the role culture plays in affecting human relationships with the earth and how the belief systems of a people shape their perspective regarding the role of humans in the natural world. Students identify and examine parameters of sustainable social systems. (Sp) Prerequisite: SOC 101 or 102.

- **SOC202L: Society and Ecology Laboratory**

- **SOC211: Juvenile Delinquency (4 hours)**
  A general survey and analysis of juvenile delinquency. Includes explanations of juvenile delinquency as deviant behavior with an emphasis on the nature, extent and causes of delinquency. Explores factors such as social structure, school, family and peers that have a major impact on juveniles. Also explores the role of police courts and the nature and history of attempts to control, prevent and treat delinquents. (Fa) Prerequisite: SOC 101 or 102; for criminal justice majors, SOC 103 is required.

- **SOC212: Criminology (4 hours)**
  A general survey and analysis of crime. Explores criminological theory, societal values with respect to crime, criminal behavior systems and criminal processing systems including police, courts and correctional procedures. (Sp) Prerequisite: SOC 101 or 102; for criminal justice majors, SOC 103 is required.

- **SOC213: Minority Group Studies (4 hours)**
  Analysis of what minority groups are, how they are formed, persist and change. Includes the study of a variety of minority groups such as ethnic, racial, sexual and other minority groups and the relationships between minority groups and majority groups in society. (Fa) Prerequisite: SOC 101 or 102.

- **SOC217: Social Psychology (4 hours)**
  The study of how people are influenced by and relate to one another. Explores how membership in groups and organizations influences the thoughts, feelings, and actions of people. Includes topics such as socialization, attitudes, conformity, leadership, power, persuasion, aggression, attraction and collective behavior. (Sp) Prerequisite: One course in sociology or psychology.

- **SOC220: Police in Society (4 hours)**
  A study of the history, goals, organization, structure and role of police in American society. Addresses a range of critical issues facing police and society including police culture, discretion, ethics, use of force, legal boundaries, police work and community relations. This course is not a how-to training course for police officers. May not be counted toward a sociology major or minor. (Sp) Prerequisite: SOC 103.

- **SOC230: Fundamentals of Interviewing (4 hours)**
  Students will learn and practice techniques and skills to increase their effectiveness in interviewing. Included is the ability to effectively understand verbal and nonverbal communication. Students will learn how to structure an interview through the introductory, developmental and termination phases. Challenges posed by diverse interview subjects will be addressed. Special emphasis will be placed on active listening
and practicing interviewing skills. May not be counted toward a sociology major or minor. (Fa)
Prerequisite: SOC 103.

**SOC291: Special Topics in Sociology or Criminal Justice (4 hours)**
Study of a selected topic in sociology that is not covered in regular course offerings. Generally takes a lecture and discussion format. The topic will be announced prior to registration. Prerequisite: SOC 101 or 102; for criminal justice majors, SOC 103 is required.

**SOC296: Reading and Research in Sociology (1 TO 3 hours)**
Research conducted under the supervision of a faculty member and designed to permit individual students or groups of students to research special areas in sociology related to their educational interests and goals. Prerequisites: Sociology or Criminal Justice major or minor, junior standing, and consent of instructor.

**SOC298: Independent Study in Sociology (4 hours)**
A course for students who have completed the necessary background courses in a specific area and wish to work with a faculty member to extend their study in that area. Students considering this course must get the approval of the divisional dean and consent of the instructor during the previous semester at least two weeks prior to registering for the course. Results of the study will be presented to the sociology faculty. Prerequisites: Sociology or Criminal Justice major, junior standing, and consent of the instructor. (Fa, Sp, Su)

**SOC301: Social Change and the Future of Society (4 hours)**
A general examination of the topic of social change. This course studies the role of social change in the development of societies, the consequences of social change for contemporary societies, and how change in various areas of society might affect life in the future. (Fa, odd years) Prerequisite: SOC 101 or 102.

**SOC302: Complex Organizations and Work Life (4 hours)**
Analyzes organizations, work life and their relationship to sustainability. Explores types of organizations, the changing nature of work, work/family conflicts, and how organizations impact workers and societies worldwide. Examines sustainable careers--especially through lab exercises. (Fa) Prerequisite: SOC 202.

