This catalog is an educational guidebook for students at Carthage and describes the requirements for all academic programs and for graduation. It also provides information about financial aid and scholarships. The catalog sets forth regulations and faculty policies that govern academic life and acquaints students with Carthage faculty and staff.

It is important that every student becomes familiar with the contents of the catalog. If any portion of it needs further explanation, faculty advisors and staff members are available to answer your questions.

Carthage reserves the right herewith to make changes in its curriculum, regulations, tuition charges, and fees.

It is the policy of Carthage and the responsibility of its administration and faculty to provide equal opportunity without regard to race, color, religion, age, sex, national origin, or sexual orientation. As part of this policy, the College strongly disapproves of any or all forms of sexual harassment in the workplace, classroom, or dormitories. This policy applies to all phases of the operation of the College.

Further, the College will not discriminate against any employee, applicant for employment, student, or applicant for admission because of physical or mental disability in regard to any position or activity for which the individual is qualified. The College will undertake appropriate activities to treat qualified disabled individuals without discrimination.

The College has been accredited continuously since 1916 by the Higher Learning Commission, 230 South LaSalle St., Suite 7-500, Chicago, IL 60604, 1-800-621-7440.
Directions
Take I-94 to Kenosha, exit 339 (Highway E) east to the lake.
Turn right onto Highway 32 (Sheridan Road).
Drive south to campus (approx. 1 mile).
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Overview</td>
<td>2</td>
</tr>
<tr>
<td>Academic Information</td>
<td>6</td>
</tr>
<tr>
<td>Academic Divisions</td>
<td>18</td>
</tr>
<tr>
<td>Academic Departments and Programs of Study</td>
<td>21</td>
</tr>
<tr>
<td>Admissions</td>
<td>198</td>
</tr>
<tr>
<td>Tuition and Fees</td>
<td>201</td>
</tr>
<tr>
<td>Student Financial Planning</td>
<td>203</td>
</tr>
<tr>
<td>Student Affairs</td>
<td>208</td>
</tr>
<tr>
<td>Faculty</td>
<td>210</td>
</tr>
<tr>
<td>Board of Trustees</td>
<td>214</td>
</tr>
<tr>
<td>Campus Buildings</td>
<td>216</td>
</tr>
<tr>
<td>Academic Calendar</td>
<td>218</td>
</tr>
<tr>
<td>Index</td>
<td>220</td>
</tr>
</tbody>
</table>
College Overview

About Carthage

The Carthage Mission

Faith and Spirituality

Library and Information Services

Accreditation

The Undergraduate Degree

The Graduate Degree

Intercollegiate Athletics

Special Programs

ROTC Programs

About Carthage

Founded in 1847, Carthage College combines an environment of reflection and self-discovery with a culture of high expectation so our students uncover and ignite their true potential.

As a four-year, private liberal arts college with roots in the Lutheran tradition, we place a strong emphasis on helping students develop a distinct moral and intellectual compass so they become perceptive, resourceful, and grounded individuals. Our rich academic experience equips students with foundational knowledge and skills, while our emphasis on real-world experiences gives them the opportunity to learn in a professional context.

Our state-of-the-art campus, a beautiful arboretum spanning more than 80 acres on the shore of Lake Michigan, has a prime location in Kenosha, Wisconsin, midway between Chicago and Milwaukee. Our vibrant community includes more than 250 faculty, 2,600 full-time students, and 200 part-time students. Our student-centered academic and co-curricular experience results in graduates who are prepared to lead meaningful, productive lives.

The Carthage Mission

Seeking Truth, Building Strength, Inspiring Service — Together.

To read the full mission, with statements of principle, go to www.carthage.edu/mission.

Faith and Spirituality

From its inception, Carthage College has been identified with the Lutheran tradition. The College’s mission statement and strategic plan affirm spiritual development of our students as a primary purpose. Along with this identity, religious inclusiveness is an intentional and specific objective. The student body and faculty represent many traditions, philosophies, and religions. It is the intent of the Center for Faith and Spirituality (CFS) to support the spiritual needs of all and help all students prepare for careers by encouraging and nurturing personal spirituality, strong social ethics, respect for religious diversity, and sense of vocation (calling).

Religious life is enhanced by students. The CFS hires students to work with worship, small groups, congregational outreach, interfaith, service, and more. There are other student organizations, including Better Together and Catholics at Carthage. These groups are supported by the Center for Faith and Spirituality, located in the A. F. Siebert Chapel. A local chapter of InterVarsity Christian Fellowship is also active on campus, as well as the Free Thinkers Society, Muslim Student Association, Jewish Awareness Association, Meditation Club, and Pagan Forum. Most worship experiences are held in the Siebert Chapel. There are three other smaller chapels on campus. Each is available for use by registered campus groups.

Worship Life

An ordained ELCA pastor serves as the Campus Pastor and Director of the CFS. Carthage has strong relations with area congregations and students are encouraged to connect with those congregations for worship during the weekend. A Roman Catholic Mass is held on Sunday evenings. A chapel service, where communion is served, is held each Tuesday during community time. On Thursday, Interfaith Lunch is available in the afternoon and student-led SPIRIT (Students Promoting Inclusivity Rooted In Togetherness) Worship is in the evening. There are a variety of small groups that meet throughout the week as well.

Another focus of the CFS is personal counsel. The Campus Pastor is available to students, staff, and faculty for consultation and pastoral care. Issues of stress involving personal relations, religious insights, and confrontation with new intellectual challenges are discussed in confidence. Communication between students and parents is mediated with the benefit of all.

Library and Information Services

Hedberg Library is home to Library and Information Services (LIS). Named for Donald Hedberg, a 1950 Carthage graduate, Hedberg Library supports the educational program of the College by providing students and faculty with the resources, services, support, and inspirational space they need to pursue their course assignments and research.

LIS supports traditional and electronic library services, information technology, and media, audiovisual, and equipment loans.

Hedberg Library has several technology-enhanced classrooms, the 75-seat Niemann Media Theater, and collaborative and individual study rooms. Also in the Hedberg Library, the Staubitz Archives document the life of Carthage by collecting, preserving, and providing access to records and artifacts representing its rich history, the publications of faculty and staff, and the activities of the Carthage community. The Brainard Writing Center, on the main level, is staffed by trained Writing Fellows who provide assistance for any written assignment. And, Donna’s Bytes, in the east section of Hedberg Library, provides food, beverages, and a relaxing atmosphere for students to unwind and enjoy discussions, lake views, or sitting in front of the fireplace.

LIS provides a physical and electronic collection of books, periodicals, audio and video recordings, microforms, and other materials. The growing collection contains more than 1 million unique resources. Laptop computers, iPads, camcorders, and other production and presentation equipment are available for loan. The library includes the Center for Children’s Literature, which features a large collection of children’s books.

Through interlibrary loan and our memberships in the Wisconsin Interlibrary Services and the Center for Research Libraries, Carthage students and faculty have access to the combined resources of virtually all the libraries in the nation. Reference, interlibrary borrowing, resource development, instructional technology assistance, and information literacy instruction are provided to the Carthage community. Media production assistance and videoconferencing services are also available to students and faculty alike.

The LIS information desk provides library reference desk and technology help desk assistance and is available virtually and during library hours for those who have research questions or need assistance with hardware, software, or media. Open 100 hours per week, the library has a generous loan policy. Students are encouraged to use the library’s resources and make suggestions for resources not currently owned.

LIS technology staff maintain an extensive campus-wide network. The network offers users access to campus resources, such as the library catalog and databases, the learning management system, the student information...
Accreditation

Carthage has been continuously accredited by the Higher Learning Commission* since 1916, when the association became the primary accrediting agency for schools in the Midwest.

Several of the College’s departments and programs have sought specialized accreditation or approval in their discipline. Additionally, where required, Carthage has received the appropriate state approvals.

The Athletic Training Program is accredited by the Commission on Accreditation of Athletic Training Education.

The chemistry major has been approved by the American Chemical Society, which promotes excellence in chemistry education for undergraduate students.

Carthage’s new nursing program has been reviewed and approved by the Higher Learning Commission. The program has also received approval from the Wisconsin Board of Nursing to admit students. Carthage is a member of the National League of Nursing and the American Association of Colleges of Nursing. The baccalaureate degree program in nursing at Carthage College is accredited by the Commission on Collegiate Nursing Education (http://www.ccneaccreditation.org).

The Music Department is accredited by the National Association of Schools of Music.

The Teacher Education Programs for positions in elementary/secondary, cross-categorical special education, and music, art, and physical education are fully approved education preparation programs by the Wisconsin Department of Public Instruction and lead to Wisconsin educator licensure.

Carthage is a member of NC-SARA (National Council for State Authorization Reciprocity Agreements). SARA is an agreement among member states, districts, and territories that establishes comparable national standards for interstate offering of postsecondary distance education courses and programs. It is intended to make it easier for students to take online courses offered by postsecondary institutions based in another state. SARA is overseen by a National Council and administered by four regional education compacts.


* Higher Learning Commission, 230 South LaSalle St., Suite 7-500, Chicago, IL 60604, 1-800-621-7440.

The Undergraduate Degree

The course of study offers sound academic preparation for advanced studies in graduate or professional schools, and for a variety of careers in business, industry, science, education, sports, music, and full-time Christian service. Similarly, the undergraduate program prepares students for medicine, engineering, government, law, social service, nursing, and theology.

Students interested in health professions focus on prerequisites for admission to particular professional schools. The following courses are prerequisites for most medical programs: one year of biology, one year of general chemistry, one year of organic chemistry, and one year of physics. Students need to become familiar with the additional prerequisites of the particular school or program to which they plan to apply.

Students may prepare for government service through a variety of majors including economics, political science, modern languages, geoscience, chemistry, history, mathematics, management, physics, and sociology.

Prelaw and pre-seminary students may concentrate their studies in a discipline of their choosing. While most prelaw students major in political science or history, law schools accept students with majors in other areas. Carthage recommends that, in addition to courses in their major, students take expository composition, accounting, American government, American history, Constitutional law, economics, ethics, legal theory, logic, psychological science, and statistics. While most pre-seminary students major in religion, seminaries accept students with majors in other areas. All pre-seminary students are advised to take at least five courses in religion as a background for graduate study.

Criminal justice, psychological science, social work, and sociology majors are prepared for careers in social service as one of their options.

For dual-degree programs in engineering and occupational therapy, see Special Programs.

Carthage offers the Bachelor of Arts degree for most majors, a Bachelor of Science in Nursing degree and two Bachelor of Music degrees. Students can major in:

- Accounting
- Allied Health Science
- Art Education
- Art History
- Asian Studies
- Biology
- Chemistry
- Chinese
- Communication
- Computer Science
- Criminal Justice
- Data Science
- Economics
- Education

Cross-Categorical Special Education (K-12)
- Elementary/Middle (Middle Childhood through Early Adolescence) (1-8) Education*
- Secondary Education (Early Adolescence through Adolescence) (5-12) minor only (in conjunction with approved major)
- Broad Field Social Science (in conjunction with a secondary education minor)
- English
- Engineering Science
- Environmental Science
- Exercise and Sport Science
- Finance
- French
The Graduate Degree
Carthage offers master’s degrees in the fields of business, music, athletic training, and education. The offerings include the Master of Science in Engineering (MSE) in Business Design and Innovation, the Master of Music (M.M.) in Music Theatre Vocal Pedagogy, the Master of Arts in Athletic Training (MA-ATH), and the Master of Education (M.Ed.).

M.Ed. concentrations include Curriculum and Instruction, Curriculum and Instruction with Reading License #316, Teacher Leadership, Teacher Leadership with Reading License #17, Higher Education, Educational Administration (K-12) with License #51, English as a Second Language with License #1395, and Bilingual with License #1023. In addition, several add-on licenses are available, including Wisconsin Reading Teacher License (K-12) License #316, Cross-Categorical Special Education License, English as a Second Language, and Bilingual.

Intercollegiate Athletics
The Athletics Department offers an opportunity for students to participate in a wide variety of sports that are designed to improve each student in mind, body, and spirit. Two levels of competition exist to meet each student’s needs. The highest competitive level is intercollegiate athletics for men and women. These teams consist primarily of recruited student-athletes, governed by the College Conference of Illinois and Wisconsin (CCIW) within the National Collegiate Athletic Association (NCAA), Division III.

Men participate in 13 sports. Fall: cross-country, football, soccer. Winter: basketball, indoor track and field, swimming and diving, and wrestling. Spring: baseball, golf, outdoor track and field, tennis, volleyball, and lacrosse. Women participate in 14 sports. Fall: cross-country, golf, tennis, volleyball, and soccer. Winter: basketball, bowling, indoor track and field, swimming and diving, and wrestling. Spring: outdoor track and field, softball, water polo, and lacrosse. The newly added esports team will compete year-round and is the first coed varsity sport at Carthage. The Director of Athletics is responsible for these departmental programs and reports to the President of the College.

The second level of competition is club sports and intramurals. These programs are recreational, but club sports involve competition against club teams from other schools or community/recreational programs. These activities are open to all Carthage students and generally require some previous experience in the activity. Club sports include ice hockey and bowling.

Department Philosophy
Athletic participation is an important part of the total educational process. It provides students with learning experiences in the cognitive, psychomotor, and affective domains.

Department Goals
Provide a variety of individual and team sports for student-athletes with appropriate leadership and coaching/teaching.
Provide the opportunity for student-athletes to participate in amateur sports in an environment that enhances the very best in competition, sportsmanship, and ethical conduct.
Assist student-athletes in the development of their leadership skills and teach them to serve as role models for others in the community.
Promote academic achievement by recognizing NCAA Academic All-Americans, Conference All-Academic, and Athletic Director’s Honor Roll recipients, while strictly adhering to the NCAA and conference academic standards for participation.
Provide safe, effective equipment and facilities to support each athlete and team.
Make available fair and equitable distribution of overall athletic opportunities, benefits, and resources.
Provide a disciplined yet humanistic environment to enhance physical, psychological, social, and emotional development and well-being.
Recruit the best student-athletes in our region who exemplify excellence in academics, athletics, and citizenship.
Win more than 50 percent of intercollegiate contests. Finish in the top four of conference standings for each sport with the ultimate goal of winning the conference championship.

Student-Athlete Advisory Committee
The Carthage Student-Athlete Advisory Committee (SAAC) is composed of two members from each Carthage athletic team. The SAAC meets regularly to discuss issues that impact Carthage student-athletes at the local, conference, and national levels. Their primary emphasis is to provide leadership opportunities for athletes and teams, while conducting service and community programs on and off campus.

From the Carthage Student-Athlete Advisory Committee, one female and one male are chosen by the students to receive the College Conference of Illinois and Wisconsin (CCIW) Merle Chapman Leadership Award. This award recognizes student-athletes within SAAC who demonstrate outstanding leadership at the campus and conference levels and a commitment to academic excellence.

Special Programs
In addition to its regular degree programs, Carthage offers coordinated dual-degree programs in engineering, occupational therapy, and pharmacy.

Bachelor of Arts/Bachelor of Science in Engineering with Case Western Reserve University
Engineering students attend Carthage for three years and, upon successful completion of the required courses listed below with certain GPA conditions, are assured admission to a partnering engineering school for completion of the final four to five semesters of what is typically a five-year program. Upon graduation from the engineering school, students receive the Bachelor of Arts (B.A.) degree from Carthage and the Bachelor of Science in Engineering (B.S.E.) degree from
the Case School of Engineering.

While at Carthage, engineering students must major in one of the natural sciences, mathematics, or computer science. Required courses for admission to the partner engineering school are:

- Chemistry 1010, 1020
- Computer Science 1810
- Mathematics 1120, 1220, 2020, 2120
- Physics 2200, 2210

Acceptance into the Case School of Engineering at Case Western Reserve University is contingent on both a three-year Carthage GPA of at least 3.0 and a 3.0 GPA in the above required courses.

**Bachelor of Arts/Bachelor of Science in Engineering with Washington University in St. Louis**

Students interested in this program spend three years studying at Carthage, completing their general education coursework, most if not all of their major requirements, and required “pre-engineering” courses, earning at least 90 credits. Students who successfully complete the dual-degree program earn two undergraduate degrees: a Bachelor of Arts from Carthage and a Bachelor of Science from The James McKelvey School of Engineering at Washington University in St. Louis in an engineering major.

To be accepted for transfer to the McKelvey Engineering program, Carthage students must complete the required coursework (available from the pre-engineering advisor), maintain a 3.25 GPA overall and in the required pre-engineering courses, and secure endorsement from the Carthage dual-degree program liaison by upholding a high standard of personal conduct and academic performance.

**Occupational Therapy**

Students interested in the dual-degree program with Washington University in St. Louis attend Carthage for three years and, upon successful completion of Carthage’s degree requirements for graduation and Washington University’s prerequisites, apply for admission by Jan. 31 to the program in occupational therapy at Washington University. Washington University is the final determinant of admission to the program.

Students who complete the program receive a Bachelor of Arts degree from Carthage and a Master of Science in Occupational Therapy (MSOT) degree from Washington University. At Carthage, students must major in either biology or psychological science, and must complete six prerequisite courses for admission to the occupational therapy program at Washington University, including BIO 3300 Advanced Human Anatomical Systems, BIO 3310 Advanced Human Physiological Systems, PYC 2850 Child and Adolescent Development, PYC 3500 Abnormal Psychology, an additional social science course such as PYC 2200 Social Psychology or PYC 3850 Adult Development and Aging, and MTH 1050 Elementary Statistics. A grade of B or better is required for each. Proficiency in medical terminology and computer competency is expected.

Applicants interested in occupational therapy programs at schools other than Washington University should examine the current catalog of the appropriate school to determine specific admission requirements.

**Pharmacy**

Carthage partners with two prominent graduate pharmacy schools, enabling students to earn both a Bachelor of Arts and a Doctor of Pharmacy.

The 3+4 option consists of three years at Carthage and then three years at the Medical College of Wisconsin. Interested students can pursue any major at Carthage, provided they complete the admission prerequisites: two general biology courses, two advanced biology courses, three chemistry courses, two organic chemistry courses, one statistics course, one mathematics course (algebra or higher), one Writing Intensive course, one course in public speaking, and four general education courses (physics, economics, ethics, humanities, social sciences, or religion). Upon meeting both institutions’ requirements, qualifying students are assured admission to the MCW School of Pharmacy. The coursework a student completes in the first year of the PharmD curriculum counts toward elective requirements for the Carthage B.A.

To earn the bachelor’s degree, participating students must accumulate at least 138 total credits (including at least 108 before transitioning to the doctoral portion at MCW) and meet all academic requirements, including a senior seminar research experience.

The 3+4 option consists of three years at Carthage (with a major in chemistry) and then four years at Rosalind Franklin University of Medicine and Science in North Chicago. Carthage students who have met the minimum GPA and other criteria receive priority status and admissions consideration for the PharmD program at RFUMS. To earn the B.A., students must accumulate at least 141 credits (including at least 96 credits at Carthage). Required courses include BIO 3500 Advanced Cell Biology and one other Writing Intensive course (in addition to the Intellectual Foundations core) at Carthage, as well as YPHS 503 Pharmaceutics III and YPHS 601A Pharmacology at Rosalind Franklin. To fulfill the Carthage senior thesis requirement, dual-degree participants undertake research at RFUMS in the summer.

**ROTC Programs**

Carthage has an agreement with Marquette University that allows students to enroll at Marquette for aerospace studies courses offered by the Air Force ROTC program. The Carthage transcript lists all courses and grades earned by the students in these courses.

AFROTC is a nationwide program that allows students to pursue commissions (become officers) in the United States Air Force (USAF) while simultaneously attending college. AFROTC classes are held on college campuses throughout the United States and Puerto Rico; students can register through normal course registration processes. AFROTC consists of four years of aerospace studies classes (Foundations of the USAF, Evolution of USAF and Space Power, Air Force Leadership Studies, and National Security Affairs/Preparation for Active Duty), and a corresponding Leadership Laboratory for each year (where students apply leadership skills, demonstrate command and effective communication, develop physical fitness, and practice military customs and courtesies).

College students enrolled in the AFROTC program (known as “cadets”) who successfully complete both AFROTC training and college degree requirements will graduate and simultaneously commission as Second Lieutenants in the Active Duty Air Force. The AFROTC program is currently offered at Marquette University, but it has a crosstown agreement that allows our students to enroll in AFROTC and become full-fledged cadet participants. For more information on AFROTC course descriptions, please review bulletin.marquette.edu/undergrad/ helenwayklinglercollegeofartsandsciences/ reserveofficers_trainingcorps/ airforceaerospacestudies_afas/. For more information on the AFROTC program, please review www.marquette.edu/rotc/airforce/.

In addition, Carthage College awards military credit from an official SMART transcript. Military credits are subject to all college-wide transfer policies. Students who are able to present a DD214 form proving one year of active duty are awarded credits that satisfy the EXS 0010 and Lifetime Fitness requirement (2 cr.) and four general elective credits.
intellectual cr.

In Intellectual Foundations, students sample great works of literature, sacred writing, philosophy, and more. The variety of material and of authors reflects the variety of ways humans have begun to seek knowledge of the world and tried to explain it. Students have the opportunity to read some of the greatest works ever written and to get a sense of the approaches thinkers have taken to capturing human experiences and responding to human concerns. While engaging these works, students see what it takes to read challenging material with care and comprehension, and they learn the rewards of thinking about that material and expressing their thoughts on it.

2. Religion
Understandings of Religion 1000 4 cr.

3. Modern Languages
0-8 cr.
Successful completion of Chinese, French, German, Greek, Japanese, Latin, or Spanish 1020. The online language placement test cannot be used to test out of the modern language requirement. Students who place at the 2010 level or above and do not plan to take a language course at Carthage will need to confirm their placement level on campus by contacting the Modern Languages Department’s Placement Coordinator. In addition, students may fulfill their language requirement by taking courses in Italian given at UW-Parkside.
You may be exempted from the Modern Language requirement:
(A) If a minimum of 6 credits in a modern language, with grades of C- or better, appears on your official post-secondary transcript.
(B) If you are fluent in a modern language other than those offered at Carthage, AND …
(1) … you can document a majority of non-language academic courses (i.e., biology, mathematics) taught in that modern language at the high school level. OR
(2) … you can pass a proficiency examination in that modern language at the level of two semesters of college coursework. The examination must be administered and documented by another college and/or university. All arrangements and costs are the responsibility of the student.
(C) If you can document having taken 12 credits from an American Sign Language program.

4. Mathematics
0-8 cr.

Successful completion of a mathematics course designated as (MTH).

5. Exercise and Sport Science
Concepts of Physical Fitness 1 cr.
One Lifetime/Fitness activity 1 cr.
A student who participates on an athletic team for an entire season can fulfill the one Lifetime/Fitness activity requirement (1 credit).
The Director of Athletics submits a list of athletic team participants to the Registrar at the end of each term. These students must still take the required EXS 0010 Concepts of Physical Fitness (1 credit).
Only Concepts of Physical Fitness and one Lifetime/Fitness activity count toward the 138 credits required for graduation.

6. Senior Thesis
As a culmination of their studies, all students will complete a Senior Thesis in their major. This can be in the form of a written thesis, laboratory research, music recital, art exhibit, or other significant and integrative experience appropriate to their major. Students graduating with more than one major must complete a Senior Thesis for each major or one integrative Senior Thesis approved by each major department or program. Students must check with the department chair for specific details in regard to completion of the Senior Thesis.

7. Major
Bachelor of Arts (36 cr.-60 cr.): Carthage majors range between a minimum of 36 credits and a maximum of 60 credits (up to 56 non-thesis credits plus up to 4 thesis credits). Up to 44 credits may be required in any one department (up to 40 non-thesis credits plus up to 4 Senior Thesis credits). A student may count a maximum of 56 credits in any one department toward graduation; however, all students must have 82 credits outside of their major department for graduation. Students must complete a minimum of 12 credits in the major at Carthage.

Bachelor of Science in Nursing (84 cr.): Students earning a Bachelor of Science in Nursing degree must complete 56 credits in the Nursing Department and 28 credits from supporting departments. Specific requirements for the BSN degree can be found under the Nursing heading in the Undergraduate Academic Departments and Programs of Study section of the college catalog.

Bachelor of Music in Piano Performance and Collaborative Piano (90 cr.):
Students earning a Bachelor of Music in Piano Performance and Collaborative Piano degree must complete 90 credits in the Music Department. Specific requirements for the BM degree can be found under the Music heading in the Undergraduate Academic Departments and Programs of Study section of the college catalog.

Bachelor of Music in Music Education (90 cr.):

Students earning a Bachelor of Music in Music Education degree must complete 57 credits in the Music Department and 22 credits from supporting departments. Specific requirements for the BMME degree can be found under the Music heading in the Undergraduate Academic Departments and Programs of Study section of the college catalog.

8. Distribution Requirements

<table>
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<tr>
<th>Fine Arts (FAR)</th>
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<td>(Four credits of dance, four private lessons, or one class lesson and three private applied lessons may count as a course for the Fine Arts distribution requirement.)</td>
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<tr>
<td>Humanities (HUM)</td>
<td>4 cr.</td>
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<tr>
<td>Natural Science (SCI) (LAB or NLAB)</td>
<td>4 cr.</td>
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<tr>
<td>Social Science (SOC)</td>
<td>4 cr.</td>
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9. Minor

Minors are optional unless specified as a requirement for the major. Minors may be pursued through electives and through general requirements. The minor is a minimum of 20 credits and a maximum of 24 credits. Those planning to obtain teacher licensure must consult with the College certification officer. Students must complete a minimum of 12 credits in the minor at Carthage.

10. Electives

Electives allow students to explore their intellectual interests in a wide variety of disciplines and areas of knowledge.

11. J-Term

All students must enroll in J-Term during their freshman year and in at least one additional year.

12. Writing Across the Curriculum

Writing well is a powerful life skill, and Carthage is committed to teaching its students to write well in all disciplines. All students are therefore required to take a total of four courses (four credit hours each) that are designated Writing Intensive (WI). The first of these courses is COR 1200 Intellectual Foundations. Of the remaining three courses, one must be in the academic major of the student’s choice, while the other courses may be any WI course in the curriculum. If students are completing more than one major, they only need one WI course in one of the majors that they are completing. WAC distributes the teaching of writing throughout the curriculum. Under WAC, writing is taught at all levels and by all departments. WAC affirms that writing well is an essential skill, one that needs to be cultivated continually.

Each student must take COR 1200 Intellectual Foundation and three other WI courses before graduation, as spelled out in Degree Requirements. Writing Intensive courses vary according to the discipline in which they are taught, but they all share the following criteria:

1. Formal and informal writing are used to help students learn the content of the course.
2. Students and professors work together to improve student writing. For example, professors may review and provide advice on theses, writing plans, and drafts as the students write them. Professors may assign several short papers and suggest methods for revision in between. Professors may confer with students between papers. Professors may model writing and monitor students’ subsequent experiments with similar writing.
3. Writing contributes significantly to each student’s course grade.
4. The course requires students to do a substantial amount of writing. This may include formal or informal writing. Depending on the course content, students may write analytic essays, critical reviews, journals, literature reviews, lab reports, research reports, reaction papers, or other similar assignments.

13. Additional Requirements

- Achieve a final grade point average of 2.0 in the major and minor, and in all coursework at Carthage.
- Following the attainment of 102 credits, students must finish all remaining coursework in residence, or petition to finish work in absentia.
- File an application for graduation in the Fall term of the academic year in which requirements will be completed.
- Participate in the Baccalaureate and Commencement exercises held annually at the end of the Spring term, unless excused by the Registrar. An undergraduate student who has twelve (12) credit hours or less to complete graduation requirements may participate in the Commencement exercises if their remaining credits will be finished during the summer. If there are any outstanding credits that will not be finished in the summer, the student will be eligible to participate in the ceremony following the completion of their remaining requirements. The diploma will be issued when the student completes the requirements for the remaining credits.

Students are subject to the regulations contained in the annual college catalog in effect when they enter Carthage. Students may, however, petition to follow regulations contained in the most current issue of the college catalog. Students who interrupt schooling for more than one academic year forfeit the right to follow the regulations in the college catalog of their original year of entry.

Program of Study

Full-time students may register for 12-18 credits during the 14-week terms. There is an additional charge for registration in excess of 18 credits. Students wishing to register for more than 18 credits must obtain approval for the overload from the Subcommittee for Academic Review and Recommendation no later than the last day to add a regular course.

Many courses are not taught every term. Most course descriptions in this catalog indicate the terms in which departments intend to offer the courses. This schedule information is an aid to planning, but the College reserves the right to revise such course plans in response to changes in student interest, enrollment demand, and staff availability.

Courses primarily designed for freshmen are numbered 1000 to 1999; those for sophomores and juniors are numbered 2000 to 3999; those for seniors are numbered 4000 to 4999.

Freshman 0 - 31 credits
Sophomore 32 - 67 credits
Junior 68 - 101 credits
Senior 102 or more credits

Grading System

At the completion of a course, each student is assigned a letter symbol: A, A-, B+, B, B-, C+, C, C-, D+, D, D-; S and P for passing grades; I for incomplete, which is given only in special cases of illness or some other uncontrollable factor; W for official withdrawal; U for unsatisfactory; and F for failure or unofficial withdrawal. A student who has received an I must finish the
incomplete work within 30 days following the end of the term in which it was received, or the grade will be recorded as an F.

Letter grades convert into the following point system for determining cumulative grade point average, i.e., an A is worth four points per credit.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>C-</td>
<td>1.67</td>
</tr>
<tr>
<td>D+</td>
<td>1.33</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>D-</td>
<td>.67</td>
</tr>
<tr>
<td>F</td>
<td>No points</td>
</tr>
</tbody>
</table>

Grades of P, S, and U do not affect the grade point average.

Auditing Courses
A student who wishes to audit a course must seek the permission of the instructor and file a report with the registrar’s office by the add deadline for the term. There is an additional fee for students wishing to take a course as an audit. Courses taken as an audit will not count in the credit totals toward graduation requirements.

Repeating Courses
Only courses with a grade of C- or lower may be repeated. When a course is repeated, the earlier grade remains on the student’s transcript, but the new grade is factored into the cumulative GPA and the old grade is removed from the calculation. On multiple attempts the most recent grade will be used in computing the cumulative grade point average.

If a student is repeating a Carthage course for the purpose of replacing the earlier grade, the repeat must be with a course at Carthage. A course may not be repeated by correspondence study, by independent study, or by study at another institution.

Add/Drop Policy
No student is permitted to add or drop a course after the deadline. Any course changes after the add/drop deadline date must be made with the permission of the Subcommittee for Academic Review and Recommendation.

A student may withdraw from a course after the add/drop deadline. (Please refer to the academic calendar for specific dates.) The course will show on the student’s transcript with a W.

Students who wish to completely withdraw from the College must secure a withdrawal form from the Registrar. If students withdraw within the first nine weeks of the term, they receive a W in each course. Exceptions must be authorized by the Subcommittee for Academic Review and Recommendation or by the Office of the Provost. Any student who does not complete all steps in official withdrawal is assigned an F in all courses.

Students may not receive credit from any course in which they are not properly registered. Responsibility for proper registration rests with the student. The student is also held responsible for observing the requirements of the degree and the proper sequence of courses.

The student accepts responsibility for class attendance. Since there is no college-wide attendance policy, instructors determine their own class-attendance policy.

Pass-Fail Option
The College permits students to elect up to two courses on the pass-fail (P or F) grading system, subject to the following conditions:

1. The student must have achieved junior or senior standing.
2. A student may not register for more than one pass-fail course during a term. A student may not enroll for a final grade of P or F in:
   - Any course used to satisfy the general education requirements.
   - Any course required for your major or minor programs (including any course in related fields) or offered by the major department, except those courses designated in the catalog as pass-fail courses.
3. A student at the time of registration will indicate the course to be taken for a final grade of P or F; this information will reside with the student, the advisor, and the Registrar; the course instructor will be informed at the end of the term.
4. To receive a P grade for a course graded pass-fail, the student must receive a letter grade of D- or better. The P grade does not calculate into the GPA; however, if the student receives an F for the course, it does calculate like a regular F into the grade point average.

After the last day to drop courses, students who register for grades of P or F will not be permitted to change that registration in order to receive regular grades; nor will students who register for regular grades be permitted to change that registration in order to receive pass-fail grades.

Examination for Credit
An enrolled student may challenge most courses by examination, but credit is prohibited in courses that the student has audited previously or attended officially or unofficially. Students may not challenge fieldwork, field placements, or student teaching courses by examination. Students should contact the chairperson of the department to make arrangements for an examination.

A grade of C or better on the examination is required to excuse the student from the course and to give credit toward graduation. The cumulative grade point average is not changed by the examination because no grade is recorded for a course completed in this manner.

There is no tuition charge for courses earned through examination. However, an administrative fee is assessed. A maximum of 32 credits may be earned by examination for credit.

Transfer/Correspondence Courses
A student enrolled at Carthage who wishes to apply transfer courses taken elsewhere to Carthage must secure advance approval from the involved department chairperson and the Registrar by the end of term prior to enrollment in the course.

Upon receipt of an official transcript from institutions accredited by the Higher Learning Commission and similar regional associations, appropriate value will be given for comparable courses or areas taught at Carthage.

Courses at other institutions are counted as part of a student’s term load. Credit will only be transferred for courses in which a grade of C- or better is earned. Credit will not be transferred from a two-year college after a student has accumulated 68 credits.

College-level courses taken in high school are credited on the same basis as other transfer credits, provided that the courses have not been counted for entrance requirements. These courses must appear on a college transcript.

The maximum total credits allowed for specialized testing (which includes IB, AP, and CLEP) is 32.

Transcripts from institutions outside of the United States must be evaluated by Educational Credential Evaluators, Inc. (ECE).

Midterm Evaluation
At the midpoint of each term, all faculty
members are asked by the Provost to submit midterm low-grade reports for all students doing D or F work. Reports are distributed through the registrar’s office to the students and their advisors.

If a student receives two or more reports, the student’s parents also will be informed, unless the student is financially independent or has placed a FERPA hold on their record (a FERPA hold is placed when a student has not consented to the release of their directory information). Financially independent students must bring proof of their independence to the Office of Student Financial Planning at the beginning of the academic year. Students who have not shown proof of their independence are assumed to be financially dependent on their parents.

**Academic Standards**

Students are required to have a minimum of a 2.0 grade point average overall and in their major(s)/minor(s) in order to graduate from the College. Students with a 2.0 or above are in good academic standing. The records of students who are not in good standing are reviewed at the end of each term by the Subcommittee for Academic Review and Recommendation.

**Grade Point Average**

Academic standing will be evaluated with the help of the following guidelines, based on the number of quality credit hours at Carthage plus all credit hours transferred into Carthage.

<table>
<thead>
<tr>
<th>Credits</th>
<th>Probation</th>
<th>Suspension</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-16</td>
<td>1.0-1.99</td>
<td>.999 or below</td>
</tr>
<tr>
<td>17-36</td>
<td>1.2-1.99</td>
<td>1.199 or below</td>
</tr>
<tr>
<td>37-56</td>
<td>1.4-1.99</td>
<td>1.399 or below</td>
</tr>
<tr>
<td>57-72</td>
<td>1.6-1.99</td>
<td>1.599 or below</td>
</tr>
<tr>
<td>73-86</td>
<td>1.8-1.99</td>
<td>1.799 or below</td>
</tr>
<tr>
<td>87+</td>
<td></td>
<td>1.999 or below</td>
</tr>
</tbody>
</table>

Students whose cumulative average, for the first time, falls below the required minimum for suspension, or who have been on academic probation for three consecutive terms, are placed in a show cause category. The student is contacted to show cause why he or she should not be suspended from the College. If there is cause for the student to be allowed to continue, he or she will be placed/continued on probation.

Students placed on probation are required to cooperate with the advising services. At the end of the term, the Provost will meet with the Subcommittee for Academic Review and Recommendation to determine whether the student has satisfactorily fulfilled the obligations of the support programs. At that time the Subcommittee for Academic Review and Recommendation will make a decision to suspend the student from the College or allow the student to stay another term.

Students who disagree with a Subcommittee for Academic Review and Recommendation decision may petition the Provost to appeal.

**Readmission after Suspension**

Students who have been academically suspended from Carthage College will be given the opportunity to reapply for admission. All academically suspended students will be sent a letter at the time of suspension indicating the specific conditions that must be met in order to be considered for readmission. Applications for readmission will be carefully reviewed by the Subcommittee for Academic Review and Recommendation. Admission back into the College is not guaranteed.

**Readmission after Withdrawal**

Students who have previously attended Carthage College and have subsequently officially or unofficially withdrawn will be given the opportunity to reapply for admission. A student is considered a withdrawn student if consecutive registrations are not maintained. All requests for admission back into the College should be directed to the Admissions Office for review. Applications will be given careful consideration for reinstatement. Readmission into the College is not guaranteed.

**Readmission after Military Service**

Students who have previously attended Carthage College and have subsequently officially or unofficially withdrawn due to military service requirements will be given the opportunity to reapply for admission. All requests for admission back into the College should be directed to the Admissions Office for review. Applications will be given careful consideration for reinstatement.

**Disciplinary Actions**

If a student is expelled from the College for disciplinary reasons, a grade of W (withdrawal) is recorded for each course, and notation of the expulsion for disciplinary reasons is made on his or her official college record.

If a student is suspended for disciplinary reasons, the period of suspension shall not prohibit the student from completing the term in the prescribed time. Faculty members have the option of providing suspended students the opportunity to make up missed course requirements.

**Veterans Administration**

**Standards of Progress**

Students attending Carthage and receiving educational benefits from the Veterans Administration must maintain satisfactory standing and adequate progress in order to continue receiving benefits. Under certain circumstances, a student might be permitted to continue study at Carthage but would fail to qualify for payment of educational benefits.

These include the following:

- Failure of all courses during a term in which the student is registered for two or more courses.
- Withdrawal from all courses after the midpoint of a term in which the student is registered for two or more courses.
- Failure to achieve a grade point average of 2.0 or above for any term during which the student is on academic probation. A student may continue on academic probation and receive benefits provided the grade point average for courses taken each term is 2.0 or above.
- Appeal from a determination that a student is not making satisfactory progress and for reinstatement of aid will be directed to the Subcommittee for Academic Review and Recommendation.

**Academic Honesty Policy**

Academic honesty is a necessary corollary to academic freedom; each concept presupposes the other. The goals and objectives of Carthage fall within the implicit context of academic honesty. Therefore, Carthage expects academic honesty from all of its members and maintains college-wide honesty guidelines and penalties that must be supported by the whole academic community. The guidelines and penalties are found in the Faculty Handbook and Students’ Handbook.

**Advising**

Carthage utilizes a holistic advising model that focuses on three core areas in order to best support the learning and personal growth of each student during their college journey. Faculty advising, student success advising, and career advising each serve a unique purpose in a student’s education, while working with one another in an integrated fashion and collaborating with faculty and staff members from other functional areas who play supplementary advisory roles as needed. The three core areas of this model can be described in the following way:

**Faculty Advising**

Faculty Advisors assist students in navigating the curriculum of their program of study in the greater context of a liberal arts education as
they meet the learning outcomes necessary to be successful in their field. Each student will be matched with a Faculty Advisor in the major department(s) they have declared by their second semester at Carthage, as well as receive additional support from other faculty members for teaching licensure, pre-professional programs, study abroad experiences, and other specialty programs during their time at Carthage.

**Student Success Advising**

Student Success Advisors support students in transitioning successfully to college life and facilitate their academic success and persistence by addressing their unique needs in a higher-education setting. Each student will be assigned a Student Success Advisor in the Center for Student Success during their enrollment process and continue working with that advisor for the duration of their time at Carthage. Each student will be supported by a Student Success Advisor as they pursue their degree, whether through participation in population-specific outreach programs, consultation with faculty advisors on degree planning, or support and resource referral in times of academic or personal challenges.

**Career Advising**

Career Specialists guide students in preparing for their future personal and professional life through reflection on their strengths and interests and exposure to experiential learning opportunities. Each student will be assigned a Career Specialist through The Aspire Center who will help them define and implement an iAspire Plan as part of The Aspire Program — Carthage’s own comprehensive, four-year career preparation program that also helps students to strengthen skills in entrepreneurship, leadership, and creativity. Examples of topics students will address through the program include major and career exploration, résumé and cover letter writing, alumni networking, internship/job search, and graduate/professional school guidance.

**Learning Accessibility Services (Support for Students with Disabilities)**

Carthage College is committed to ensuring equal access to educational opportunities under the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973. Learning Accessibility Services support over 300 students with physical, learning, psychological, sensory, and other disabilities. Carthage students partner with our office and their instructors to create a plan for their access and inclusion on campus. All services are free of charge. Learning Accessibility Services is located in Hedberg Library.