**SOC303: Criminal Procedure, Evidence and Investigation (4 hours)**
Introduces principles of evidence and techniques of investigation. Includes constitutional limitations on arrest, search and seizure, the exclusionary rule, interrogation and confessions. Identifies problems of evidence gathering and presentation as well as basic skills and procedures of criminal investigation. May not be counted toward a sociology major or minor. (Fa) Prerequisites: SOC 103, and 211 or 212.

**SOC304: Introduction to Criminal Law (4 hours)**
An examination of the nature, variety and sources of criminal law and the relationship of criminal law to theories of punishment and social control. Includes the classification of crimes, as well as the creation, organization and content of criminal law. May not be counted toward a sociology major or minor. (Sp) Prerequisites: SOC 103, and 211 or 212.

**SOC305: Marriage & Family-Contmp Society (4 hours)**
The study of the changing nature of marriage and family life in the United States. An emphasis on processes and issues that challenge modern family life, including how the family interacts with other major social institutions. Topics include cohabitation, sexuality, mixed families, communication, parenting and divorce. (Sp) Prerequisite: Junior standing.

**SOC307: Corrections in American Society (4 hours)**
A study of the history, trend, purpose, organization and practice of corrections in American society. Includes jails, probation, intermediate sanctions, corrections in the community, prisons and supervision after release. Includes issues such as restorative justice, offender rights and incarceration of women, juveniles, special needs populations and members of minority groups. May not be counted toward a sociology major or minor. (Fa) Prerequisites: SOC 103; 211 or 212.

**SOC308: Sociological Theory (4 hours)**
An examination of the foundations and development of sociological theory from its beginning to the present. Explores the major theories and schools of thought and the relationship between theory and research through the works of important classical and contemporary sociological theorists. (Sp) Prerequisites: SOC 101 or 102 and junior standing.

**SOC311: Methods of Social Research (4 hours)**
A study of the ways sociologists use data to explore, describe and explain human social life. The focus will be on learning, evaluating and applying the techniques and methodology used in generating, gathering and analyzing social scientific data. (Fa, Sp) Prerequisite: SOC 101 or 102 and junior standing.

**SOC318: Sociology of Sex Roles (4 hours)**
This course explores the social construction of masculinity and femininity and how they are maintained or challenged in interaction. The course also considers patriarchy and how gender intersects with other systems of inequality, such as race and class. (Fa, even years)

**SOC380: Internship in Applied Sociology (4 hours)**
An opportunity for majors to work as a sociologist in a designated institution or agency under faculty supervision. Students considering this course must consult with their program adviser during the semester preceding the internship. (Fa, Sp) Prerequisites: Junior standing, SOC 311, and consent of the instructor.

- **SOC390: Sustainability Field Project (2 to 4 credits hours)**
  Applied work in a designated organization or setting under faculty and field supervision. Offers three project types, depending on career path: Field Work, Internship, or similar experience in an alternate cultural setting. (Fa, Sp, Su) Prerequisite: SOC 202, SOC 302, ENV 120, ENV 222, consent of instructor and advisor.

- **SOC391: Special Topics in Sociology (4 hours)**
  Study of a selected topic in sociology that is not covered in regular course offerings. Generally takes a lecture and discussion format. The topic will be announced prior to registration. Prerequisite: SOC 101 or 102.

- **SOC396: Reading and Research in Sociology (1 TO 3 hours)**
  Research conducted under the supervision of a faculty member and designed to permit individual students or groups of students to research special areas in sociology related to their educational interests and goals. Prerequisites: Sociology or Criminal Justice major or minor, junior standing, and consent of instructor.

- **SOC398: Independent Study in Sociology (4 hours)**
  A course for students who have completed the necessary background courses in a specific area and wish to work with a faculty member to extend their study in that area. Students considering this course must get the approval of the divisional dean and consent of the instructor during the previous semester at least two weeks prior to registering for the course. Results of the study will be presented to the sociology faculty. Prerequisites: Sociology or Criminal Justice major, junior standing, and consent of the instructor. (Fa, Sp, Su)

- **SOC399: Capstone in Sociology (4 hours)**
  Students will review their education experience as sociology majors and explore career paths. Assignments include readings that recap sociology as a field of study and writings that consider the relevance of sociology to professional and social life. (Sp) Prerequisite: Senior standing.

- **SOC481: Capstone - Internship in Criminal Justice (4 hours)**
  The internship course serves as the capstone experience for the study of criminal justice. It provides an opportunity for criminal justice majors to work in a designated agency or institution under faculty and agency supervision. Includes seminar meetings during the term and a capstone research paper. Students considering this course for a given semester must consult the instructor during the preceding semester. (Sp) Prerequisites: SOC 311, Senior standing, criminal justice major, consent of internship instructor and a minimum of 2.6 grade point average in courses in the major.
SPA101: Elementary Spanish I (4 hours)
A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the Spanish language. Introduction to Hispanic cultures, politics, history, and literature through texts in English or in English translation from Spanish. Weekly out-of-class discussion sections. Conducted primarily in Spanish. (101-Fa, 102-Fa, Sp)

SPA102: Elementary Spanish II (4 hours)
A beginning course designed to introduce the student to the basic skills of understanding, speaking, reading and writing the Spanish language. Introduction to Hispanic cultures, politics, history, and literature through texts in English or in English translation from Spanish. Weekly out-of-class discussion sections. Conducted primarily in Spanish. (101-Fa, 102-Fa, Sp)

SPA201: Intermediate Spanish I (4 hours)
Review of basic phonetic elements and syntax as an aid to improvement and expansion of good pronunciation and composition. Introduction to Hispanic cultures. Weekly out-of-class discussion sections. Conducted in Spanish. (SP201-Fa; SP202-Sp) Prerequisites: SPA 102 or consent of the instructor.

SPA202: Intermediate Spanish II (4 hours)
Review of basic phonetic elements and syntax as an aid to improvement and expansion of good pronunciation and composition. Introduction to Hispanic cultures. Weekly out-of-class discussion sections. Conducted in Spanish. (SP201-Fa; SP202-Sp) Prerequisites: SPA 201 or consent of the instructor.

SPA290: Spanish for Health and Human Services (2 hours)
Focus on health and human service vocabulary, language skills for professional communication, and cross-cultural awareness in order to communicate effectively, both formally and informally. Students participate in hands-on, experiential learning opportunities in the community. Conducted in Spanish. (Sp) Prerequisites: SPA 202 or consent of instructor.

SPA298: Independent Studies in Spanish (4 hours)
Prerequisites: Junior standing and written consent of instructor required for registration. Written proposals of projects must have the prior approval of the divisional dean and consent of the instructor prior to registration. (Fa, Sp)

SPA301: Conversation and Composition I (4 hours)
General Education H1. Practice in conversation and composition with emphasis on new and technical vocabulary. Functional grammar review. Reading, discussion and interpretation of more challenging literary texts. Reinforcement of basic linguistic elements such as phonetics and syntax as an aid to further refinement of the four language skills. Conducted in Spanish. (Fa) Prerequisites: SPA 202 or consent of instructor.

SPA302: Conversation & Composition II (4 hours)
This course strengthens skills already learned in Spanish courses by integrating elements of print journalism interviewing, writing and editing. It also expands the cultural knowledge of the students by focusing on their writing on themes of cultural relevance. Conducted in Spanish. (Sp) Prerequisite: SPA 301 or consent of instructor.

SPA305: Spanish for the Professions (4 hours)
This course introduces students to the vocabulary and discourse appropriate to the professions. It develops communicative skills for professional situations (speaking, listening, comprehension, reading, writing, translation, interpretation, and computer skills) and provides cultural and cross-cultural awareness. Students prepare oral and written reports. Conducted in Spanish. (Sp) Prerequisite: SPA 307 or consent of instructor.

SPA307: Latin American Civilization (4 hours)
General Education H2. Lectures and discussion on Latin American cultural history and trends, particularly as they relate to the arts, political thought, and economics. Conducted in Spanish. (Sp) Prerequisites: SPA 302 or consent of instructor.

SPA308: Spanish for the Professions (4 hours)
General Education H2. Lectures and discussion on Hispanic cultural trends, particularly as they relate to the arts, political thought, and economic conditions. Topics will focus on social movements in Spain or Spain’s impact on Latin America, the Caribbean, and the United States. Conducted in Spanish. (Sp) Prerequisites: SPA 302 or consent of instructor.