**Academic Resources**

**Brainard Writing Center**

Located on the upper level of the Hedberg Library, the Brainard Writing Center is open to all members of the Carthage community. The center is certified by the College Reading and Learning Association. Student writing fellows, who have completed a stringent training program, provide assistance for students at any stage of the writing process. Students from all majors and at all levels of writing ability are welcome. Regular weekly tutoring sessions are also available. Although students may drop in, appointments are strongly recommended. The Writing Center also provides online tutoring services.

**Tutoring**

Trained student tutors provide individual and small group assistance, available upon request for most scheduled courses. Tutors meet with students on a regularly scheduled basis or as needed.

**Supplemental Instruction**

Supplemental Instruction (SI) is a nationally recognized program designed to increase student academic performance. Upper-class students attend class and facilitate study sessions in which students create graphic organizers, quiz each other, play review games, and more.

**Academic Coaching**

Academic coaches help students develop college-level time management, study, note-taking, and test-taking skills. Student academic coaches are available on request and meet individually with students, often on a regular basis throughout the semester.

**January Term**

January Term offers students a variety of opportunities not always available during Spring and Fall terms. On-campus courses include those especially created for J-Term as well as regular-term courses, some of which may satisfy distribution requirements or other general education credits. Students register for one course only, allowing them to concentrate study in one subject.

J-Term also provides off-campus opportunities, such as travel to other parts of the country and abroad, as well as hands-on experience through field placement internships. Students also may propose an independent study project under the direction of a faculty member.

On-campus courses and independent studies are graded, unless otherwise indicated, and the grade is computed in the student’s grade point average. Specially designed J-Term courses are usually graded but may be offered as pass-fail. If pass-fail, the course cannot be taken for a letter grade. Field placements and some off-campus study tours receive grades S or U and do not affect a student’s grade point average. Other off-campus study tours are graded.

Students must consult with their academic advisors to select their J-Term course. Students taking an on-campus course and living in residence halls pay no additional room and board for the J-Term. This is limited to full-time residential students registered for either the Fall or Spring terms. Tuition for one J-Term class (on-campus or off-campus) per academic year is included for students attending full-time for a full academic year. Some J-Term courses require an additional fee to cover cost of travel and other course activities; payment of these nonrefundable fees is due at registration.

All students must successfully complete a J-Term course during their freshman year and one additional year.

**The Aspire Program**

The Aspire Program is a comprehensive four-year career preparation program for all Carthage students. Through The Aspire Program, students develop a dynamic approach to goal-setting and life skill-building using the program’s four pillars: career development, entrepreneurship, leadership, and creativity.

Students will own their ability to be lifelong learners and impactful contributors in the world, and to recover when plans don’t go as expected. Carthage’s location in the Milwaukee to Chicago corridor provides students access to a wide range of experiential learning and postgraduate opportunities, and its unique J-Term and off-campus study program provides global access to expand students’ perspectives on the world.

The Aspire Program builds on Carthage’s strong history of providing students with the skills they need to succeed and is facilitated by The Aspire Center. The program blends academic and cocurricular resources to create a comprehensive career development plan for all students from their first days on campus.

Alongside helping students to develop skills in entrepreneurship, leadership, and creativity, The Aspire Center helps students to develop career plans and professional networks to help them earn high-quality internships, jobs, and graduate/professional school admittance. Every student is assigned to a Career Specialist when they arrive at Carthage to help them define and implement their iAspire Plan.

Students and alumni receive assistance through individual advising, workshops, and other on- and off-campus career events.
Typical topics include major exploration, career option identification, student employment, résumés/cover letters, interviewing, internship and job search/selection, alumni networking/mentoring, and graduate/professional school guidance. Handshake, the Carthage College job/internship posting system, provides students access to local and national opportunities. The Aspire Program is housed in The Aspire Center, located on the top floor of Lentz Hall. The Aspire Program is a member of the National Association of Colleges and Employers.

International Study Abroad
The Director of Education Abroad helps interested Carthage students identify, plan, and prepare for a study abroad experience. Approved earned credits are accepted toward the degree, in many cases fulfilling general education requirements or major/minor requirements. Carthage has special affiliations with several institutions; however, participation in other programs also may be approved.

GNR 3510 Immersion Abroad 12-16 cr.
Linguistic and/or cultural immersion abroad for one or more terms in an academic setting. (In exceptional cases, approval may be granted for substituting two summers for the term.)

Prerequisites for applying study abroad to the major in any modern language: MLA 2200, 3010, and at least two of the following courses: 3080, 3090, 3110 (or permission of the Chair of the Modern Languages Department).

Individual Study
The College believes opportunities should be provided for students to study, with a large degree of self-direction, in areas beyond the normal course offerings of the departments. To this end, the following course is available at the discretion of, and under the direction of, the departments:

4500 Independent Study 1-4 credits
In this course, a student or a group of students may study or read widely in a field of special interest. It is understood that this course will not duplicate any other course regularly offered in the curriculum, and that the student will work in this course as independently as the teacher thinks possible.

Prior to registration the student should consult the teacher (or teachers) whose field of competency encompasses the student’s subject and who will supervise the work; the student and the teacher(s) will decide the title to be reported and the nature of the examination or term paper, and will discuss the preparation of a bibliography and a plan of coherent study.

All students must obtain final approval of the department before registration. In the case of interdisciplinary study, the approval of all cooperating departments must be secured. Two independent study courses may not be taken concurrently.

Specially Arranged Courses
Under extenuating circumstances, catalog courses may be arranged with both department and instructor approval. Specially arranged courses may not be offered to fulfill the Writing Intensive, Global Heritage, or Carthage Symposium graduation requirements.

Self-Designed Major/Minor
Student-designed majors and minors provide an opportunity for students to develop a program of study other than those routinely offered at Carthage. Like all majors and minors, those that are student-designed must meet all general degree requirements, and the specific courses in the proposal should represent a coherent set of experiences that support the rationale described in the proposal through the intentional building of knowledge and sophistication in the proposed field of study. Student-designed majors/minors must be based on areas of faculty expertise and include only regularly offered courses. The proposals should not rely on tutorial, independent studies, or a single faculty member. Self-designed majors/minors must be completed and submitted for approval PRIOR to the student achieving senior credit standing.

Proposed minors include 20-24 credits of coursework that is not part of the student’s major requirements. Majors must include 40-44 credits of major-specific coursework. Proposals must have at least 50 percent of the program-specific credits to be from coursework not required for any other degree the student is pursuing. Students should try to achieve a balance similar to other majors in the catalog with respect to the mix of 2000, 3000, and 4000 level courses. This proposed program should lead to deeper and more sophisticated understanding in the intended area of study.

To establish a self-designed major or minor, students must identify a faculty member to serve as their advisor and work closely with him or her to articulate their idea for the proposed program of study. Completed proposal forms must include complete and thoughtful rationale for the self-designed program, and signatures from the faculty advisor and chairpersons whose course offerings will be included in the proposed program. These signatures signify agreement with and support for the rationale, and validation of the quality and coherence of the proposed program. Completed proposals are submitted by the advisor to his or her department for approval. They must then be approved by the divisional curriculum subcommittee and division, and must be ready for approval by the Curriculum Committee PRIOR to the student achieving senior standing. Incomplete proposals will be returned without consideration.

Topics Courses
200T Topics 1-4 credits
A course of variable content for lower-level students. Topics will not duplicate material covered in any other course.

400T Topics 1-4 credits
A course of variable content for upper-level students. Topics will not duplicate material covered in any other course.

Field Placements/Internships
The field placement and internship programs provide students with meaningful work experiences that either directly relate to their career objectives or assist in determining those objectives. The central feature of the programs is the opportunity for significant interaction between students’ work experiences and their academic programs. The following policies shall govern field placement and internships during the regular term:

1. The student may register for up to twelve hours of field placement or internship per term. He or she may count up to 12 hours of field placement or internship toward graduation, including J-Term field placement or internship credits, but excluding student teaching. Credits earned in departmental offerings involving fieldwork, such as Parish Service, and Field Instruction and Methods in Social Work, are to be included in these limits. Field placement may not be substituted for student teaching.

2. Field placements are open to juniors and seniors in good standing who receive the approval of the supervising faculty member and the appropriate department chairperson or program director. Internships are open to all students with the approval of the supervising faculty member and The Aspire Center.

3. For field placements, attendance at a regularly held on-campus seminar conducted by the instructor is expected.

4. A minimum of four hours of on-the-job activity shall be spent per week for 1 credit.
For 2-12 credits, a minimum of two hours of on-the-job activity shall be spent per week for each credit.

5. The instructor will take into account the evaluations of the on-the-job supervisor, grading placements on an A to F scale. Internships in J-Term are normally pass-fail.

Departments will have discretion in the determination of prerequisites, whether or not a field placement may be counted toward the major, whether or not it is required for the major, and how many hours are necessary. Departments may establish guidelines in addition to the following:

**3500 Field Placement**

A field placement enables the student to explore a possible career, and to work in an individual, academically oriented position designed to supplement or complement the student’s academic experience. All field placements require faculty supervision and regular meetings between the student and the instructor. Field placements are offered by various academic departments.

**3550 Internship**

An internship enables the student to gain practical experience in his or her field of study. All internships require faculty supervision and regular meetings between the student and the instructor. Further credit will be given for internships in subsequent terms in the same placement so long as the supervising faculty member is satisfied that the student is acquiring new or enhancing existing skills and knowledge base. All internships must be arranged through The Aspire Center.

**Office of Continuing Studies**

The Office of Continuing Studies (OCS) serves as Carthage College’s hub for access and innovation, providing lifelong learning opportunities to a diverse population of nontraditional students. OCS works closely with faculty and staff from across campus to deliver high-quality programs that further the College’s mission and meet the needs of students and the community.

OCS is dedicated to ensuring student success through the highest level of service, support, and advising throughout each student’s career at Carthage. In addition to providing administrative leadership for all its programs, OCS serves as a resource to the faculty and academic departments that oversee and deliver the curriculum for programs that confer undergraduate and graduate credit.

The portfolio of programs within OCS includes Adult Undergraduate Studies, Summer Studies, Graduate Studies, and Professional Development Programs.

**Adult Undergraduate Studies**

Adult Undergraduate Studies (AUS) provides high-quality learning opportunities, rooted in a liberal arts tradition, for nontraditional learners in Kenosha, Wisconsin, and the surrounding communities. AUS offers on-site adult undergraduate degree programs in part-time and accelerated formats that build on the strengths of our physical campus, accomplished faculty, and academic programs. Quality interactions between traditional students, nontraditional students, and faculty members in a traditional campus setting foster a commitment to lifelong learning that enriches each individual and strengthens the College.

Students enroll in AUS to:

- Start, change, or advance a career;
- Complete a Bachelor of Arts degree in accounting, management, or marketing;
- Fulfill general education requirements and electives as a part of other Carthage majors;
- Review and prepare for graduate school;
- Complete an additional major or minor;
- Enrich an area of interest; and/or
- Complete classes at times convenient to work and personal schedules.

AUS offers two programs:

**7-Week Program:** Offers courses in the evening in seven-week terms, with seven terms per year. Most classes meet for three hours, one night a week, and contain structured learning outside of class. During the winter term (January), classes meet two days per week for three and a half weeks.

**Part-Time Semester Program:** Offers courses in the traditional daytime format in 14-week terms, with four terms per year.

**Majors**

The AUS 7-Week Program offers Bachelor of Arts majors in the following areas:

- Management
- Marketing

**Admission**

Qualified candidates seeking admission to AUS must:

- Submit an Adult Undergraduate Studies application form.
- Submit official transcripts from all previously attended colleges, universities, and/or college equivalent programs, with a minimum grade point average of 2.0; high school transcripts may be used if there is no prior college experience.

Complete a required interview with an AUS representative.

Degree-seeking, 7-week students must submit all unofficial college transcripts before registering for courses. Official college transcripts must be submitted by the completion of their first term. If the student has not attended college, high school transcripts should be used.

Part-time semester students must submit official transcripts before they can register for courses. If the student has not attended college, high school transcripts should be used.

**Financial Aid**

If AUS students wish to receive financial aid, they must complete the FAFSA on an annual basis. To qualify in a given term, students must be degree-seeking and registered for at least 6 credits per term. If an AUS student enrolls in 12 or more credits in a term, the student will be billed the full-time tuition rate and will be eligible for additional aid. The terms are Fall, Spring, and Summer. For 7-week program students, Winter term financial aid is not explicitly included in the federal financial aid package. Students should reserve some or all of their refund to pay for any Winter term coursework. Students can only receive financial aid from one institution at a time.

**Inactive Students**

Students who are not enrolled in two consecutive 7-week terms or one semester in the part-time semester program will be unofficially withdrawn from the College by the Office of the Registrar due to inactivity, including if they added and then dropped a course during that time. Students who are admitted but do not enroll within four 7-week terms or one traditional semester will also be unofficially withdrawn.

Once a student is withdrawn from Carthage (officially or unofficially), they must reapply if the student wishes to return. If readmitted, the student is subject to new catalog requirements and changes in program offerings.

**Summer Studies**

Summer Studies at Carthage meets the needs of traditional and nontraditional students. There are two sessions during the summer: Summer I and Summer II. Most courses are offered in the 7-week accelerated format. Summer classes are open to Carthage AUS students, Carthage traditional students, college students from other institutions, teachers, other professionals, and high school students with special permission.
Graduate Studies

Graduate Studies administers post-baccalaureate programs that build upon and complement the strengths of Carthage’s undergraduate curriculum. Graduate Studies programs include the Master of Education (M.Ed.), Accelerated Certification for Teachers (ACT), Master of Science in Business: Design and Innovation Track, Master of Science in Business: Sports Management Track, Master of Music in Music Theatre Vocal Pedagogy, and Master of Arts in Athletic Training.

Master of Education (M.Ed.)

The Master of Education (M.Ed.) program, first accredited by the Higher Learning Commission in July 1975, addresses the specific needs of teachers in the community by furthering their general education or providing intensive study in a particular academic area. Through evening and summer studies, students can earn their M.Ed., add additional teaching licenses to their existing professional license, or complete coursework for personal enrichment.

The M.Ed. program fosters intellectual and professional learning opportunities within the context of a liberal arts education. Classes enable teachers to keep abreast of current issues relating to education, such as curricula, leadership, and administration. All courses meet Wisconsin teacher licensure requirements in selected areas and carry Wisconsin Department of Public Instruction (DPI) program approval.

The M.Ed. is a 38-44 credit graduate program with eight specialized concentrations, including Curriculum and Instruction, Curriculum and Instruction with Reading License #316, Teacher Leadership, Teacher Leadership with Reading License #17, Higher Education, Educational Administration (K-12) with License #51, English as a Second Language with License #1395, and Bilingual with License #1023.

In addition to these concentrations, Carthage offers the following advanced licenses:

Administration/Principal’s License (51): Developed by a team of administrators from Kenosha Unified and Racine Unified school districts and the Carthage Education Department, the administration concentration prepares educators for leadership roles as principals in the K-12 setting. Coursework focuses on site-based management, school law, school finance, and leadership development. To be fully certified upon completion, candidates must hold a professional educator’s license, or be licensed as a school counselor, school psychologist, or a school social worker, and have at least three years and 540 hours of successful experience in these areas. The program can be completed in two years by taking two courses per term. Students who already possess a master’s degree and wish to gain the #51 license will need to complete the required courses only. No culminating experience or research courses will be required.

Cross-Categorical Special Education License (801): This concentration leads licensed teachers to a certification in Special Education. With completion of the certification and research sequence, candidates will earn a master’s degree with a concentration in special education. For state licensure, students will need to take and pass the appropriate Praxis II and Foundations of Reading tests.

English as a Second Language (ESL) License 1395: Carthage offers a program for the English as a Second Language Wisconsin educator license. This program can be completed at the graduate level leading to the 1395 English as a Second Language License and a Master of Education degree, or it can be completed as a post-baccalaureate program leading to the license only. Candidates holding one of the following licenses are eligible to complete this program: Early Childhood-Adolescent (grades K-12 Level 74), Middle Childhood-Early Adolescent (grades 1-8 Level 72), and Early Adolescent-Adolescent (grades 6-12 Level 73).

Bilingual (Bilingual License 1023): Carthage offers a program for the Bilingual Wisconsin educator license. This program can be completed as a post-baccalaureate program leading to the 1023 Bilingual License. Candidates holding one of the following licenses are eligible to complete this program: Early Childhood-Adolescent (grades K-12 Level 74), Middle Childhood-Early Adolescent (grades 1-8 Level 72), and Early Adolescent-Adolescent (grades 6-12 Level 73).

Reading Licenses (316 and 17): Carthage offers a graduate reading program for licensed educators. The Reading 316 license is the Reading Teacher license, designed for reading teachers working directly with children. The Reading 17 license is the Reading Specialist certification, designed for those who are directly responsible for directing or supervising a reading program in a K-12 setting; this license will require completion of both the Reading 316 license and the M.Ed. degree.

Working with an advisor assigned by the Graduate Admissions Coordinator, the student establishes a program of study. The program of study is then approved by the Education Department.

Each program requires a minimum of 38-44 credits and successful completion of either a thesis or comprehensive exam. Required courses include Foundations of Education, Quantitative Research, and Qualitative Research. The remaining courses are selected from curricular offerings in the academic subject area.

Admission

Qualified candidates seeking admission to the M.Ed. or advanced licensing program must:

- Have successfully completed a bachelor’s degree with a minimum grade point average of 3.0.
- Possess a valid teaching certificate issued by one of the 50 states, or employment in a profession that is educational in purpose (e.g., nursing, social work, etc.).
- Complete and submit the required admissions items:
  - Application, personal statement, and application fee
  - Official transcripts of all college work
  - Proof of a valid teaching certificate (for licensed teachers)
  - Three letters of recommendation: one from a supervisor, one from a colleague at the current place of employment, and one of the candidate’s choosing (former professor, additional supervisor or colleague are common)
  - Interview with the Director of the Graduate Program in Education (optional, but recommended)

When the application is complete, a committee will review the application materials and issue an admission decision. Accepted students will be assigned to an advisor who will guide them through the program.

Accelerated Certification for Teachers (ACT)

The Accelerated Certification for Teachers (ACT) program is designed for students who already hold a bachelor’s degree to become a licensed teacher at the middle and high school level. This 14-month program offers certification in cross-categorical special education and a full range of secondary education areas: art, broadfield science (e.g., biology, chemistry, physics), economics, English, geography, history, modern languages (e.g., French, Spanish), math, music, physical education, political science,
sociology, speech communications, and theatre.

Students complete licensing requirements beginning with coursework taken during the summer, followed by a yearlong clinical experience as the teacher of record in a school district and evening/weekend coursework, and ending with a second summer of coursework. Upon completion, participants are approximately 14 credits away from earning a Master of Education.

Admission
Qualified candidates seeking admission to the ACT program must:

- Have current employment (or a commitment for employment) at a sponsoring school district or be eligible to student teach
- Complete and submit the required admissions items:
  - Application, personal statement, and application fee
  - Official transcripts of all college work (Note: An official transcript evaluation will be completed to determine if additional courses may be needed in the teaching content area prior to admission into the ACT program.)
  - Interview with the Director of the ACT Program (optional, but recommended)
- Have successfully completed a bachelor’s degree with a minimum grade point average of 3.00 in all college coursework
- Pass the Praxis Core Academic Skills for Educators (Reading, Writing, and Math)
- Pass the appropriate Praxis II content test for the area of licensure

Master of Science in Business

Design and Innovation Track
The Master of Science program in Business Design and Innovation (BDI), first accredited by the Higher Learning Commission in August 2016, provides an educational experience grounded in independent and critical thinking, and creative problem-solving and solution finding. The master’s program builds upon a liberal arts education where the curriculum streams of design, innovation, and sustainability are taught through the critical concepts of theory, knowledge, application, and continuous learning at the individual level, team level, and organization level to build mastery.

The Design and Innovation track prepares graduates to work in collaboration, leading and managing high-performing cross-functional teams. The program develops student capacity for design thinking, as well as innovative solutions, strategies, programs, and services for the private, nonprofit, and government sectors. On their journey, students master analytical methods through research-informed and evidence-based frameworks.

BDI is a 39-credit intensive cohort-based graduate program completed over 10 months. A series of workshops to further develop experiential/action-based learning is also built into the curriculum. Graduates will master organizational development skills, including human-centered design, leadership development, change management, and team building; understand and apply innovative design solutions to businesses and organizations; apply group-level development knowledge, including leading and motivating high-impact teams to facilitating team learning; utilize creativity and innovation both in theory and in practice; and bridge the gap between theory and practice through internship, capstone, and experiential learning.

Sports Management Track
The Sports Management track in Carthage’s growing MSc program teaches students effective management strategies through the lens of sports. Input from more than twenty senior executives in professional basketball, hockey, baseball, and esports shaped the curriculum, ensuring that graduates’ skills will align with hiring preferences.

Besides courses tailored to the unique world of sports, this new option overlaps with the Design and Innovation Track. That gives students a firm grasp of core business principles like emotional intelligence and cross-functional team management.

Admission
Qualified candidates seeking admission to the Master of Science in Business (Design and Innovation OR Sports Management Track) must:

- Have successfully completed a bachelor’s degree from an accredited institution by August 1 of the entry year
- Complete and submit the required admissions items:
  - Application, personal statement, and application fee
  - Official transcripts of all college work
  - Two letters of recommendation
  - A statement of purpose
  - Résumé/CV
  - Entrance interview
  - GRE or GMAT test scores are recommended but not required.

Master of Music in Music Theatre Vocal Pedagogy
Carthage’s 10-month, 36-credit Master of Music degree is one of the few programs that focus specifically on music theatre vocal pedagogy, covering styles from “legit” to contemporary pop/rock. Students will develop pedagogical strategies in academic courses while implementing them in performance, mentored praxis, and supervised teaching experiences. Students will participate in weekly seminar meetings to share their ongoing development as music theatre pedagogues.

Our program is:

- Accredited by the National Association of Schools of Music.
- Flexible. There are options for full- or part-time study.
- Accelerated. Be a member of our intensive cohort.
- Practical. Applied teaching experience will develop your skills and your résumé.
- Interdisciplinary. Just like the field of music theatre, the M.M. program at Carthage creates connections between the study of the voice and related art forms, maximizing your professional opportunities.

Students have full access to our facilities, including the library, fitness center, and dining facilities. Additionally, students can take advantage of an array of collegiate events, speakers, sporting events, performances, art exhibitions, and more.

Admission
Qualified candidates seeking admission to the M.M. program must:

- Have successfully completed a bachelor’s degree from an accredited institution
- Complete and submit the required admissions items:
  - Online application and application fee
  - Official transcripts of all college work
  - Two letters of recommendation
  - Professional résumé
  - Schedule a required performance audition and interview. (Applicants should be prepared to sing two full, contrasting songs that demonstrate vocal ability and dramatic interpretation, as well as to discuss their personal goals of teaching in the interview.)

Master of Arts in Athletic Training
Students with an earned bachelor’s degree in a related field can complete a Master of Arts in Athletic Training. Following admission to the program, students will complete two years of graduate-level coursework. The Carthage MA-ATH program consists of 65 graduate-level credits.

Admission
Acceptance into the program is based on the following criteria:

- **Formal admission and acceptance by the Office of Admissions**
- **Earned a Bachelor of Arts or Bachelor of Science in a related field with a minimum 3.0 GPA**
- **Prerequisite course completion with a grade of C or better**
- **Submission of the professional phase applications packet by January 1.**
- **Required documents: Caregiver Background and Criminal History Check, immunization records, program physical exam including 10-panel drug test, TOEFL documentation (for non-native English speakers)**
- **Fulfill the technical standards verified by a health care provider**
- **Entrance interview with Program Admission Committee**

An application is submitted to the program director by January 1. Notification of acceptance or rejection will be sent no later than March 1. Students accepted into the program will arrange with the program director a plan to complete all Jump Start Experiences before beginning the professional phase of the program. Jump Start Experiences are faculty- and mentor-led activities to familiarize students with the profession of athletic training. These experiences will provide students with foundational knowledge and opportunities to practice basic skills.

**International Graduate Admissions**

**Admission**

Admission procedures for international graduate students include verification of the applicant’s academic ability, English language proficiency, and Certification of Finances Form in order to issue a Form I-20. Form I-20 is provided to students who have been accepted for admission. Admission to Carthage College includes:

- Completed application
- Official transcripts from all colleges attended
- Certification of Finances Form

**Application Requirements**

- Carthage Graduate Application for Admission and application fee.
- All official transcripts, certificates, and diplomas from all colleges previously attended. Original transcripts must be evaluated by Education Credential Evaluators (ECE). The General with Grade Average or Course by Course evaluations through ECE are both accepted. An official score report must be sent to Carthage directly from ECE.
- Submit official TOEFL or IELTS scores. For TOEFL, a minimum score of 78 is required for the iBT and 213 on the computer version. The minimum score for IELTS is 6.0. Scores must be sent directly to Carthage from the testing agency.
- Carthage offers Conditional Acceptance for students who meet the admission requirement but need additional English language preparation prior to enrolling.
- Submit the Certification of Finances Form. All monetary amounts listed on the Certification of Finances Form must be certified by bank officials. If you have a financial sponsor, that person must submit the sponsor statement.
- Certain programs may require a musical audition or portfolio of previous work. A program advisor will contact you to make arrangements for an audition or portfolio demonstration.

**Target Language Expert Application and Admission Policy**

An application to Carthage College will be initiated by the Target Language Expert (TLE) Coordinator and the Modern Languages Department. TLE candidates should submit all official transcripts, certificates, and diplomas from all colleges previously attended to the TLE Coordinator. Original transcripts will be evaluated by Education Credential Evaluators (ECE) in English and forwarded directly to Carthage College. This process will be initiated by Carthage College. TLE candidates need to review their application with the Target Language Expert Coordinator. The TLE Coordinator will determine whether the TOEFL, IELTS, or ACTFL scores will be required for admission.

**International Admissions Programs**

International Admissions Programs aim to increase the number of international students at Carthage, making the campus a more global-learning environment where everyday interactions are diverse and enlightening and increase the cultural humility of all community members. International Admissions Programs are committed to fostering a safe, positive, and nurturing environment where each student can achieve his or her personal and academic goals.

**American Cultural Literacy Courses**

- GNR 1000 American Cultural Literacy I
- GNR 1010 American Cultural Literacy II

American Cultural Literacy I and II introduce students to life and culture in the United States. Using sources of information ranging from interviews to news reports to literature, students will explore a range of topics designed to help them live and work successfully at a college in the United States and in the surrounding communities. The courses will encourage exploration of and interaction with campus and local resources. Daily life, cultural manifestations, and social issues of the United States will be discussed primarily within the context of the contemporary world. Students will begin to contrast their own culture and their stereotypes of U.S. culture with their own experiences and interactions in the United States, and will reflect on the meaning and significance of the similarities and differences they discover. Topics covered may include student life, campus resources, the local community, U.S. media and sports culture, U.S. politics, and regional differences in language and culture. This course may not be taken by native speakers of English.

**Honors**

Through the Honors Program, Carthage offers enhanced educational opportunities to students with records of outstanding achievement and potential. Honors Program goals include:

1. Cultivating and retaining students with exceptional promise, motivating them to take leadership roles inside and outside the classroom, and enriching their entire instructional and cocurricular careers as learners at Carthage and beyond.
2. Creating opportunities for faculty to develop and deliver one-of-a-kind learning experiences.
3. Encouraging creative cooperation between students and faculty as they engage in scholarly activities together.
4. Strengthening the scholarly profile of the institution as a whole.

**Admission to the Carthage Honors Program**

The Honors Program invites less than 10 percent of the incoming class each year based on academic achievement. Highly motivated and ambitious students who do not receive an invitation are encouraged to apply for consideration through the Director of Honors.

**Incoming First-Year Students**

Invitations to apply to join the Honors Program will go primarily to students who present outstanding high school credentials (e.g., ACT scores, GPA, class rank) and/or excel in Carthage’s competitive scholarship competitions. Additional students will be
invited to apply upon the recommendation of the Vice President for Enrollment (or designated representative).

Transfer Students
Individuals admitted to the Honors Program as new transfer students typically have maintained at least a 3.25 college GPA, have demonstrated excellence in one or more courses, have been recommended for the Honors Program by the Vice President for Enrollment (or designated representative), and have been interviewed by the Director of Honors.

Continuing Students
Students admitted to the Honors Program during their first or second year of study at Carthage typically have maintained at least a 3.25 Carthage GPA, have demonstrated excellence in one or more courses, have been recommended for the Honors Program by one or more instructors, and have been interviewed by the Director of Honors. They will be asked to complete a written application.

Carthage Honors Plan of Study
Students who complete the Carthage Honors Program are expected to commit themselves to rigorous study and to demonstrate intellectual balance and flexibility through their ability to make connections across disciplines.

Courses
The Honors Plan of Study requires students to complete six one-credit Honors Experiences and an additional three four-credit courses in the Honors Program with a grade of no lower than B in any of those courses.

Carthage Honors Experiences (six one-credit experiences)
Honors Experience courses are the heart of the Carthage Honors program, providing extraordinary learning opportunities borne out of all academic disciplines while fostering an active honors community. These experiences, requiring thoughtful preparation and reflection but limited class meeting time, allow for large gatherings of honors students to participate in one-of-a-kind shared educational experiences. These experiences may be linked to unique opportunities already happening on campus: guest lecturers, gallery openings, business coalition guests, performing arts events, etc. They may be opportunities for students to learn about faculty members’ particular research interests. They may be faculty-led service-learning opportunities. They may also include off-campus outings — faculty-led excursions taking advantage of the rich cultural opportunities awaiting in Chicago or Milwaukee.

Multiple Honors Experiences will be offered each semester, and students may choose whichever experiences appeal most to them. These courses are optimally taken at the rate of one per semester for six semesters but can be taken at any point throughout a student’s career, and students may enroll in more than one per semester.

Carthage Honors Experiences are for Honors students only.

Honors Intellectual Foundations
Honors Intellectual Foundations courses are offered in sections for Honors students only. Honors students who do not take the Honors Intellectual Foundations course, either because they joined the honors program late or because they could not fit the honors section of IF into their schedules, may take a supplemental 1-credit seminar to fulfill the Honors Intellectual Foundations requirement.

Honors Global Heritage or Diverse Perspectives
Honors Global Heritage courses are approved Global Heritage or Diverse Perspectives courses offered in sections for Honors students only. These courses require active and independent work at a high level. For approval as an Honors course, instructors must show that the course will be taught above the introductory level and will require an independent project of research and/or analysis.

Honors Co-curriculum
The Honors Program seeks to enhance classroom experiences through a wide variety of intellectual, cultural, and social opportunities. Honors students, with appropriate faculty encouragement and support, assume visible leadership in a variety of contexts across campus and help elevate its intellectual and cultural tones. The Honors Council serves as an umbrella organization for student-led Honors activities on campus.

Through the Honors Council, students can participate in service projects, social activities, special programming, and student-faculty gatherings. The Honors Council has an executive board and is structured so students can provide input into the Honors curriculum, present papers at regional and national conferences, and apply to participate in off-campus and international Honors terms.

Carthage Honors Recognition
Upon graduation, students will be recognized with Carthage Honors if they complete six Honors Experiences/Seminars, an Honors Intellectual Foundations course or the supplemental one-credit seminar, and an Honors Global Heritage or Diverse Perspectives course with a grade of B or higher. Carthage Honors recipients must also have a final, overall GPA of at least 3.5. The Carthage Honors designation will appear on their transcript and diploma.

Academic Honorary Organizations
Alpha Chi: A national college honor scholarship society whose purpose is to promote academic excellence and exemplary character among college students and to honor those who achieve such distinction. No more than the top 10 percent of the senior class may be inducted.

Alpha Lambda Delta: A national honorary society recognizing outstanding academic achievement for first-year students.

Sigma Xi: An international research society whose programs and activities promote the health of the scientific enterprise and honor scientific achievement. Students who show outstanding potential as researchers may be named as associate members.

Omicron Delta Kappa: A national honorary society recognizing juniors and seniors for excelling in academic work and service to the community.

Departmental Honor Organizations: Students may be invited to join discipline-specific national organizations that acknowledge excellent work.

Scholarships and Academic Planning
The Director of Honors and faculty advisors are available to assist qualified students in applying to graduate programs and for national and international fellowships, such as the Rhodes, Marshall, Truman, Fulbright, and Mellon. Students who receive these and other awards are recognized each spring.

Dean’s List
Full-time students who earn at least a 3.5 GPA while completing at least 14 letter-graded credits in a term are acknowledged on the Carthage Dean’s List.

Honors in the Major
Departments at Carthage offer students the opportunity to earn honors in their major. Each department may establish the requirements for honors in the Major according to the standards, needs, practices, and traditions of the discipline. If established, these requirements must be submitted to the Director of Honors for approval. If a department elects not to establish its own requirements for Honors in the Major or does not submit these requirements to the director of honors, the following requirements will apply to students seeking Honors in the Major: Honors Contracts in two advanced courses in one major AND presentation of the Senior Thesis to an audience beyond the major department AND all of the following:
1. Complete all requirements for the major.
2. Receive a rating of “excellent” on the Senior Thesis from the faculty of the major department.
3. Be formally recommended by the faculty of the major department.
4. Maintain an overall GPA of 3.5 at graduation. Please see the appropriate department chair for details on Honors in the Major.

Latin Honors
Diplomas of graduating seniors with at least 64 graded Carthage credits are inscribed as follows:
Cum Laude: recognition of a final, cumulative grade point average of at least 3.5/4.0.
Magna Cum Laude: recognition of a final, cumulative grade point average of at least 3.7-3.899/4.0.
Summa Cum Laude: recognition of a final, cumulative grade point average of at least 3.9/4.0.

Credit Hour
Credit earned at Carthage College is measured in credit hours, a standard derived from the Carnegie Unit and in common use in higher education. Each credit hour corresponds to the academic achievement attained in one contact hour (50 minutes) of classroom instruction and a minimum of two hours of out-of-class student work per week over a 15-week semester, or its equivalent via alternative pedagogy. Most courses at the College are four credits; they meet three times a week for 65 minutes each day (195 minutes/week), twice a week for 100 minutes each day (200 minutes/week), or once a week for 180 minutes each day (180 minutes/week) for approximately 15 weeks. Courses carrying fewer than four credits are reduced by the appropriate proportion.

Family Educational Rights and Privacy Act
Carthage does not discriminate on the basis of sex, race, creed, color, national origin, age, or disability in the educational programs or activities that it operates, and is required by Title IX of the Education Amendment of 1972 and the regulations adopted pursuant thereto, by Title VI and Title VII of the Civil Rights Act of 1964, and by Section 504 of the Rehabilitation Act of 1973, not to discriminate in such manner. The requirements not to discriminate in educational programs and activities extend to employment therein and to admission thereto.
Carthage is in compliance with the Family Educational Rights and Privacy Act (FERPA) of 1974 (as amended) in regard to the right of students or their parents to review the student’s education record, correction of information from those records, and limitation of disclosure of information contained in those records. Further details are published in the Community Code, and forms authorizing institutional withholding of student records are available in the Office of the Registrar.
Every year, the College is required to communicate its policy on the use of illicit drugs and alcohol to every student and employee.
In compliance with the Drug-Free Schools and Communities Act Amendments of 1989, Carthage annually publishes and distributes an “Alcohol and Other Drug Awareness” statement.
The College is required to publish and distribute to all current students and employees an annual security report describing campus security policies and campus crime statistics. In compliance with the Crime Awareness and Campus Security Act of 1990, Carthage publishes and distributes this information every fall.
Carthage is required to make available graduation and retention rates. These figures are available from the Office of the Registrar. Inquiries concerning the application of said acts and published regulations to this College may be referred to:
1. The Vice President for Business for matters relating to employment, policies and practices, promotions, fringe benefits, training, and grievance procedures for College personnel. Telephone: 262-551-6200.
2. The Vice President for Enrollment for matters relating to student admissions and financial aid. Telephone: 262-551-6000.
3. The Dean of Students for matters regarding administrative policies relating to students, student services, and the student administrative grievance procedure. Telephone: 262-551-5800.
If a student believes the institution has failed to comply with FERPA, he or she has the right to file a complaint with the Family Education Rights and Privacy Act Office, Department of Education, 400 Maryland Ave. S.W., Washington, D.C. 20202.
Academic Divisions

Division of Arts and Humanities

Division of Natural and Social Sciences

Division of Professional Studies

Academic Divisions

Carthage comprises three academic divisions and their respective departments and programs, as outlined below:

Division of Arts and Humanities

Art
Asian Studies
Communication and Digital Media
English
History
Modern Languages
Music
Religion
Theatre
Women’s and Gender Studies

Division of Natural and Social Sciences

Biology
Chemistry
Computer Science
Criminal Justice
Economics
Environmental Science
Geospatial Science
International Political Economy
Mathematics
Neuroscience
Physics and Astronomy
Political Science
Psychological Science
Sociology

Division of Professional Studies

Accounting and Finance
Athletic Training
Broad Field Social Science
Education
Exercise and Sport Science
Health Education
Management and Marketing
Nursing
Social Work

Division of Arts and Humanities

Exploration of the arts and humanities introduces students to intellectual and aesthetic activity as essential dimensions of the human condition. Through scholarly inquiry, artistic creation, and community engagement, the Division of Arts and Humanities cultivates a rich artistic and intellectual community that fosters a respect for diversity and encourages lifelong learning. Students learn to engage critical and creative thinking skills as tools for reflection, expression, and engagement.

The Division of Arts and Humanities offers four interdisciplinary programs, including majors in Music Theatre and Asian Studies, and minors in Women’s and Gender Studies and African Studies. General education courses for nonmajors provide an introduction to creative and critical inquiry, and include survey courses as well as courses in creative application and short-term education abroad.

Departments in the Division include:

Art

B.A. in Studio Art
B.A. in Art History
B.A. in Art Education (K-12 licensure)
Minors in Studio Art, Art History, Photography, Film and New Media Studies and History of the Arts

Communication and Digital Media

B.A. in Graphic Design
B.A. in Communication
B.A. in Public Relations
Minors in Communication, Graphic Design, Photography, Film and New Media Studies, and Public Relations

English

B.A. in English
B.A. in English with an emphasis in Creative Writing
Teacher Education Licensure in English Education (Secondary Education; additional coursework required)
Minor in English

History

B.A. in History
Teacher Education Licensure in History Education (Secondary Education; additional coursework required)
Minor in History

Modern Languages

B.A. in Chinese
B.A. in French
B.A. in German
B.A. in Japanese
B.A. in Spanish
Teacher Education Licensure in French Education, German Education, and Spanish Education (Secondary Education; additional coursework required)
Minors in Chinese, French, German, Japanese, and Spanish

Music

B.A. in Music
B.A. in Music with an emphasis in Music Performance
B.A. in Music with an emphasis in Music Theatre
B.A. in Music with an emphasis in Piano Pedagogy
B.M. in Piano Performance and Collaborative Piano
B.M. in Music Education
Minor in Music
Master of Music in Music Theatre Vocal Pedagogy

Religion

B.A. in Religion
Minor in Religion and Interfaith Studies

Theatre

B.A. in Theatre
Teacher Education Licensure in Theatre (K-12 licensure; Secondary Education Minor; additional coursework required)
B.A. in Theatre Performance
B.A. in Technical Direction
B.A. in Theatrical Costume Design
B.A. in Theatrical Stage Management
B.A. in Music with an emphasis in Music Theatre
Minors in Theatre, Dance

Interdisciplinary Programs

B.A. in Asian Studies
Minors in Asian Studies, African Studies, and Women’s and Gender Studies

Contributions to the General Education Curriculum

Students seeking to satisfy distribution requirements will find regular offerings of courses with the HUM and FAR designation to meet their general education requirement. These courses are designed to engage students intellectually and creatively in particular areas of the arts and humanities by introducing students to aesthetic activity as an essential dimension of the human condition, of human cultures, and of their own capacities and callings.

Courses fulfilling the HUM and FAR designation generally fall into two categories:

Survey courses designed to cultivate appreciation of the arts and humanities by exposing students to a significant body of literature or area of creative activity within its cultural context
Application courses designed to engage students in the direct experience of aesthetic and creative work

Information on specific general education
The division offers 14 degree programs and four dual-degree programs in partnership with other institutions. General education courses provide a survey-level introduction to a topic or disciplinary field for the nonmajor. The division supports nonmajors through more than a dozen regularly offered general education courses. In addition to course and degree-program offerings, the division is home to several active research groups that invite students to expand on coursework and contribute to professional disciplinary and cross-disciplinary scholarship.