SPA318: Topics in Hispanic Cultures, Literature, History, Politics (4 hours)
General Education H2. Focuses on a particular aspect of Hispanic culture, literature, history, or politics. Students analyze and discuss literary and/or historical and (socio)political texts. Includes topics on Spain, Latin America, and/or the Caribbean. Conducted in Spanish. May be repeated with change of topic. (Sp) Prerequisites: SPA 307 or 308, or consent of instructor.

SPA325: Spanish for the Professions (4 hours)
This upper-intermediate level course will allow students to explore the diverse career possibilities available to those proficient in Spanish. Building upon previous knowledge of the Spanish language, students will expand their communication, reading, videos, oral presentations, written reports, projects and a variety of
interactive activities will expand cross-cultural awareness as well as increase familiarity with the language. During spring break, students will travel to Lima, Peru, to complete volunteer work related to their field(s) of interest. Both pre- and post-reflection will compliment reflection completed during the immersion experience. Prerequisite SPA202.

- **SPA398: Independent Studies in Spanish (2 TO 4 hours)**
  Prerequisites: Junior standing and written consent of instructor required for registration. Written proposals of projects must have the prior approval of the divisional dean and consent of the instructor prior to registration. (Fa, Sp)

- **SPA401: Advanced Conversation (2 hours)**
  A panorama of customs, life styles, attitudes, and cultural achievements of the Spanish speaking peoples today. Emphasis on informal conversation with individual interests and projects encouraged. Includes oral and written reports as well as grammar and syntax review. Conducted in Spanish. (Sp) Prerequisite: SPA 307 or 308, or consent of instructor. (May be taken twice.)

- **SPA480: Internship/Capstone Internship in Spanish (2 TO 4 hours)**
  Applications of foreign language and culture using language skills in professional settings. This course may also serve as a culminating capstone experience. Facilitates transition from university to career or graduate school through the creation of a resume and portfolio, as well as experience with employment interviews and/or submission of application to graduate school. S/U graded. (Fa, Sp) Prerequisites: SPA 307 or 308, 318 and senior standing.

- **SPA498: Indep Directed/Capstone Study (2 TO 4 hours)**
  Intensive reading in a specific area of Spanish or Spanish-American literature or culture. Weekly conference conducted in Spanish. Eight credits maximum may apply toward degree. This course may also serve as a culminating capstone experience for seniors. Facilitates transition from university to career or graduate school through the creation of a resume and portfolio, as well as experience with employment interviews and/or submission of application to graduate school. Written proposals of projects must have the prior approval of the divisional dean and consent of the instructor prior to registration. (Fa, Sp) Prerequisites: SPA 307 or 308, 318.
Sport and Recreation Management

- **SRM315: Sport Management Practicum I (1 hours)**
  This course provides students with an opportunity to observe and apply skills learned in the Sport and Recreation Management program under the direction and supervision of Sport and Recreation Management faculty.

- **SRM405: Recreational Programming (4 hours)**
  This course will provide students with the skills to develop, administer and lead a variety of recreation programs. The course will also involve budgeting and marketing/promotion methods and strategies designed for various populations and settings.

- **SRM407: Facility Operation (2 hours)**
  This course is designed to bridge the gap between business administration theory and practical application in the fitness and recreation fields. Information provided in this course prepares students for their internship and first professional work experiences.

- **SRM409: Sports Promotion and Event Planning (2 hours)**
  The purpose of this course is to acquire an in-depth knowledge about the specialized field of "event management" and to become familiar with management techniques and strategies required for successful planning, promotion, implementation and evaluation of special events within a sport context. To the extent feasible, students will be provided opportunities for direct observation of and hands-on involvement in the planning and staging of one or more special events.

- **SRM410: Recreation Administration and Supervision (4 hours)**
  This course will introduce students to a variety of special topics in the field of Recreation with emphasis on recreation management and leadership components. Specifically, students will be exposed to the importance of building community partnerships, researching for grant-funding sources, elements of contractual services, identifying current trends in the field, and characteristics of Gold Medal agencies (what makes them successful?).