**Departments in the Division include:**

- **Biology**
  - B.A. in Biology
  - Minor in Biology
- **Chemistry**
  - B.A. in Chemistry
  - B.A. in Chemistry (ACS certified)
  - Minor in Chemistry
- **Computer Science**
  - B.A. in Computer Science
  - B.A. in Computer Science with concentration in Game Development
  - Minor in Computer Science
  - Minor in Game Development
- **Economics**
  - B.A. in Economics
  - Minor in Economics
- **Environmental Science**
  - B.A. in Environmental Science
- **Geospatial Science**
  - B.A. in Geoscience
  - B.A. in Geographic Information Science
  - Minor in Geoscience
  - Minor in Geographic Information Science
  - Minor in Climatology and Meteorology
- **Mathematics**
  - B.A. in Mathematics
  - B.A. in Data Science
  - Minor in Mathematics
  - Minor in Data Science
- **Neuroscience**
  - B.A. in Neuroscience
- **Physics and Astronomy**
  - B.A. in Physics and Astronomy
  - B.A. in Engineering Sciences
  - Minor in Physics and Astronomy
- **Political Science**
  - B.A. in Political Science
  - Minor in Political Science
- **Psychological Science**
  - B.A. in Psychology
  - Minor in Psychology
  - Sociology and Criminal Justice
  - B.A. in Sociology
  - B.A. in Criminal Justice
  - Minor in Sociology
  - Minor in Criminal Justice

**Degree Programs**

- B.A. in International Political Economy
- **Dual-Degree Programs**
  - Engineering
  - B.A., B.S. Engineering
  - Pharmacy
  - B.A., Pharm.D.
  - Occupational Therapy
  - B.A., M.S. O.T./O.T.D.
  - Chiropractic
  - B.A., D.C.

**Centers and Institutes**

- A. W. Clausen Center for World Business
- Carthage Institute of Paleontology
- NASA Wisconsin Space Grant Consortium

**General Education Courses**

Each department and program within the division offers general education courses supporting the needs of students seeking to satisfy major and distribution requirements in the natural sciences, mathematics, and social sciences. These courses carry the designations SCI, SOC, MTH, and LAB (for lab-based natural science courses). Information on specific general education courses can be found in the catalog pages for each department and program.

**Experiential Learning**

Experiential learning is a core component of a Carthage education, and each department in the division supports a range of opportunities from field placements and clinical experiences to internships and research programs with national and international partners. A flagship program for the College is the Summer Undergraduate Research Experience (SURE). SURE students are competitively selected to participate in faculty-led research on campus and around the world. SURE students present their research at regional and national conferences.

Ongoing experiential learning opportunities within the division include the following:

**Internships:**

- Chicago Council on Global Affairs
- NASA/WSGC internships in aerospace-related fields (dozens of available internships for STEM students)
- Shedd Aquarium (through Carthage in Chicago program)

**Clinical and field placements:**

Courses can be found in the catalog pages for each department.

**Experiential Learning Opportunities**

Experiential learning is a core component of a Carthage education, and each department in the division supports a range of opportunities. From field placements to internships, performance tours, and excavations, students in the Division of Arts and Humanities engage in experiential learning. Local, regional, and international partnerships provide opportunities for students to translate theory into practice. A flagship program for the College is the Summer Undergraduate Research Experience (SURE). Students who earn a SURE grant are competitively selected to conduct research and creative projects with faculty mentors. Students present their research and creative projects at conferences and events around the world.

**Cocurricular and Extracurricular Learning Opportunities**

Students in the Division of Arts and Humanities develop strong relationships with their faculty mentors, largely through cocurricular and extracurricular learning opportunities. From studio to classroom, students and faculty engage in collaborative projects that help prepare them to be engaged, informed citizens. Over 2,000 students participate in music ensembles, art clubs, theatre productions, poetry readings, and historical enactments.

From lecture series such as the Hannibal Lectures to our New Play Initiative, the division provides opportunities for students and community to gather together to engage with the critical questions and creative ideas of our past, present, and future. Our music concerts showcase the creative work of students and faculty alongside world-class invited guest artists. The H. F. Johnson Gallery of Art brings established and innovative artists to the Carthage campus, and the annual Graphic Design and Art Department “Art Walk” showcases the work of our emerging student artists and designers.

**Division of Natural and Social Sciences**

Degree programs in the Division of Natural and Social Sciences prepare students to be leaders, innovators, and caregivers in a complex and rapidly changing world. Through a curriculum that emphasizes personal attention by faculty mentors, hands-on learning, and early engagement with authentic research, students learn to think independently while working collaboratively to apply modern methods of scientific inquiry to the most pressing questions and challenges of the modern world.
Division of Professional Studies

The Division of Professional Studies includes those departments with programs leading to professional licensure or certifications. In addition to Carthage’s liberal arts curriculum, these programs provide career-specific education and field experiences to prepare students to meet requirements for successful certification or licensure in a particular career path. Students interested in any of these programs are encouraged to refer to the specific requirements of the program listed under each department and to work with advising early to ensure all requirements are planned for appropriately.

Departments in the Division include:

Accounting and Finance
- B.A. in Accounting
- B.A. in Finance
- Minor in Business Administration

Education
- B.A. in Elementary/Middle: Middle Childhood - Early Adolescent (Grades 1-8 licensure)

B.A. in Cross-Categorical Special Education (K-12 licensure)
- Minors in Urban Education, Educational Studies, STEM, and Early Adolescence and Adolescence (Grades 6-12 licensure)
- Master of Education

Exercise and Sport Science
- B.A. in Exercise and Sport Science (optional: Physical Education K-12 licensure)
- B.A. in Allied Health Science
- Minor in School Health Education
- Athletic Coaching Certification
- Adaptive Physical Education Certification
- Master of Athletic Training

Management and Marketing
- B.A. in Management
- B.A. in Marketing
- Minor in Business Administration
- M.S. in Business Design and Innovation

Nursing
- B.S. in Nursing
- RN to BSN (beginning January 2022)

Social Work
- B.A. in Social Work
- Minor in Social Justice

The Exercise and Sport Science Department is also responsible for the courses all students need to fulfill the Physical Education and Fitness requirement.

The programs in the Division of Professional Studies are typified by integrating high-impact experiences into the requirements for their majors, such as internships, field, and clinical placements, student teaching, and organized community service opportunities. These experiences support and complement coursework, provide practical experience in career settings, prepare students for certification exams, and help students build their portfolios and job application packages. In addition, paths to such certifications and licenses require students to meet and maintain standards of academic achievement, such as a minimum GPA, successful field experiences, and the passing of standardized examinations. Advisors and faculty in each of these programs welcome interested students to meet with them early and often to ensure students’ plans are appropriate and their progress is supported.

A number of extracurricular organizations provide additional opportunities for building skills, résumés, and strong networks of friends and future colleagues:

- Carthage Association of Nurses (CANS)
- Social Work Advocacy Group (SWAG)
- Enactus (formerly Students in Free Enterprise)
- Velocity Consulting
- Volunteer Income Tax Assistance (VITA)
- Finance/Investment Club
- Carthage Accounting Association
- Association of Carthage Education Students (ACES)
- Pi Alpha Honors Fraternity
- Pi Lambda Theta
- Pi Sigma Epsilon
- Pals and Partners
- Racine/Kenosha Reading Council
Accounting and Finance
The Accounting and Finance Department offers majors in both accounting and finance, with many students opting to double major. Most accounting majors can meet the education requirements to be eligible to sit for the CPA exam in four years at Carthage. Students should work closely with academic advisors to create a plan based on their state’s legal requirements. Accounting graduates have obtained employment in auditing, financial analysis, tax accounting, and corporate accounting in private, public, nonprofit, and government entities.

Finance majors gain financial analysis skills, and hands-on portfolio management experience, and take advantage of our economics, accounting, GIS, and math classes to strengthen their knowledge. Finance graduates have obtained employment in financial analysis, financial planning, corporate finance, portfolio management, wealth management, compliance, banking, insurance, and investment analysis in private, public, nonprofit, and government entities.

Accounting Major
Required courses (48-50 cr.)
ACC 2010 Financial Accounting (4 cr.)
ACC 2040 Cost and Managerial Accounting (4 cr.)
OR ACC 2020 AND ACC 2050 (6 cr.)
ACC 3010 Intermediate Accounting I (4 cr.)
ACC 3020 Intermediate Accounting II (4 cr.)
ACC 3060 Individual Taxation (4 cr.)
ACC 4020 Auditing (4 cr.)
MGT 3600 Legal Environment of Business (4 cr.)
FIN 3210 Corporate Finance (4 cr.)
ECN 1010 Principles of Microeconomics (4 cr.)
ECN 1020 Principles of Macroeconomics (4 cr.)
ACC 200*/400* Topics in Accounting (4 cr.)
ACC 3610 Law for Accountants (2 cr.)
Choose 2 of the following (8 cr.)
ACC 3090 Business Taxation (4 cr.)
ACC 3250 Accounting Information Systems (4 cr.)
ACC 3600 Legal Environment of Business (4 cr.)
BUS 4900 Business Policies Senior Seminar (4 cr.)
Choose 1 of the following (4 cr.)
BUS/ECN 2340 Applied Statistics for Management and Economics (4 cr.)
MGT 3100 Introduction to Business Analytics (4 cr.)

Finance Major
Required courses (46 cr.)
ACC 2010 Financial Accounting (4 cr.)
ECN 1010 Principles of Microeconomics (4 cr.)
ECN 1020 Principles of Macroeconomics (4 cr.)
FIN 2100 Microsoft Excel for Basic Business Applications (2 cr.)
FIN 3200 Money and Banking (4 cr.)
FIN 3210 Corporate Finance (4 cr.)
FIN 3290 International Finance (4 cr.)
FIN 3500 Fixed Income Analysis (4 cr.)
FIN 4050 Security Analysis and Portfolio Management (4 cr.)
MGT 3120 Principles of Management (4 cr.)
MGT 3600 Legal Environment of Business (4 cr.)
BUS 4900 Business Policies Senior Seminar (4 cr.)

Choose one of the following:
ACC 2040 Cost and Managerial Accounting (4 cr.)
ACC 3010 Intermediate Accounting (4 cr.)

Choose one of the following:
BUS/ECN 2340 Applied Statistics for Management and Economics (4 cr.)
MTH 1050 Elementary Statistics (4 cr.)
MTH 3050 Statistics (4 cr.)

Choose one of the following:
FIN 3110 Intermediate Financial Modeling with MS Excel (4 cr.)
ECN 3340 Introduction to Econometrics (4 cr.)
MGT 3100 Introduction to Business Analytics (4 cr.)

Accounting and Finance majors are required to pass the Microsoft Office Specialist (MOS) Excel certification exam.

Business Administration Minor (not available to majors in either the Accounting and Finance Department or the Management
and Marketing Department).

Required courses (24 cr.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 1110</td>
<td>Introduction to Business</td>
<td>4 cr.</td>
</tr>
<tr>
<td>Any ECN course</td>
<td>Any ACC or FIN course</td>
<td>4 cr.</td>
</tr>
<tr>
<td>Any MGT or MKT course</td>
<td></td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

8 additional credits from courses with the following prefixes: ACC, BUS, FIN, MGT, and MKT not already counted above.

**Accounting**

**ACC 2010**

Financial Accounting

4cr

An analysis of accounting, the language of business. Introduction to basic accounting theory, concepts, and practices emphasizing income measurement; study of the accounting cycle; and preparation of basic financial statements.

Fall/Spring

**ACC 2020**

Managerial Accounting

4cr

This course focuses on the use of accounting as an analytic business tool within a business organization. This includes understanding cost behavior and using this knowledge to make important management decisions. It includes developing the costs of providing products and/or services to the organization's customers and developing budgets or plans for the organization's operations. Finally, it includes measuring performance against those plans for purposes of taking corrective action and rewarding performance. Emphasis will be placed on current innovations in managerial accounting resulting from changes in the global manufacturing environment. Analytical skills and written and oral communication skills will be emphasized, partly through the medium of case studies that model real-world situations.

Prerequisite: ACC 2010

Fall/Spring

**ACC 3010**

Intermediate Accounting I

4cr

A comprehensive, in-depth, analytical, and interpretive study of alternative accounting procedures for communicating financial and economic information, supported by critical evaluations of current issues and reporting practices. Students conduct a separate analysis of each of the major items appearing in corporate financial statements, with emphasis on theory and the logic involved in selecting one accounting or financial reporting approach over another.

Prerequisite: ACC 2010

Fall/Spring

**ACC 3020**

Intermediate Accounting II

4cr

A comprehensive, in-depth, analytical, and interpretive study of alternative accounting procedures for communicating financial and economic information, supported by critical evaluations of current issues and reporting practices. Students conduct a separate analysis of each of the major items appearing in corporate financial statements, with an emphasis on theory and the logic involved in selecting one accounting or financial reporting approach over another.

Prerequisite: ACC 3010 with a C or higher

Fall/Spring

**ACC 3060**

Individual Taxation

4cr

A study of federal income taxation of individuals focused on tax theory and policy, laws, and related authoritative sources. Practical applications of tax laws are stressed through computerized preparation of frequently encountered forms and schedules and use of research materials applied to tax-planning scenarios.

Prerequisite: ACC 2010

Fall/Spring

**ACC 3090**

Business Taxation

4cr

A study of federal income taxation of business entities focused on tax theory and policy, laws, and related authoritative sources. Practical applications of tax laws are stressed through preparation of frequently encountered forms and use of research materials applied to tax-planning scenarios. Taxation of gifts, estates, and trusts is also covered.

Prerequisite: ACC 3060

Spring

**ACC 3250**

Accounting Information Systems

4cr

The course will provide an in-depth study of the role of computer-based accounting systems to create meaningful information for economic decisions. Emphasis is upon analyzing and designing accounting information systems, using accounting system applications to analyze information, and evaluation of internal control activities.

Prerequisite: ACC 3010

J-Term

**ACC 3610**

Law for Accountants

2cr

An overview of legal concepts valuable to accountants, including the Uniform Commercial Code; agency relationships; property and bailments; wills, trust, and estates; sales and lease of goods; title, risk and insurable loss; secured transactions; bankruptcy; negotiable instruments; transfer of liability; electronic funds transfers; liability of accountants; and accounting ethics.

Prerequisite: MGT 3600

Carthage 2021-2022 Catalog
ACC 4010

Advanced Accounting

4cr
Theoretical analysis and problem-solving approach to current issues in accounting theory and practice; accounting for mergers, acquisitions, reorganizations, bankruptcy and liquidations, consolidations, and parent company and subsidiary relationships; preparation of consolidated accounting statements; and use of accounting procedures to prepare accounting reports for management, investors, and governmental agencies.
Prerequisite: ACC 3020

ACC 4020

Auditing

4cr
Principles, standards, and procedures involved in the independent examination and analysis of financial statements prepared for management and the general public. Concepts of ethical and social responsibilities are explored. Special emphasis is given to the proper reporting and communication of financial and economic information to the general public and to various governmental agencies.
Prerequisite: ACC 3020
Fall

ACC 4040

Advanced Cost and Managerial Accounting

2cr
This course covers managerial accounting and cost management practices that can be strategically applied across a business to improve organizational performance. The course emphasizes the methods available to measure and evaluate costs for decision-making and performance evaluation purposes. Specific topics include: variable and absorption costing; activity-based cost management; lean manufacturing and lean accounting; product life cycle costing and cost of ownership; inventory management; productivity measurement; the balanced scorecard.
Prerequisite: ACC 2020

Finance

FIN 2100

Microsoft Excel for Basic Business Applications

2cr
This course is for students from all majors who wish to attain proficiency in using Microsoft Excel for basic business applications. Students will learn the basic functionalities of Excel, including working with workbooks, worksheets, organizing and analyzing data, creating tables and charts to transform data into meaningful and useful information, and building models to solve practical problems. Integrated into the learning of Excel will be the review of foundational mathematical and statistical concepts. An additional fee is required for the Microsoft Office Specialist (MOS) Excel certification exam.
Fall/Spring

FIN 3110

Intermediate Financial Modeling with MS Excel

4cr
This course focuses on creating financial models using Microsoft Excel to help solve common business problems. It covers the entire problem-solving process - problem identification, identifying data needs, model design, model construction, and model implementation. The model building process will address issues related to user interface, built-in error checking mechanisms, computational efficiency and effective reporting both on-screen and in print. Models which students will learn how to build will include loan amortization, discounted cash flow valuation, capital expenditure budgeting, integrated financial statements, portfolio optimization, and Monte Carlo simulation models.
Prerequisites: FIN 2100 or ACC 3250
Spring

FIN 3200

Money and Banking (SOC)

4cr
A survey of the financial sector of the economy covering the role and functions of money and other financial instruments, commercial banks and financial intermediaries, the purposes of central banking and the structure and operations of the Federal Reserve, and the relationship between the monetary and credit system and the level of economic activity.
Prerequisite: ECN 1020 or ECN 1030
Spring

FIN 3210

Corporate Finance

4cr
This course introduces students to the framework and methodology employed in financial decision-making with a focus on three areas. First is an introduction to the financial markets and both investment and financing instruments available to corporations, nonprofits, and individuals. Second is the analysis of financial statements and learning how that information is used to make decisions about the target capital structure for a firm and the dividend policy that would support that capital structure. In the third area, students will learn how to evaluate business projects (capital budgeting) using financial criteria and different financing choices (capital structure) for these projects.
Prerequisites: ACC 2010 and either BUS/ECN 2340, MGT 3100, MTH 1050, or MTH 3050
Fall/Spring
International Finance

FIN 3290

4 cr.
This course examines the monetary side of international economics and globalization, including the current and historical structure of international financial institutions. Topics include exchange rate theories, monetary regimes, interest rates, asset pricing, risk diversification, the balance of payments, currency crises, and open-economy aspects of fiscal and monetary policies. Emphasis is given to the use of theories in understanding current events and policy issues.
Prerequisites: ECN 1010 and 1020, or ECN 1030
Fall/Spring

Fixed Income Analysis

FIN 3500

4 cr.
This course covers the major types of fixed income securities that are available in today’s financial markets. Students will learn the distinguishing features of each type of fixed income security, how they are issued, traded, and valued in the markets. Students will learn how to identify and quantify various kinds of risk (e.g. interest rate risk and credit risk) that are associated with owning fixed income securities. Students will learn how asset-backed securities (ABSs) are created through a process called securitization and how they are traded. The course will cover ABSs that are backed by assets such as home mortgages, car loans and credit card loans. Students will also learn modern valuation techniques for fixed income securities, and how to manage a portfolio of fixed income securities, and how to manage a portfolio of fixed income securities. Students will gain proficiency in using a commercially available trading/investment platform with live data feeds, both for market analysis and simulation trade execution. Students will learn risk management techniques and how to develop a sound trade plan.
Prerequisite: FIN 3210
Spring

Real Estate Analysis

FIN 3620

4 cr.
Nearly everyone will own real estate in their lifetime. Whether you wish to learn how to buy and value a house or duplex, develop a commercial property, or be able to develop a commercial lending real estate proposal, this course will help by examining real estate found in the surrounding community through multiple lenses.

Trading the Financial Markets: Beyond the Theories and Myths

FIN 3800

4 cr.
This course will introduce the students to the world of trading in the equity markets and their related equity options markets, as well as trading in the futures markets. The focus will be on markets that are available on the U.S. exchanges and through brokerages. Students will learn how to use the tools of technical and fundamental analysis. Students will gain proficiency in using a commercially available trading/investment platform with live data feeds, both for market analysis and simulation trade execution. Students will learn risk management techniques and how to develop a sound trade plan.

Security Analysis and Portfolio Management

FIN 4050

4 cr.
In this course students employ modern portfolio theory to analyze securities using technical and fundamental analyses, for individual equity securities, and in the context of a diversified portfolio. Students will gain hands-on experience managing multimillion-dollar portfolios using live data feeds, and constructing interactive portfolio allocation models using Microsoft Excel.
Prerequisite: FIN 3210

Trade Analysis

African Studies

The African Studies program provides opportunities for students to develop multiple competencies across a variety of fields in a specific geographical context. The curriculum includes a common experience African Transitions course as well as a broad variety of experiential courses. The interdisciplinary nature of the curriculum allows students to explore society, culture, language, history, politics, economics, and international relations.
The minor consists of six courses (24 credits) from 3 different categories.

Minor:
Category 1 Common course (4 cr.)
Category 2 Choose 1 course from each list (12 cr.)
Category 3 Choose 2 courses from options below (8 cr.)

Arts/Culture
- ARH 3720 Arts of Africa (4 cr.)
- MUS 3020 Survey of Music of West and Southern Africa (4 cr.)

Gender
- POL/SOC/WMG 3030 Women of Africa (4 cr.)

Religion
- REL 3370 Religion in Africa (4 cr.)

J-Term study tour(s) to Africa
Any Category 2 course not already being used
Any course with significant African content, as approved by Program Director

Allied Health Science

Allied Health Science Major (44 cr.)
The Allied Health Science (AHS) major encompasses both natural science and behavioral science in its broad interdisciplinary curriculum, concentrating on health-related issues and health outcomes.
The program combines laboratory science classes with courses essential for solving problems, working in interprofessional health care teams, and analyzing data - skills needed in the health care field. The student is provided excellent preparation for graduate-level health care professional schools.
This major also serves as:
Pre-Professional Phase for the Carthage 3+2 Master of Arts in Athletic Training
Core courses:

AHS 1020 Intro to Health care Professions (2 cr.)
AHS 3080 Structural Kinesiology (4 cr.)
AHS 4439 Health care Informatics (2 cr.)
AHS 4469 Evidence-based Practice in Health care (2 cr.)
AHS 4900 Senior Seminar (4 cr.)
BIO 2010 Anatomy & Physiology for the Health Professional I (4 cr.)
BIO 2020 Anatomy & Physiology for the Health Professional II (4 cr.)
CHM 1010 General Chemistry I (4 cr.)
CHM 1020 General Chemistry II (4 cr.)
EXS 2330 Applied Statistics for Health and Human Services (4 cr.)
EXS 3080 Physiology of Exercise (4 cr.)
PHY 2100 Physics I (4 cr.)

Suggested electives:

PYC 1500 Introduction to Psychological Science (4 cr.)
CDM 2100 Health care Communication (4 cr.)
PYC 1850 Lifespan Developmental Psychology for the Health Professional (4 cr.)

AHS 1020

Introduction to Health care Professions

2cr
The course is an introduction to various aspects of the health care field. Students will explore a variety of health-related disciplines and create an academic plan for their chosen career path. Specific healthcare pathways available at Carthage will be look at more thoroughly. The concept of interprofessional practice will be introduced and strategies implemented. Students will have the opportunity to engage in experiential learning activities.
Fall

AHS 3080

Structural Kinesiology

4cr
Structural kinesiology is the study of the muscles as they are involved in movement. This class will cover in detail the origin, insertion, function, and innervation of the major skeletal muscles as they relate to human movement.
Prerequisite: AHS 1020
Spring

AHS 4439

Healthcare Informatics

2cr
The course provides the student with the fundamental knowledge of the concepts of health informatics and how technology can be used in the delivery of health care.
Spring

AHS 4469

Evidence Based Practice in Healthcare

4cr
The course will provide a framework for the health care student to systematically review the best evidence to make informed choices and improve patient outcomes.
Prerequisite: EXS 2330
Fall

AHS 4900

Senior Seminar

4cr
The student is given the opportunity to apply methods of scholarly research mastered in AHS 4465 Evidence Based Practice in Healthcare, to athletic training issues found in the physically active population. The student is expected to write a literature review on a faculty-approved topic.
Prerequisite: AHS 4469
Spring

Art

Studio and academic programs of the Art Department provide a range of experiences for study of the visual arts for all Carthage students. The Art Department offers majors in Studio Art, Art Education, and Art History. Studio Art majors are eligible to apply for the Art Education Teaching Certification (K-12 Licensure) program. Minors are offered in Studio Art and Art History, as well as cross-disciplinary Film and New Media, Photography, and History of the Arts.

Studio courses are designed to provide a foundation in traditional media, while preparing the student to explore new media and a personal vision. They acquaint students with fundamental concepts of design, materials, and tools of the fine arts and crafts. Working in two, three, and four dimensions, students learn to relate abstract ideas and visual forms, acquiring languages of visual communication.

Art history and theory courses in both Western and non-Western traditions allow the student to study visual art as an enduring cultural legacy and the site of aesthetic exploration and expression. These courses are designed to provide the intellectual framework for understanding and interpreting visual culture. They also build the analytical skills necessary to discuss the complex modes of artistic expression across the ages.

Because the curriculum pivots around artistic production and exhibition, museum visits, internships, visiting artist workshops, and involvement in Carthage’s H. F. Johnson Gallery of Art are central experiences. The culmination of a studio major is the Senior Art Exhibition. The culmination of a major in art history is the public presentation of an original thesis.

Departmental Honors are awarded to outstanding studio or art history students who achieve excellence in the thesis and achieve a cumulative grade point average of 3.5 or greater. Recipients demonstrate leadership and engagement in the Carthage arts community, and studio recipients demonstrate outstanding participation in art shows and critiques.

Majors in studio art are prepared for a lifelong practice in creative activity. Studio art learning is broadly applicable to many fields because students learn how to sustain creative research, pursue independent insights, and make new ideas available to the larger community. Employers are aware of this, and a studio art major is attractive preparation for entry-level positions in a variety of fields. At the same time, there are many art-related job opportunities for studio art majors, some of...
which require graduate study. A few examples of the many career opportunities include illustration, art therapy, teaching, visual merchandising, industrial design, book design, interior décorator, mural artist, animator, museum installation, industrial draftsman, exhibit design, cartooning, calligrapher, fashion designer, photojournalist, production pottery, master printmaker, and many others.

Studio majors who complete the requirements for Art Education Certification will be eligible for licensure to teach art to grades K-12 in Wisconsin. Graduates wishing to teach in other states will possess credentials readily recognized in other states, allowing for a streamlined process of certification in other states. These candidates will possess the skills to be practicing studio artists as well as effective teachers who stress the importance and value of art.

Art history is inherently interdisciplinary; employers in many fields find the major attractive for entry-level positions requiring a liberal arts education. However, there are many careers directly related to the art history degree. Many, but not all, require graduate study. Career opportunities for art history majors include museum curation, museum education, gallery sales, art and property appraisal, visual art resource curation, art investment and consultation, art law and law enforcement, cultural property preservation and conservation, publishing (as a writer or editor), freelance research, and arts organization management.

**Studio Art Major**

**44 credits (12 credits in ARH and 32 credits in ART)**

A grade of C or better is required in all studio art courses, Sophomore and Senior Seminars, and Thesis Exhibition.

**Required courses (24 cr.)**

- **ART 2000** Drawing I (4 cr.)
- **ART 2600** Sophomore Seminar in Studio Art (4 cr.)
- **ARH 2700** Art Survey I: Paleolithic to 1400 (4 cr.)
- **ARH 2701** Art Survey II: 1400-21st Century (4 cr.)
- **ART 3000** Advanced Drawing (4 cr.)
- **ART 4000** Senior Seminar in Studio Art (4 cr.)

Choose two courses (8 cr.) from the Foundations classes listed below

- **ART 1070 FOUNDATIONS, SURFACE: Images + Design** (4 cr.)
- **ART 1071 FOUNDATIONS, MATERIAL: Objects + Space** (4 cr.)
- **ART 1072 FOUNDATIONS, TIME: Movement + Digital** (4 cr.)

Choose one art history course from the list below (4 cr.):

- **ARH 2100 History of Photography: Daguerre to Digital** (4 cr.)
- **ARH 2710 Arts of the Americas** (4 cr.)
- **ARH 3550 Internship in Art History** (4 cr.)
- **ARH 3710 20th Century American Art** (4 cr.)
- **ARH 3720 Arts of Africa** (4 cr.)
- **ARH 3730 Masterpieces of Asian Art and Architecture** (4 cr.)
- **ARH 3740 Modern Art** (4 cr.)
- **ARH 3750 Ancient Art** (4 cr.)
- **ARH 3760 Women in the Arts** (4 cr.)
- **ARH 4500 Independent Studies in Art History** (4 cr.)

Choose two classes from below. One must be upper-level studio 3000 or higher. Upper-level studio courses may be repeated up to three times. (8 cr.):

- **ART 1050 Crafts** (4 cr.)
- **ART 200T Art**
- **ART 2110 Darkroom Photography** (4 cr.)
- **ART 2130 Color Photography** (4 cr.)
- **ART 2210 Oil Painting** (4 cr.)
- **ART 2220 Acrylic Painting** (4 cr.)
- **ART 2230 Watercolor Painting** (4 cr.)
- **ART 2300 Printmaking: Silkscreen** (4 cr.)
- **ART 2310 Printmaking: Lithography** (4 cr.)
- **ART 2320 Printmaking: Intaglio** (4 cr.)
- **ART 2330 Printmaking: Relief** (4 cr.)
- **ART 2400 Introduction to Sculpture** (4 cr.)
- **ART 2410 Wood Sculpture** (4 cr.)
- **ART 2500 Ceramic Hand-Building** (4 cr.)
- **ART 2510 Ceramic Wheel-Throwing** (4 cr.)
- **ART 2520 Ceramic Tile** (4 cr.)
- **ART 2750 4D** (4 cr.)
- **ART 3010 Illustration** (4 cr.)
- **ART 3100 Studio Photography** (4 cr.)
- **ART 3110 Advanced Darkroom Photography** (4 cr.)
- **ART 3130 Advanced Color Photography** (4 cr.)
- **ART 3200 Advanced Drawing** (4 cr.)
- **ART 3230 Advanced Painting** (4 cr.)
- **ART 3300 Advanced Printmaking** (4 cr.)
- **ART 3400 Advanced Sculpture** (4 cr.)
- **ART 3500 Advanced Ceramics** (4 cr.)
- **ART 3700 Advanced 4D** (4 cr.)
- **ART 400T Advanced Topics in Studio Art** (4 cr.)
- **ART 4500 Independent Study in Studio Art** (4 cr.)

**Art Education Teaching Certification (K-12 Licensure)**

Students who intend to teach art in a school setting can obtain grades K-12 licensure from the Wisconsin Department of Public Instruction if they complete the following:

1. Complete all courses in the Studio Art major.

2. Complete all required education courses for the K-12 Art Education Licensure Program.

3. Successfully pass the Core Academic Skills for Educators test (waived with minimum ACT score of 23 with at least 20 on reading, English, and math, or SAT score composite of 1070 with a minimum of 450 in math and verbal). Contact the Education Department for registration information. Passing scores are: Reading 156, Writing 162, and Mathematics 150.

4. Maintain a cumulative 2.75 GPA for all postsecondary coursework (earned at all higher education institutions).

5. Apply for acceptance into the Teacher Education Program (TEP) sophomore year. Refer to the Education Department website at www.carthage.edu/education for specific requirements and the application for acceptance to the TEP.

6. Pass Praxis II.

7. Attend required student-teacher meeting and apply for acceptance into the Student Teaching Program junior year.

8. Successfully pass the Preliminary edTPA Portfolio the semester before student teaching.

9. Successfully complete the student teaching program.
Carthage 2021-2022 Catalog

Education and Society

To be eligible for student teaching, students must: a) complete pre-student teaching clinical experiences, b) pass the edTPA Preliminary Portfolio, c) pass the Praxis II exam in art, d) successfully complete a pre-student teaching interview, and e) maintain a minimum 2.75 cumulative GPA.

Please contact the Education Department for specific requirements and deadlines for acceptance to the student teaching semester.

The pre-student teaching clinical experiences are developmental in scope and sequence and will occur in a variety of settings with a balance of observation/teaching experiences at the elementary, middle, and secondary level.

To meet the clinical experience requirements, students must register and successfully complete all education courses requiring a pre-student teaching clinical experience.

Requirements:

Students will take the following courses before acceptance into the TEP (Teacher Education Program):

EDU 1010 Education and Society (4 cr.)
EDU 2010 Educational Psychology and Assessment (4 cr.)
EDU 2150 Creative Arts: Music and Art in Elementary and Middle Schools (4 cr.)

Students will take the following courses after they have been accepted into the TEP (Teacher Education Program):

EDU 2050 Teaching and Supporting Learners with Diverse Characteristics and Needs (4 cr.)
EDU 3520 Developmental and Content Area Reading (4 cr.)
ART 4210 Art Curriculum and Methods (K-5) (4 cr.)
ART 4220 Art Curriculum and Methods (6-12) (4 cr.)
EDU 4900 Student Teaching Seminar (12 cr.)

Art History Major

40 credits

Three years of foreign language study are recommended.

Required classes (12 cr.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARH 2700 Art Survey I: Paleolithic to 1400</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 2701 Art Survey II: 1400-21st Century</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 4700 Senior Seminar in Art History</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

Choose one course from the following list (4 cr.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ARH 2800 Research Methods in a Global Art History</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 3700 Research Methods in Art History</td>
<td>4 cr.</td>
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Choose three classes (12 cr.) from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ARH 2100 History of Photography: Daguerre to Digital</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 2710 Arts of the Americas</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 200T Topics in Art History</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 3550 Internship in Art History</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 3710 20th Century American Art</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 3720 Arts of Africa</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 3730 Masterpieces of Asian Art and Architecture</td>
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</tr>
<tr>
<td>ARH 3740 Modern Art</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 3750 Ancient Art</td>
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</tr>
<tr>
<td>ARH 3760 Women in the Arts</td>
<td>4 cr.</td>
</tr>
<tr>
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<td>4 cr.</td>
</tr>
<tr>
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<td>4 cr.</td>
</tr>
<tr>
<td>CDM 2620 Film Analysis</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 2600 New Media Theory and Aesthetics</td>
<td>4 cr.</td>
</tr>
<tr>
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</tr>
</tbody>
</table>

Choose one studio art class (ART) from below (4 cr.)

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>ART 1050 Crafts</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 1070 FOUNDATIONS, SURFACE: Images + Design</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 1071 FOUNDATIONS, MATERIAL: Objects + Space</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 1072 FOUNDATIONS, TIME: Movement + Digital</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 200* Topics in Studio Art</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 2000 Drawing I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 2110 Darkroom Photography</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 2130 Color Photography</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 2210 Oil Painting</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 2220 Acrylic Painting</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 2230 Watercolor Painting</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 2300 Printmaking: Silkscreen</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 2310 Printmaking: Lithography</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 2320 Printmaking: Intaglio</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 2330 Printmaking: Relief</td>
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</tr>
<tr>
<td>ART 2400 Introduction to Sculpture</td>
<td>4 cr.</td>
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<tr>
<td>ART 2410 Wood Sculpture</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 2500 Ceramic Hand-Building</td>
<td>4 cr.</td>
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<tr>
<td>ART 2510 Ceramic Wheel-Throwing</td>
<td>4 cr.</td>
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<tr>
<td>ART 2520 Ceramic Tile</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 2600 Sophomore Seminar in Art</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 3000 Advanced Drawing</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 3010 Illustration</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 3100 Studio Photography</td>
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<td>ART 3110 Advanced Darkroom Photography</td>
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<td>ART 3130 Advanced Color Photography</td>
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<td>ART 3200 Advanced Painting</td>
<td>4 cr.</td>
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<tr>
<td>ART 3300 Advanced Printmaking</td>
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<td>ART 3400 Advanced Sculpture</td>
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<tr>
<td>ART 3700 Advanced 4D</td>
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<td>ART 400* Advanced Topics in Studio Art</td>
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In consultation with advisor, choose two courses (8 cr.) from the following:

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<td>Course Name</td>
<td>Credits</td>
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<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>CLS 2200 Classical Archaeology</td>
<td>4 cr.</td>
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<tr>
<td>CLS 2300 Greek and Roman Art</td>
<td>4 cr.</td>
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<td>CLS 200T Topics in Classics</td>
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<td>CLS 3250 Field Archaeology</td>
<td>4 cr.</td>
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<td>CLS 400T Topics in Classics</td>
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<td>HIS 1000 Issues in American History</td>
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<td>HIS 1110 Issues in European History</td>
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<td>HIS 1120 Issues in European History II</td>
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<tr>
<td>HIS 1200 Issues in Asian History</td>
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<tr>
<td>HIS 3040 Modern Central America: Inevitable Revolutions</td>
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<td>HIS 1410 Issues in South America: Dictatorship and Democracy</td>
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<td>HIS 2150 Modern Britain</td>
<td>4 cr.</td>
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<td>HIS 2250 20th Century Europe</td>
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<td>HIS 2310 The Greeks</td>
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<tr>
<td>HIS 2350 The Romans</td>
<td>4 cr.</td>
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<tr>
<td>HIS 2620 America in the 1960s</td>
<td>4 cr.</td>
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<tr>
<td>HIS 200T Topics in History</td>
<td>4 cr.</td>
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<tr>
<td>HIS 2850 Comparative History: Chicago and Milwaukee</td>
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<tr>
<td>HIS 2900 20th Century U.S. History</td>
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<td>HIS 3100 The Age of Augustus</td>
<td>4 cr.</td>
</tr>
<tr>
<td>HIS 3400 Modern China</td>
<td>4 cr.</td>
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<tr>
<td>HIS 3450 Modern Japan</td>
<td>4 cr.</td>
</tr>
<tr>
<td>HIS 3990 Historiography</td>
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</table>

**Studio Art Minor**

*Total credits: 24*

Choose one course (4 cr.) from the following:

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<tr>
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<tr>
<td>ART 2000 Drawing I</td>
<td>4 cr.</td>
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Choose one course (4 cr.) from the following:

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<tbody>
<tr>
<td>ARH 1700 Introduction to Art History</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 2700 Art Survey I: Paleolithic to 1400</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 2701 Art Survey II: 1400 to 21st Century</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 2710 Arts of the Americas</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 3720 Arts of Africa</td>
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<tr>
<td>ARH 3730 Masterpieces of Asian Art and Architecture</td>
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Choose four courses (16 cr.) from the following. At least one must be at 3000+ level. Only one may be Art History (ARH):

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<td>ARH 2100 History of Photography: Daguerre to Digital</td>
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<td>ARH 2700 Art Survey I: Paleolithic to 1400</td>
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Total credits: 20

Required course (4 cr.)

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<td>ARH 2701 Art Survey II: 1400-21st Century</td>
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<td>ARH 200T Topics in Art History</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 3550 Internship</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 3720 Arts of Africa</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 3730 Masterpieces of Asian Art and Architecture</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 3740 Modern Art</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

Choose one course (4 cr.) from the following:

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARH 3750 Ancient Art</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 3760 Women in the Arts</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 4500 Independent Studies in Art History</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

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<th>Credits</th>
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<tr>
<td>ARH 3710 20th Century American Art</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 3740 Modern Art</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ARH 3750 Ancient Art</td>
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<tr>
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<tr>
<td>ARH 4500 Independent Studies in Art History</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>
**Art**

**ART 1070 FOUNDATIONS, SURFACE: Images + Design** (4 cr.)
**ART 1071 FOUNDATIONS, MATERIAL: Objects + Spaces** (4 cr.)
**ART 1072 FOUNDATIONS, TIME: Movement + Digital** (4 cr.)
**ART 2000 Drawing I** (4 cr.)

**History of the Arts Minor**

**Total Credits: 24**

Choose six courses (24 cr.) from below

- **ARH 2100 History of Photography** (4 cr.)
- **ARH 2700 Art Survey I: Paleolithic to 1400** (4 cr.)
- **ARH 2701 Art Survey II: 1400-21st Century** (4 cr.)
- **ARH 2710 Arts of the Americas** (4 cr.)
- **ARH 2800 Topics in Art History** (4 cr.)
- **ARH 3720 Arts of Africa** (4 cr.)
- **ARH 3730 Masterpieces of Asian Art and Architecture** (4 cr.)
- **ARH 3710 20th Century American Art** (4 cr.)
- **ARH 3740 Modern Art** (4 cr.)
- **ARH 3750 Ancient Art** (4 cr.)
- **ARH 3760 Women in the Arts** (4 cr.)
- **ARH 4500 Independent Studies in Art History** (4 cr.)
- **CDM 3450 Mass Communications** (4 cr.)
- **MUS 3060 Music History II** (4 cr.)
- **THR 3270 Classical Theatre Survey** (4 cr.)

**Requirements for the Photography Minor (24 credits)**

The Photography program provides a breadth of photography experience designed to allow students to build a range of photographic knowledge and skills. New digital photographic technology is juxtaposed with historical knowledge and processes giving students a range of art abilities as well as a historical context for their work. This focused study in photography allows students to develop an artist voice as well as professional skills for creating meaningful images. Students have the option to extend their photography skills into video and film.

Students must take 5 courses (20 cr.) from the list below.