- **SRM435: Sport Management Practicum II (1 hours)**
  This course provides students with an opportunity to observe and apply skills learned in the Sport and Recreation Management program under the direction and supervision of Sport and Recreation Management faculty.

- **SRM480: Capstone: Internship in Sport Management (12 hours)**
  The purpose of this course is to enhance and develop personal growth in recreation management knowledge, ethical behaviors, career development, interpersonal skills, problem solving abilities, and personal responsibilities through participation in an internship at a recreation facility. During a 15-week internship, students will spend 30 hours/per week (450 total hours) developing, implementing, and administering recreation and outdoor adventure programs in a college affiliated recreation program. During the 15-week internship, students participating in the internship will come together for seminars. (Su, Fa) Prerequisites: REC 405 and 410.
Theatre Arts

THE100: Theatre Participation (1 hours)
Participation in either Mainstage or Studio Season theatre productions as an actor or technician.
Prerequisite: consent of instructor. (Fa, Sp)

THE101: Introduction to Theatre Arts (4 hours)
General Education F1. Survey course focusing on the development of theatre, as well as an investigation of the literature and the practitioners of the art form. Course activity includes theatre performance field trips, reading of plays and oral and/or written theatre criticism. (Required course fee) (Fa, Sp, Su)

THE101L: Performance Field Trips
Laboratory component for THE101.

THE102: Oral Interpretation and Presentation (4 hours)
General Education F1. This course focuses on the interpretation, and presentation of various forms of dramatic and traditional literature. Students will become familiar with the basic principles of rhetorical and dramatic analysis and participate in the preparation and performance of many styles of texts, from prose to poetry as well as dramas and more formal literature. (Fa, Sp, Su)

THE120: Theatre Crew (2 hours)
Student participation in running or preparing the technical aspects of Theatre Arts Program Mainstage or Studio productions. (Fa, Sp)

THE121: Theatre Crew (2 hours)
Student participation in running or preparing the technical aspects of Theatre Arts Program Mainstage or Studio productions. (Fa, Sp)

THE200: Theatre Workshops (1 TO 2 hours)
Intensive practical work in various specialized topics within the Theatre Arts. Course may be repeated as topics will vary. (Required course fee) (Fa, Sp)

THE215: European Theatre History and Literature to 1800 (4 hours)
General Education F2. The traditions of the Euro-American theatre are investigated in terms of theatre conventions and drama of the various periods. Prerequisite: THE 101 or consent of instructor. (Fa)

THE216: Global Theatre History and Literature since 1800 (4 hours)
General Education F2. Concentration upon North American and European drama, Asian, Latin American and African theatre conventions and drama are presented. Prerequisite: THE 101 or consent of instructor. (Sp)

THE291: Special Studies/Topics in Theatre (1 TO 4 hours)
Study of a selected topic not covered in regular course offerings. The topic will be announced prior to registration. Four credits maximum will apply toward degree. (Fa, Sp)

THE296: Special Studies/Research in Theatre (1 TO 4 hours)
Advanced research allows individual students or groups of students to undertake special projects related to their program emphasis. Four credits maximum will apply toward degree. (Fa, Sp) Prerequisite: Approval of the divisional dean, departmental chair, and consent of instructor.

THE298: Independent Study in Theatre (1 TO 4 hours)
Independent study of selected areas under the supervision of one or more members of the faculty. Required for program honors. (Fa, Sp) Prerequisite: Approval of the divisional dean departmental chair and consent of the instructor.

THE300: Theatre Practicum (1 hours)
Supervised production work in the areas of theatre administration, stage management, scenery, lighting, costuming, or performance. Prerequisite: consent of instructor. (Fa, Sp)

THE301: Contemporary Acting Styles (4 hours)
Explores advanced techniques of acting, voice, and movement for use in modern theatre genres. (Fa) Prerequisites: THE 102 or consent of instructor.

THE302: Period Acting Styles (4 hours)
Explores advanced acting, voice, and movement techniques for use in classic theatre genres. (Sp) Prerequisites: THE 102 or consent of instructor.

THE305: Principles of Technical Theatre (4 hours)
Exploration of theories and practices and further advancement of practical skills employed in the areas of production management and stage management. (Fa, odd years) Prerequisites: THE 120/121 or consent of instructor.