- **ART 1070 FOUNDATIONS, SURFACE: Images + Design** (4 cr.)
- **ART 1072 FOUNDATIONS, TIME: Movement + Digital** (4 cr.)
- **ART 2750 4D (variable content)** (4 cr.)
- **ART 3110 Advanced Darkroom Photography** (4 cr.)
- **ART 3130 Advanced Color Photography** (4 cr.)
- **CDM 3500 Advanced Digital Photography** (4 cr.)
- **CDM/ART Topics Courses with Related Content** (4 cr.)
- **ART 3700 Advanced 4D** (4 cr.)
- **CDM 1900 Adobe Creative Cloud: Level Up** (4 cr.)
- **CDM 2650 Photographing Nature: Investigating Biodiversity and Conservation** (4 cr.)
- **CDM 2700 Film and New Media Production** (4 cr.)
- **CDM 2800 Exploring the Documentary Form** (4 cr.)
- **CDM 3500 Advanced Digital Photography** (4 cr.)
- **CDM 3550 Communication Internship as approved by instructor - must be photography based** (4 cr.)

Courses cannot be counted in more than one category. Variable content courses may be used in more than one category, but only if the topic/content is different.

**Requirements for the Film and New Media Minor (24 credits)**

The Film and New Media minor offers students opportunities in studio and production-based courses, film and new media theory, and associated history. The courses provide necessary techniques, skill sets, and critical theory to prepare students for an increasingly digital global landscape of media production and critique. In this minor, students may choose to pursue coursework that emphasizes the discipline of film (film production and screenwriting), the discipline of new media (video art, sound art, light, computational and interactive art, and other new media and time-based forms) or a combination of film and new media classes. Students have the option to enhance their image-making skills with photography and their new media development skills with computer science courses.

Required courses (16 cr.)

- **ART 1070 FOUNDATIONS, SURFACE: Images + Design** (4 cr.)
- **ART 2750 4D (variable content)** (4 cr.)
- **CDM 2600 New Media Theory and Aesthetics** (4 cr.)
- **CDM 2700 Film and New Media Production** (4 cr.)

Advanced or Extended Focus, select 1 course (4 cr.)

- **ART 3700 Advanced 4D** (4 cr.)
- **CDM 2730 Studies in Media Production** (4 cr.)
- **CDM 3320 Screenwriting** (4 cr.)
- **CDM 3950 Advanced Film and New Media Production** (4 cr.)

Electives, select 1 course (4 cr.)

- **ARH 2100 History of Photography: Daguerre to Digital** (4 cr.)
- **ART 1072 FOUNDATIONS, TIME: Movement + Digital** (4 cr.)
- **ART 2130 Color Photography** (4 cr.)
- **ART 2400 Introduction to Sculpture** (4 cr.)
- **ART 2750 4D** (4 cr.)
- **ART 3700 Advanced 4D** (4 cr.)
**ARH 1700**

*Introduction to Art History (FAR)*

4cr

This introductory art history course provides an intense chronological overview of artistic conventions from prehistoric cave painting to the 20th century. Students investigate not only what elements comprise a particular style, but also why and how artistic expression has been shaped by social, political, cultural, religious, and individual forces.

Prerequisite: None

Fall/Spring

**ARH 2700**

*Art Survey I: Paleolithic to 1400 (FAR)*

4cr

An introduction to a global history of art, from the Paleolithic to 1400.  
Prerequisite: None  
Fall

**ARH 2701**

*Art Survey II: 1400 - 21st Century (FAR)*

4cr

An introduction to a global history of art, from 1400 to the 21st century.  
Prerequisite: None  
Spring

**ARH 2710**

*Arts of the Americas (FAR)*

4 cr

An introduction to the indigenous art traditions of the Americas. This includes the Aztec, Maya, Inca, Amazon, and North American Indian traditions. The course content is primarily visual but will necessarily consider the historical, archaeological, social, and religious contexts of the works. The course will be of special interest to students studying history, religion, or Latin American culture. It is a dramatic and fabulously rich body of works that is a world apart from the Western European tradition, but as close to home as the dirt under our feet.  
Prerequisite: None  
Fall

**ARH 2800**

*Research Methods in a Global Art History (FAR)*

4cr

An introduction to resources and methods of research of non-Western art. The class gives an overview of types of evidence, methods of scholarship, and historiographies of a selection of non-Western art histories such as Chinese, Japanese, East African, Oceanic, and Indian. A case study approach, focusing on non-Western art, is used for practical exercises in research and writing.  
Prerequisite: None

**ARH 3150**

*Women in the Literary and Visual Arts (FAR)*

4cr

While doing library research on "women" for her guest lecture at Newnham and Girton colleges in 1928, the disconcerted Virginia Woolf learned that "it was impossible for any woman, past, present, or to come, to have the genius of Shakespeare . . . Cats do not go to heaven. Women cannot write the plays of Shakespeare." Women in the Literary and Visual Arts takes up that famous feminist's concern: WHY have there been no famous women artists? HAVE there been none? Now Women in the Literary and Visual Arts investigates women's artistic work alongside those cultural forces that have shaped it. The course begins by establishing the historical context for women's artistic expression. This includes the major events defining the moment in history and the material conditions that characterize it. Also included with each period will be some of those major voices that have achieved canonical status, as well as those women artists, writers, and performers who have been omitted from history.  
Prerequisite: None
<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Prerequisite(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARH 3155</td>
<td>Women in the Visual and Performing Arts (FAR)</td>
<td>4</td>
<td>Have there been any great women artists? Have there been ANY at all? This interdisciplinary Art History/Music/Women's and Gender Studies course examines artifactual evidence to discover not only those women and their activities that have fallen from historical record, but also to discover just what women have been doing from eight in the morning until eight at night, what historical conditions have shaped their activities, and what roles they have played as art and music makers, patrons, muses, and subjects. Consider Vinnie Ream Hoxie, our own Madison teenager who sculpted the famous Lincoln statue in the U.S. Capitol! Prerequisite: None</td>
<td></td>
</tr>
<tr>
<td>ARH 3710</td>
<td>20th Century American Art (FAR)</td>
<td>4</td>
<td>This course is intended to provide students with an in-depth understanding of the artistic, sociopolitical, philosophical, psychological, and spiritual forces that forged a distinctly American art in that century when the United States rose to prominence on the world stage. Students will be introduced to the language and methodologies of art, and they will engage with American art's quest for identity from its Gilded Age Eurocentric aspirations, through industry-driven modernism and Depression-era regionalism, to Cold War American heroes like Pollock and 60s superstars like Warhol. Our study will examine American art's role in the age of information, pluralism, and diversity, and conclude with America's postmodern identity crisis. Prerequisite: None</td>
<td></td>
</tr>
<tr>
<td>ARH 3720</td>
<td>Arts of Africa (FAR)</td>
<td>4</td>
<td>An introduction to the art traditions of Africa through the study of selected works. Ten thousand years of African art will be explored, up to and including the African diaspora. Prerequisite: None</td>
<td></td>
</tr>
<tr>
<td>ARH 3730</td>
<td>Masterpieces of Asian Art and Architecture (FAR)</td>
<td>4</td>
<td>Introduction to the art traditions and cultures of China, Japan, Korea, South and Southeast Asia, and the Near East through the study of selected works and their context. Special emphasis on art and architecture related to major religious and philosophic traditions including Hinduism, Buddhism, and Islam. Aesthetic systems will be explored in relation to key monuments. Prerequisite: None</td>
<td></td>
</tr>
<tr>
<td>ARH 3740</td>
<td>Modern Art (FAR)</td>
<td>4</td>
<td>Modern Art focuses on the arts of the 20th and 21st centuries, allowing students to engage with the artistic experimentation of their own era. This study of the arts, beginning with our Age of Anxiety, traces the competing and often rebellious styles of the Post Impressionists up through the Post Modernists. The course stimulates students to grapple with the question: What is art? Prerequisite: None</td>
<td></td>
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<tr>
<td>ARH 3750</td>
<td>Ancient Art (FAR)</td>
<td>4</td>
<td>Ancient art concentrates on the arts of prehistoric, preliterate, and ancient peoples, ending with the arts of the Romans to close the classical tradition. The course will be of interest to any student intrigued by the dynamic relationship between art, magic, ritual, myth, science, religion, and philosophy. Prerequisite: None</td>
<td></td>
</tr>
<tr>
<td>ARH 3760</td>
<td>Women in the Arts (FAR)</td>
<td>4</td>
<td>?WHY have there been no great women artists?? HAVE there been none? Prepare to be amazed! This course takes up Nochlin's famous question by examining artifacts from prehistory and surveying evidence of women's roles and creativity in the arts up through the present. Prerequisite: None</td>
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</tr>
<tr>
<td>ARH 4700</td>
<td>Senior Seminar in Art History</td>
<td>4</td>
<td>Senior Seminar provides the art history major with an opportunity to design and pursue a substantial research project in the field. Intensive independent work is required, culminating in a major paper and formal presentation. Prerequisites: ARH 2700, ARH 2701, and ARH 3700</td>
<td></td>
</tr>
</tbody>
</table>
ART 1030

Exploring Studio Art (FAR)
4cr
A study of design as the structural and unifying basis of the visual arts. Analysis of the elements of design and their use in solving two-dimensional and three-dimensional problems. Introduction to various media and techniques used in making art. A studio course containing theory and practice. Fulfills the fine art requirement for non-art majors only.
Prerequisite: None
Fall/Spring

ART 1050

Crafts (FAR)
4cr
Introductory analysis of the history and practice of various crafts. The course will focus on such areas as art metal, glass fusion, paper, fiber, and batik, depending on content in given terms.
Fall/Spring

ART 1070

FOUNDATIONS, SURFACE: Images + Design (FAR)
4cr
A studio-based course designed to cultivate a student's ability to understand and create images. Students will work fluidly across two-dimensional and three-dimensional processes and across material-based and digital-based projects. Projects will involve fundamental principles of design, color, and visual organization through drawing, printmaking, painting, fiber art, book arts, 3D media, technology, and lens-based media. Course content will explore the context of images in the larger culture and the potential of art and design to make inquiries into social, cultural, philosophical, scientific, political, or technological topics. Students will take projects through the creative design process, from ideation to construction, presentation, and critique.
Prerequisite: None
Fall/Spring

ART 1071

FOUNDATIONS, MATERIAL: Objects + Spaces (FAR)
4cr
An investigation of three-dimensional objects and spaces in art and design. Students will work fluidly across three-dimensional and four-dimensional processes and across material-based and digital-based projects. This studio course will cultivate a student's ability to perceive, think, visualize, design, build, and reflect. Students will acquire a broad skill set of fabrication techniques, working with traditional and 21st century materials, including paper, wood, wire, clay, plaster, mixed media, video, sound, digital 3D designs, and others. Through organizing visual and other sensory elements, students will learn formal and conceptual principles of three-dimensional design. Projects will emphasize which convey meaningful messages.
Prerequisite: None
Fall/Spring

ART 1072

FOUNDATIONS, TIME: Movement + Digital (FAR)
4cr
This course is a study of design fundamentals in time-based media, with emphasis on content. Students will explore the interactions of time through the lens and the tactile world, using video, sound, animation, performance, installation, and/or new media. Projects will be interdisciplinary in nature, with the combining of time-based media, for example performance art and video, installation art and sound. Through individual production, group projects, and critical discussion, students will examine the relationships between image, sound, linear and nonlinear narrative, time, and space.
Prerequisite: None
Fall/Spring

ART 2000

Drawing I (FAR)
4cr
This foundational studio course introduces students to basic drawing techniques and media. Focusing on observational drawing, students learn to create naturalistic images and the illusion of three-dimensional space on a two-dimensional page. In addition, students are exposed to great artists and drawings through history, critique, and art theory.
Prerequisite: None
Fall/Spring

ART 2110

Darkroom Photography (FAR)
4cr
This course focuses on the camera as a tool of expression and photography as a basic art form. Darkroom techniques will be taught, and each student will acquire the compositional and technical skills necessary to create original photographs. Students are required to have their own cameras.
Prerequisite: None
Fall/Spring

ART 2130

Color Photography (FAR)
4cr
Students will explore the conceptual, aesthetic, historical, and technical aspects of color photography as an art medium. Students will use DSLR cameras and the contemporary process of digital photography to produce work that is both visually engaging and conceptually challenging. The course will culminate in a portfolio of works that thoroughly explores an area of interest with technical proficiency. Students are required to have their own cameras.
Prerequisite: None
ART 2210

Oil Painting (FAR)
4cr
A beginning course in oil painting with emphasis on developing skills and techniques particular to the oil paint medium. Color theory and inventive compositional strategies based on the study of traditional and contemporary painters will be investigated. Individual attention will be given to discovery of personal artistic voice in the medium. Paintings will be based on both direct observation and the imagination. Oil painting is a studio course containing lecture, demonstrations, discussions, and theory.

ART 2220

Acrylic Painting (FAR)
4cr
A beginning course in acrylic painting with emphasis on developing skills and techniques particular to the acrylic paint medium. Color theory and inventive compositional strategies based on study of modern and contemporary painters will be investigated. Individual attention will be given to discovery of personal artistic voice in the medium. Paintings will be based on both direct observation and the imagination. Acrylic painting is a beginning studio course containing lecture, demonstrations, discussions, and theory. Prerequisite: None

ART 2230

Watercolor Painting (FAR)
4cr
A beginning course in watercolor painting with emphasis on developing skills and techniques particular to the watercolor medium. Color theory, particularly as it relates to watercolor, will be introduced. Transparency, granularity, and permanence will be discussed as well as various watercolor mediums. Individual attention will be given to discovery of personal artistic voice in the medium. Paintings will be based on both direct observation and the imagination. Watercolor Painting is a studio course containing lecture, demonstrations, discussions, and theory. Prerequisite: None

ART 2300

Printmaking: Silkscreen (FAR)
4cr
This studio course introduces the theory, practice, and history of silkscreen printmaking. Direct stencil production, resist methods, and photographic methods will be studied. Students will be encouraged to engage the printmaking process as a means of discovery as they learn to master traditional practices. Prerequisite: None

ART 2310

Printmaking: Lithography (FAR)
4cr
This studio course introduces the theory, practice, and history of lithography as a fine art printmaking medium. Traditional stone lithography and more recent paper plate processes will be studied. Students will be encouraged to engage the printmaking process as a means of discovery as they learn to master traditional practices. Prerequisite: None

ART 2320

Printmaking: Intaglio (FAR)
4cr
This studio course introduces the theory, practice, and history of intaglio printmaking. Etching, engraving, drypoint, and mezzotint will be covered. Students will be encouraged to engage the printmaking process as a means of discovery as they learn to master traditional practices.

ART 2330

Printmaking: Relief (FAR)
4cr
This studio course introduces the theory, practice, and history of relief printmaking. Traditional woodcut and wood engraving as well as linoleum, collagraph, and new materials will be explored. Students will be encouraged to engage the printmaking process as a means of discovery as they learn to master traditional practices. Prerequisite: None

ART 2400

Introduction to Sculpture (FAR)
4cr
This studio course explores traditional and contemporary sculpture materials and processes. Emphasis is on both additive and subtractive methods of working. Goals include acquiring technical skills, understanding the physical and expressive possibilities of diverse materials, and learning safe, appropriate use of tools. Students can anticipate working with wood, clay, stone, metal, and other materials. Prerequisite: None

ART 2410

Wood Sculpture (FAR)
4cr
Students investigate techniques and concepts in wood sculpture leading to individual exploration and development. Students will work in a variety of types of wood, using hand and power tools and learning the related health/safety of the tools and woodshop. The projects will address a series of problems based on both traditional themes and contemporary developments in sculpture. Discussions and critiques will support students' learning process. Prerequisite: None
ART 2500

Ceramic Hand-Building (FAR)

4cr
Introduction to ceramic hand-building techniques, ceramic sculpture, and basic ceramic processes including clay and glaze formulation and kiln firing.
Prerequisite: None
Fall/Spring

ART 2510

Ceramic Wheel-Throwing (FAR)

4cr
Introduction to ceramic wheel-throwing techniques, functional pottery, sculpture, and basic ceramic processes including clay and glaze formulation and kiln firing.

ART 2520

Ceramic Tile (FAR)

4cr
The objective of this course is to develop technical and conceptual skills for ceramic tile and brick making using fundamental hand-building and mold-making techniques. All projects have historical and/or conceptual components and require research, planning, development of ideas, and good craftsmanship. Formal, historical, and conceptual components of architectural ceramics will be explored. Working in both two and three dimensions, flat tiles, low- and high-relief tiles, and brick will be created. In addition, projects will investigate how abstract and representational images and patterns can be designed across multiple pieces. Composition, rhythm, and repetition will be a major focus.
Prerequisite: None
Fall/Spring

ART 2600

Sophomore Seminar in Studio Art

4cr
A combination writing-intensive seminar and studio art course introducing basic and intermediate art concepts and skills, including the writing and speaking skills necessary for discussion and critique of visual art. Through readings and discussions, students will be introduced to contemporary artists, movements, criticism, and theory. Students will also be introduced to studio and professional art practices necessary for careers and further study in the arts.
Prerequisite: None
Spring

ART 2750

4D (FAR)

4cr
Time, space, and technology are fundamental in contemporary art practice. This course will be an introduction to the process of making art by utilizing technology and transaction among people, objects, locations, and situations. Through studio assignments, screenings, readings, lectures, discussion, and/or workshops, students will be introduced to contemporary time-based art practices. Depending on the specific topic offered, this will include video, sound art, performance art, installation, light, experimental film, social practice, web-based, and/or new media.
Prerequisite: None

ART 3000

Advanced Drawing (FAR)

4cr
Advanced drawing with emphasis on the human figure. A studio art course containing theory and practice. Emphasis is on projects that focus on self-portraits, working from models and narrative/figure assignments as part of the development of individual style. A studio art course containing lectures, demonstrations, theory, and practice.
Prerequisite: Art 2000
Fall/Spring

ART 3010

Illustration (FAR)

4cr
Illustration is an applied art that communicates specific content through image making. Drawing is emphasized as both a practice and a discipline in illustration. A variety of narrative approaches will be introduced with an emphasis on individuality of expression. Introduction to various media is based on class projects. The goal of the course projects will be to communicate ideas for commercial reproduction resulting in a varied portfolio of finished works. A studio art course containing lectures, demonstrations, theory, and practice. Previous drawing experience is highly suggested.
Prerequisite: None

ART 3100

Studio Photography (FAR)

4cr
An introduction to the use of large format view cameras. Technical instruction includes the use of the camera, lighting equipment, film handling, exposure procedures, film development, and printing.
Prerequisite: ARH 2100

ART 3110

Advanced Darkroom Photography (FAR)

4cr
Advanced studio work in photography. Emphasis is placed upon darkroom photography as a creative and expressive medium and is taught from a fine arts perspective. In addition to the technical issues of image-making, the content, aesthetics, and formal qualities of the photographic image are explored. A 35mm camera with manual exposure capabilities is required. This course may be repeated up to three times. This class may be used as an elective in majors and minors in art.
Prerequisite: ART 2110
<table>
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<th>Credits</th>
<th>Description</th>
<th>Prerequisites/Notes</th>
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<tr>
<td>ART 3130</td>
<td>Advanced Color Photography</td>
<td>4cr</td>
<td>In this course, students will create an in-depth portfolio of photographic works that demonstrates technical proficiency, thorough historical knowledge, and advanced understanding of the aesthetic and formal concerns in photography. This course will emphasize content development and maximizing the creative and expressive potential of digital color photography. Students are required to have their own digital SLR camera with manual controls. Prerequisite: ART 2130 or CDM 2500</td>
<td></td>
</tr>
<tr>
<td>ART 3200</td>
<td>Advanced Painting</td>
<td>4cr</td>
<td>Advanced studio work in painting with an emphasis on individual work and the formulation of individual language. Independent exploration in areas of interest is highly encouraged within the parameters of class assignments. This course may be repeated up to three times to encompass all media: oil, acrylic, mixed media, and watercolor. Prerequisite: ART 2210, ART 2220, or ART 2230 Fall/Spring</td>
<td></td>
</tr>
<tr>
<td>ART 3300</td>
<td>Advanced Printmaking</td>
<td>4cr</td>
<td>Advanced studio work in printmaking with an emphasis on individual work and the formulation of a personal visual language. This course may be repeated up to three times. Prerequisite: Consent of instructor Fall/Spring</td>
<td></td>
</tr>
<tr>
<td>ART 3310</td>
<td>Graphic Production Techniques</td>
<td>4cr</td>
<td>Camera-ready layout will be reproduced through serigraphic printing techniques. A studio art course containing theory and practice. Prerequisite: Consent of instructor Fall</td>
<td></td>
</tr>
<tr>
<td>ART 3400</td>
<td>Advanced Sculpture</td>
<td>4cr</td>
<td>Advanced studio work in sculpture. Emphasis is on mastery of sculpture's materials and techniques and the interaction of concept and form. Individual and collaborative projects may include working with time, motion, and site-specific installation as well as more traditional freestanding works. This course may be repeated up to three times. Prerequisite: None</td>
<td></td>
</tr>
<tr>
<td>ART 3500</td>
<td>Advanced Ceramics</td>
<td>4cr</td>
<td>Advanced studio work in ceramics with an emphasis on individual work and the formulation of a personal visual language. Students may meet with other ceramics sections. This course may be repeated up to three times. Prerequisite: ART 2500 or 2510 Fall/Spring</td>
<td></td>
</tr>
<tr>
<td>ART 3700</td>
<td>Advanced 4D</td>
<td>4cr</td>
<td>Advanced studio work in time-based media, emphasizing individual production in one or more of these areas: video, sound art, performance art, installation, light, experimental film, social practice, web-based, and/or new media. Students will refine their aesthetic, conceptual and technical skills through individual projects and continued study of the expanding critical role time-based media has in contemporary art and society. This course may be repeated up to three times. Prerequisites: ART 2750</td>
<td></td>
</tr>
<tr>
<td>ART 4000</td>
<td>Senior Seminar in Studio Art</td>
<td>4cr</td>
<td>Senior Seminar in Studio Art provides the Studio Art major with an opportunity to create and install a capstone senior exhibition. The course focuses on development of personal artistic voice and critical ability with an awareness of contemporary artists and theory. Along with their artwork, students will exit the course with an artist statement, portfolio, resume, and website. Prerequisites: Completion of four studio courses, junior review, and consent of instructor Fall</td>
<td></td>
</tr>
</tbody>
</table>
Asian Studies

ART 4210

Art Curriculum and Methods:
Early Childhood Through Early Adolescent (K-5) (FAR)

4cr
Candidates will learn techniques that they can use with elementary students to help them create elementary works of art as well as form an appreciation for art. Emphasis will be placed on applying the National Visual Arts Standards K through 8 (developed by the National Art Education Association) to lesson plans. Candidates will explore methods for motivating, creating, and evaluating elementary students’ artwork, as well as methods for integrating art across all disciplines. Candidates will plan and implement art lesson plans in local elementary schools for their field experience requirement. Prerequisites: Acceptance into the TEP and EDU 2150

ART 4220

Art Curriculum and Methods:
Early Adolescent Through Adolescent (6-12)(FAR)

4cr
Candidates will learn techniques that they can use with middle and secondary school students to guide their artistic development and enable them to create works of art, as well as form an appreciation for art and art history. Emphasis will be placed on applying the National Visual Arts Standards 6?12 (developed by the National Art Education Association) to lesson plans. Candidates will explore methods for motivating, creating, and evaluating middle and secondary students’ artwork. Candidates will plan and implement art lesson plans in local middle and/or secondary schools for their field experience requirement. Prerequisites: Admission into the TEP and EDU 2150

Asian Studies

Asian Studies at Carthage is an interdisciplinary program that broadly trains students in several critical and methodological approaches to the study of Asia. We assist our students in developing linguistic, cultural, and disciplinary competencies in fields as diverse as modern languages, biology, history, religion, geography, and others. These constantly evolving competencies are learned and practiced within the specific geographical context of Asia, preparing our majors and minors for a diverse array of careers involving Asia. Our graduates are working in many fields and industries in both the United States and Asia, while others have won competitive national scholarships, such as the Fulbright Fellowship, enabling them to deepen their studies in Asia.

Major:
The Asian Studies major offers two tracks: the Language track and the Culture track. Each track consists of 40 credits and shares two core courses (8 cr.): ASN 1000 Introduction to Asian Studies and ASN 4000 Senior Seminar in Asian Studies. In addition to these core courses, the Language track requires students to take 16 credits in either Japanese OR Chinese language. The remaining 16 credits must be drawn from at least three (3) different academic departments. These 16 credits must be selected from the list below, or approved by the Director of Asian Studies. In addition to the core courses, the Culture track requires 8 credits in either Japanese OR Chinese language. The remaining 24 credits must be drawn from at least three (3) different academic departments. These 24 credits must be selected from the list below, or approved by the Director of Asian Studies.

Minor:
The minor consists of 24 credits. Students are required to take ASN 1000 Introduction to Asian Studies and five (5) other courses (20 cr.) from the list below. These six courses must be from at least three departments and selected from the list below.

Art Department
ARH 3730 Masterpieces of Asian Art and Architecture (4 cr.)

Economics Department
ECN 200* Topics in Economics (4 cr.)
when the course has substantial Asian content
ECN 3100 Political Economy of East Asia (4 cr.)
ECN 4030 International Political Economy (4 cr.)

Geospatial Science Department
GEO 2800 Geography of East Asia (4 cr.)

History Department
HIS 1200 Issues in Asian History (4 cr.)
HIS 2450 A Social History of 20th Century Japan Through Film (4 cr.)
HIS 3400 Modern China (4 cr.)
HIS 3450 Modern Japan (4 cr.)

Modern Languages Department
CHN 2070 Calligraphy and Chinese/Japanese Language (4 cr.)
CHN 3070 Chinese/Japanese Culture and Language (4 cr.)
CHN 3080 Chinese and Japanese Literature and Culture (4 cr.)
JPN 2070 Calligraphy and Chinese/Japanese Language (4 cr.)
JPN 3070 Chinese/Japanese Culture and Language (4 cr.)
JPN 3080 Chinese and Japanese Literature and Culture (4 cr.)
MLA 2450 A Social History of 20th Century Japan Through Film (4 cr.)

Political Science Department
POL 1030 Introduction to Comparative Politics (4 cr.)
when the course has substantial Asian content
POL 200* Topics in Political Science (4 cr.)
when the course has substantial Asian content
POL 3390 Politics of Rapid Growth in East Asia (4 cr.)

Religion Department
REL 3110 Hinduism (4 cr.)
REL 3120 Islam (4 cr.)
REL 3130 Buddhism (4 cr.)
REL 3140 East Asian Religions (4 cr.)
REL 3360 Religion and Society in Modern India (4 cr.)
REL 3500 Shared Sages in Sacred Scriptures (4 cr.)
### Biology

Biology majors select a sequence of courses that will acquaint them with the structure, function, development, genetics, and molecular biology of a variety of organisms: viruses, bacteria, fungi, protists, plants, and animals.

The biology curriculum prepares students for graduate study and entry into medical, veterinary, dental, physical therapy, and other professional schools. In addition, graduates may pursue careers in secondary education, academic and industrial research, quality assurance, forensic science, and a variety of not-for-profit and governmental, environmental, and conservation areas.

Students seeking teaching licensure in biology are advised to meet with the department chair of biology, a representative of the Education Department, and their advisor to ensure that all requirements for the appropriate state licensure are met.

The department also offers several courses designed to serve students with a general interest in biology who do not plan to major in biology. BIO 1030 Conservation for Educators focuses on issues important to humans and their environment. BIO 1040 Human Anatomy and Physiology provides a strong background in the basic structure and function of humans.

In addition to standard courses, a student may elect to pursue BIO 4500 Independent Study in Biology or BIO 4900 Research in Biology on a selected topic. The study may develop into a Senior Thesis and/or Honors in the Major.

Courses designed for nonscience majors: BIO 1010, 1011, 1012, 1020, 1030, 1040, 200T, 2500, 2650, and 2810.

#### Biology Major

A major in biology consists of the following courses:

**Core Courses (20 cr.):**

- BIO 1110 Molecules, Cells, and Organisms (4 cr.)
- BIO 1120 Organisms, Populations, and Systems (4 cr.)
- BIO 2100 Reflections in Biology (4 cr.)
- BIO 2400 Genetics (4 cr.)
- BIO 4120 Senior Seminar in Biology (4 cr.)

Students majoring in Biology will also be required to take 4 upper-level (3000 or 4000) level courses (16 cr.), not including Bio 4120 (Senior Seminar). One of these upper-level courses must be taken from each of the three Discipline Areas of Biology, which are 1. Cellular and Molecular Biology, 2. Organismal Biology, and 3. Ecological Biology. The fourth upper-level Biology course may be taken from any of the three Discipline Areas, or from additional upper-level courses that do not fit into a Discipline Area such as CHM 3010 Biochemistry, NEU 3950 Neuroscience II, BIO 4100 Biostatistics and Experimental Design, BIO 4900 Research in Biology, or any 400-level Topics in Biology course.

**Required Chemistry Courses (16 cr.):**

- CHM 1010 General Chemistry I (4 cr.)
- CHM 1020 General Chemistry II (4 cr.)
- CHM 2070 Organic Chemistry I (4 cr.)
- CHM 2080 Organic Chemistry II (4 cr.)

**The following courses will not count for credit toward a biology major: BIO 1010, 1011, 1012, 1020, 1030, 1040, 2500, 2650, 2810, and 200T.**

#### Discipline Area Courses

**Cellular and Molecular Biology:**

- BIO 3340 Microbiology (4 cr.)
- BIO 3500 Advanced Cell Biology (4 cr.)
- BIO 4300 Immunology (4 cr.)
- BIO 4310 Developmental Biology (4 cr.)
- BIO 4320 Recombinant DNA Technology (4 cr.)
- BIO 4400 Molecular Biology of Cancer (4 cr.)

**Organismal Biology:**

- BIO 3050 Plant Physiology (4 cr.)
- BIO 3300 Advanced Human Anatomical Systems (4 cr.)
- BIO 3310 Advanced Human Physiological Systems (4 cr.)
- BIO 3320 Entomology (4 cr.)
- BIO 3330 Comparative Anatomy of Vertebrates (4 cr.)
- BIO 3350 Parasitology (4 cr.)
- BIO 4350 Dinosaur Evolution and Extinction (4 cr.)

**Ecological Biology:**

- BIO 3100 General Ecology (4 cr.)
- BIO 3200 Aquatic Ecology (4 cr.)
- BIO 3210 Animal Behavior (4 cr.)
- BIO 4200 Advanced Ecology (4 cr.)

**Other Advanced Course Elective Options:**

- CHM 3010 Biochemistry (4 cr.)
- NEU 3950 Neuroscience II: Cellular and Molecular Neuroscience (4 cr.)
- BIO 4100 Biostatistics and Experimental Design (4 cr.)
- BIO 4900 Research in Biology (4 cr.)
- BIO 400T Advanced Topics in Biology (4 cr.)

#### Biology Minor

A minor in biology consists of six courses in biology, or five courses in biology plus CHM 3010.

Note: Medical Terminology Topics course is excluded from the biology minor.

#### Senior Thesis in Biology

The Senior Thesis is developed in consultation with the department faculty in BIO 4120.

#### Honors in the Major

Honors in biology requires a 3.5 GPA in
biology, an outstanding written and oral presentation of the Senior Thesis project to the public and a panel of Biology Department faculty, and a formal recommendation from the Biology Department.

**BIO 1010**  
**Concepts in Biology (LAB SCI)**  
4cr  
A study of life phenomena with focus on macromolecules, cells, inheritance, and the structure and function of bacteria and plants. Lecture and laboratory. This course does not count toward the biology major.  
Prerequisite: None  
Fall/Spring

**BIO 1011**  
**Exploring Climate Change (LAB SCI)**  
4cr  
This course explores the science of global climate change, focusing primarily on biology. Students will study the effects of climate change on organisms and ecosystems as well as the role living organisms play in maintaining the global climate. Implications of climate science for public policy will also be examined. Lecture and laboratory.  
Alternating Spring

**BIO 1012**  
**Exploring Evolution (LAB)**  
4cr  
This course explores the contemporary applications and historical development of the scientific theory of evolution by natural selection, which underlies much of modern biology. In addition to exploring how scientific knowledge is developed through a rigorous process of experimentation, contemporary applications of the theory will be studied (applying evolutionary science to understand and combat infectious disease, improve agricultural yields to feed a growing population, etc.). The application of evolutionary concepts to other fields of study will also be explored. This course is intended for non-majors seeking to fulfill general education requirements.

**BIO 1020**  
**Plants and People (LAB SCI)**  
4cr  
Fundamentals of growth and development of plants with special reference to the history and social influence of cultivated plants. Designed for the nonscience major. This course does not count toward the biology major. Lecture and laboratory.  
Prerequisite: None  
Spring

**BIO 1030**  
**Conservation for Educators (LAB SCI)**  
4cr  
A survey of principles and problems in conservation, the historical and ecological backgrounds to these, and how they have impacted public and private stewardship of natural resources. This course does not count toward the biology major. Lecture, laboratory, and field trips.  
Prerequisite: None  
Spring

**BIO 1040**  
**Human Anatomy and Physiology (LAB SCI)**  
4cr  
A study of structure and function of organs and systems of the human body. This course is designed for students interested in Exercise and Sport Science or Dance, or those looking to fulfill the general education lab science requirement. This course does not count toward the biology major. Lecture and laboratory.  
Fall/Spring

**BIO 1051**  
**Phage Hunters II (LAB SCI)**  
4cr  
The Phage Hunters II bioinformatics course is a lecture/lab combined course. Research will focus on annotation of a bacteriophage genome using up-to-date bioinformatics tools. Students will compare their bacteriophage genome to other sequenced genomes and look for relationships between their phage and other phages species. Culmination of the project will result in presentation of their findings in a scientific manner.  
Prerequisite: BIO 1110 with a C or higher or instructor permission

**BIO 1110**  
**Molecules, Cells, and Organisms (LAB SCI)**  
4cr  
This course is a lecture/lab combined course that provides first-year biology majors with hands-on original research experience. The research focus will reflect the expertise of the faculty member and contribute to ongoing authentic research. The course will cover biological content from molecules, cells, and whole organisms within an evolutionary framework; research skills appropriate to the research focus; the generation and analysis of data; and presentation of the results for the larger scientific community. The content includes topics such as molecular structures and characteristics, cellular components and functions, gene expression, energy capture and transformation, homeostasis, repair, reproduction, and processes of evolution at these scales.  
Prerequisite: This course is intended for biology majors. Students can take BIO 1110 and BIO 1120 in any order, but cannot enroll concurrently.
BIO 1120

Organisms, Populations, and Systems (LAB SCI)

4cr
This course is a lecture/lab combined course that provides first-year biology majors with a hands-on original research experience. The research focus will reflect the expertise of the faculty member and contribute to ongoing authentic research. The course will cover biological content from whole organisms, populations, and systems within an evolutionary framework; research skills appropriate to the research focus; the generation and analysis of data; and presentation of the results for the larger scientific community. The content includes topics such as the diversity of biological organisms, organismal structure and physiology, interactions among organisms and their environments, the integration of biological systems, and the processes of evolution at these scales. Prerequisite: This course is intended for biology majors. Students can take BIO 1110 and BIO 1120 in any order, but cannot enroll concurrently.

BIO 2010

Human Anatomy and Physiology for the Health Professional I (LAB SCI)

4cr
This course, the first in a two-part sequence, is designed to allow the learner to explore foundational concepts of human anatomy and physiology. The course emphasizes the integration of anatomical structure with physiologic function and processes. This course does not count toward the biology major and is not designed for BIO, NEU, or CHM majors. This course includes a laboratory. Prerequisite: None

BIO 2020

Human Anatomy and Physiology for the Health Professional II (LAB SCI)

4cr
This course, the second in a two-part sequence, is designed to allow the learner to explore foundational concepts of human anatomy and physiology, focusing on the selected body systems. The course emphasizes the integration of anatomical structure with physiologic function and processes. This course does not count toward the biology major and is not designed for BIO, NEU, or CHM majors. This course includes a laboratory. Prerequisite: BIO 2010 with a C- or higher

BIO 2100

Reflections in Biology

4cr
This seminar will facilitate the development of a personal framework for shaping and reflecting on one's experiences as a biology major, and for constructing a path of study relevant to one's anticipated goals. Participants will meet with biology faculty members, learn about departmental resources and opportunities, join in discussions with invited speakers, explore the breadth of preparatory and career options, and reflect on the societal value of biological vocations. This course is intended for students within the BIO Major to be taken during their second year. Prerequisite: Biology Major

BIO 2330

Vertebrate Field Paleontology (LAB SCI)

4cr
This is a summer course designed to provide students with firsthand experience of vertebrate paleontology fieldwork in eastern Montana in July. Students will learn about sedimentation, fossils, taphonomy, erosional and depositional processes, quarrying, making field jackets, collecting stratigraphic and quarry data, microvertebrate site collection, screenwashing, how to use a GPS, and other practical tools of the trade. Prerequisite: None

BIO 2400

Genetics (LAB SCI)

4cr
A study of Mendel's concepts of particulate inheritance, recent advances regarding the physical nature of the hereditary material, and genetic variation in populations. The genetic basis of biological individuality is explored, with emphasis on the molecular basis of genetic variation. Lecture and laboratory. Prerequisites: BIO 1110 and BIO 1120 with at least a C- or higher

BIO 2500

Medical Ethnobotany (NLAB)

4cr
A study of the way plant products have been used as drugs to treat disease and modify human physiology in various cultural and historical settings. This course does not count toward the biology major. Lecture. Prerequisite: None
BIO 2650

Photographing Nature: Investigating Biodiversity and Conservation (NLAB)

4cr
This course introduces the student to the use of digital photography to explore plant and animal species and their habitats. The course begins with instruction in digital photography, and then moves outside where students will focus on organisms, learning to photograph them while exploring their biology. Photography will be used to engage students in making detailed observations and beginning the process of scientific discovery. After learning about species, their ecological interactions, and conservation, students will complete a final project that utilizes visual imagery to educate others about the value of biodiversity, ecology, and/or conservation issues. This course does not count toward the biology major.
Prerequisite: None

BIO 2810

Geography and Biology of China (NLAB)

4cr
Throughout China's history, the relationship between humans and the native plant and animal communities has fueled the growth of civilizations and created new ecological challenges. This course aims to present students with geographical and biological perspectives to help them understand how the Chinese people have been interacting with their environment through time and across a vast country. This course does not count toward the biology major.
Prerequisite: None

BIO 3050

Plant Physiology (LAB SCI)

4cr
The scientific study of plants with a focus on how the structure and function of plants enable these organisms to respond dynamically to a wide variety of environments. Lecture and laboratory.
Prerequisite: BIO 2400 with at least a C- or higher.
Spring

BIO 3100

General Ecology

4cr
An ecology course focused on exploring modern-day approaches to quantifying behavioral and species interactions, understanding evolutionary adaptations, and correlating biotic and abiotic factors that affect species distribution. Lecture and laboratory.
Prerequisites: BIO 1110 and BIO 1120, or ENV 1000 with a C- or higher

BIO 3200

Aquatic Ecology (LAB SCI)

4cr
A study of the interactions between the physical, chemical, and biological components of lakes and streams with an emphasis on macroinvertebrates. Lecture, laboratory, and field trips.
Prerequisites: BIO 1110 and BIO 1120 with a C- or higher, or ENV 1000 with a C- or higher

BIO 3210

Animal Behavior (LAB SCI)

4cr
An examination of the interactions of organisms with their environment, specifically responses to various environmental stimuli. The physiology, development, evolution, and adaptive nature of behaviors, including human behavior, will be addressed. Lecture and laboratory.
Prerequisites: BIO 1110 and BIO 1120 with a C- or higher, or ENV 1000 with a C- or higher

BIO 3300

Advanced Human Anatomical Systems (LAB SCI)

4cr
This course is an advanced examination of structure as it relates to the organization of tissues, organs, and systems of the human body. This includes a study of human structure and its functional adaptation to changing environments. This course is designed for students who want to pursue a career in health care or graduate school who are Biology, Neuroscience, or pre-Pharmacy Chemistry majors. This course covers more material at greater depth than either BIO 2010 or BIO 2020. Lecture and laboratory.
Prerequisites: BIO 1110 and BIO 1120 with a C- or higher

BIO 3310

Advanced Human Physiological Systems (LAB SCI)

4cr
A systemic approach to the study of human physiology. This includes the fundamental regulatory mechanisms associated with homeostatic functions of major body systems. This course is designed for students who want to pursue a career in health care or graduate school, who are Biology, Neuroscience, or pre-Pharmacy Chemistry majors. The course covers more material at greater depth than either BIO 2010 or BIO 2020. Lecture and laboratory.
Prerequisites: BIO 1110 and BIO 1120 with a C- or higher

Spring
BIO 3320

Entomology (LAB SCI)

4cr
A study of the structure, function, life cycles, economic impact, and taxonomic classification and identification of arthropods, with an emphasis on insects. Lecture, laboratory, field trips, and insect collection. Prerequisites: BIO 1110 and BIO 1120 with a C- or higher, or ENV 1000 with a C- or higher Fall

BIO 3330

Comparative Anatomy of Vertebrates (LAB SCI)

4cr
A study of structural, functional, and phylogenetic relationships among the chordates, particularly the vertebrates. Lecture and laboratory. Prerequisites: BIO 1110 and BIO 1120 with a C- or higher Fall

BIO 3340

Microbiology (LAB SCI)

4cr
An introduction to microorganisms and how microbes interact with their environment, with emphasis on microbial-human interactions. A variety of techniques used in research and clinical microbiology laboratories will be utilized. Lecture and laboratory. Prerequisite: BIO 2400 with a C- or higher Fall

BIO 3350

Parasitology (LAB SCI)

4cr
A survey of symbiotic relationships in humankind and animals, with emphasis on animal parasites causing harm, and evaluation of humankind's efforts throughout history at combating parasites. Lecture and laboratory. Prerequisite: BIO 2400 with a C- or higher Fall

BIO 3400

Conservation Science

4cr
The multidisciplinary science of conservation focuses on the preservation of biological species and ecosystems. This course examines several aspects of conservation science, including the documentation and classification of the full breadth of biological diversity on earth; the assessment of the health of species populations; the impact of human activities on species, communities, and ecosystems; and strategies for preserving, protecting, and/or restoring species, habitats, communities, and ecosystem services. The course introduces students to research techniques, including both quantitative and qualitative assessments while exploring contemporary issues in conservation science. Students will also be exposed to a variety of career options for conservation professionals. Prerequisite: BIO 1120 or ENV 1000

BIO 3450

Bioinformatics: Phage Hunters II

4cr
The Phage Hunters II bioinformatics course is a lecture/lab combined course focused on utilizing bioinformatics techniques as part of an authentic research project. Research will involve annotation of a bacteriophage genome using up-to-date bioinformatics tools. Students will compare data about their bacteriophage genome to other sequenced genomes and will design and complete independent research projects related to the phages being studied. Culmination of the research will result in presentation of their findings in a scientific manner. Prerequisite: BIO 1110 with a C or higher Fall

BIO 3500

Advanced Cell Biology

4cr
Cells are the fundamental units of all living organisms. Recent advances in cell and molecular biology have facilitated examination of the complex processes occurring within these dynamic structures and have led to an in-depth understanding of diseases such as cancer. Advanced Cell Biology is a lecture and laboratory course exploring the concepts and techniques in this exciting area in biology. The structure and function of molecules and cells is explored through interactive lectures, research experiments, and in-class activities such as case studies. Discussion of primary literature articles and data interpretation is emphasized. Techniques such as microscopy, image analysis, tissue culture, flow cytometry, and electrophoresis are used to understand the structure, characteristics, and function of molecules and cells. Prerequisites: BIO 1110 and BIO 1120 with a C- or higher in both Fall

BIO 4100

Biostatistics and Experimental Design

4cr
An introduction to the techniques necessary to design and carry out original research in biology. Students will focus on the proper use of statistics in analyzing results and how to model an experimental system. Lecture. Prerequisites: Junior standing and 16 credits in biology Spring

BIO 4120

Senior Seminar in Biology

4cr
Students will write and successfully present research results to a broad audience. The course culminates in a completed Senior Thesis. This course is intended to be taken by BIO Majors during their senior year. Lecture. Fall
BIO 4150

Field Botany and Mycology
4cr
A field study of the plants and fungi of Wisconsin, emphasizing methods of identification, characteristics of major lineages, and plant and fungal ecology and conservation. Labs will consist of field trips to local natural areas, and will introduce students to the plant and fungal species of the region, their habitats, and relationship to other species. Occasional weekend field trips may be required.
Prerequisite: ENV 1000 or BIO 1120

BIO 4200

Advanced Ecology (LAB SCI)
4cr
An examination of the relationships between organisms in their environments stressing quantitative methods of data collection and analysis and a more thorough examination of the theoretical basis of ecology. Lecture, laboratory, and field trips.
Prerequisites: BIO 1110 and BIO 1120 with a C- or higher, or ENV 1000 with a C- or higher

BIO 4300

Immunology (LAB SCI)
4cr
An introduction to the immune system and mechanism of defense in the human body with emphasis on antigen-antibody reactions, roles of immunoglobulins, cellular immunity, allergic reactions, and autoimmune diseases. Lecture and laboratory.
Prerequisite: BIO 2400 with a C- or higher

BIO 4310

Developmental Biology (LAB SCI)
4cr
The study of the development from egg and sperm to mature adult of representative organisms. Original scientific literature will be a focal point for the exploration of how a single cell develops into a complex multicellular organism. Lecture and laboratory.
Prerequisite: BIO 2400 with a C- or higher

BIO 4320

Recombinant DNA Technology (LAB SCI)
4cr
An introduction to the principles and practices of cloning and analyzing genes with an emphasis on applications and hands-on experience. Lecture and laboratory.
Prerequisite: BIO 2300 or BIO 2400 or CHM 3010 with a C- or higher

BIO 4350

Dinosaur Evolution and Extinction (LAB SCI)
4cr
The lectures in this course present an introduction to the evolution, anatomy, growth, and behavior of dinosaurs, and will promote discussion of the function and evolutionary importance of adaptive changes. The labs will train students in anatomical description and ?tree thinking?.
Prerequisite: BIO 3330

BIO 4400

Molecular Biology of Cancer
4cr
Cancer is a disease which has been documented in ancient history. However, it is predominantly considered a disease of the modern era and its increased prevalence coincides with the development of improved preventative strategies and treatments for infectious diseases. Why has the frequency of cancer diagnoses increased as our life expectancy has increased? This course will explore the molecular biology of the hundreds of diseases classified as "cancer". Particular focus will be placed on the three main causative agents of cancer: viruses, carcinogens, and genetic mutations. The molecular basis of conventional treatment strategies such as surgery, chemotherapy, and radiation will also be discussed and compared to more contemporary treatments such as immunotherapy. Students in this course learn how to carefully read primary literature articles. Students in this course are expected to contribute to the discussion and presentation of several scientific research studies published in the field of cancer biology from over 100 years ago to modern day.
Prerequisite: BIO 2400 with a grade of C- or better

BIO 4500

Independent Study in Biology
2-4cr
A student can conduct an independent study in a topic of interest in biology. It is understood that this course will not duplicate any other course regularly offered in the curriculum, and that the student will work in this course as independently as the instructor believes possible.
Prerequisite: Permission of instructor
Fall/Spring
BIO 4900

Research in Biology
1-4cr
Work on a research project under the direction of a faculty member. Students may enroll for credit more than once, but may not count more than 4 credits toward the major.
Prerequisite: Selection of a research project and advisor must be approved by the department chair
Fall/Spring

Chemistry
Chemistry explores the properties of atoms and molecules and their transformations in nature and in the laboratory. Approved by the American Chemical Society, the Chemistry Department prepares students for graduate study, industrial chemistry, medical school, law school, engineering, and teaching.

Chemistry Major
Must complete the following core courses:

- CHM 1020 General Chemistry II (4 cr.)
- CHM 2070 Organic Chemistry I (4 cr.)
- CHM 2080 Organic Chemistry II (4 cr.)
- CHM 2120 Inorganic Chemistry (4 cr.)
- CHM 3110 Advanced Integrated Laboratory (4 cr.)
- CHM 3130 Physical Chemistry I (4 cr.)
- CHM 3140 Physical Chemistry II (4 cr.)
- CHM 3230 Analytical Chemistry I (4 cr.)
- CHM 4000 Chemistry Seminar (4 cr.)
- MTH 1120 Calculus I (4 cr.)
- MTH 1220 Calculus II (4 cr.)
- PHY 2200 General Physics I (4 cr.)
- PHY 2210 General Physics II (4 cr.)

Students must also complete 8 credits from the following list of electives:

- CHM 3010 Biochemistry (4 cr.)
- CHM 3020 Advanced Biochemistry (4 cr.)
- CHM 3100* Advanced Synthesis Laboratory (4 cr.)
- CHM 3240 Analytical Chemistry II (4 cr.)
- CHM 400T Topics in Chemistry (4 cr.)
- CHM 4070 Advanced Organic Chemistry (4 cr.)
- CHM 4120 Advanced Inorganic Chemistry (4 cr.)
- CHM 4900* Research in Chemistry (2 or 4 cr.)

*Chemistry majors may count either of these courses for 4 credits, but not both toward the 8 credit elective.

An advanced course in physics may replace 4 elective credits with departmental approval.

For the distinction of a degree approved by the American Chemical Society, students must take the 13 core courses listed above, CHM 3010, 3100, 3240, and 4120, and Linear Algebra (MTH 2040) or Multivariate Calculus (MTH 2120) or Mathematics for Scientists and Engineers (PHY 3470). Research must also be performed on- or off-campus for an ACS degree, with a written report submitted to the department chair.

Secondary Education
Chemistry majors who plan on teaching in secondary education would benefit from the following elective courses in chemistry:

- CHM 3010 Biochemistry (4 cr.)
- CHM 3240 Analytical Chemistry II (4 cr.)

Chemistry Minor
The minor in chemistry requires the following core courses:

- CHM 1010 General Chemistry I (4 cr.)
- CHM 1020 General Chemistry II (4 cr.)
- CHM 2070 Organic Chemistry I (4 cr.)
- CHM 2080 Organic Chemistry II (4 cr.)

Also must take 8 credits from the following chemistry courses: CHM 3010, CHM 3020, CHM 3100, CHM 3110, CHM 3230, CHM 3240, CHM 3130, CHM 3140, CHM 400T, CHM 4070, CHM 4120, or CHM 4900.

**Students with two years of high school chemistry with an average grade of B or higher may take CHM 1020 without taking CHM 1010 and be awarded credit for CHM 1010 upon completion of CHM 1020 with a minimum grade of C.

Honors in the Major
Please see department chair for details.

CHM 1000

Better Living Through Chemistry (LAB SCI)
4cr
A one-semester introduction to the field of chemistry with various themes, such as environmental chemistry. Topics covered include chemical reactions and stoichiometry, atomic and molecular structure, thermodynamics, kinetics, and acid-base chemistry. The structures of organic and biological molecules also are discussed. Lecture, three periods; laboratory, three periods. Students cannot fulfill the Natural Science distribution requirement by taking both CHM 1000 and CHM 1010.
Prerequisite: None
Spring

CHM 1010

General Chemistry I (LAB SCI)
4cr
The basic principles and concepts of chemistry, including atomic structure, chemical reactions and stoichiometry, gas laws, thermochemistry, and periodic classification of the elements. Lecture, three periods; laboratory, three periods.
Fall

CHM 1020

General Chemistry II (LAB SCI)
4cr
A study of chemical and ionic equilibria, kinetics, electrochemistry, thermodynamics, and acid-base chemistry. Lecture, three periods; laboratory, three periods.
Prerequisite: CHM 1010 with at least a C-, departmental approval, or two years of high school chemistry with an average grade of B. A grade of C or better in CHM 1020 provides credit for CHM 1010.
Fall/Spring
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Description</th>
<th>Prerequisites/Co-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 2070</td>
<td>Organic Chemistry I (LAB SCI)</td>
<td>4cr</td>
<td>A study of the compounds of carbon, stressing syntheses, reaction mechanisms, and the intimate connections between molecular structure and reactivity. Lecture, three periods; laboratory, three periods. Prerequisite: CHM 1020 with at least a C- or departmental approval. Fall</td>
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<tr>
<td>CHM 2080</td>
<td>Organic Chemistry II (LAB SCI)</td>
<td>4cr</td>
<td>A continuation of CHM 2070, involving increasingly complex molecules, including biochemicals. Lecture, three periods; laboratory, three periods. Prerequisite: CHM 2070 with at least a C- or departmental approval. Spring</td>
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<tr>
<td>CHM 2120</td>
<td>Inorganic Chemistry</td>
<td>4cr</td>
<td>A study of the principles of molecular orbital theory, coordination chemistry of transition metals and its relationship to magnetic and spectroscopic properties, solid-state chemistry and nanomaterials. Lecture, three periods. Prerequisite: CHM 2070 with at least a C- or departmental approval. Spring</td>
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<tr>
<td>CHM 3010</td>
<td>Biochemistry (LAB SCI)</td>
<td>4cr</td>
<td>A study of the chemical nature of cellular components such as nucleic acids, proteins, carbohydrates, and lipids. Intermediary metabolism will be studied. Lecture, three periods; laboratory, three periods. Prerequisite: CHM 2080 with at least a C- or departmental approval. Fall/Spring</td>
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<tr>
<td>CHM 3020</td>
<td>Advanced Biochemistry</td>
<td>4cr</td>
<td>A study of advanced topics in biochemistry, such as molecular recognition and specificity, protein folding, membrane dynamics, drug discovery, molecular signaling, and modern spectroscopy methods like nuclear magnetic resonance (NMR). Prerequisite: CHM 3010 with a grade of C- or better.</td>
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<tr>
<td>CHM 3100</td>
<td>Advanced Synthesis Laboratory</td>
<td>4cr</td>
<td>This laboratory performs state-of-the-art techniques and studies theory involved in the synthesis of organic and inorganic compounds while conducting multiple synthetic projects. Techniques used will include air-free synthesis, column chromatography, nuclear magnetic resonance, mass spectroscopy, and high-performance liquid chromatography. Synthesis and use of organometallic compounds will also be done. Laboratory, 4 periods per day. Prerequisites: CHM 2080 and CHM 2120 with C- or departmental approval. J-Term</td>
<td></td>
</tr>
<tr>
<td>CHM 3110</td>
<td>Advanced Integrated Laboratory</td>
<td>4cr</td>
<td>This course provides an integrated laboratory experience that mimics what chemists do in industry and graduate school related to instrumentation use, method development, calibration curve generation, and data analysis. The use of multiple instrumentation techniques and methods, including bomb calorimetry, high resolution IR spectroscopy, spectrophotometry, gas and liquid chromatography, mass spectrometry, electrochemistry, and molecular modeling, will be done in this laboratory. Laboratory, two three-hour periods. Prerequisite: CHM 2080 with C- or approval by department. Spring</td>
<td></td>
</tr>
<tr>
<td>CHM 3130</td>
<td>Physical Chemistry I</td>
<td>4cr</td>
<td>A study of equilibrium thermodynamics, phase transitions, the properties of solutions, molecular motion, and reaction kinetics. Lecture, three periods. Prerequisites: CHM 2080, MTH 1220, and PHY 2200. Fall</td>
<td></td>
</tr>
<tr>
<td>CHM 3140</td>
<td>Physical Chemistry II</td>
<td>4cr</td>
<td>A study of quantum theory; the electronic structures of atoms and molecules; molecular modeling and simulations; and vibrational, electronic, and magnetic resonance spectroscopy. Lecture, three periods. Prerequisite: CHM 3130. Corequisite: Physics 2210. Spring</td>
<td></td>
</tr>
<tr>
<td>CHM 3230</td>
<td>Analytical Chemistry I (LAB SCI)</td>
<td>4cr</td>
<td>A study of the principles, methods, and calculations of volumetric, compleximetric, and potentiometric methods of quantitative analysis. An understanding of the analytical method, with a focus on sampling. Lecture, three periods; laboratory, three periods. Prerequisite: CHM 2080 with at least a C- or departmental approval. Fall</td>
<td></td>
</tr>
</tbody>
</table>

Carthage 2021-2022 Catalog
CHM 3240

Analytical Chemistry II

4cr
A study of the principles and methods of modern instrumental analysis with emphasis on the underlying concepts involved. Vibrational, nuclear, atomic, and electronic spectroscopies are treated as well as electrochemical and chromatographic techniques. Lecture, three periods.
Prerequisite: CHM 3230 with at least a C- or departmental approval

CHM 4000

Chemistry Seminar

4cr
A study of primary scientific literature and written and oral communication of chemistry concepts. Emphasis on the integration of multiple subdisciplines of chemistry and research.
Fall

CHM 4070

Advanced Organic Chemistry

4cr
An advanced survey of modern organic chemistry, linking structural aspects to reaction behavior. Concepts, including stereochemistry, kinetics, thermodynamics, and orbital symmetry, are rigorously applied to selected reactions. Lecture, three periods.
Prerequisite: CHM 2080 with at least a C- or departmental approval
Fall/Spring

CHM 4120

Advanced Inorganic Chemistry

4cr
A focus on the chemistry of the transition metals. Advanced treatment of chemical-bonding theories, symmetry, and spectroscopy. Chemistry of organometallic and bioinorganic compounds are studied. Lecture, three periods.
Prerequisites: CHM 2120 with at least a C- and CHM 2080 with at least a C- or departmental approval
Spring

CHM 4900

Research in Chemistry

2-4cr
Work on a research topic under the direction of faculty members. Students may enroll for credit more than once if taken for 1 or 2 credits.
Prerequisite: The student and instructor must agree on a topic before the term begins.
Fall/Spring/J-Term

CLS 1030

Ancient Greece I: Troy to Sparta (HUM)

4cr
An introduction to the history and culture of ancient Greece from the era of the legendary Trojan War to the rise of Athens and Sparta in the 5th century BCE. Students will be introduced to the various developments in Greek civilization, including art, mythology and religion, archaeology, and literature. This course is cross-listed with the History Department.

Prerequisite: None

CLS 1040

Ancient Greece II: Alexander the Great to Cleopatra (HUM)

4cr
An introduction to the history and culture of ancient Greece from the rise of Alexander the Great in the 4th century BCE to the conflicts with Rome and the death of Cleopatra, the last Ptolemaic queen. Students will be introduced to the various developments in Greek civilization, including art, mythology and religion, archaeology, and literature. This course is cross-listed with the History Department.

Prerequisite: None

CLS 1050

Ancient Rome I: The Rise of Rome (HUM)

4cr
An introduction to the history and culture of ancient Rome from the time of the Trojan War to the Roman Republic and the assassination of Julius Caesar. Students will be introduced to the various developments in ancient Roman civilization, including art, mythology and religion, archaeology, and literature. This course is cross-listed with the History Department.

Prerequisite: None
CLS 1060

Ancient Rome II: Emperors and Barbarians (HUM)

4cr
An introduction to the history and culture of ancient Rome from the rise of Augustus and the Roman Empire to the transformations wrought by barbarian incursions and Christianity. Students will be introduced to the various developments in Roman civilization, including art, mythology and religion, archaeology, and literature. This course is cross-listed with the History Department.
Prerequisite: None

CLS 1100

Classical Mythology (HUM)

4cr
Survey of the major myths of the ancient Mesopotamians, Greeks, and Romans, and their influence in art and literature.
Prerequisite: None
Fall

CLS 2200

Classical Archaeology (HUM)

4cr
Classical Archaeology introduces students to the material culture of the ancient Mediterranean world as well as the latest methodologies that allow scholars to reconstruct and interpret the past.
Prerequisite: None

CLS 2300

Greek and Roman Art and Architecture (HUM)

4cr
A survey of the art and architecture of the ancient Greeks and Romans, from the Greek Geometric period to the time of Constantine.
Prerequisite: None

CLS 2500

Blacks in Antiquity: Race in the Ancient Mediterranean World (HUM)

4cr
Students will examine and learn how the ancients understood color, ethnicity, and race in the Ancient Mediterranean World (North Africa, Greece, and Rome) through the reading of ancient and modern texts and an examination of ancient art, particularly the role of sub-Saharan Africans in the world around the Mediterranean Sea.
Prerequisite: None

CLS 2600

Special Topics in Roman Studies (HUM)

4cr
This course covers a specific area of study in the history and culture of ancient Rome.
Examples: the Age of Augustus and Roman Comedy.
Prerequisite: None

CLS 2700

Special Topics in Greek Studies (HUM)

4cr
This course covers a specific area of study in the history and culture of ancient Greece.
Examples: the Age of Pericles and Ancient Greek Drama.
Prerequisite: None

CLS 2800

Special Topics in Classical Studies (HUM)

4cr
This course covers a specific area of study within the field of Classics.
Examples: Race, Sex, and Gender in the Ancient World; Ancient Egypt; and the Ancient Novel.
Prerequisite: None

CLS 2900

Special Topics in Archaeology (HUM)

4cr
This course covers a specific area of study within the field of Classical Archaeology.
Examples: Divine Design and Sacred Spaces, and the Archaeology of Rome.

CLS 3210

Seminar in Greek Studies (HUM)

4cr
An in-depth exploration of a particular period of Greek history or culture. Possible topics include Alexander the Great, Greek Drama, Greek Historians, Golden Age of Athens, and the Second Sophistic Movement.

CLS 3230

Seminar in Classical Studies (HUM)

4cr

CLS 3240

Seminar in Archaeology (HUM)

4cr
This Seminar in Archaeology focuses on various themes in the study of Roman religion and the ways in which archaeological evidence, broadly construed, provides information on the religious beliefs, practices, and controversies that were inextricably linked to ancient society as a whole.

Classics

Carthage 2021-2022 Catalog
**CLS 3250**

**Field Archaeology (Trip)**

4cr
Students gain archaeological experience in the field with an orientation that focuses on the period(s) of the site, its history, and its ancient context.
Prerequisite: CLS 2200
Summer and J-Term

**CLS 3260**

**Seminar in Roman Studies (HUM)**

4cr
An in-depth exploration of a particular topic in Roman history or culture. Possible topics include the Fall of the Roman Republic, the Poetry of Virgil, Roman Historians, the Early Roman Emperors, and the Age of Constantine.

**CLS 3310**

**Greek Religions (HUM)**

4cr
A survey of the history and practice of Greek religions in the public sphere and the relationship between religious practices, rites, and beliefs and the rich body of Greek myth.
Prerequisite: REL 1000 or consent of instructor

**CLS 3320**

**Roman Religions (HUM)**

4cr
A survey of the history and practice of Roman religion in both the public and private spheres, including how the Romans wove religious practices into every aspect of life.
Prerequisite: REL 1000 or consent of instructor

**CLS 4100**

**Senior Seminar in Classics (HUM)**

4cr
The Senior Seminar is taught and directed by one member of the department with the assistance and participation of other faculty members. The seminar will lead the student toward the completion of the senior project, which will be determined by the student and the directing professor.
Prerequisite: Major in department
Fall

**CLS 4990**

**Senior Thesis Completion**

0cr
Students should register for CLS 4990 during the semester that they intend to complete their senior project.

**Greek**

**GRK 1010**

**Elementary Greek I (MLA)**

4cr
Students will learn the fundamentals of ancient Greek vocabulary and grammar necessary to read texts in the original. The course prepares students to read poetry and prose from authors such as Homer, Sappho, Herodotus, Euripides, and Plato, as well as from the New Testament.
Fall

**GRK 1020**

**Elementary Greek II (MLA)**

4cr
A continuation of GRK 1010, with continued emphasis on the development of reading skills.
Prerequisite: GRK 1010 or consent of instructor
Spring

**GRK 2010**

**Intermediate Ancient Greek I**

4cr
An introduction to the reading of continuous ancient Greek literature as well as a review of grammar and syntax. Possible readings include Homer, Sophocles, Aristophanes, Thucydides, Plato, and the New Testament.
Prerequisite: GRK 1020 or consent of the instructor
Fall

**GRK 2020**

**Intermediate Ancient Greek II**

4cr
A continuation of GRK 2010, with further development of reading skills.
Prerequisite: GRK 2010 or consent of the instructor
Spring

**GRK 3010**

**Advanced Ancient Greek I**

4cr
Sustained reading of a single author or text, with attention to more advanced syntax as well as style, dialect, and poetic meter.
Prerequisite: GRK 2020 or consent of the instructor

**GRK 3020**

**Advanced Ancient Greek II**

4cr
A continuation of GRK 3010, with further development of skills necessary to appreciate Greek literature.
Prerequisite: GRK 3010 or consent of the instructor

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Carthage 2021-2022 Catalog
Latin

LTN 1010

Elementary Latin I (MLA)

4cr
Students will learn the fundamentals of vocabulary and grammar necessary to read texts in the original. The course prepares students to read poetry and prose from authors such as Plautus, Catullus, Caesar, Cicero, Virgil, and Ovid.

Fall

LTN 1020

Elementary Latin II (MLA)

4cr
A continuation of LTN 1010, with further development of reading skills.
Prerequisite: LTN 1010 or consent of the instructor

Spring

LTN 2010

Intermediate Latin I

4cr
An introduction to the reading of continuous ancient Latin literature, as well as a review of grammar and syntax. Possible readings include Plautus, Catullus, Sallust, Virgil, and Horace.
Prerequisite: LTN 1020 or consent of the instructor

LTN 2020

Intermediate Latin II

4cr
A continuation of LTN 2010, with further development of reading skills.
Prerequisite: LTN 2010 or consent of the instructor

Communication and Digital Media

Mission: The Communication and Digital Media Department (CDM) engages students in the adventure of human communication in historical and contemporary contexts.
CDM strives to help students understand the role communication in all its forms plays in culture and commerce, and to develop insights and skills that equip students for thoughtful, effective, and ethical communication in the 21st century.

Classical and contemporary theoretical perspectives are examined as a platform for developing critical faculties, as well as the skills required to become an effective communicator in diverse settings. Students are trained in written, oral, and visual communication. Students will be able to not only learn to critique the effectiveness of communication, but also use their skills to create their own effective communication.
The department believes technologies and attendant cultures of the information age are deeply impacting human communication in the 21st century. Global and local cultures are undergoing profound shifts in communication practices. This department is committed to helping our students develop the understanding and practical skills necessary for effective communication and leadership in these changing circumstances. New literacies and communicative competencies have become essential for the liberally educated person envisioned by the Carthage College mission statement. The curricula of the department have been developed in conversation with the wisdom of the ages, the insights of neighboring disciplines, the riches of world cultures, and the ethical challenges of a complex world.
Department faculty actively support students in the identification and fulfillment of appropriate internships that challenge and extend their classroom learning. All students majoring in graphic design, communication, or public relations are expected to demonstrate their intellectual grasp of the discipline, as well as their own artistic and communicative competencies, by successfully completing their major skill assessment, which leads to their senior capstone seminar. This course will involve a major thesis, project, or exhibition. Recent graduates have gained employment or pursued graduate study in diverse fields such as graphic design, web design, public relations, sports media, electronic and print media, journalism, business, and human resources.

Requirements for the Communication Major

Fundamentals (12 cr.):
CDM 1150 Human Communication (4 cr.)
CDM 1200 Public Speaking (4 cr.)
CDM 1300 Visual Communication (4 cr.)

Major Core (20 cr.)
Students must take the following (16 cr.):
CDM 2300 Interpersonal Communication (4 cr.)
CDM 3000 Rhetoric and Persuasion (4 cr.)
CDM 3450 Mass Communication (4 cr.)
CDM 3545 Communication Skills Assessment (0 cr.)
CDM 4010 Communication Senior Seminar (4 cr.)

Students must choose one of the following (4 cr.):
CDM 2600 New Media Theory and Aesthetics (4 cr.)
CDM 2620 Film Analysis (4 cr.)

Students must choose any 3 courses (12 cr.) from the Communication Studies and/or
Media Studies electives listed below. Students wishing to major in Communication are encouraged to consider an emphasis of either Communication Studies or Media Studies to reflect their interests, skills, potential careers, etc.

**Communication Studies:**
- CDM 2100 Health Communication (4 cr.)
- CDM 2400 Gender Communication (4 cr.)
- CDM 2450 Nonverbal Communication (4 cr.)
- CDM 3400 Social Media (4 cr.)
- CDM 3550 Communication Internship (4-8 cr.)
- CDM 3600 Intercultural Communication (4 cr.)
- CDM 3700 Organizational Communication (4 cr.)
- CDM 200*/Topics in Communication (4 cr.)
- CDM 3900 Leadership and Small Group Communication (4 cr.)

**Media Studies:**
- CDM 1900 Adobe Creative Cloud: Level Up (4 cr.)
- CDM 2500 Basic Digital Photography (4 cr.)
- CDM 2600 New Media Theory and Aesthetics (4 cr.)
- CDM 2620 Film Analysis (4 cr.)
- CDM 2700 Film and New Media Production (4 cr.)
- CDM 2800 Exploring the Documentary Form (4 cr.)
- CDM 2900 Sports Media (4 cr.)
- CDM 3310 Journalistic Writing (4 cr.)
- CDM 3320 Screenwriting (4 cr.)
- CDM 3400 Social Media (4 cr.)
- CDM 3550 Communication Internship (4-8 cr.)
- CDM 3950 Advanced Film and New Media Production (4 cr.)
- CDM 200*/Topics in Communication (4 cr.)

**Requirements for the Graphic Design Major**
Fundamentals (12 cr.):
- CDM 1150 Human Communication (4 cr.)
- CDM 1200 Public Speaking (4 cr.)
- CDM 1300 Visual Communication (4 cr.)

Major Core (32 cr.):
- ART 1070 FOUNDATIONS, SURFACE: Images + Design (4 cr.)
- CDM 2000 Graphic Design I (4 cr.)
- CDM 2850 Typography (4 cr.)
- CDM 3150 History of Graphic Design (4 cr.)
- CDM 3250 Graphic Design Practicum (4 cr.)
- CDM 3530 Web Design I (4 cr.)
- CDM 3555 Graphic Design Skills Assessment (0 cr.)
- CDM 3750 Graphic Design II (4 cr.)
- CDM 4020 Graphic Design Senior Seminar (4 cr.)

Choose one course from the following (4 cr.):
- CDM 1900 Adobe Creative Cloud: Level Up (4 cr.)
- CDM 2300 Interpersonal Communication (4 cr.)
- CDM 3000 Rhetoric and Persuasion (4 cr.)
- CDM 3400 Social Media (4 cr.)
- CDM 3570 Public Relations Internship (4-8 cr.)
- CDM 3700 Organizational Communication (4 cr.)

Choose one course from the following (4 cr.):
- BUS 1110 Introduction to Business (4 cr.)
- PYC 1500 Introduction to Psychological Science (4 cr.)
- SOC 1000 Introduction to Sociology (4 cr.)
- PHL 1200 The Art of Thinking (4 cr.)

**Skill Assessment**
The assessment specific to your major must be taken in the spring of a student’s third/junior year. It will be pass/fail, and the student will have to repeat the assessment with a pass to be cleared to register for an Internship and/or Senior Seminar. Students double majoring in CDM must pass the skills assessment in each major.

**Requirements for the Public Relations Major**
Fundamentals (12 cr.):
- CDM 1150 Human Communication (4 cr.)
- CDM 1200 Public Speaking (4 cr.)
- CDM 1300 Visual Communication (4 cr.)

Major Core (28 cr.):
- CDM 2200 Principles of Public Relations (4 cr.)
- CDM 3350 Public Relations Writing (4 cr.)
- CDM 3420 Communications Management (4 cr.)
- CDM 3565 Public Relations Skills Assessment (0 cr.)
- CDM 3800 Public Relations Research Methods (4 cr.)
- CDM 3810 Public Relations Campaigns (4 cr.)
- CDM 3820 Crisis Communication (4 cr.)
- CDM 4030 Public Relations Senior Seminar (4 cr.)
3. Overlap of courses between double majors in CDM must be at or below 50 percent.

Requirements for majoring and minoring within the department:

In order to major and minor in the CDM Department, overlap of courses between any major and minor in CDM must be at or below 50 percent.

Requirements for the Communication Minor (24 credits)

Students must take CDM 1150 (4 cr.) and select 5 courses (20 cr.) from the list below.

Graphic Design or Public Relations majors who want to minor in Communication must select 6 courses (24 cr.) excluding CDM 1150 and CDM 1200. Overlap between majors and minors must be at or below 50 percent.

Students wishing to minor in Communication are encouraged to consider an emphasis to reflect their interests, skills, potential careers, etc.

For Communication Studies, choose from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDM 2100</td>
<td>Health Communication</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 2300</td>
<td>Interpersonal Communication</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 2400/</td>
<td>Gender Communication</td>
<td>4 cr.</td>
</tr>
<tr>
<td>WMG 200R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDM 2450</td>
<td>Nonverbal Communication</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3000</td>
<td>Rhetoric and Persuasion</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3400</td>
<td>Social Media</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3550</td>
<td>Communication Internship</td>
<td>4-8 cr.</td>
</tr>
<tr>
<td>CDM 3600</td>
<td>Intercultural Communication</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3700</td>
<td>Organizational Communication</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM</td>
<td>200*/400*</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3900</td>
<td>Leadership and Small Group Communication</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

For Media Studies, choose from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDM 1900</td>
<td>Adobe Creative Cloud: Level Up</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 2500</td>
<td>Basic Digital Photography</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 2600</td>
<td>New Media Theory and Aesthetics</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 2620</td>
<td>Film Analysis</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 2700</td>
<td>Film and New Media Production</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 2800</td>
<td>Exploring the Documentary Form</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 2900</td>
<td>Sports Media</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3310</td>
<td>Journalistic Writing</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3320</td>
<td>Screenwriting</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3400</td>
<td>Social Media</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3450</td>
<td>Mass Communication</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3500</td>
<td>Advanced Digital Photography</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3550</td>
<td>Communication Internship</td>
<td>4-8 cr.</td>
</tr>
<tr>
<td>CDM 3950</td>
<td>Advanced Film and New Media Production</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 200*/400*</td>
<td>Topics Courses with Related Content</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

Requirements for the Photography Minor (24 credits)

The Photography program provides a breadth of photography experience designed to allow students to build a range of photographic knowledge and skills. New digital photographic technology is juxtaposed with historical knowledge and processes giving students a range of art abilities as well as a historical context for their work. This focused study in photography allows students to develop an artist voice as well as professional skills for creating meaningful images.

Students have the option to extend their photography skills into video and film.

Students must take 5 courses (20 cr.) from the list below.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARH 2100</td>
<td>History of Photography</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 2110</td>
<td>Darkroom Photography</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 2130</td>
<td>Color Photography</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 2500</td>
<td>Basic Digital Photography</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 3110</td>
<td>Advanced Darkroom Photography</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ART 3130</td>
<td>Advanced Color Photography</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3500</td>
<td>Advanced Digital Photography</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM/ART</td>
<td>Topics Courses with Related Content</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

Requirements for the Public Relations Minor (24 credits)

Students must take CDM 2200 and CDM 3350, and select 4 courses (16 cr.) from the list below. For students majoring in Communication or Graphic Design, overlap between majors and minors must be at or below 50 percent.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDM 3420</td>
<td>Communications Management</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3570</td>
<td>Public Relations Internship</td>
<td>4-8 cr.</td>
</tr>
<tr>
<td>CDM 3800</td>
<td>Public Relations Research Methods</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3810</td>
<td>Public Relations Campaigns</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CDM 3820</td>
<td>Crisis Communication</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

Requirements for the Graphic Design Minor (24 credits)

Students must take the 6 courses (24 cr.) listed below. For students majoring in Communication or Public Relations, overlap between majors and minors must be at or below 50 percent.
ART 1070  FOUNDATIONS, SURFACE: Images + Design (4 cr.)
ART 1072  FOUNDATIONS, TIME: Movement + Digital (4 cr.)
ART 2750  4D (variable content) (4 cr.)
ART 3110  Advanced Darkroom Photography (4 cr.)
ART 3130  Advanced Color Photography (4 cr.)
ART 3550  Art Internship as approved by instructor - must be photography based (4-8 cr.)
ART 3700  Advanced 4D (4 cr.)
CDM 1900  Adobe Creative Cloud: Level Up (4 cr.)
CDM 2650  Photographing Nature: Investigating Biodiversity and Conservation (4 cr.)
CDM 2700  Film and New Media Production (4 cr.)
CDM 2800  Exploring the Documentary Form (4 cr.)
CDM 3500  Advanced Digital Photography (4 cr.)
CDM 3550  Communication Internship as approved by instructor - must be photography based (4-8 cr.)

Courses cannot be counted in more than one category. Variable content courses may be used in more than one category, but only if the topic/content is different.

Requirements for the Film and New Media Minor (24 credits)
The Film and New Media minor offers students opportunities in studio and production-based courses, film and new media theory, and associated history. The courses provide necessary techniques, skill sets, and critical theory to prepare students for an increasingly digital global landscape of media production and critique. In this minor, students may choose to pursue coursework that emphasizes the discipline of film (film production and screenwriting), the discipline of new media (video art, sound art, light, computational and interactive art, and other new media and time-based forms) or a combination of film and new media classes. Students have the option to enhance their image-making skills with photography and their new media development skills with computer science courses.

Required courses (16 cr.)
ART 1070  FOUNDATIONS, SURFACE: Images + Design (4 cr.)
ART 2750  4D (variable content) (4 cr.)
CDM 2600  New Media Theory and Aesthetics (4 cr.)
CDM 2700  Film and New Media Production (4 cr.)

Advanced or Extended Focus, select 1 course (4 cr.)
ART 3700  Advanced 4D (4 cr.)
CDM 2730  Studies in Media Production (4 cr.)
CDM 3320  Screenwriting (4 cr.)
CDM 3950  Advanced Film and New Media Production (4 cr.)

Electives, select 1 course (4 cr.)
ARH 2100  History of Photography: Daguerre to Digital (4 cr.)
ART 1072  FOUNDATIONS, TIME: Movement + Digital (4 cr.)
ART 2130  Color Photography (4 cr.)
ART 2400  Introduction to Sculpture (4 cr.)
ART 2750  4D (4 cr.)
ART 3700  Advanced 4D (4 cr.)
CDM 2500  Basic Digital Photography (4 cr.)
CDM 2620  Film Analysis (4 cr.)
CDM 2630  Studies in Media Production (4 cr.)
CDM 2730  Studies in Media Production (4 cr.)
CDM 2800  Exploring the Documentary Form (4 cr.)
CDM 3200  Words and Images in Motion (4 cr.)
CDM 3320  Screenwriting (4 cr.)
CDM 3940  Art, Activism, and Social Change (4 cr.)
CDM 3950  Advanced Film and New Media Production (4 cr.)
CSC 1100  Introduction to Computing (4 cr.)
CSC 1810  Principles of Computer Science (4 cr.)

Courses cannot be counted in more than one category. Variable content courses may be used in more than one category, but only if the topic/content is different.

CDM 1150

Human Communication

4cr
This course provides a broad grounding in the history and current interdisciplinary understandings of human communication. Students will explore the role of identity/self and perception, verbal and nonverbal communication, listening, and culture within human interaction. These concepts will be further applied to the study of relationships, small groups, organizations, rhetoric, and media.

CDM 1200

Public Speaking

4cr
A study of the role, rights, responsibilities, and ethics of the speaker, medium, and audience in a variety of speech situations in a democratic society. Speaking techniques examined include the processes of invention, organization, and presentation in informative, demonstrative, persuasive, and ceremonial settings. Students must demonstrate effectiveness in integrating media (e.g., presentation software or other video or audio elements) into their speech communications. Targeted instruction is arranged as necessary to ensure basic competency in the technical use of presentation software.

CDM 1300

Visual Communication

4cr
An introduction to the practice of critical observation and analysis of static, dynamic, and interactive visual information. Students develop theoretical and applied skills in interpreting a wide range of visual information, and demonstrate their own abilities to design and produce visual information.
CDM 2000

Graphic Design I
4cr
This studio course serves as an introduction to the practice of graphic design. Basic design and communication principles, along with the processes and techniques associated with the creation of effective visual communication, will be emphasized. Students will also be instructed in the use of digital drawing and painting programs for the production of graphic design solutions. Projects will range from visual exercises addressing basic principles of two-dimensional design to practical design problems requiring conceptual and critical as well as compositional evaluation. Exploration of materials and creative ideation, along with industry trends, issues, and significant practitioners, will also be discussed. Prerequisites: CDM 1300 and ART 1070.

CDM 2100

Health Communication
4cr
The primary purpose of this course is to investigate the phenomena of communication, theoretically and practically, as it occurs in health care contexts. Private and public messages, internal and external to health institutions, will be examined to explore how those messages affect health care decisions and outcomes. Health communication includes many diverse cultures and communities of practice, including patient-provider communication, marketing and public health campaigns, use of technology in health care, and communication within and across allied fields.

CDM 2200

Principles of Public Relations
4cr
An introduction to public relations as the theory and practice of effective communication between organizations and their diverse publics. Explores the role of public relations in organizational culture and in society, with particular emphasis on ethics, corporate integrity, and local and global contexts. Case studies provide opportunities for students to engage in research on the public relations of actual organizations, and to develop writing and presentation skills required of public relations practitioners.

CDM 2300

Interpersonal Communication
4cr
Theories and research of one-to-one human interaction. Topics include communication models, identity, social roles and expectations, self-disclosure, listening, conflict, trust, and the development, maintenance, and termination of relationships. Survey and application of intra- and interpersonal communication in friendships, families, romantic partnerships, and other social and professional contexts. Prerequisite: CDM 1150.

CDM 2400

Gender Communication
4cr
In-depth study of interaction within and between groups with regard to gender, sex, and sexuality. Topics include the continua of gender and sexuality, gender development, cultural roles and expectations, verbal and nonverbal communication, rhetoric of gender/sex-based social movements, power and violence, and gendered communication in education, close relationships, organizations, and media. Cross-listed as WMG 200R.