THE306: Principles of Theatre Design (4 hours)
Exploration of theories and practices and the further advancement of practical skills in the areas of scenic, lighting, costume, and sound design. (Fa, even years) Prerequisites: THE 120/121 or consent of instructor.

THE307: Directing for the Stage (4 hours)
Practical course in directing for the stage, focusing on script analysis, script preparation, casting concerns, staging techniques, and design strategies, culminating in a directorial concept presentation based on a contemporary play. (Fa) Prerequisites: THE 101 or consent of instructor.

- **THE308: Writing for the Stage (4 hours)**
  Practical course in writing for the stage, including a study of basic dramatic structures and the analysis of weekly writing assignments, focusing on structure, style, and imagination, and culminating in a final term project of a one-act play. (Sp) Prerequisites: THE 101 or consent of instructor.

- **THE380: Internship in Theatre Arts (1 TO 4 hours)**
  Professional work experience under supervision of selected theatre faculty and professionals; written report required. Instructor approval required prior to registration. (Fa, Sp, Su)

- **THE390: Theatre Projects (1 TO 4 hours)**
  Special theatre production or tour experiences established by the program. Announcements of specific projects to be offered are made as they are developed.

- **THE391: Special Studies/Topics in Theatre (1 TO 4 hours)**
  Study of a selected topic not covered in regular course offerings. The topic will be announced prior to registration. Four credits maximum will apply toward degree. (Fa, Sp)

- **THE396: Special Studies/Research in Theatre (1 TO 4 hours)**
  Advanced research allows individual students or groups of students to undertake special projects related to their program emphasis. Four credits maximum will apply toward degree. (Fa, Sp) Prerequisite: Approval of the divisional dean, departmental chair, and consent of instructor.

- **THE398: Independent Study in Theatre (1 TO 4 hours)**
  Independent study of selected areas under the supervision of one or more members of the faculty. Required for program honors. (Fa, Sp) Prerequisite: Approval of the divisional dean departmental chair and consent of the instructor.

- **THE460: Applied Theatre - Capstone Experience (2 hours)**
  Under faculty supervision students will complete one or more projects in the areas of theatre management, directing, playwriting, dramaturgy, stage management, theatre design, technical direction, acting, theatre education and the business of theatre. (Fa, Sp) Prerequisite: Senior standing as a Theatre Arts major.

- **THE461: Applied Theatre - Capstone Experience (2 hours)**
  Under faculty supervision students will complete one or more projects in the areas of theatre management, directing, playwriting, dramaturgy, stage management, theatre design, technical direction, acting, theatre education and the business of theatre. (Fa, Sp) Prerequisite: Senior standing as a Theatre Arts major.

- **THE480: Internship in Theatre Arts (1 TO 4 hours)**
  Professional work experience under supervision of selected theatre faculty and professionals; written report required. Instructor approval required prior to registration. (Fa, Sp, Su)

- **THE490: Theatre Projects (1 TO 4 hours)**
  Special theatre production or tour experiences established by the program. Announcements of specific projects to be offered are made as they are developed.
Writing

- **WRI120: Introduction to Professional Writing (4 hours)**
  This course examines the field of professional writing and explores writing conventions (format, style, research documentation) in various organizational contexts. Students in the course will both produce and analyze documents tailored to real-world situations. (Sp)

- **WRI380: Internship in Writing (4 hours)**
  Work experience under professional supervision with opportunities to participate in real-world professional writing. End-of-semester written report required. Prerequisite: 3.0 GPA or higher, or consent of the instructor.

- **WRI391: Topics in Professional Writing (4 hours)**
  This course provides students with an opportunity to focus on a specific topic not covered in regular course offerings. In the course, students will learn about research methods and develop writing skills germane to the selected topic. The use of long-form, research based writing assignments will help students develop the skills appropriate to upper level standing in the Professional Writing major.

- **WRI496: Writing Major Capstone (4 hours)**
  The writing major capstone requires students to propose and prepare a semester-long research and writing project. The capstone will have a central theme that students approach using the knowledge and research practices from their secondary major or minor. Class discussion will focus on research methodologies, rhetorical strategies, and the writing process. The final project will provide students with a substantial and polished written document that will facilitate their transition to work in a professional field or to higher education. (Fa)