CDM 2450

Nonverbal Communication
4cr
Comprehensive study of nonverbal codes and systems, including kinesics, proxemics, haptics, vocals, olfactics, chronemics, oculistics, facial expression, and environments. Foundations of nonverbal communication will cover innate and socialized behavior development, and the role of perception on interaction expectancies. Particular exploration of the relationship between nonverbal and verbal interaction in social, intimate, professional, educational, and mediated contexts. Prerequisite: CDM 1150.

CDM 2500

Basic Digital Photography (FAR)
4cr
An introduction to photography in which students practice the art of photography, introducing them to the technical and stylistic aspects of digital photo making. Students are required to supply their own digital camera, which has manual capabilities such as aperture and shutter speed priority mode. Using Photoshop software, students will also work with their own photos in the digital realm, applying what they learn to select, manipulate, display, and print work.

CDM 2600

New Media Theory and Aesthetics (FAR)
4cr
Students will learn and apply a variety of critical methods for understanding and evaluating the current landscape of new media. The course will investigate mobile technology, social networks, streaming, the internet and its cultures, as well as various other forms of emerging media (including VR, AR, and interactive technologies). The course is designed to provide students with a knowledge base for future work in emerging arts and sciences, digital production, screen arts and cultures, and other communication-related fields.
CDM 2620

Film Analysis (FAR)

4cr
This course will provide an introduction to the study of film. Students will learn about the history and economics of the film industry, engage in textual analysis of film, and/or consider film's cultural impact.

CDM 2650

Photographing Nature: Investigating Biodiversity and Conservation (FAR)

4cr
This course introduces the student to the use of digital photography to explore plant and animal species and their habitats. The course begins with instruction in digital photography, and then moves outside where students will focus on organisms, learning to photograph them while exploring their biology. Photography will be used to engage students in making detailed observations and beginning the process of scientific discovery. After learning about species, their ecological interactions, and conservation, students will complete a final project that utilizes visual imagery to educate others about the value of biodiversity, ecology, and/or conservation issues.

Prerequisite: None

CDM 2700

Film and New Media Production (FAR)

4cr
This course engages students in the process of developing, writing, producing, shooting, and editing content for audio, video, virtual reality, and new media. Students study the process of media production by critical analysis of film texts and by active participation in the production process.

CDM 2800

Exploring the Documentary Form (FAR)

4cr
Film is an important and intrinsic medium for understanding our culture and its values. More specifically, nonfiction film has played a critical role in educating society on important issues and histories, often shaping public policy and opinion through production processes. Students will learn about the components of documentary and its production, while exploring the form's history and various modes of representation that have been cultivated and conceptualized over the past century.

CDM 2850

Typography

4cr
This studio course is a hands-on introduction to typography, or the use and design of type. Students will become familiar with the history, classification, and anatomy of type. This course will emphasize the abstract visual design principles critical to the effective use of type in graphic design, and will consider the expressive, communicative potential of typographic form. Course projects will include exercises, studies, and formal design problems. Throughout the course, students will be exposed to a variety of design-related practitioners, publications, ideas, methods, and objects.

Prerequisite: CDM 2000

CDM 3000

Rhetoric and Persuasion

4cr
A study of rhetorical theory as it provides models for the construction and criticism of public discourse. Classical and contemporary writings on rhetoric are explored in the context of theories of language, representation, communication, and ethics.

Prerequisite: CDM 1150 or consent of instructor

CDM 3150

History of Graphic Design

4cr
This course provides students with the knowledge and understanding of the places, people, and events; historical and cultural factors; and technological innovations that have influenced the development of graphic design into the practice that it is today. Historical awareness provides a meaningful context for students to evolve and to contribute in positive ways to the cultures in which they live and work. Students will also be asked to apply what they are learning and design several projects, incorporating the styles they are observing.

Prerequisite: CDM 1300 or consent of instructor

Spring

CDM 2900

Sports Media

4cr
This course will be a broad survey of sports and the communication media. The course will explore the history of media and sport, sports journalism, sports marketing, and technology's influence on the sports marketplace. The course is a study of sports media, as well as a course where students write sports journalism and investigate careers in sports organizations and media.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDM 3200</td>
<td>Words and Images in Motion</td>
<td>4 cr</td>
<td>This course addresses the creation of motion graphics for graphic design students. Students will be introduced to strategies for communicating with kinetic visual elements that focus on form, speed, rhythm, orientation, color, texture, and quality of motion. The course will include lectures and screenings of the history, techniques, and applications of motion graphics, as well as demonstrations using modern software such as Adobe Photoshop and After Effects. Additional topics include basic animation principles, screen design and composition, timing, storyboarding, sound and music development and synchronization, as well as project management and organization. Students will learn to make informed design decisions, and will draw on the basic principles of visual communication, graphic design, and motion literacy in the creation of time-based work that is expressive, dynamic, and inventive. Prerequisite: CDM 2000</td>
</tr>
<tr>
<td>CDM 3250</td>
<td>Graphic Design Practicum</td>
<td>4 cr</td>
<td>This course will introduce graphic design students to the knowledge and skills necessary to enter the field of graphic design as a professional. Students will embark on a path leading toward the compilation of an entry-level design portfolio. Topics will include self-promotion, creative briefs, client relations, print production, fee estimates, and presentation skills. Students will typically work with one or more real-world clients during the course of the semester. They will learn to effectively market themselves through the creation of a visual identity and a branded basic website. Class discussions and presentations will also address current graphic design techniques, trends, and trendsetters as well as topics more directly related to the student's individual creative practice, such as effective brainstorming, critical analysis, and reasoning in the evaluation and development of their design solutions. Prerequisite: CDM 2850</td>
</tr>
<tr>
<td>CDM 3310</td>
<td>Journalistic Writing</td>
<td>4 cr</td>
<td>This course develops awareness and understanding of the conventions and practices that lead to effective writing for various media outlets. Emphasis may include newspapers, magazines, television, internet, and radio. The focus is on developing writing skills through exercises in a variety of formats and styles appropriate to specific media. Students will also understand the history of the journalism industry and the contemporary changes in the environment.</td>
</tr>
<tr>
<td>CDM 3320</td>
<td>Screenwriting</td>
<td>4 cr</td>
<td>Screenwriting introduces students to writing for film, television, the web, and other mass media outlets. Students will identify and develop a script for short film, long form, documentary, broadcast news, commercials, the web, and the other types and formats of screenwriting. Students will also apply the concepts of copyright, fair use, licensing, and creative commons.</td>
</tr>
<tr>
<td>CDM 3350</td>
<td>Public Relations Writing</td>
<td>4 cr</td>
<td>Writing plays an integral role in modern public relations. This course develops an understanding of the conventions and practices of effective public relations writing for contemporary media, with special emphasis on writing for social media, as they relate to public relations. Coursework includes extensive exercises designed to develop skills in a variety of formats, styles, and rhetorical strategies appropriate to public relations. Prerequisite: CDM 2200 or consent of the instructor</td>
</tr>
<tr>
<td>CDM 3400</td>
<td>Social Media</td>
<td>4 cr</td>
<td>This course examines digital technology as a medium of communication. Issues covered include the social, economic, civic, and global implications of the information age. Prerequisite: CDM 1150 or consent of instructor</td>
</tr>
<tr>
<td>CDM 3420</td>
<td>Communications Management</td>
<td>4 cr</td>
<td>This is an advanced course for public relations majors or other students who wish to understand the nature and management of effective communication within and among organizations. Students will develop insights and capacities in organizational communication leadership; careers and cultures in corporations, agencies, small business, and nongovernmental organizations; client relations; communication planning strategies and systems; stakeholder communication; stockholder and financial communication; reputation management; global communication; crisis management; change management; tracking issues and trends and managing communication about them; and funding and evaluating communications campaigns. Prerequisites: CDM 2200 and CDM 3350</td>
</tr>
<tr>
<td>CDM 3450</td>
<td>Mass Communication</td>
<td>4 cr</td>
<td>An advanced survey of the media and their role in culture. This course examines the economic, textual, and cultural dimensions of several mass media. Prerequisite: CDM 1150 or consent of instructor</td>
</tr>
</tbody>
</table>
CDM 3500
Advanced Digital Photography
4cr
Advanced Digital Photography is an advanced class for participants who have taken basic digital photography and want to expand their photographic skills. The majority of the class time will be concentrating on the two broad goals of 1) thinking creatively about photography and 2) enhancing technical aspects of photography.
Prerequisite: CDM 2500

CDM 3530
Web Design I
4cr
This course is an introduction to web design aimed at the graphic design major. The course will introduce computer technologies used in page and screen layout for web design. Students will become familiar with the basic technical tools, standards, and guidelines involved in web page design including the hand coding of HTML and CSS documents. In addition, students will be expected to apply the conceptual and technical design skills addressed in Graphic Design I. Coursework will include readings and exercises taken from texts and online sources, along with at least one more extensive project.
Prerequisite: CDM 2000

CDM 3540
Web Design II
4cr
An advanced web design course that builds on the skills and topics addressed in Web Design I. The course will address advanced aspects of web design including the design of responsive websites for display on desktop and mobile media devices, and web app design. Topics addressed include user interface design, JavaScript library integration, and the use of a CMS (content management system). In addition, students will be expected to apply the conceptual and technical design skills addressed in CDM 1300 Visual Communication. Coursework will include readings, exercises taken from the texts, and online sources, along with more extensive web design projects.
Prerequisite: CDM 3530

CDM 3545
Communication Skills Assessment
0cr
This e-portfolio assessment for every Communication major must be taken during the spring of the third/junior year. Assessment is pass/fail. Students are expected to revise and resubmit if necessary. Students may repeat the assessment until a passing grade is earned in order to take CDM 4010. The website will have been developed in a previous course. Students are expected to update their websites during their program to include new or improved content, including scholarly research and writing, speech content in presentation software form, current resume, and optional elements (creative pieces, etc.). Spring, taken during junior/third year

CDM 3550
Communication Internship
4-8cr
An internship enabling students to gain practical experience in communication. The internship is typically arranged by the student, and must be approved by a department faculty member and by The Aspire Center. Students meet regularly with the supervising professor, maintain a log or journal of the experience, and complete a major paper documenting, analyzing, and interpreting the internship experience.
Prerequisite: None

CDM 3555
Graphic Design Skills Assessment
0cr
This e-portfolio assessment for every Graphic Design major must be taken during the spring of the third/junior year (the academic year prior to taking CDM 4020 Graphic Design Senior Seminar). Assessment is pass/fail, and the student will have to repeat the assessment with a pass to take CDM 4020. The assessment will contain a variety of focused graphic design skills and ensure students are prepared to continue their studies in the major. All of the items included in the assessment will be introduced in previous courses, but those skills must be sustained to pass the assessment.
Prerequisite: CDM 2000
Spring, taken junior/third year

CDM 3560
Graphic Design Internship
4-8cr
An internship enabling students to gain practical experience in graphic design. The internship is typically arranged by the student, and must be approved by a department faculty member and by The Aspire Center. Students meet regularly with the supervising professor, maintain a log or journal of the experience, and complete a body of professional portfolio pieces.
Prerequisite: None
CDM 3565

Public Relations Skills Assessment
0cr
This e-portfolio assessment for every Public Relations major must be taken during the spring of the third/junior year (the academic year prior to taking CDM 4030 Public Relations Senior Seminar). Assessment is pass/fail. Students are expected to revise and resubmit if necessary. Students may repeat the assessment until a passing grade is earned in order to take CDM 4030. The website will have been developed in a previous course. Students are expected to update their websites during their program to include new or improved content, including scholarly research and writing, speech content in presentation software form, current resume, samples of public relations writing and/or projects that focus on a variety of public relations skills, and optional elements (creative pieces, etc.). Prerequisites: CDM 2200 and CDM 3350 Spring, taken during junior/third year

CDM 3570

Public Relations Internship
4-8cr
An internship enabling students to gain practical experience in public relations. The internship is typically arranged by the student, and must be approved by a department faculty member and by The Aspire Center. Students meet regularly with the supervising professor, maintain a log or journal of the experience, and complete a body of professional portfolio pieces. Prerequisite: None

CDM 3600

Intercultural Communication
4cr
Exploration of the various theories, opportunities, and problems related to communication by individuals within and across different cultural groups. Prerequisite: CDM 1150

CDM 3700

Organizational Communication
4cr
This course will help students understand organizational communication theories, models, and processes. Students will apply these principles in organizational communication through case studies and research presentations. Additionally, students will examine the impact of diversity, globalization, and leadership on organizational communication. Prerequisite: CDM 1150

CDM 3750

Graphic Design II
4cr
This course provides a structure for an intensive exploration of the design fundamentals presented in Graphic Design I. Course projects are extensive and range in focus from theoretical culture and design-related issues to complex commercial design applications. Throughout the course, students are exposed to a variety of design-related practitioners, publications, ideas, methods, and objects. Prerequisites: CDM 2200 and CDM 3350

CDM 3800

Public Relations Research Methods
4cr
This course provides an overview of the research methods and tools used to assess communication behavior in public relations. This course introduces students to quantitative and qualitative research methods, including content analysis, surveys, case studies, focus groups, ethnography, and interviews. Students learn how to use basic statistical programs, survey tools, and qualitative analysis tools. Prerequisite: CDM 2200

CDM 3810

Public Relations Campaigns
4cr
The course draws heavily on students' previous training in principles, writing, and research to develop and partially implement a public relations campaign for an actual organizational client. Students will use the principles and techniques of public relations to analyze case studies, track current public relations issues, create various communication campaigns, and solve real-world problems. The course introduces students to the process of campaign development, management, and evaluation using the principles and strategies of public relations and agency management. Prerequisite: CDM 3350

CDM 3820

Crisis Communication
4cr
The importance of an organization's image or reputation becomes readily apparent when organizations face crises of many types. How well they anticipate, communicate during, and respond meaningfully to these crises can enhance or destroy the organization's reputation. Reputation management and crisis communication have long been a significant aspect of strategic communication and public relations. This course blends theory and practice in examining recent trends and issues in the related areas of organizational image, reputation management, and crisis communication. Prerequisite: CDM 2200

CDM 3900

Leadership and Small Group Communication
4cr
This course will examine how people work in small groups with an emphasis on elements that influence group productivity and effective communication: leadership, group development stages, group goal setting, social and task maintenance roles, membership diversity, motivation, problem-solving, decision-making, conflict resolution, argumentation, critical thinking, and ethics. Prerequisite: None
The minor requires 6 courses (24 cr.):

- \( \text{CSC 2710 Game Development I} \) (4 cr.)
- \( \text{CSC 2720 Game Development II} \) (4 cr.)
- \( \text{CSC 2730 Game Development III} \) (4 cr.)
- \( \text{CSC 2810 Database Design and Management} \) (4 cr.)
- \( \text{CSC 2910 Object-Oriented Programming} \) (4 cr.)
- \( \text{CSC 3210 Computing Paradigms} \) (4 cr.)
- \( \text{CSC 3530 Artificial Intelligence and Cognitive Modeling} \) (4 cr.)
- \( \text{CSC 3600 Network Programming} \) (4 cr.)
- \( \text{CSC 3750 Algorithms} \) (4 cr.)
- \( \text{CSC 3770 Computer Graphics} \) (4 cr.)
- \( \text{CSC 3810 Foundations of Computer Science} \) (4 cr.)
- \( \text{CSC 400* Topics in Computer Science} \) (1-4 cr.)
- \( \text{CSC 4500 Independent Study} \) (2-4 cr.)
- \( \text{CSC 4650 Computer Architecture} \) (4 cr.)
- \( \text{CSC 4900 Research in Computer Science} \) (1-4 cr.)

In addition, these courses must also be taken:

- \( \text{MTH 1240 Discrete Structures} \) (4 cr.)
- \( \text{CSC 4000 Senior Seminar} \) (4 cr.)
- \( \text{CSC 4990 Senior Thesis Completion} \) (0 cr.)

**Concentration in Game Development**

Computer Science majors may earn a concentration in Game Development by using CSC 2710, CSC 2720, and CSC 2730 as three of the four required electives numbered at or above 2000. Further, to earn the concentration in Game Development, the student’s Capstone Project must be a substantial game or other application which leverages strong simulation and/or graphics-driven components.

**Computer Science Minor**

A minor consists of Computer Science 1810, 1820, three additional Computer Science courses numbered above 2000, and MTH 1240.

**Game Development Minor**

Game Development at Carthage College is viewed expansively – that is: we recognize that much of future storytelling, training, simulation, and more will necessarily leverage the lessons learned in pursuing a credential in Game Development. More simply put: Game Development isn’t just for games.

Our minor provides a rigorous foundation in Computer Sciences and programming from the perspective of Game Development which graduates can apply to many applications in many disciplines.

The minor requires 6 courses (24 cr.):
CSC 1810  Principles of Computer Science I  (4 cr.)
CSC 1820  Principles of Computer Science II  (4 cr.)
CSC 2710  Game Development I  (4 cr.)
CSC 2720  Game Development II  (4 cr.)
CSC 2730  Game Development III  (4 cr.)
and either:
CDM 2630  Studies in Media  (4 cr.)
or
CDM 2730  Studies in Media Production  (4 cr.)

Graduate School
A student majoring in Computer Science and planning to attend graduate school should take additional mathematics courses such as Calculus I, Calculus II, and Linear Algebra, and consider minoring in mathematics.

CSC 1030  Data Science I  
4cr
This class introduces students to the foundational skills needed for data analysis: data manipulation and visualization, statistical summarization, and problem-solving using data. No prior programming experience is needed, and students will become proficient at writing code in a modern computer environment.
Fall/Spring

CSC 1040  Data Science II  
4cr
This class introduces students to the data structures and algorithms needed for complicated data analysis tasks. No prior programming experience is needed, and students will learn principles of computer science that will benefit them in future programming endeavors.
Prerequisite: CSC 1030 with a grade of C or better
Spring

CSC 1100  Introduction to Computing  
4cr
An introduction to the art and science of computer programming for the student without previous programming experience. Topics covered include the historical development of computing, the basic operating principles of computers, and an introduction to problem-solving using one or more high-level computing languages, such as Python. Intended for nonmajors/nonminors. Does not count toward major or minor in CSC.
Fall/Spring

CSC 1810  Principles of Computer Science I  
4cr
A study of the fundamentals of writing computer programs and problem-solving, using structured and object-oriented techniques. Intended for future majors and minors in Computer Science and minors in Game Development. Students are strongly encouraged to enroll in this call in the Fall term of their first year.
Fall/Spring

CSC 1820  Principles of Computer Science II  
4cr
The emphasis of this course is on problem-solving. Students will mature as problem-solvers as they are presented with increasingly challenging problems to program.
Prerequisite: CSC 1810 with a C or higher
Spring, with limited Fall availability

CSC 2560  Data Structures and Algorithms  
4cr
An examination of advanced programming techniques for problem-solving and manipulating data using primarily object-oriented approaches.
Prerequisite: CSC 1820 with a C or higher
Fall

CSC 2710  Game Development I  
4cr
Video games are serious work. Reaching far beyond the multibillion-dollar gaming industry, the lessons of video game development increasingly translate to disparate fields requiring simulation, training, and easy-to-use interfaces. This course introduces students to the game development and design process. Students will build games representative of a variety of genres. This is a project-based course.
Co-requisite: CSC 1810 or instructor permission
Alternating Fall

CSC 2720  Game Development II  
4cr
A continuation of CSC 2710 Game Development I with an emphasis on three dimensional environments. This is a project-based course.
Prerequisite: CSC 2710 with a C or better.

CSC 2730  Game Development III  
4cr
A continuation of CSC 2720 Game Development II focusing on advanced topics such as save systems and multiplayer.
Prerequisite: CSC 2720 with a C or better.
## CSC 2810
**Database Design and Management**
4cr
An introduction to database methods including data models (relational, object-oriented, network, and hierarchical); database design and modeling; implementation and accessing methods; and SQL. Students will design and implement a database using a database management system.
Prerequisite: CSC 1820 with a C or higher

## CSC 2910
**Object-Oriented Programming**
4cr
An introduction to object-oriented design techniques including encapsulation, inheritance, and polymorphism. Other features of modern object-oriented programming languages are covered as well, including exception handling, garbage collection, event handling, and threads. A modern object-oriented language such as Java will be used.
Prerequisite: CSC 1820 with a C or higher

## CSC 3210
**Computing Paradigms**
4cr
A survey of language-design issues and runtime behavior of several programming languages suitable for different problem-solving paradigms (structured, functional, object-oriented).
Prerequisite: CSC 2560 with a C or higher

## CSC 3510
**Computer Organization**
4cr
A study of the lower levels of computers. Machine and assembly languages, memory, addressing techniques, interrupts, and input-output processing are also studied. This course compliments CSC 4370 Operating Systems. Students are encouraged to take this course in Spring and CSC 4730 in the following Fall term.
Prerequisite: CSC 2560 with a C or higher

## CSC 3530
**Artificial Intelligence and Cognitive Modeling**
4cr
This course explores the primary approaches for developing computer programs that display characteristics we would think of as being intelligent. Students will analyze how intelligent systems are developed and implemented with a focus on exploring how human behavior on cognitive tasks can be used to inform the development of these artificial systems, as well as how the performance and behavior of these artificial systems can inform our understanding of human cognition.
Prerequisite: CSC 2560 with a C or higher or with permission of instructor

## CSC 3600
**Network Programming**
4cr
An examination of data communications and communications networks including signal encoding, multiplexing, circuit and packet-switched networks, TCP/IP, WANs, LANs, and intranets. Particular emphasis is placed on Socket-based, multi-threaded programming.
Prerequisite: CSC 2560 with a C or higher

## CSC 3750
**Algorithms**
4cr
This course studies various problem-solving strategies and examines the classification, design, complexity, and efficiency of algorithms.
Prerequisites: CSC 1820 with a C or higher and either MTH 1060 or MTH 1240

## CSC 3770
**Computer Graphics**
4cr
Given the ubiquity of computer graphics in modern culture (in forms such as computer gaming, motion pictures, and other kinds of visual entertainment), the deeply technical nature of its formulation and construction can be overlooked. This course provides an introduction to computer graphics covering aspects of linear algebra, geometry, color, vision, and the unique nature of modern graphics programming. This course is project driven.
Prerequisite: CSC 2560 with a C or higher

## CSC 3810
**Foundations of Computer Science**
4cr
This course examines various models of computation, including finite and pushdown automata and recursive functions. Language grammars, parsing, and complexity classes also are studied. Special schedule.
Prerequisite: CSC 3750

## CSC 4000
**Senior Seminar**
4cr
Students review and discuss current issues and trends in computer science.
Prerequisites: Senior standing, completion of six CSC courses, and instructor permission

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Carthage 2021-2022 Catalog
CSC 4350
Software Design and Development
4cr
An examination of the software development process from analysis through maintenance using both structured and object-oriented methods. Students work together on a team project.
Prerequisite: CSC 2560 with a C or higher. Should be taken in the Spring term of junior year.

Spring

CSC 4500
Independent Study
2-4cr
Independent study in a topic of interest in computer science that does not duplicate any other course in the regular course offerings.
Prerequisite: CSC 2560

CSC 4650
Computer Architecture
4cr
Students examine various computer architectures including the von Neumann mode, RISC/CISC, and parallel architectures.
Prerequisite: CSC 3510 with a C or better

CSC 4730
Operating Systems
4cr
A study of the basic components and concepts of a multitasking operating system including processes, scheduling, resource management, I/O and file systems, virtual memory, security, and semaphores.
Prerequisite: CSC 2560 with a C or higher

Fall

CSC 4900
Research in Computer Science
1-4cr
An opportunity to conduct research in computer science, culminating in a research paper.
Prerequisites: CSC 1820 with a C or higher and instructor approval

CSC 4990
Senior Thesis Completion
0cr
Students should register for CSC 4990 during the semester that they intend to complete and present their Senior Thesis.

Criminal Justice

The criminal justice major at Carthage is intended to help students understand crime as a social problem closely related to other social problems like inequality, sexism, and racism. While the curriculum emphasizes the sociological nature of crime as a social problem, it is also interdisciplinary, including courses in political science and criminal justice, as well as electives in disciplines such as social work.

The curriculum includes several courses specifically designed to help students understand crime as a social problem. Students will understand how law, crime, and social control differentially impact people across a wide range of social identities such as race, ethnicity, sex, gender, class, and age. The curriculum seeks to promote an understanding of, and appreciation for, human diversity while also preparing students to promote equity and fairness within the criminal justice system.

The program is designed to prepare students to work in a variety of criminal justice, social welfare, and public service careers. There is a wide variety of criminal justice careers at the local, state, and national levels.

Criminal Justice Major

The Criminal Justice major consists of 36 credits, including a four-credit Senior Seminar. Students considering law school are encouraged to take the prelaw track within the Criminal Justice major.

All majors must take a common core consisting of the following five courses (20 cr.):
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJ 2100</td>
<td>Probation, Parole, and Community Supervision</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ/SOC 2270</td>
<td>Juvenile Delinquency</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ 2700</td>
<td>Criminal Law</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ 3010</td>
<td>Police and Society</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ 3020</td>
<td>American Courts</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ/SOC 3120</td>
<td>Crimes of the Powerful</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ 3200</td>
<td>Restorative Justice</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ 3300</td>
<td>Mock Trial</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ 3500</td>
<td>Field Placement</td>
<td>varies</td>
</tr>
<tr>
<td>CRJ 3550</td>
<td>Internship</td>
<td>varies</td>
</tr>
<tr>
<td>CRJ 200*/400*</td>
<td>Topics Courses</td>
<td>4 cr.</td>
</tr>
<tr>
<td>EDU 4340</td>
<td>Urban and Cultural Leadership</td>
<td>4 cr.</td>
</tr>
<tr>
<td>POL 3350</td>
<td>Human Rights</td>
<td>4 cr.</td>
</tr>
<tr>
<td>POL 3900</td>
<td>Comparative Law</td>
<td>4 cr.</td>
</tr>
<tr>
<td>POL 3930</td>
<td>Environmental Law</td>
<td>4 cr.</td>
</tr>
<tr>
<td>POL 200*/400*</td>
<td>Topics Courses</td>
<td>4 cr.</td>
</tr>
<tr>
<td>SOC 3110</td>
<td>Deviance</td>
<td>4 cr.</td>
</tr>
<tr>
<td>SWK 1300</td>
<td>Introduction to Social Justice and Social Welfare</td>
<td>4 cr.</td>
</tr>
<tr>
<td>SWK/WMG 2210</td>
<td>Family Violence</td>
<td>4 cr.</td>
</tr>
<tr>
<td>SWK 2400</td>
<td>Human Behavior in the Social Environment</td>
<td>4 cr.</td>
</tr>
<tr>
<td>SWK 2600</td>
<td>Ethics and Leadership in a Multicultural Society</td>
<td>4 cr.</td>
</tr>
<tr>
<td>WMG 1100</td>
<td>Introduction to Women’s and Gender Studies</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

**Criminal Justice Minor (20 credits)**

The minor includes CRJ 1000 Criminal Justice System and SOC/CRJ/WMG 2530 Race and Racisms. Students may take any three courses from the following to fulfill their elective requirements:

Note: SWK majors may only count one of the listed SWK courses below toward their CRJ minor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJ 1000</td>
<td>Probation, Parole, and Community Supervision</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ 2260</td>
<td>Criminology</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ/SOC 2270</td>
<td>Juvenile Delinquency</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ 2700</td>
<td>Criminal Law</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ 3010</td>
<td>Police and Society</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ 3020</td>
<td>American Courts</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ/SOC 3025</td>
<td>Social Problems in the City</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ 3200</td>
<td>Restorative Justice</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ 3300</td>
<td>Mock Trial</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ 3500</td>
<td>Field Placement</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CRJ 3550</td>
<td>Field Placement</td>
<td>varies</td>
</tr>
<tr>
<td>CRJ 200*/400*</td>
<td>Topics Courses</td>
<td>4 cr.</td>
</tr>
<tr>
<td>EDU 4340</td>
<td>Urban and Cultural Leadership</td>
<td>4 cr.</td>
</tr>
<tr>
<td>POL 2400</td>
<td>American Government: National, State, Local</td>
<td>4 cr.</td>
</tr>
<tr>
<td>POL 2900</td>
<td>Constitutional Law: Separation of Powers</td>
<td>4 cr.</td>
</tr>
<tr>
<td>POL 2910</td>
<td>Constitutional Law: Civil Liberties and Civil Rights</td>
<td>4 cr.</td>
</tr>
<tr>
<td>POL 3350</td>
<td>Human Rights</td>
<td>4 cr.</td>
</tr>
<tr>
<td>POL 3900</td>
<td>Comparative Law</td>
<td>4 cr.</td>
</tr>
<tr>
<td>POL 3930</td>
<td>Environmental Law</td>
<td>4 cr.</td>
</tr>
<tr>
<td>POL 200*/400*</td>
<td>Topics Courses</td>
<td>4 cr.</td>
</tr>
<tr>
<td>SOC 3110</td>
<td>Deviance</td>
<td>4 cr.</td>
</tr>
<tr>
<td>SWK 1300</td>
<td>Introduction to Social Justice and Social Welfare</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

**CRJ 1000**

**Criminal Justice System (SOC)**

4cr

A survey of the various institutions by which the criminal justice system is administered: the police, the legal profession, the court systems, and the penal institutions. The problems faced by the criminal justice system and evaluation of the adequacy of the existing system will be given emphasis.

Fall/Spring

**CRJ 2100**

**Probation, Parole, and Community Supervision**

4cr

This course provides a detailed examination of alternative forms of punishment within the criminal justice system, namely probation, parole, and community supervision. Given the enormous strain on the prison system, these forms of punishment have become increasingly common in recent years. This course examines the nature of such programs within the larger socio-historical context.

**CRJ 2260**

**Criminology**

4cr

This course examines the nature, extent, and distribution of crime in the United States. Theories of crime causation are also examined in this course.

Prerequisite: CRJ 1000

Fall/Spring

**CRJ 2270**

**Juvenile Delinquency**

4cr

Studies causes of unconventional youthful behavior, societal reactions to it, specialized agencies, treatment strategies, policy proposals for prevention of juvenile delinquency, and the juvenile justice system with its competing functions and personnel.

Prerequisite: SOC 1000

Fall
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
<th>Prerequisite/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJ 2530</td>
<td>Race and Racisms</td>
<td>4 cr</td>
<td>Examines the sociological, economic, and psychological nature of the relationships between racial and ethnic groups with differential access to political and economic power. Focus is on the United States, with some discussion of racism, cultural discrimination, and sexism in other parts of the world. Prerequisite: SOC 1000 or CRJ 1000 Fall/Spring</td>
<td></td>
</tr>
<tr>
<td>CRJ 2700</td>
<td>Criminal Law (SOC)</td>
<td>4 cr</td>
<td>The organization and content of criminal law with attention given to its origin and development and the elements of crimes of various types. Specific attention will be given the Model Penal Code. Prerequisite: CRJ 1000 Fall</td>
<td></td>
</tr>
<tr>
<td>CRJ 3010</td>
<td>Police and Society</td>
<td>4 cr</td>
<td>This course will rely on a variety of scholarly materials to answer such questions as: Why do we have police? What is the role of the police in a democratic society? What do we want the police to do? Who decides what the police do? How do we want the police to do their job? The course will also address other key issues including (1) the history of the American police, (2) the nature of police work, (3) the police as agents of social control, (4) the structure and function of police organizations, (5) police misconduct, and (6) police accountability. Prerequisite: CRJ 1000 Spring</td>
<td></td>
</tr>
<tr>
<td>CRJ 3020</td>
<td>American Courts</td>
<td>4 cr</td>
<td>This course examines the history and structure of the American court system. Understood as one of the primary institutions within the criminal justice system, emphasis will be placed on exploring the values, traditions, and philosophy of the courts. Prerequisite: CRJ 1000 Fall</td>
<td></td>
</tr>
<tr>
<td>CRJ 3025</td>
<td>Social Problems in the City</td>
<td>4 cr</td>
<td>This course presumes social problems in the city as products of oppression, marginalization, and social control. Students will learn how economic forces and social structures such as race, class and government policies influence how cities are socially and spatially organized, and how that has changed over time. Students cover topics like the Great Migration, systemic racism, policing, inequality, poverty, segregation, and joblessness. We will also discuss the interrelations between different social issues and the prospects for social change. Prerequisite: CRJ 1000 or instructor permission</td>
<td></td>
</tr>
<tr>
<td>CRJ 3030</td>
<td>Social Impacts of Mass Incarceration</td>
<td>4 cr</td>
<td>This course presents the historical patterns of response to crime and modern methods of dealing with criminally defined behavior, including the major reactive models. Also examined are treatment approaches in corrections, corrections personnel, and corrections as an institutional system. Prerequisite: CRJ 1000 Fall</td>
<td></td>
</tr>
<tr>
<td>CRJ 3035</td>
<td>Wrongful Convictions</td>
<td>4 cr</td>
<td>This course is intended to help students understand relevant research on the causes and effects of wrongful convictions. The course draws upon research across several academic disciplines like sociology, psychological sciences, legal studies, and criminology in order to understand wrongful convictions as social processes that occur at different levels of social reality (i.e. individual to systemic), and several points within criminal justice systems (from law-making to conviction). Prerequisite: CRJ 1000 or instructor permission</td>
<td></td>
</tr>
<tr>
<td>CRJ 3110</td>
<td>Deviance</td>
<td>4 cr</td>
<td>This course examines deviance as a sociological concept. Students will gain a theoretical understanding of the ways in which deviance has been defined historically, as well as contemporary definitions. Societal reactions, ranging from informal social control to formal control, are also examined. Prerequisite: SOC 1000 or CRJ 1000</td>
<td></td>
</tr>
<tr>
<td>CRJ 3120</td>
<td>Crimes of the Powerful</td>
<td>4 cr</td>
<td>This course explores the social and institutional contexts of various forms of corporate and governmental deviance and/or crime. A range of cases that constitute elite deviance and/or criminal activity will be examined (e.g., insider trading, political corruption, corporate harm caused to consumers and the environment). Each case will be discussed within its larger political, social, and historical context. Prerequisite: SOC 1000 or CRJ 1000</td>
<td></td>
</tr>
</tbody>
</table>
CRJ 3200

Restorative Justice

4cr
This course examines alternative approaches to the traditional corrections-based and/or punitive models of the criminal justice system. Topics covered in this course include victim-offender mediation programs. The theoretical basis of restorative justice is contrasted to retributive models of justice.

CRJ 3300

Mock Trial

4cr
Students who participate in this course will become members of the Carthage Mock Trial Team and will represent Carthage College in the annual American Mock Trial Association Tournament. In this course students will study all aspects of trial court procedure and the litigation process. Students will develop an understanding of how both criminal and civil trials work and will learn about the various roles played by the participants in the trial court process. Students will act as witnesses, prosecutors, and defense attorneys. Students will also work on and develop important skills such as public speaking, critical thinking, negotiation, communication, debating, and team building.

CRJ 4990

Senior Seminar

4cr
The capstone experience for all majors in the department, the primary emphasis of this course will be writing the Senior Thesis. An oral presentation of the thesis is required for this course.
Prerequisites: Senior standing and CRJ 2260 Fall/Spring

Economics / International Political Economy

Developing a student’s ability to “think like an economist” may be taken as the primary purpose of an undergraduate economics education. This involves a number of distinctive elements: using deductive reasoning in conjunction with simplified models to understand economic phenomena; identifying trade-offs in the context of constraints; distinguishing positive (what is) from normative (what should be) analysis; tracing the implications of possible changes in economic institutions or policies; critically examining data to evaluate and refine our understanding of the economy; and creatively framing economic problems and policy questions in ways that suggest novel approaches to their resolution.

These cognitive abilities and modes of thought are enriched by breadth and depth of knowledge, and by the general forms of knowledge that cut across disciplines. Economic reasoning contains not only logic and facts, but also analogies, stories, and value premises. Context — political, historical, and cultural — is important. In formulating economic arguments, students learn to make important connections between economics and other realms of human understanding. In the economics major, we share with other disciplines the desire to empower students with a self-sustaining capacity to think and learn.

At Carthage, the major is rooted in two introductory courses designed to engage students in economic thinking and to demonstrate its applicability to a variety of issues in microeconomics and macroeconomics. The basic principles introduced here are reinforced and refined in the trunk of the major consisting of the intermediate-level theory courses and quantitative methods.

Breadth in the major, the various branches of the tree, is achieved through offering a select number of upper-level electives, each of which emphasizes contextual inquiry and active learning, and draws upon a broad array of source materials. Elective work will often include student internships in economics and foreign study tours offered by departmental faculty. As the capstone to their work in the major, students complete the economic seminar course, including a Senior Thesis approved by a faculty advisor and presented to departmental faculty and students.

Economics Major (44 credits)

1st or 2nd year:
- ECN 1010 Principles of Microeconomics (4 cr.)
- ECN 1020 Principles of Macroeconomics (4 cr.)
- or

2nd or 3rd year:
- ECN 2510 Intermediate Microeconomics (4 cr.)
- ECN 2520 Intermediate Macroeconomics (4 cr.)
- BUS/ECN Applied Statistics for Management and Economics (4 cr.)
- ECN 3310 History of Economic Thought (4 cr.)
- ECN 3340 Introduction to Econometrics (4 cr.)

3rd or 4th year:
Three (3) or four (4) electives in economics from courses 2500 or above. Note: Students who have taken ECN 1010 and ECN 1020 may meet this diversity requirement by taking only three elective courses; students who have taken only ECN 1030 are required to take four elective courses.

4th year:
- ECN 4410 Senior Seminar in Economics (4 cr.)
- ECN 4990 Senior Thesis Completion (0 cr.)

Economics Minor (24 cr)

- ECN 1010 Principles of Microeconomics (4 cr.)
- ECN 1020 Principles of Macroeconomics (4 cr.)
- or
- ECN 1030 Issues in Economics (4 cr.)

- BUS/ECN Applied Statistics for Management and Economics (4 cr.)
- ECN 2510 Intermediate Microeconomics (4 cr.)
- and/or
- ECN 2520 Intermediate Macroeconomics (4 cr.)

Note: Students who have taken ECN 1010 and ECN 1020 may take only one of the intermediate-level courses; students who have taken only ECN 1030 are required to take both intermediate-level courses. Students must take two (2) field electives in economics from courses 2500 or above.

Honors in the Major
Please see Department Chair for details. Basic requirements are listed under All-College Programs in the catalog.

International Political Economy Major
The major and program in International Political Economy (IPE) at Carthage consists of 48 credits. It is designed for students who wish to focus study in business, economics, political science, and other fields on international perspectives, and the business and public policy decisions that help shape
today’s global economy and society. Because the major is broadly cross-disciplinary, and rooted in historical as well as contemporary concerns, students in IPE should be interested in study beyond a single discipline. The major combines applied thought with more abstract thought and discussion, written research and analysis, oral presentation and debate. Students develop knowledge of contemporary world affairs and the world’s peoples. IPE graduates go into a wide range of occupations.

**Core Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECN 1030</td>
<td>Issues in Economics</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ECN/BUS 2340</td>
<td>Applied Statistics for Management and Economics</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ECN 3270</td>
<td>International Trade</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ECN 4030</td>
<td>International Political Economy</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ECN/4050</td>
<td>Seminar in International Political Economy</td>
<td>4 cr.</td>
</tr>
<tr>
<td>POL 1050</td>
<td>Introduction to International Relations</td>
<td>4 cr.</td>
</tr>
<tr>
<td>POL 2050</td>
<td>Philosophical Foundations of Political Economy</td>
<td>4 cr.</td>
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</tbody>
</table>

**Choice of one:**

<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ECN 2510</td>
<td>Intermediate Microeconomics</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ECN 2520</td>
<td>Intermediate Macroeconomics</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

**Choice of three:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECN 200T/400T</td>
<td>Topics in Economics</td>
<td>1-4 cr.</td>
</tr>
<tr>
<td>ECN 3290</td>
<td>International Finance</td>
<td>4 cr.</td>
</tr>
<tr>
<td>ECN 3300</td>
<td>Law and Economics</td>
<td>4 cr.</td>
</tr>
<tr>
<td>GEO 1500</td>
<td>Human Geography</td>
<td>4 cr.</td>
</tr>
<tr>
<td>GEO 1600</td>
<td>Earth Revealed</td>
<td>4 cr.</td>
</tr>
<tr>
<td>GEO 1610</td>
<td>Introduction to GIS: Mapping Your World</td>
<td>4 cr.</td>
</tr>
<tr>
<td>POL 200T/400T</td>
<td>Topics in Political Science</td>
<td>1-4 cr.</td>
</tr>
<tr>
<td>MGT 3730</td>
<td>International Legal Environment of Business</td>
<td>4 cr.</td>
</tr>
<tr>
<td>FRN 3080</td>
<td>French-Speaking World: Social, Political, and Economic Issues</td>
<td>4 cr.</td>
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<td>or</td>
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<tr>
<td>GRM 3080</td>
<td>German-Speaking World: Social, Political, and Economic Issues</td>
<td>4 cr.</td>
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<tr>
<td>or</td>
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<td></td>
</tr>
<tr>
<td>SPN 3080</td>
<td>Spanish-Speaking World: Social, Political, and Economic Issues</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

**ECN 1010**

**Principles of Microeconomics (SOC)**

4 cr

The rise and expansion of market economies, and the principles of microeconomic behavior. Topics include an introduction to economic methodologies, the ideas and institutions of the microeconomy, consumer behavior, the business firm and market structure, labor and capital markets, and government policies affecting resource allocation and the distribution of income.

Fall/Spring

**ECN 1020**

**Principles of Macroeconomics (SOC)**

4 cr

An introduction to the principles and issues of the national economy, and the institutions of macroeconomic behavior. Topics include the role of government in a mixed market economy; measuring and determining national income; money and the banking system; and the public policies available for achieving full employment, price stability, and continuing economic growth in modern industrial and democratic societies.

Prerequisite: None

Fall/Spring

**ECN 1030**

**Issues in Economics (SOC)**

4 cr

This course offers students an introduction to economics, along with some elementary tools of economic analysis, with emphasis on their application to contemporary problems and issues. The economy and selected issues are examined in their global context. Designed to meet the needs and interests of students in various majors outside of the economics and business administration areas, the course is not open to students who have received credit for either ECN 1010 or ECN 1020.

Fall

**ECN 2340**

**Applied Statistics for Economics and Management (MTH)**

4 cr

The application of statistics to problems in business and economics, encompassing the gathering, organization, analysis, and presentation of data. Topics include descriptive statistics in tabular and graphical forms, the common measures of central tendency and dispersion, sampling and probability distributions, construction of confidence intervals and hypothesis testing, and correlation analysis. This course is offered as BUS 2340 or ECN 2340. Students who earned less than 20 on the math component of the ACT (or equivalent on the SAT) are encouraged to take a math class to strengthen their preparation for this class.

Fall/Spring

**ECN 2510**

**Intermediate Microeconomics (SOC)**

4 cr

The economic theory of microeconomic units: consumers, firms, and industries. This entails the study of production, cost, and price theory, and the practices of firms under alternative market structures. Concepts of social welfare will be explored, and the uses and limits of public policy in addressing the problems of market failures will be examined.

Prerequisite: ECN 1010 or 1030

Fall
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECN 2520</td>
<td>Intermediate Macroeconomics (SOC)</td>
<td>4cr</td>
<td>ECN 1020 or 1030</td>
<td>The economic theory of macroeconomic aggregates: national income accounting; the determinants of output, income, and employment levels; the analysis of inflation; processes of economic growth; and open-economy macroeconomics. Monetary, fiscal, and income policies are examined, and the uses and limits of these tools in promoting macroeconomic goals are discussed.</td>
</tr>
<tr>
<td>ECN 3050</td>
<td>Environmental Economics</td>
<td>4cr</td>
<td>ECN 1010, or ECN 1030, or consent of the instructor</td>
<td>This course explores the economic dimension of environmental and natural resource use questions. The actions of producers and consumers, as influenced in part by institutional patterns and public policies, give rise to a variety of environmental problems and issues.</td>
</tr>
<tr>
<td>ECN 3100</td>
<td>Political Economy of East Asia (SOC)</td>
<td>4cr</td>
<td>ECN 1010 or ECN 1030, or consent of the instructor</td>
<td>An exploration of the historical, cultural, and political forces that have contributed to the economic growth and development of Asia. Emphasis is placed on studying development in the context of regional and global integration.</td>
</tr>
<tr>
<td>ECN 3200</td>
<td>Money and Banking (SOC)</td>
<td>4cr</td>
<td>ECN 1020 or ECN 1030</td>
<td>A survey of the financial sector of the economy covering the role and functions of money and other financial instruments; commercial banks and financial intermediaries; the purposes of central banking and the structure and operations of the Federal Reserve; and the relationship between the monetary and credit system and the level of economic activity.</td>
</tr>
<tr>
<td>ECN 3220</td>
<td>Regional Economic Development (SOC)</td>
<td>4cr</td>
<td>ECN 1010 or ECN 1030</td>
<td>The analysis of subnational or regional and metropolitan economies encompassing their distinctive processes and problems of economic growth, employment, and income determination, and intra-urban land use patterns. Policies addressing urban problems in the areas of job creation, housing, public infrastructure, education, and welfare are included among the topical areas examined.</td>
</tr>
<tr>
<td>ECN 3240</td>
<td>Public Sector Economics (SOC)</td>
<td>4cr</td>
<td>ECN 1010 or ECN 1030, or consent of the instructor</td>
<td>An analysis of the reallocative and redistributive functions of federal, state, and local government with emphasis given to examining the efficiency and equity implications of various tax and expenditure programs. Attention also is given to the issues of public borrowing, debt management, public enterprises, and the impact of these public sector activities on private capital markets.</td>
</tr>
<tr>
<td>ECN 3250</td>
<td>Economics of Poverty and Income Inequality (SOC)</td>
<td>4cr</td>
<td></td>
<td>This course surveys research and evidence on the effects of high income inequality on a host of social, economic, and quality-of-life indicators. It studies trends in poverty and inequality in the U.S. and internationally by economic class, gender, and race. The course explores the leading explanations for these trends. It critically evaluates policy options for addressing them, and considers how society's views of these problems and their underlying causes influence policy responses to them. Lastly, the course examines the effects on income distribution and social mobility of a wide range of public policies.</td>
</tr>
<tr>
<td>ECN 3260</td>
<td>Labor Economics (SOC)</td>
<td>4cr</td>
<td>ECN 1010 or ECN 1030, or consent of the instructor</td>
<td>An overview of the institutions and processes affecting the development, allocation, and utilization of human resources, as well as the level and structure of wages and other forms of compensation. Topics include the impact of legislation, collective bargaining, discrimination, and education on labor markets, along with the design of public policies to address market imperfections or to provide assistance to those not currently in the workforce.</td>
</tr>
<tr>
<td>ECN 3270</td>
<td>International Trade (SOC)</td>
<td>4cr</td>
<td>ECN 1010 or ECN 1030, or consent of the instructor</td>
<td>An historical and theoretical analysis of international economic relations in both public and private spheres. Using the principles of economic analysis, models of international trade and factor prices, commercial policy, and economic integration are set forth and become a basis for examining policy issues.</td>
</tr>
</tbody>
</table>
ECN 3290

International Finance
4cr
This course examines the monetary side of international economics and globalization, including the current and historical structure of international financial institutions. Topics include exchange rate theories, monetary regimes, interest rates, asset pricing, risk diversification, the balance of payments, currency crises, and open-economy aspects of fiscal and monetary policies. Emphasis is given to the use of theories in understanding current events and policy issues.
Prerequisites: ECN 1010 and 1020, or ECN 1030
Spring

ECN 3300

Law and Economics (SOC)
4cr
An examination of how economic concepts and modeling can be applied to help determine the justification for, and the effects of, various types of laws and contractual arrangements. The problems posed by externalities and other market failure arising in resource, labor, and product markets are discussed, and the legal framework and regulatory environment for addressing these issues is surveyed so alternative approaches might be evaluated.
Prerequisite: Junior or senior standing

ECN 3310

History of Economic Thought (SOC)
4cr
The evolution of economic ideas in the Western tradition, their influence on their times, and their lasting effects on the economics discipline are the focus of this course. The precapitalist development of economic thought is explored, followed by an examination in the capitalist age of classical, neoclassical, and Keynesian economics with particular emphasis on the work of Smith, Marx, and Keynes. The final stage of the course considers modern economic thought and the role its antecedents play in informing contemporary theoretical and policy discussions.
Spring

ECN 3330

The Economics of Love and Sex
4cr
No one would argue that ours is not a culture of commodification. Everything is for sale; we even package ourselves for consumption in the college and job market. Even our most intimate relationships may be governed by supply and demand and cost-benefits analysis. The extent to which love and sex are subject to market forces is the controlling question of this course. Using a combination of literature, film, and economic and feminist theory, we will go back to the Greek philosophers to define love and friendship, then explore the relationship between love, sex, and economics in British and American culture from the long 19th century until today.
Prerequisite: Junior standing

ECN 3340

Introduction to Econometrics (SOC)
4cr
Econometrics is a set of tools researchers use to estimate relationships between variables, test theories, and make forecasts, all using real-world data. Econometric analysis supports decision-making in public policy, business, the court system, and academia. This course provides a rigorous introduction to econometrics, with a particular emphasis on multiple regression analysis. Topics include formulating good research questions; estimating regression models using cross-section, time-series, and panel data; conducting hypothesis tests; and interpreting and critically evaluating published regression results.
Prerequisite: BUS/ECN 2340
Spring

ECN 3350

Internship in Economics/IPE
4-8cr
Placement for a term and relevant learning experiences in business, nonprofit organizations, or government. Enrollment is restricted to economics majors; this course may not be used to fulfill upper-division economic electives. Graded P/F.
Prerequisites: Junior standing and permission of the instructor
Fall/Spring
ECN 400D

TP: Big Data in Economics and Public Policy (SOC)

4cr
Large amounts of data are increasingly being used to design and implement public policies that address the largest challenges our society faces. During this course you will learn how big data can be used in conjunction with economic theory to understand and address public policy problems such as economic mobility and climate change. You will be introduced to how to manipulate and analyze data to glean insights about the world around you. We will discuss the basics of learning from data, casual inference, regression, and some data visualization techniques.
Prerequisite: BUS/ECN 2340 or MTH 1050, and either ECN 1010, ECN 1020, ECN 1030 or CSC 1030.

ECN 4030

International Political Economy (SOC)

4cr
Building upon prior analysis of international trade and finance, this course offers students an advanced study of the interaction of the economic and political processes in the world arena. Topics may include, but are not limited to, economic and political integration, theories of direct foreign investment and international production, economic development, the political economy of the global environment, and international governance.
Spring

ECN 4050

Seminar in International Political Economy

4cr
Serving as a capstone for the International Political Economy major, the seminar goes beyond disciplinary lines in an attempt to further integrate diverse and often competing perspectives, methodologies, and values. A research thesis on a topic of the individual student's choice, made in consultation with an advisor, is required along with an oral presentation to faculty and students involved in the program.
Prerequisite: Senior standing
Spring

ECN 4410

Senior Seminar in Economics

4cr
Serving as a capstone for the major, the seminar focuses on the research process in economics. Essential elements of this process are development of an effective research question, surveying the literature, analysis of a selected problem, the testing of this analysis and interpretation of results, drawing conclusions, and effective communication of research findings to a wider audience.
Successful completion of a thesis on a topic approved by the department along with an oral presentation of results to faculty and students is required.
Prerequisites: ECN 2510, ECN 2520, ECN 3310, and ECN 3340
Fall

ECN 4990

Senior Thesis Completion

0cr
Students must register for ECN 4990 during the semester of their Senior Thesis completion.

Education

The Education Department at Carthage offers majors in Middle Childhood/Early Adolescent Education (ages 6-13; grades 1-8) and Cross-Categorical Special Education (ages 6-21; grades K-12); minors in Early Adolescence/Adolescent Education (ages 10-21; grades 5-12); and programs in the special fields: art, music, theatre, and physical education (grades K-12).

Teacher Licensure Programs/Majors

Carthage prepares students for teaching in the following majors: middle childhood/early adolescent (elementary/middle education), art, cross-categorical special education, biology, broad field social science, chemistry, economics, English, French, German, geography, history, mathematics, music, physical education, physics, political science, psychology, sociology, Spanish, theatre, and communication.

Please see the requirements for each major in the appropriate section of the catalog.
NOTE: Completion of the Carthage education program does not guarantee licensure. State requirements (such as student teaching, content tests, edTPA assessments, criminal background checks, etc.) in addition to program completion must also be met for teacher certification.

Planning a Program

A decision to teach requires a personal commitment and the willingness to follow a prescribed program. Students whose goal is teaching must plan their program with particular care in order to meet both the requirements for graduation and the requirements for a teaching license. Details for these programs can be found in the handbook Steps to Becoming a Teacher. Because licensure requirements may vary among the different states, students are advised to seek information early in their college career regarding particular state requirements.

In each of the licensure programs listed, there are specific course sequences that must be followed to achieve licensure. Students are expected to plan and confirm their programs with an Education Department faculty member and/or appointed advisor. Middle Childhood/Early Adolescent majors shall demonstrate proficiency in the standards in section PI 34.02 and complete a minor (licensable or non-licensable) approved by the state superintendent in one of the categories or subcategories in section PI 34.39 or 34.30 (see Steps handbook for a complete list). Middle Childhood/Early Adolescent majors seeking licensure in a minor area must choose from the licensable minor list also found in the Steps handbook.

Admission into the Teacher Education Licensure Program

Admission into the Teacher Education Licensure Program (TEP) requires a
cumulative grade point average (GPA) of not less than 2.75 on a 4.0 scale computed on all credits of collegiate-level coursework for undergraduate programs at any and all postsecondary schools attended. The GPA needed in education courses, major and minor, must be at least 2.75.

Students must successfully complete a criminal background check prior to admittance to the Teacher Education Program. Students are also expected to successfully complete an assessment of basic skills using standardized tests and other appropriate measures prior to admission to the Teacher Education Program. All students who want to be admitted to the Teacher Education Program to pursue state licensure must either achieve a composite ACT score of 23 or higher with a minimum score of 20 on each subset (or the equivalent scores on the SAT) or exceed the following passing scores on the CORE test prior to application for admittance to the Teacher Education Program: Reading 156, Writing 162, and Mathematics 150, or earn grades of 3.0 or higher on a set of courses selected by the Education Department and approved by DPI, listed clearly in the Steps handbook.

Students should apply for admission to the Teacher Education Program after completing foundation courses in education with a C- or better (EDU 1010, 2010, and 2720 for Middle Childhood/Early Adolescent majors or 2570 for Early Adolescent/Adolescent minors and Theatre majors; including EXS 2700 for Exercise and Sport Science majors, MUS 1180 for Music majors, and EDU 2150 for Art Education majors) and in general education (COR 1200 with a C or better). Only students who have at least a 2.75 cumulative grade point average are allowed into the program. No student seeking licensure may enroll in education courses numbered 3000 and above without first having been admitted to the Teacher Education Program. Students must consult their Steps to Becoming a Teacher handbook for the complete list of TEP requirements.

**Student Teaching**

Student teaching is required for all licensure programs (initial and add-on).

In order to be approved for student teaching and later endorsed for licensure, a student must have a minimum grade point average of 2.75 on a 4.0 scale for the entire undergraduate program, which includes courses from all institutions of higher learning prior to attending Carthage. In addition, student teaching candidates need to submit a second self-report background check, successfully complete pre-student teaching field experiences, pass the appropriate Praxis II content test, or earn a 3.0 or higher in the appropriate courses as listed in the Steps handbook, and pass the FORT Exam (for MC/EA and CCSE majors) by the time that they apply to student teach, and successfully complete an interview. **Students must be admitted to the Teacher Education Program at least one term prior to application for student teaching.**

Student teachers will earn a grade of P (Pass) or F (Fail). The grade of P (Pass) is equivalent to a grade of a C or higher.

**Clinical Experience**

The pre-student teaching clinical experiences at Carthage are developmental in scope and sequence and will occur in a variety of settings. To meet the clinical experience requirements, students must successfully complete an education course requiring a pre-student teaching clinical experience. Students are expected to balance these experiences so that their time is distributed within the content and grade levels in which students seek licensure and in multicultural settings.

**Human Relations**

The human relations requirement is satisfied by taking Intellectual Foundations (COR 1200) and completing required field experiences as cited above.

**Environmental Education**

Teacher education certification candidates in Middle Childhood/Early Adolescent education, science, social studies, and other related areas are required to gain competencies in environmental education through liberal arts and education courses as well as other experiences.

Students should be able to show exposure to knowledge of:

1. The wide variety of natural resources and methods of conserving those natural resources.
2. Interactions between the living and nonliving elements of the natural environment.
3. The concept of energy and its transformation in physical and biological systems.
4. Interactions among people and the natural and manufactured environments.
   • Historic and philosophical review of the interactions between people and the environment
   • The social, economic, and political implications of continued growth of the human population
   • The concept of renewable and nonrenewable resources and the principles of resource management
   • The impact of technology on the environment
   • The manner in which physical and mental well-being is affected by interaction between people and their environments
5. Affective education methods that may be used to examine attitudes and values inherent in environmental problems.
6. Ability to incorporate the study of environmental problems in whichever subjects or grade levels the teachers are involved.
   • Outdoor teaching strategies
   • Simulation
   • Case studies
   • Community resource use
   • Environmental issue investigation, evaluation, and action planning
7. Ways in which citizens can actively participate in resolving environmental problems.

Middle Childhood/Early Adolescent majors fulfill the environmental education requirements in methods courses 3160 and 3260.

Students in the Early Adolescent/Adolescent minor can fulfill the environmental science requirement by taking either of the following courses: BIO 1020 or BIO 1030.

The biological science requirement can be fulfilled by taking either BIO 1020 or BIO 1030.

**General Education Requirements for Education Majors:**

Middle Childhood through Early Adolescent majors and Early Adolescent through Adolescent minors must meet the following requirements:

**Core Sequence:** COR 1200 and one course marked as Global Heritage (GH).

**Writing Across the Curriculum:** Four courses including one Intellectual Foundation course (COR 1200), one writing-intensive labeled course in the department, and two choice writing-intensive courses in the College.

**HIS 1000:** Issues in American History (4 cr.) fulfills the HUM distribution credit for general education requirements.

**Fine Arts:** Choose from approved catalog list of art, music, theatre, or communication courses with FAR distribution credit (4 cr.)

**Natural Sciences:** Choose from the courses listed below (may not be substituted with trips):
1. Any approved biological science (4 cr): BIO 1010, BIO 1020, BIO 1030, BIO 1040 (BIO 1020 or 1030 is recommended for students in the sciences or social sciences/history seeking secondary licensure).

2. Any approved physical science course (physics or chemistry) (4 cr.): CHM 1000, CHM 1010, PHY 1000, or PHY 1030.

**Social Science:** one with SOC distribution credit from the area of economics, geography, political science, psychology, or sociology (4 cr.)

**Modern Language:** Choose two courses (8 cr.) with MLA distribution credit.

**Mathematics:** Choose one course (4 cr.) with MTH distribution credit (may not be substituted with a trip).

**Religious Studies:** REL 1000 Understandings of Religion

**Exercise and Sport Science**

Middle Childhood and Early Adolescent majors must take EXS 2450 Physical Education and Health Methods. Early Adolescence/Adolescence minors should take EXS 0010 Concepts of Physical Fitness and one credit of an EXS lifetime fitness course.

Students who double major in Elementary Education and Cross-Categorical Special Education or minor in Urban Education are exempt from the 82 credits that are required to be taken outside of the department. All other general education requirements listed above must be fulfilled.

**NOTE:** Topics courses may not be used to satisfy content course requirements.

**Majors:**

**Middle Childhood through Early Adolescent (Grades 1 through 8)**

The Education Department offers a major in Middle Childhood through Early Adolescent (Grades 1-8), which requires completion of the following courses:

1. Courses for the major

   - EDU 1010 Education and Society (4 cr.)
   - EDU 2050 Teaching and Supporting Learners with Diverse Characteristics and Needs (4 cr.)
   - EDU 2130 Multicultural Children’s and Early Adolescent’s Literature (4 cr.)
   - EDU 2150 Creative Arts: Music and Art in Elementary and Middle Schools (4 cr.)
   - EDU 2720 Fostering Engagement and Positive Behavior in the Classroom (Grades 1-8) (4 cr.)
   - EDU 3160 Social Studies in the Elementary and Middle Schools (4 cr.)
   - EDU 3230 Reading and Language Arts in the Middle Grades (4 cr.)
   - EDU 3250 Effectively Teaching Mathematics in the Elementary/Middle School (4 cr.)
   - EDU 3260 Effectively Teaching Science in the Elementary/Middle School (4 cr.)

2. Choose one (4 cr.) course from the following:

   - EDU 2340 Foundations in Urban Education (4 cr.)
   - EDU 3240 English Language Learner: Methods and Study in Education (4 cr.)
   - EDU 4282 Culturally Responsive Instruction (4 cr.)

3. The following courses are required to complete the Wisconsin teacher licensure requirements:

   - EDU 2010 Educational Psychology and Assessment (4 cr.)
   - EDU 3220 Reading and Language Arts in the Early Grades (4 cr.)
   - EDU 4900 Student Teaching Seminar (12 cr.)

4. The following courses are required for licensure and are taken as general education requirements for the Carthage degree:

   - EDU 2010 Educational Psychology and Assessment (4 cr.)
   - EDU 3220 Reading and Language Arts in the Early Grades (4 cr.)
   - EDU 4900 Student Teaching Seminar (12 cr.)

5. The Middle Childhood through Early Adolescent major also must earn a minor or second major. Candidates will choose either a licensable or non-licensable minor.

6. The senior capstone experience for Middle Childhood through Early Adolescent majors is the successful completion of student teaching.

**Licensable Minors:** biology, chemistry, English, French, geography, German, health (for EXSS majors only), history, mathematics, natural science/STEM, physics, Spanish, speech communication.

**Non-licensable Minors:** art (studio or art history), business, computer science, economics, marketing, music, political science, psychological science, sociology, theatre, and urban education.

**Broad Field Social Science Secondary Education Major**

(56 credits for major, plus 18 credits for licensure):

The Broad Field Social Science Education major emphasizes breadth over depth in the social sciences and is solely for students who are also pursuing teacher certification in Secondary Education (Early Adolescence to Adolescence, grades 5-12).

This major consists of two components plus a minor:

1. A total of 32 credits from at least five of the following social science departments: Geospatial Science History Political Science Psychology Sociology Economics

   Note: A minimum of 4 credits must be earned in each of the above departments, but no more than 8 credits can be from any one department, except for the minor field that students choose for certification (see below).

2. Completion of 24 credits required for the Early Adolescence through Adolescence minor, plus the additional 18 credits.
required for Early Adolescence through Adolescence certification.

Minor for the Broad Field Social Science Major:

All Broad Field Social Science Education majors MUST select a minor from the following list, which is NOT included in the 32 credits listed in the major (above), and for which they will be licensed in grades 5-12: history, political science, sociology, economics, or psychology. They must earn 24 credits in the minor department. See minor requirements for the selected department. The Senior Thesis is completed as part of the EDU 4200 course: Methods and Materials in Teaching Secondary Social Science.

Cross-Categorical Special Education

Students seeking the major in Cross-Categorical Special Education must also have a major in Middle Childhood through Early Adolescent education or a content major and an Early Adolescence and Adolescence minor. Upon completion of the Cross-Categorical Special Education major, students are eligible for both licenses: Ages 6-12 and Ages 13-21. They must apply for both licenses to ensure that their certification will span grades 1-12 (ages 6-21). The Cross-Categorical Special Education major consists of the following courses:

1. Core courses for the major:
   
   EDU 2080 Instructional Technology for Exceptional Learners (4 cr.)
   
   EDU 2120 Inclusion: Communication and Collaboration with Families, Professionals, and Communities (4 cr.)
   
   EDU 3110 Comprehensive Assessment of Exceptional Learners (4 cr.)
   
   EDU 4090 Methods for Teaching Elementary Level Exceptional Learners (4 cr.)
   
   EDU 4100 Methods for Teaching Secondary Level Exceptional Learners (4 cr.)
   
   EDU 4300 Professional Seminar (2 cr.)

   Education Minors:

   Urban Education Minor

   For teacher candidates seeking grades 1-8 (Middle Childhood through Early Adolescence) certification or grades 5-12 (Early Adolescence through Adolescence) certification:
   
   Requirements for the minor:

   The candidates will:

   1. Major in Elementary Education (MC-EA license) or minor in Secondary Education (EA-A license)
   
   2. Complete the following six courses (24 credits):
      
      EDU 2340 Foundations in Urban Education
      
      SWK 2500 Engaging Multicultural Students and Families
      
      EDU 3240 English Language Learner: Methods and Studies in Education
      
      EDU 3340 Teachers and Teaching in Urban Education
      
      EDU 4282 Culturally Responsive Instruction
      
      EDU 4340 Urban and Cultural Leadership

   Natural Science/STEM Minor

   For teacher candidates seeking grades 1-8 (Middle Childhood through Early Adolescence certification):
   
   The STEM minor consists of 20 credits. All students must complete four foundation courses (16 cr) of the following:
   
   Requirement 1 (Choose one of the following):

   - BIO 1020 Plants and People (4 cr.)
   - BIO 1030 Conservation for Educators (4 cr.)
   - ENV 1000 Introduction to Environmental Science (4 cr.)

   Requirement 2 (Choose one of the following):

   - CHM 1000 Better Living Through Chemistry (4 cr.)
   - CHM 1010 General Chemistry I (4 cr.)
   - PHY 1000 Physics for Future Presidents (4 cr.)
   - Requirement 4

   GEO 1600 Earth Revealed (4 cr.)

   In addition to the 16 core credits, students must then complete an additional four credits:

   - EDU 3270 Exemplary STEM Education (4 cr.)

   Broad Field Science Minor

   For teacher candidates seeking grades 5-12 (Early Adolescence through Adolescence) certification:
   
   The Broad Field Science minor, as a supplement to the science major and EA-A education certification, will prepare students to teach science in middle schools and high schools.
   
   Requirements for the Minor

   The students will:

   1. Major in biology, chemistry, or physics.
   
   2. Complete an additional 24 credits from the following list of courses, two from each of the three core areas of science not in their major field:
      
      Chemistry
      - CHM 1010 General Chemistry I
      - CHM 1020 General Chemistry II
      
      Biology
      - BIO 1020 Plants and People
      - BIO 1030 Conservation for Educators
      - BIO 2200 Introduction to Ecology
      
      Physics
      - PHY 2100 Physics I
      - PHY 2110 Physics II
      - PHY 2200 General Physics I
      - PHY 2210 General Physics II
      - ENV 1000 Introduction to Environmental Science
      
      Secondary Education Minor

   For teacher candidates seeking grades 5-12 (Early Adolescence through Adolescence) certification:
   
   Students preparing for middle/secondary teaching must complete a licensable major in the academic area in which they plan to teach and an Early Adolescence through Adolescence Education minor. Students may not pursue a Secondary Education minor if they do not plan to complete EDU 4900 Student Teaching Seminar. Students majoring in physical education, music, art, and theatre should refer to the respective areas of the catalog for additional requirements.
   
   The minor consists of the following education courses:

   1. Courses for the minor
      
      EDU 1010 Education and Society (4 cr.)
      
      EDU 2050 Teaching and Supporting Learners with Diverse Characteristics and Needs (4 cr.)
      
      EDU 2570 Fostering Engagement and Positive Behavior in the Classroom (Grades 5-12) (4 cr.)
      
      EDU 3520 Developmental and Content Area Reading (4 cr.)
      
      *** 4200 Methods and Materials (in appropriate content area) (4 cr.)
Choose one of the following (4 cr.):
EDU 2340 Foundations in Urban Education (4 cr.)
EDU 3240 English Language Learner: Methods and Study in Education (4 cr.)
EDU 4282 Culturally Responsive Instruction (4 cr.)

2. Additional courses required for licensure (18 cr.):
EDU 2010 Educational Psychology and Assessment (4 cr.)
EDU 4900 Student Teaching Seminar (12 cr.)
Note: English majors must also take EDU 2130 Multicultural Children’s and Early Adolescents’ Literature (4 cr.)

3. The following courses are required for licensure and taken as general education requirements for the Carthage degree:
HIS 1000 Issues in American History (4 cr.)
Any appropriate social science course (4 cr.)
Any appropriate biological science course (4 cr.)
Any appropriate physical science course (physics or chemistry), at least one must be a lab science (4 cr.)

4. Science and social science majors, including history, must satisfy the environmental education requirement by completing BIO 1020 Plants and People or BIO 1030 Conservation for Educations or ENV 1000 Introduction to Environmental Science. Students may not use study tours to satisfy BIO and PHY science requirements.

5. Secondary Education students will complete the Senior Thesis in their major fields.

6. All education majors and minors should plan their program with an advisor from the major and minor academic area and an advisor from the Education Department.

7. NOTE: Topics courses may not be used to satisfy content course requirements.

**Educational Studies Minor**

For non-education majors:

Education involves the ability to teach, manage, and lead a group of people. Therefore, students majoring in management, psychological science, social work, religion, and related disciplines would benefit greatly with a minor in educational studies. This minor provides the background information on basic educational theories, child and adolescent psychology, and foundational knowledge about how their majors connect with the ability to teach, manage, and lead groups of people.

Required:
EDU 1010 Education and Society (4 cr.)
EDU 2010 Educational Psychology and Assessment (4 cr.)
EDU 2050 Teaching and Supporting Learners with Diverse Characteristics and Needs (4 cr.)

Choose two of the following:
EDU 2130 Multicultural Children’s and Adolescents’ Literature (4 cr.)
EDU 2340 Foundations in Urban Education (4 cr.)
EDU 2570 Fostering Engagement and Positive Behavior in the Classroom (Grades 5-12) (4 cr.)
EDU 2720 Fostering Engagement and Positive Behavior in the Classroom (Grades 1-8) (4 cr.)
EDU 3240 English Language Learner: Methods and Study in Education (4 cr.)

**Field Experience Required:**
EDU 3500 Fieldwork in Education (4 cr.)

**EDU 2010**

**Educational Psychology and Assessment**

4cr

The course will provide introductions to major theoretical systems of relevance to education, background on instructional design tactics based on the theories covered, and historical background on key psychological and assessment issues that bear on current teaching practices. Contributions of educational psychology and assessment to the areas of classroom management, research foundations, reading and interpreting data, and current instructional methodologies will be addressed.

Prerequisite: EDU 1010
Fall/Spring

**EDU 2050**

**Teaching and Supporting Learners with Diverse Characteristics and Needs**

4cr

This methods course prepares preservice general educators to effectively teach and support learners with diverse characteristics and needs in the context of the general education classroom. Characteristics of learners with learning and behavioral differences, including those eligible for special education services, are addressed, with additional content on the impact of cultural and language differences on learning.

Participants will apply principles of differentiation and universal design in planning whole-class and small-group instruction that involves the integration of technologies and strategy instruction. A field-based project is required.

Prerequisite: EDU 1010
Fall/J-Term/Spring

**EDU 1010**

**Education and Society**

4cr

The history and philosophy of education (elementary, middle/junior high, and secondary), as well as current social and political issues of education learning environments will be the basic content of this course. Governance issues will also be examined. Critical-thinking skills will be developed through writing, speaking, and listening.

Fall/J-Term/Spring
EDU 2080

Instructional Technology for Exceptional Learners

4cr
Students will demonstrate fluency in describing pedagogical approaches to incorporating technology into the instruction of exceptional learners, particularly students with learning disabilities, emotional disturbance, and cognitive disorders. Field experience required.
Prerequisite: EDU 1010

EDU 2120

Inclusion: Communication and Collaboration with Families, Professionals, and Communities

4cr
This course will prepare preservice special educators to effectively communicate and collaborate with other professionals, family members, and communities for the maximal benefits of students with disabilities.
Prerequisite: EDU 2010

EDU 2130

Multicultural Children's and Early Adolescents' Literature

4cr
A study of the story interests of children and early adolescents. Emphasis will be placed on the interactive strategies that focus on content and process and encourage students' responses in social, affective, cognitive, and metacognitive dimension. Literature will be used as an instructional tool to promote all aspects of reading in correlation with engaging students in literature experiences as a central theme.
Prerequisite: EDU 1010
Fall/Spring

EDU 2150

Creative Arts: Music and Art in Elementary and Middle Schools

4cr
A study of the philosophies, methods, and materials essential in facilitating artistic development in elementary and middle school students. This comprehensive approach to arts education includes art and music history, criticism, aesthetics, and active participation in art making and musical performance. Emphasis will be placed upon the integration of the arts into the curriculum. Fieldwork required.
Prerequisite: EDU 1010 Corequisite: EDU 3220 and EDU 3250

EDU 2150

Fostering Engagement and Positive Behavior in the Classroom (Grades 1-8)

4cr
A study of the methods and techniques involved in organized behavior management programs in a school setting. Emphasis is placed on the role of the teacher in relationship to children with special needs. Fieldwork required. Contributions of educational psychology to the areas of classroom management and conflict resolution will be addressed.
Prerequisites: EDU 1010 and EDU 2010
Fall/Spring

EDU 2340

Foundations in Urban Education

4cr
Foundations in Urban Education will provide students with background information to understand current issues in urban schooling. Students will learn the history of urban education, politics and culture in urban schooling, and conduct fieldwork in local urban school settings.
Spring

EDU 2810

Alcohol, Tobacco, and Other Drugs (ATOD) Education

2cr
This course provides an overview of substance use and abuse among adolescents. The course will focus on understanding how to teach this topic as part of a comprehensive school health education curriculum.
Prerequisite: EDU 1010

EDU 3110

Comprehensive Assessment of Exceptional Learners

4cr
Students will demonstrate competence in designing, implementing, and interpreting informal assessment instruments.
Prerequisite: Admission to the Teacher Education Program
EDU 3160
Social Studies in the Elementary and Middle Schools
4cr
A study of the processes, skills, and learning approaches required for teaching social studies. Values, value clarification, moral development, simulations, and global concepts will be stressed. Fieldwork required. Prerequisite: Admission to the Teacher Education Program Corequisite: EDU 3230 and EDU 3260

EDU 3220
Reading and Language Arts in the Early Grades
4cr
The study of the development and mastery of information that involves the integrated processes of reading and thinking. Emphasis will be placed on the developing reader, including the understanding of English Language Learners. In addition, the course will focus on the integration of language arts into the curriculum, implementation of word analysis strategies, comprehension of written discourse, reading in the content areas, and the management of reading programs. Fieldwork required. Prerequisite: Admission to the Teacher Education Program Corequisite: EDU 3250 and EDU 2150

EDU 3230
Reading and Language Arts in the Middle Grades
4cr
The study of formal and informal diagnostic procedures for identifying strengths and weaknesses of students' reading, and the successful implementation of programs designed to meet the individual needs of students in learning the language arts. In addition, an emphasis will be placed on the role of linguistics in reading development. Fieldwork required. Prerequisite: Admission to the Teacher Education Program Corequisite: EDU 3260 and EDU 3160

EDU 3240
English Language Learner: Methods and Studies in Education (DIV)
4cr
This course will provide foundational knowledge and experiences in the effective instruction of students whose native language is not English. Students will become familiar with major theories, educational issues, and instructional methods that are related to working with this specific population of students across all grade levels, K-12. Observational field experiences will be required. Prerequisite: Admission to the Teacher Education Program or declared Educational Studies minor

EDU 3250
Effectively Teaching Mathematics in the Elementary/Middle School
4cr
This course is designed to provide elementary/middle school preservice teachers with knowledge of the development sequence of mathematical knowledge and fluency in the pedagogical concepts and skills needed for student success. The focus of this course is on the content, methods of teaching, and curricula as taught at the early childhood, elementary, and middle school levels. A wide range of teaching and learning experiences will be demonstrated and practiced. The course experiences include collaborating with the instructor and cooperating teachers who are involved in our partnerships with local schools in planning, implementing, and evaluating classroom mathematics instruction. Environmental education will be incorporated into this course. Field experience required. Prerequisite: Admission to the Teacher Education Program Corequisite: EDU 3260 and EDU 3160

EDU 3260
Effectively Teaching Science in the Elementary/Middle School
4cr
This course is designed to provide elementary/middle school preservice teachers with knowledge of the developmental sequence of scientific ideas and concepts and fluency in the pedagogical concepts and skills needed for student success. The focus of this course is on the content, methods of teaching, and curricula as taught at the early childhood, elementary, and middle school levels. A wide range of teaching and learning experiences will be demonstrated and practiced. The course experiences include collaborating with the instructor and cooperating teachers who are involved in our partnerships with local schools in planning, implementing, and evaluating classroom science instruction. Field experience required. Prerequisite: Admission to the Teacher Education Program Corequisite: EDU 3260 and EDU 3160

EDU 3270
Exemplary STEM Education
4cr
Human societies and our natural world are being shaped in powerful ways by science, technology, engineering, and mathematics. STEM education, therefore, seeks to prepare today's youth to thrive and serve in the world they will inherit as adults. In this course, students examine the idea of STEM literacy, the origin and evolution of STEM education as a national and international imperative, trends in equity and opportunity of access, and common features of exemplary STEM programs and schools. With this foundation, students complete either a comparative or criterion-referenced analysis of (an) existing STEM school/program(s). Prerequisite: Permission of instructor
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 3340</td>
<td>Teachers and Teaching in Urban Education</td>
<td>4cr</td>
<td>This undergraduate course provides an analysis of historical socioeconomic status and political factors influencing urban education; methods of effective instruction and practice that include positive school culture for learning; and opportunities to explore various analytical frameworks (critical race theory, privilege theory, social identity development) that embody the epistemological, methodological, and pedagogical approaches to study/understand everyday inequities in P-20 education. Field experience required. Prerequisite: Admission to the Teacher Education Program (TEP)</td>
<td></td>
</tr>
<tr>
<td>EDU 3500</td>
<td>Fieldwork in Education</td>
<td>4cr</td>
<td>This is a self-designed clinical experience intended for students who have a minor in Educational Studies. In this course, the student will work with a member of the Education Department faculty to develop a professional fieldwork experience. The fieldwork experience will occur in a professional setting that reflects the student's potential career based on his or her major field of study. Prerequisite: Declared Educational Studies minor</td>
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<tr>
<td>EDU 3520</td>
<td>Developmental and Content Area Reading</td>
<td>4cr</td>
<td>The study of written communication as an interactive process that requires the integration of the individual reader, text, and context factors. The course will focus on using reading to teach subject matter in middle and secondary schools. Note: The course is required for all subject matter certification candidates including art, music, and physical education. Field experience required. Prerequisite: Admission to the Teacher Education Program Fall/Spring</td>
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<tr>
<td>EDU 3900</td>
<td>Junior Thesis Seminar</td>
<td>2cr</td>
<td>This seminar class incorporates teaching knowledge and skills with the applications of teaching methods and the theory behind the practice. The InTASC Teaching Standards, required portfolio development (Senior Thesis), teaching mission, and personal philosophy will be finalized. The compilation of the portfolio is the Senior Thesis for those students seeking elementary education licensure. The state requirement of the edTPA (Educational Teacher Performance Assessment) will be introduced and delineated for all pre-student-teaching students. Wisconsin state teaching licensure procedures and requirements will be reviewed with additional attention to Illinois teaching license procedures. Emphasis within this course may change to reflect current trends, innovations, and requirements relevant to state teaching licensure. Prerequisites: Admission to the Teacher Education Program (TEP) and junior standing Fall/Spring</td>
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</tr>
<tr>
<td>EDU 4090</td>
<td>Methods for Teaching Elementary Level Exceptional Learners</td>
<td>4cr</td>
<td>Students will demonstrate understanding of instructional strategies and techniques for working with students with disabilities in inclusive classrooms (grades 1-5) and individualizing the general education curriculum. Students will complete a fieldwork project in which they will assess students with disabilities, develop individualized education programs, and demonstrate the program's effectiveness with performance-based assessment information. Field experience required. Prerequisite: Admission to the Teacher Education Program</td>
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<tr>
<td>EDU 4100</td>
<td>Methods for Teaching Secondary Level Exceptional Learners</td>
<td>4cr</td>
<td>Students will demonstrate understanding of instructional strategies and techniques for working with students with disabilities in inclusive classrooms (grades 6-12) and individualizing the general education curriculum. Field experience required. Prerequisite: Admission to the Teacher Education Program</td>
<td></td>
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</tbody>
</table>
EDU 4200

Methods and Materials in Teaching Secondary Social Science

4cr
A study of social sciences teaching methods and instructional materials in the students' field of preparation. Special attention is given to the selection and organization of subject matter and learning activities. Fieldwork required. Students majoring in broad field social science with a minor in secondary education will write their Senior Thesis in partial fulfillment of the course requirements. Prerequisite: Admission to the Teacher Education Program

Fall

EDU 4279

Bilingual Methods

4cr
This course will draw upon theory, methodology, and research-based best practices for instructing and assessing bilingual students. It will include a focus on contemporary social problems (for the bilingual-bicultural student), culture of the target group, and competency foundations including rationale, historical and legal requirements, and a survey of existing bilingual models including clinical experiences in bilingual classrooms. The course will also include an analysis of current, authentic Spanish language development assessments. Educator cultural competency and the unique learning needs of ELLs from diverse backgrounds, including those with disabilities, will be meaningfully incorporated into course study and application. This course includes 10 hours of clinical experience in a dual-language or bilingual classroom. Prerequisite: Instructor permission

EDU 4280

ELL Literacy and Accommodations

4cr
Instruction will cover five broad areas that participants will use as they work with learners who have varying levels of language and literacy delays. The areas of focus: relevant criteria used for determining language and literacy delays in children; relationships between cognition, speech, and language; cultural and linguistic differences; instructional arrangements for diverse learning styles; and core components of effective literacy instruction. This class includes 10 hours of clinical work in an ESL classroom in addition to the coursework. Prerequisites: Admission to the Teacher Education Program and EDU 3240

EDU 4282

Culturally Responsive Instruction (DIV)

4cr
Students will examine the cultural diversity that exists locally, nationally, and globally in order to develop a positive appreciation for the contributions of other cultures. Students will gain personal contact with members of other cultures and learn effective intercultural communication skills for our diverse world. This class is cross-listed with EDU 5220. Prerequisite: Admission to the Teacher Education Program

Fall/Spring

EDU 4284

Practicum in ESL Classrooms

4cr
This capstone course provides students with observation and analysis skills to apply to their own ESL teaching for this practicum experience, as well as with techniques for working with paraprofessionals in ESL/bilingual classrooms in schools. ESL components/artifacts will be added to the existing portfolio for teaching licensure. Prerequisite: Instructor permission

EDU 4285

Fundamentals of Linguistics for Teachers of Diverse Learners

4cr
This course will provide students with a framework to better understand the parameters of linguistics, including the nature of communication; phonological components such as phonetics, phonology, morphology and syntax; sociolinguistics; and linguistic anthropology. Students will also examine the language acquisition process with regard to its application to student literacy learning outcomes with an emphasis on the unique language acquisition needs of English Language Learners. Prerequisite: Admission to the Teacher Education Program

EDU 4286

Practicum in Bilingual Classrooms

4cr
Students seeking licensure in Bilingual Education will apply what they have learned about the unique needs of additional language learners in a practicum experience. A strong bilingual and ELL learning foundation (based on in-class study, scholarly research, and clinical experiences) will be applied to additional language-learning classroom settings. Students will attend an independent seminar with their professor and will journal, share experiences, and create lesson plans to be critiqued by peers and the course instructor based on a rubric devised specifically with English Language Learning needs in mind. Student portfolios will be completed and reviewed by the course instructor. Prerequisite: Instructor permission

EDU 4300

Professional Seminar

2cr
The readings and assignments in this class will develop students' skills in collaborating with colleagues and parents to support student learning and well-being. Corequisite: EDU 4900 (Student Teaching)

Fall/Spring
EDU 4340

Urban and Cultural Leadership

4cr
This undergraduate course of study provides exploration and analysis of leadership theories within the context of urban schooling and culture through the examination of teachers as formal and informal leaders. Through the analysis of leadership case studies in urban schools, students will determine what empowerment trajectories urban teachers take in order to become teacher leaders who will improve school cultures and student achievement. Field experiences or project-based activities are embedded in this course. Prerequisite: None

EDU 4900

Student Teaching Seminar

12cr
Teacher candidates observe and teach in a classroom for a full semester under the joint supervision of a qualified cooperating teacher and a college supervisor. Seminar addresses issues specific to the student teaching experience and reinforce application of current educational expectations, including Common Core and the final Education Teacher Performance Assessment (edTPA). Certification requirements to obtain an initial and professional license are addressed. Prerequisites: Students must be members of the Teacher Education Program for at least two semesters; maintain a cumulative GPA of 2.75; they must maintain a major GPA of 2.75; complete all required graduation and teaching license coursework; pass the Praxis II content test; pass the FORT (Middle Childhood, Early Adolescence, and Cross-Categorical Special Education only), and clear both a background check and TB test. Fall/Spring

English

The English Department offers a program with several kinds of students in mind: those fulfilling general education requirements; those who want to explore literature and creative writing as electives; those who wish to minor in creative writing; those who wish to complete an education major or minor in English; and those who want a major in English. An English major serves as a springboard to any career rooted in critical

and creative thought. Our graduates work in fields as varied as education, graphic design, sales, creative writing, journalism, government, and law.
The purpose of the English major at Carthage is to foster the imaginative understanding of literature and language. Students will learn to examine language closely, recognizing and identifying significant features, techniques, and patterns, while also expanding their understanding of how such details contribute to meaning, reception, and impact. In coursework that considers the diverse forms and rich historical contexts of literature, students will analyze texts from the perspectives of race, class, gender, and sexuality. Throughout the English curriculum, students will explore the possibilities of language as both readers and writers.
By majoring in English, students will learn to write eloquently in multiple genres, for multiple purposes, including, but not limited to persuading skeptical audiences through clear and convincing argument; developing community through honest and ethical exchange of written ideas; sharing discoveries through public-facing research; building self-awareness through exploratory writing; and developing new perspectives on the self and world through creative engagement with the plural possibilities of language. The department encourages students to learn practices of creative writing and reading that support the development of all student writers. Those who choose to deepen their practices of writing poetry and fiction and nonfiction prose may choose the emphasis in creative writing within the English major or a creative writing minor.
English majors are expected to take advantage of the many opportunities to attend literary programs like the Visiting Writers Series and performances of plays, including those of the Carthage Theatre Department. Majors are encouraged to participate in at least one of the annual fall trips to the Stratford Shakespeare Festival in Ontario and to take advantage of theatre excursions to Chicago and Milwaukee throughout the year.
As part of the specific requirements for each program of study within English, students will choose courses that fall within the following two categories:
Category I: Literature and Its Contexts

English Major (40 credits)
The English major consists of the following:
ENG 1160 Introduction to Literary Studies (4 cr.)
ENG 2050 Introduction to Creative Writing (4 cr.)
ENG 4000 Junior Seminar: Critical Theory and Methods in Literary Studies (4 cr.)
ENG 4100 Senior Seminar (4 cr.)

English majors must also take two courses from Category I: Literature and Its Contexts and two from Category II: Literary Forms and Theories.
All English majors must take either ENG 3090 Literature of Diversity or another ENG course designated to satisfy the “Diverse Perspectives” requirement. The balance of the 40 credits may be completed by choosing among the department course offerings.
In addition, students majoring in English and seeking teaching licensure at the secondary level must take the following:
EDU 2130 Multicultural Children’s and Early Adolescent’s Literature (4 cr.)
ENG 4200 Methods and Materials in Teaching English (4 cr.)

Students interested in teaching licenses should contact the Education Department.

English Minor
The English minor consists of 24 credits,
English majors consists of the following 24-credit course of study:

ENG 2010 American Literary Traditions (4 cr.)
ENG 3040 Advanced Writing (4 cr.)
ENG 4300 Seminar in Creative Writing (4 cr.)

All English minors must take either ENG 3090 Literature of Diversity or another ENG course designated to satisfy the "Diverse Perspectives" requirement. The balance of the 24 credits may be completed by choosing among the department course offerings.

**Honors in the Major**

Students interested in pursuing honors in English should consult the department chairperson. Basic requirements are listed under All-College Programs in the catalog.

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**ENG 1060**

**Interpreting Literature (HUM)**

4 cr

A rotating selection of courses that are designed to introduce nonmajors to critical reading and literary analysis, focusing on the terminology, tools, and practices needed to study literature in an informed, imaginative way. The course may focus on a particular author, genre, or organizing theme (for example, wilderness or satire) and will provide students with knowledge of the conventions and varieties of literature while seeking to instill in them an awareness of the range and diversity in literary voices as well as a sense of how literature and culture interact. Course content rotates according to instructor and semester.

Fall/Spring/Summer

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**ENG 1160**

**Introduction to Literary Studies (HUM)**

4 cr

This gateway course, open to both majors and non-majors, introduces students to the essential techniques, approaches, and fundamental questions of literary studies. How can close attention to language enrich our understanding of any written text? How do we discern and make meaning from literature? Why does literature matter? In this course, students will develop their reading, writing, and critical thinking skills through the careful study of literature from an array of genres and periods. ENG 1160 is required of all English majors and minors and may be used for distribution credit in the Humanities.

Fall/Spring

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**ENG 2010**

**Studies in American Literature (HUM)**

4 cr

This variable content course introduces students to some of the major critical questions of American literary and cultural studies. What is “America”? Identity, and how is it forged through literature and media? How do literary, media, and textual cultures produce and reflect the political concerns of particular historical moments? What do we read, and why do we read, and how do we read, when our aim is to understand ourselves as subjects, or as members of a national community, or U.S. history? How are identities (national, personal, racial, ethnic, gendered, sexual, dis/abled) forged in relation to a larger body politic or imagined community, and how does literature mediate that relation?

The content of this course will shift, sometimes focusing on particular themes or ideas, sometimes focusing on historical period, but the course’s aims will remain consistent: to better understand “America”; through inquiry into the diverse literary productions that circulate in the U.S.; to better understand literature by considering its relation to the cultures, communities, imaginations, and politics of “America.”

Fall/Spring
ENG 2020

Studies in British Literature (HUM)

4cr
This variable-content course provides an introduction to British literature through the study of one or more of the literary historical periods into which the discipline is traditionally divided, e.g., the early modern period, the nineteenth century, modernism, and/or contemporary literature. Through close study of particular authors, styles, and contexts, students will become familiar with the historical and artistic forces that shaped (and continue to shape) the literature of Britain understood in its most expansive sense.
Fall/Spring

ENG 2050

Creative Writing

4cr
A workshop in writing poetry and fiction. Through reading and responding to published literary pieces as well as their own projects, students will acquire increased appreciation for the craft and aesthetic of literature and their own writing skills.
Fall/Spring

ENG 2060

Expository Composition

4cr
This course will focus on the development of a clear and persuasive expository style suited for academic or professional writing. Students will gain a heightened sense of "audience" by reading and responding to each other's writing.

ENG 3010

Literature in Its Time I: Prior to 1800 (HUM)

4cr
A rotating selection of courses engaging important themes, voices, and works of the medieval and Renaissance periods and the 18th century. Because literary works are not written in a vacuum but partake of the beliefs and concerns of a particular milieu, these courses provide the student with an interdisciplinary approach to literature by showing how philosophy, music, art, science, and society are reflected in and help shape the literature of each period. This course can be repeated for credit with alternating topics.

ENG 3020

Literature in Its Time II: After 1800 (HUM)

4cr
A rotating selection of courses engaging important themes, voices, and works of the British Romantic period, the Victorian period, the Modern period, and 19th to 21st century American literature. These courses follow the same interdisciplinary approach as Literature in Its Time I. This course can be repeated for credit with alternating topics.

ENG 3030

Major Texts in Critical Theory (HUM)

4cr
What is literature? What is a text? How does language work? What is the point of reading? How is literature connected to the world? Do we need to understand the historical and political context of a text to decide what it means? How might a reader's own context influence interpretation? This course wrestles with difficult questions like these by exploring a rotating selection of major texts in the fields of literary theory and cultural criticism. Texts may include (but are not limited to) works by Ferdinand de Saussure, Jacques Derrida, Michel Foucault, Edward Said, Judith Butler, Gayatri Chakravorty Spivak, Gloria Anzaldúa, and/or Donna Haraway. We will study the critical texts for themselves, but we will also practice using their interpretive approaches. This course will be excellent preparation for thesis work in English but is not limited to English majors.
Prerequisite: Sophomore standing or above

ENG 3040

Advanced Writing

4cr
A rotating selection of courses focusing on the production of literary and expository writing, the art of the short story and the poem, as well as the essay and creative nonfiction. Through intensive workshops each course will immerse students in the writing process, stressing the craft and technique of writing. In addition to reviewing students' own work, the course will include some study of exemplary works in the appropriate form of discourse.
Prerequisites: ENG 2050 or consent of the instructor
NOTE: This course can be repeated for credit.
Spring
ENG 3070

Film and Literature (HUM)

4cr
This class will explore the relationship between film and literature. Students will be taught to "read" literature and film, analyzing narrative structure, genre conventions, and technical and artistic factors to better understand the relationship between text and image. In addition, students will examine how film and literature reflect the times and conditions in which they are made, and conversely, how they sometimes help shape attitudes and values in society. Our reading and viewing of texts will not only address aesthetic achievement and cultural values, but also distinguish the unique ways in which film and literature construct their representative meanings.

ENG 3090

Literature of Diversity (HUM)

4cr
Each offering in this rotating selection of courses explores a single diverse ethnic literature, such as African-American, Asian-American, Hispanic-American, and Native American. While content will vary according to the discretion of the instructor, this group of courses is united by a common desire to read a diverse literature according to its own heritage double-voice as it is further complicated by issues of gender and class. To this end, a course in Native American literature, for example, might begin with a study of the creation myths in the oral tradition, then move to historical, anthropological, autobiographical, and fictional accounts of the Native American experience as the two (often conflicting) voices of Native American and American describe it.

ENG 3100

Literature and Gender (HUM)

4cr
In this course the literature chosen for study will reflect issues relevant to considerations of gender. In some instances, works will be chosen in order to explore the idea of how literature portrays what it means to be gendered. In other instances, literature will be chosen in order to explore how writers of one gender portray characters of the opposite gender. In some instances the choice of literature will be based on extending awareness of writers who, because of their gender, have not historically been included within the canon. The historical and social contexts of these works will be an integral part of the conversation within the course.

ENG 3110

Shakespeare (HUM)

4cr
This course will offer a deep engagement with Shakespeare through close study of several of his plays. Students will be assigned roles and learn to speak their parts with intention and meaning, developing an understanding of and learning to take pleasure in Shakespeare's language and forms. Close reading and discussion will consider the plays on the page and in performance, while literary history and criticism will provide insight into their forms and contexts.

ENG 3140

Literary Genres (HUM)

4cr
This umbrella covers a series of courses on a single literary genre, such as the short story, poetry, drama, the epic, or the novel, that will vary in emphasis at the discretion of the instructor. The novel, for example, might be a course focusing on the novel as genre and as literature. The genre section of the course will acquaint the student with the relevant criticism. The literary section will approach the novel as literature according to formalist analysis of language and form; canonical issues; sociohistorical contexts; the influence of gender, race, and class; and the role of the reader.

ENG 3150

Special Studies in a Major Author Prior to 1800 (HUM)

4cr
This seminar-style class studies the writing of a major English author prior to 1800. The variable content may draw from one or several genres and gives attention to literary criticism about the writer and the writer's own literary theories. Social, historical, and biographical contexts also constitute elements of the study. Featured authors may include Chaucer, Spenser, Marlowe, Donne, Milton, Swift, or Pope; occasionally the instructor may choose to study two authors rather than one, if the two complement each other.

ENG 3160

Special Studies in a Major Author After 1800 (HUM)

4cr
This seminar-style class studies the writing of a major English author after 1800. The variable content may draw from one or several genres and will give attention to literary criticism about the writer and the writer's own literary theories. Social, historical, and biographical contexts will also constitute elements of the study. Featured authors may include Austen, George Eliot, Twain, Yeats, Hardy, Woolf, T. S. Eliot, and Faulkner. Occasionally the instructor may choose to study two authors rather than one, if the two complement each other.
ENG 4000

**Junior Seminar: Critical Theory and Methods in Literary Studies (HUM)**

4cr

This course, designed for English majors, will prepare students for advanced scholarship in literary studies (that is: the senior thesis in English). The course familiarizes students with genealogies of literary theory and current trends in research. Students will consider the historical, ethical, and philosophical concerns that impact our understanding of literature - its production, circulation, reception, and meaning. They will do this by reading and employing multiple traditions of literary theory, ranging from (but by no means limited to) aesthetic philosophy to cultural studies. Students will also study the modes of inquiry that inform literary studies by learning methods of research, and the modes and genres of scholarly writing in the field of English. This course should be taken by English majors in the semester preceding their senior thesis.

Prerequisites: Declared major in English and junior standing

ENG 4100

**Senior Seminar**

4cr

This course, for senior English majors and seniors from other fields who may petition to be admitted, is a seminar for students to work independently on a substantial paper of literary criticism, while reporting progress and making a final seminar presentation before a group working in the same field of study. Instruction and discussion, especially in the early weeks of the course, will focus on the development of the English language, the history of literary criticism, and bibliographical tools necessary for further research in English. This course is required of all English majors and serves as an opportunity for them to demonstrate their ability to think critically and to express their ideas effectively in writing. They will, furthermore, be required to deal with questions and issues that derive from literary theory.

Fall

ENG 4200

**Methods and Materials in Teaching English**

4cr

A study of English teaching methods and instructional materials. Special attention is given to the selection and organization of subject matter and learning activities. Fieldwork required.

Prerequisite: Admission to the Teacher Education Program (TEP)

Fall

ENG 4300

**Seminar in Creative Writing**

4cr

In this course students will explore, in various ways, how writing enters the world outside the classroom. The primary focus is on the students' Senior Chapbooks. They will develop the content of their Senior Chapbooks in a studio setting, learning how individual pieces can be combined to form a longer work and/or learning how a single longer piece can be readied for sharing in a more final form and to a wider audience. Students will undertake the material production of chapbooks, studying various methods of chapbook production and producing a chapbook of their writing. Finally, they will learn to present that writing in a public reading. Additional related course activities will include participating in public writing activities that extend beyond the campus, including some of the following: teaching writing in the schools or other public institutions; attending and participating in readings off-campus; and sharing work in various ways with the wider community (zines, posters, graffiti, street corner readings, open mikes, etc.).

Prerequisite: ENG 3040 or consent of the instructor

Environmental Science

Students majoring in Environmental Science focus on studying interactions between humans and the natural world. As an area of study in a liberal arts college, this major highlights the interconnections between the natural and social sciences for approaching environmental challenges. The approach is broadly based and yet also focused on the student’s choice of an individual study track (Environmental Conservation, Environmental Analysis, Environmental Policy).

One of the primary goals of the Environmental Science major is to educate natural and social scientists in the liberal arts tradition, so students will understand how to approach complex problems using methodologies and philosophies from multiple disciplines including biology, chemistry, economics, geography, and political science. The program prepares students for graduate study and/or careers in a variety of environmental fields.

**Environmental Science Major**

The major in Environmental Science consists of at least 60 credits including a core set of courses (32 credits) and a plan of study (28 credits) chosen by the student in consultation with his or her advisor.

In consultation with an advisor, the student selects a plan of study that is both focused and interdisciplinary. Three sequences of study from which to choose have been approved for students. Changes to the sequences must be approved by the academic advisor and the Environmental Science department chair.

Per the College requirement, all Environmental Science majors must complete a Senior Thesis. An oral presentation of the Senior Thesis is required following the Environmental Science Senior Seminar (ENV 4000). Environmental Science majors who are double-majoring are required to take ENV 4000 even if they have completed a Senior Seminar in another major.

Students can choose any one of the following course sequences to fulfill their Environmental Science major:

**All students must complete the listed Core requirements:**

**Core Foundations:**

- ENV 1000 Introduction to Environmental Science (4 cr.)
- ENV 2610 Case Studies in Environmental Science (4 cr.)
- ENV 3000 Research Design (4 cr.)
- ENV 4000 Senior Seminar (4 cr.)

**Core Skills:**

- ENV 2100 Quantitative Environmental Analysis (4 cr.)
- GEO 1610 Introduction to GIS: Mapping Your World (4 cr.)

**Core Perspectives:**

- POL 3620 Environmental Politics (4 cr.)
- ECN 3050 Environmental Economics (4 cr.)

**Core Experiences:**
ENV 4980  Applied Experience in the Discipline (0 cr.)
ENV 4990  Senior Thesis Completion (0 cr.)

All students must choose one track and complete the listed Track requirements:

Environmental Conservation Track

Track Foundations:
- BIO 3100  General Ecology
- BIO/ENV 3400  Conservation Science

Track Skills:
- GEO 3900  Methods of Field Research
- OR GEO 2610  Advanced GIS
- OR GEO 2700  Satellite Image and Air Photo Analysis
- ENV 2010  Environmental Chemistry or other approved chemistry course

Track Perspectives:
Three upper-level science courses, at least two of which carry a lab, chosen from:
- BIO 3200 Aquatic Ecology, BIO 3210 Animal Behavior, BIO 3320 Entomology, BIO 4150 Field Botany and Mycology, BIO 4200 Advanced Ecology, GEO 3200 Hydrology, GEO 3400 Forest Ecology, GEO 3700 Climatology, GEO 3800 Soil Science, ENV 2750 Sustainable Agriculture, or other approved course.

Environmental Analysis Track

Track Foundations:
- ENV 2010  Environmental Chemistry

Track Skills:
- CHM 1020  General Chemistry II
- CHM 2070  Organic Chemistry I
- CHM 3230  Analytical Chemistry I or other approved upper-level science course.
- One additional course chosen from: PHY 2100 Physics I, MTH 1120 Calculus I, GEO 2610 Advanced GIS, CSC 1030 Data Science I, or other approved course.

Track Perspectives:
Two upper-level science courses, at least one of which carries a lab, chosen from:
- BIO 3100 General Ecology, BIO 3200 Aquatic Ecology, BIO 3500 Advanced Cell Biology, GEO 3200 Hydrology, GEO 3700 Climatology, GEO 3800 Soil Science, ENV 2550 Environmental Pollutants, or other approved course.

Environmental Policy Track

Track Foundations:
- POL 3930  Environmental Law

Track Skills:
- SOC 3020  Sociological Research or other approved methods course
- CHM 1000  Better Living Through Chemistry OR ENV 2550 Environmental Pollutants
- One data processing course chosen from: BUS/ECN 2340 Applied Statistics for Management and Economics, GEO 2610 Advanced GIS, CSC 1030 Data Science I, or other approved course.

Track Perspectives:
One regionally focused course chosen from: POL 2400 American Government, POL 3040 African Transitions, POL 3360 Latin American Politics, POL 3370 Russian/East European Politics, POL 3380 West European Politics, POL 3400 Chinese Politics, EGN 3100 Political Economy of the Pacific Rim, GEO 2800 Geography of East Asia, or other approved course.

One course on the social components of policy chosen from: SWK 3100 Social Welfare Policy Analysis, POL 3450 Global Poverty, or other approved course.


Successful completion of ENV 1000 will fulfill many prerequisites for the courses listed in each sequence.

Applied Experience in the Discipline (ENV 4980)
Finally, students must complete an approved experience in which they apply their knowledge of Environmental Science outside the classroom, providing them with practical experience in the discipline. This experience should be done in an environmentally relevant job, internship, research experience, or substantive volunteer opportunity.

Examples include:
- Relevant employment in the discipline, either over the summer or part-time during the academic year.
- An environmentally relevant internship with an interest group, nonprofit organization, consulting firm, industry, government agency, etc.
- Research experience through the Carthage SURE program or an off-campus program.
- A substantive volunteer opportunity with an environmental focus.

Field experiences are approved as part of your plan of study. Consult your advisor.

ENV 1000

Introduction to Environmental Science (LAB SCI)

4cr
This course integrates biology, chemistry, and physical geography, and will provide an introduction to the fundamental natural science foundation necessary to understand and be literate in environmental science. Topics include systems analysis (atmosphere, lithosphere, hydrosphere, and biosphere), matter, energy, ecosystems, biodiversity, environmental risk, ozone, water, soil and air pollution, global warming, food resources, and human health. Science and information literacy, with particular emphasis on the evaluation of sources, are emphasized in the classroom experience. Data analysis is an integral component of the course and is emphasized in laboratory work. The laboratory portion of this course will allow students hands-on experience with scientific and instrumental techniques typically used in environmental science with which data are analyzed at a variety of temporal and spatial scales.

Fall

ENV 2010

Environmental Chemistry (LAB SCI)

4cr
An overview of chemical processes in the natural world. The course will include sections on atmospheric chemistry, aquatic chemistry, and soil chemistry and will address both natural phenomena and human impacts. These processes will be used to evaluate the causes and challenges of current environmental issues including ozone depletion, climate change, and water pollution. Laboratory exercises will focus on the analysis of pollutants in environmental samples.

Prerequisite: CHM 1000 or CHM 1010
ENV 2100
Quantitative Environmental Analysis
4cr
An introduction to the quantitative tools used by environmental scientists to evaluate and address environmental issues. The course will introduce students to a range of such tools, discuss their strengths and weaknesses, and apply them to real-world environmental problems.
Prerequisite: ENV 1000

ENV 2550
Environmental Pollutants (NLAB)
4cr
An introduction to the range of natural and synthetic chemicals that contribute to environmental pollution. Topics covered include the structure and properties of pollutants, their sources and use patterns, the pathways by which they enter environmental systems, the factors that affect their transport and fate, and their effects on human and ecosystem health. Through the process of investigating selected pollutants students will gain experience compiling and evaluating scientific information from a variety of sources, including newspaper articles, databases, and scientific journals, and communicating their findings clearly and effectively. Informal laboratory activities will give students the opportunity to design experiments and measure environmental pollutants in real-world settings.

ENV 2610
Case Studies in Environmental Science (LAB SCI)
4cr
This course uses case studies and research experiences to build upon the concepts introduced in ENV 1000. There is further development of topics that integrate biology, chemistry, and physical geography. Topics may include invasive species; biodiversity; water, soil, or air pollution; global warming; food resources; and human health. Data analysis is an integral component of the course and is emphasized in class and laboratory work. The laboratory portion of this course will allow students hands-on experience with scientific and instrumental techniques typically used in environmental science with which data are analyzed on a variety of temporal and spatial scales. For Environmental Science majors, this course allows students to generate work that demonstrates their abilities to synthesize and integrate data and information from the biological, chemical, and geographical sciences.
Prerequisite: ENV 1000 with a grade of C- or higher.

ENV 2650
Photographing Nature: Investigating Biodiversity and Conservation (NLAB)
4cr
This course introduces the student to the use of digital photography to explore plant and animal species and their habitats. The course begins with instruction in digital photography, and then moves outside where students will focus on organisms, learning to photograph them while exploring their biology. Photography will be used to engage students in making detailed observations and beginning the process of scientific discovery. After learning about species, their ecological interactions, and conservation, students will complete a final project that utilizes visual imagery to educate others about the value of biodiversity, ecology, and/or conservation issues.

ENV 2750
Sustainable Agriculture (NLAB)
4cr
This seminar will review the history of agricultural development and evaluate environmental, economic, and social problems that develop from our past and current food production systems. Alternatives to conventional agricultural systems will be discussed and evaluated (including but not limited to organic, biodynamic farming, hydroponics, and vertical farming). We will analyze and discuss these issues from multiple scientific and cultural perspectives, and review the role of food production systems and food choice in promoting or degrading individual, community, and ecosystem health.
Prerequisite: None

ENV 3000
Research Design
4cr
An introduction to the methods used by environmental scientists to design and complete research projects. Topics covered include research strategies, literature reviews, experimental design, data analysis, and scientific writing and communication. As part of the course, students will design an independent research project and develop a formal proposal to support their work.
ENV 3400

Conservation Science
4cr
The multidisciplinary science of conservation focuses on the preservation of biological species and ecosystems. This course examines several aspects of conservation science, including the documentation and classification of the full breadth of biological diversity on earth; the assessment of the health of species populations; the impact of human activities on species, communities, and ecosystems; and strategies for preserving, protecting, and/or restoring species, habitats, communities, and ecosystem services. The course introduces students to research techniques, including both quantitative and qualitative assessments, while exploring contemporary issues in conservation science. Students will also be exposed to a variety of career options for conservation professionals.
Prerequisite: BIO 1120 or ENV 1000

ENV 4000

Senior Seminar
4cr
This is the capstone course for Environmental Science majors. During this course seniors complete and present their Senior Thesis work in consultation with faculty in the Environmental Science program.
Prerequisite: Senior standing

ENV 4980

Applied Experience in the Discipline
0cr
Students must register for Field Experience Completion the term that they plan to complete their field experience.
Prerequisite: Permission of the instructor

ENV 4990

Senior Thesis Completion
0cr
Students must register for ENV 4990 during the semester that they plan to complete their Senior Thesis. For most students this will be the Spring of their senior year.
Prerequisite: Permission of the instructor

Exercise and Sport Science

Physical Education/Fitness Requirement
All students pursuing graduation are required to participate in and pass two physical education experiences within the Exercise and Sport Science Department. The first is EXS 0010 Concepts of Physical Fitness (1 credit). This is a seven-week lecture/laboratory experience that presents basic knowledge and methods relevant to maintaining and developing good health, fitness, and overall wellness. The P.E. experiences are graded S/U.

In addition, upon completion of the above course, all students are required to pass one of the following seven-week courses in a lifetime or fitness activity (1 cr.):

- EXS 0020 Walking for Fitness
- EXS 0030 Strength Training
- EXS 0050 Rock Climbing
- EXS 0060 Racquetball
- EXS 0130 Golf
- EXS 0160 Water Aerobics
- EXS 0170 Conditioning
- EXS 0180 Aerobics
- EXS 0200 Lifeguard Training
- EXS 0210 Water Safety Instructor
- EXS 0230 Handball
- EXS 0240 Yoga
- EXS 0250 Martial Arts
- EXS 0290 Open Water Scuba Certification
- EXS 0500 Pilates

EXS 0410 Ballet I
EXS 0420 Ballet II
EXS 0430 Tap
EXS 0440 Jazz Dance I
EXS 0450 Jazz Dance II
EXS 0460 Ballroom Dance
EXS 0470 Modern Dance
EXS 0490 International Dance: Folk

Only Concepts of Physical Fitness and one Lifetime/Fitness activity count toward the 138 credits required for graduation.
A student who participates on an athletic team for an entire season can fulfill the one lifetime/fitness activity requirement (1 credit).
Exercise and Sport Science Department majors (AHS and EXSS) are not required to take the EXS 0010 Concepts of Physical Fitness class or a lifetime/fitness activity.
The Exercise and Sport Science Department offers the following programs:

- College Physical Education/Fitness Requirement
- Major in Exercise and Sport Science
  - Health and Human Performance Concentration
  - Physical Education Concentration
- Major in Allied Health Science
- Coursework leading to Wisconsin Department of Public Instruction Teaching Licenses in the following areas:
  - Physical Education (preK-12): Certification 530
  - Health Education (preK-12): Certification 910
  - Adaptive Physical Education (preK-12): Certification 860
  - Coaching Athletics (preK-12): Certification 540

The Exercise and Sport Science Department offers two majors: (1) Exercise and Sport Science, and (2) Allied Health Science (see Allied Health Science for details).

Requirements for the Exercise and Sport Science Major

Core curriculum (20 cr.)
Students must take the following:

Carthage 2021-2022 Catalog 83
Exercise and Sport Science

EXS 1010 Foundations of EXSS (2 cr.)
EXS 1020 Instructional Methods for Individual and Group Activities (4 cr.)
EXS 2200 Nutrition for Health and Performance (3 cr.)
EXS 2300 Applied Principles of Strength Training (3 cr.)
EXS 3070 Applied Exercise Anatomy and Biomechanics (4 cr.)
EXS 3080 Physiology of Exercise (4 cr.)

Students majoring in Exercise and Sport Science must select either a Health and Human Performance Concentration or a Physical Education Concentration.

Health and Human Performance Concentration (32 cr.)

EXS 2020 Psychology of Health and Performance (4 cr.)
EXS 3030 Sport and Rec Management (4 cr.)
EXS 3110 Personal and Community Health (4 cr.)
EXS 4040 Exercise Prescription (4 cr.)
EXS 4900 Field Placement in EXSS (Senior Thesis) (4 cr.)
NSG 2330 Applied Statistics for Health and Human Services (4 cr.)

Choose one:
EXS 3210 Advanced Techniques in Training and Conditioning (4 cr.)
or
EXS 4020 Theory and Practice of Coaching (4 cr.)

Choose one:
BIO 1040 Human Anatomy and Physiology (4 cr.)
or
BIO 2010 Human Anatomy and Physiology for the Health Professional I (4 cr.)

Physical Education Concentration (36 cr.)

EXS 2620 Adapted Physical Education and Sport (4 cr.)
EXS 2700 Elementary Physical Education, Principles of Movement (4 cr.)
EXS 3520 Field Placement in Specially Designed Physical Education (4 cr.)
EXS 4060 Fitness Education (4 cr.)
EXS 4070 Assessment in Physical Education (4 cr.)
EDU 4900 Student Teaching (counts as Senior Thesis) (12 cr.)

Choose one:
EDU 2010 Elementary Physical Education: Principles of Movement
EDU 2040 Fitness Education
EDU 3520 Developmental and Content Area Reading
EXS 4200 Methods and Materials of Teaching Physical Education
EDU 4900 Student Teaching Seminar (12 cr.)

Physical Education Teaching Certification (K-12 Licensure)

Students who intend to teach physical education in a school setting can obtain grades preK-12 licensure from the Wisconsin Department of Public Instruction if they complete the following:

1. Complete all courses in the Exercise and Sport Science major with Physical Education Concentration.
2. Complete all required education courses for the K-12 Physical Education Licensure Program (Secondary Education minor).
3. Apply for acceptance into the Teacher Education Program (TEP) sophomore year. Please contact the Education Department for specific requirements related to acceptance into the TEP.
4. Apply for acceptance into the Student Teaching Program (STP) junior year. Please contact the Education Department for specific requirements related to acceptance into the STP.
5. Successfully complete student teaching.

To be eligible for student teaching, students must complete pre-student teaching clinical experiences that are developmental in scope and sequence and will occur in a variety of settings with a balance of observation at the elementary, middle, and secondary level. To meet the clinical experience requirements, students must register and successfully complete an education course requiring a pre-student teaching clinical experience. Please contact the Education Department for specific requirements related to acceptance into the Teacher Education and Student Teaching Programs. Each program has specific requirements and deadlines that the student must meet to earn a physical education teaching license.

Required courses for Physical Education K-12 Licensure (54 cr.)

EDU 1010 Education and Society (4 cr.)
EDU 2010 Educational Psychology and Assessment (4 cr.)
EXS 2700 Elementary Physical Education: Principles of Movement (4 cr.)
EDU 2040 Teaching and Supporting Learners with Diverse Characteristics and Needs (4 cr.)
EDU 3520 Developmental and Content Area Reading (4 cr.)
EXS 4200 Methods and Materials of Teaching Physical Education (4 cr.)
EDU 4900 Student Teaching Seminar (12 cr.)

Certification 860 Adaptive Physical Education (44 credits)

Students seeking this certification must complete the following:

1. Complete all courses in the Exercise and Sport Science major.
2. Complete all required courses for the Secondary Education minor.
3. Complete 2 additional courses (8 cr.)
4. PYC 2850 Child and Adolescent Development (4 cr.)
5. EXS 3520 Field Placement in Specially Designed Physical Education (4 cr.)

PYC 2850 must be completed prior to taking EXS 3520 Field Placement in Specially Designed Physical Education (4 cr.), the required capstone class.

Health Minor (24 credits)

Students who earn a K-12 certification in physical education and wish to teach health education in the school setting need to complete the following coursework for a health minor, pass the Praxis II health exam (or waiver), and complete student teaching.
Required courses for the School Health Certification (910 - Health):

- EXS 1080 Introduction to Health and Wellness Education (3 cr.)
- EXS 2200 Nutrition for Health and Performance (3 cr.)
- EXS 2270 Consumer Health Issues (2 cr.)
- EXS 2500 Comprehensive School Health Programming (2 cr.)
- EXS 2810 Alcohol, Tobacco, and Other Drugs (ATOD) Education (2 cr.)
- EXS 3090 Sexuality Education (2 cr.)
- EXS 3110 Personal and Community Health (4 cr.)
- EXS 3120 Issues in Emotional and Mental Health (2 cr.)
- EXS 4210 Methods and Materials of Teaching Health Education (4 cr.)

The following coursework is required:

- BIO 1040 Human Anatomy and Physiology (4 cr.)
- EXS 2300 Applied Principles of Strength Training (3 cr.)
- EXS 3030 Sport and Recreation Management (4 cr.)
- EXS 3070 Applied Exercise Anatomy and Biomechanics (4 cr.)
- EXS 4050 Physiology of Exercise and Biomechanics (4 cr.)
- EXS 2180 Prevention and Care of Athletic Injuries (2 cr.)
- EXS 4020 Theory and Practice of Coaching (4 cr.)

Honors in the Major
Please see department chair for details. Basic requirements are listed under All-College Programs in the catalog.

EXS 0010
Concepts of Physical Fitness
1cr
This is a seven-week lecture/laboratory experience that presents basic knowledge and methods relevant to maintaining and developing good health, fitness, and overall wellness.
Prerequisite: None
Fall/J-Term/Spring

EXS 1072
Water Safety Instruction (WSI)
1cr
The Water Safety Instruction course trains instructor candidates to teach the fundamental Learn-to-Swim courses, including Parent and Child Aquatics, Preschool Aquatics, Learn-to-Swim Levels 1-3, 4-6, and Adult Swim. This certification is the gold standard and provides the most comprehensive training for swim instructors.
Prerequisite: EXS 1010
Fall/Spring

EXS 1080
Introduction to Health and Wellness Education
3cr
This course will introduce students to health topics pertaining to the development of their physical, psychological, and social well-being. Students will learn about the major theories in health education and gain experience teaching health topics.
Fall

EXS 2020
Psychology of Health and Performance
4cr
This course provides an exploration of the Health Behavior Theories and practices necessary to guide clients toward improved health related outcomes. Theories practices of Sport Psychology and team dynamics will also be covered.
Prerequisite: EXS 1010
EXS 2200

Nutrition for Health and Performance
3cr
This course will provide students with the knowledge of how to improve their own nutrition and provide reliable, accurate guidance to others. Significant time will be spent exploring nutrition guidelines for athletic performance.
Prerequisite: EXS 1010 or ATH 1020
Fall/Spring

EXS 2270

Consumer Health Issues
2cr
Evaluation of health misinformation and quackery pertaining to health-related products and services. Examination of major health care issues from a consumer point of view, enabling the students to make intelligent decisions about how to obtain and use health-related products, services, and information.
Spring

EXS 2300

Applied Principles of Strength Training
3cr
An introductory study in strength training. Emphasis will be placed on basic muscle anatomy, program design, and safe exercise technique.
Prerequisite: EXS 1010
Fall/Spring

EXS 2330

Applied Statistics for Health and Human Services (MTH)
4cr
This course presents a practical approach to utilizing statistics in situations encountered in the Health and Human Services professions. Fundamental statistical theories and concepts are presented to help students understand the rationale and purpose of using statistical computations. Basic parametric statistical analyses, as well as the mathematical logic behind these calculations, will be presented. Students will learn how to perform hypothesis testing with normal distributions and also learn to interpret and critically evaluate research outcomes. This knowledge will allow students to be evidence-based practitioners and critical consumers of peer reviewed research.
Prerequisite: Junior standing and accepted Nursing majors or declared Exercise and Sport Science or Allied Health majors.

EXS 2450

Physical Education and Health Methods
2cr
This course consists of class activities, readings, and lectures designed to provide elementary teachers with the knowledge of how to incorporate movement in their classrooms. Students will examine their own health and identify reliable online resources for providing health education in the K-6 setting.
Course fulfills the requirements for EXS 0010 Concepts of Physical Fitness (1 cr.) and one Lifetime/Fitness activity (1 cr.).
Fall/Spring

EXS 2500

Comprehensive School Health Programming
2cr
This course is designed to teach students how to plan for and evaluate all the components of an effective school health program.
Spring

EXS 2620

Adapted Physical Education and Sport
3cr
A study of special populations and their exercise and sport needs. Emphasis will be placed on in-depth knowledge of specific disabilities, with modifications necessary to enable the pursuit of a healthy and productive lifestyle.
Prerequisite: EXS 1010
Fall/Spring

EXS 2700

Elementary Physical Education: Principles of Movement
4cr
An analysis of exercise, sport, and motor programs for young children. Emphasis will be placed on learning how to teach skills, concepts, and movement principles at an age-appropriate level.
Prerequisite: EXS 1010
Fall/Spring

EXS 2810

Alcohol, Tobacco, and Other Drugs (ATOD) Education
2cr
This course provides an overview of substance use and abuse among adolescents. The course will focus on understanding how to teach this topic as part of a comprehensive school health education curriculum.
Fall/Spring
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXS 3010</td>
<td>Tests and Measurement in Exercise and Sport Science</td>
<td>4 cr</td>
<td>EXS 1010 and sophomore standing</td>
<td>A practical approach to measurement and evaluation of cognitive, affective, and psychomotor domains as they apply to the field of health, fitness, and performance. The students will be introduced to basic statistical principles and practice conducting and writing a simple research study.</td>
</tr>
<tr>
<td>EXS 3030</td>
<td>Sport and Recreation Management</td>
<td>4 cr</td>
<td>EXS 1010</td>
<td>Principles of efficient management and leadership concepts as applicable to the sport and recreation industry. Focuses on principles and techniques of management relating to programs, facilities, special events, and personnel. Includes key personnel issues in sport management situations; ethics, law, and governance in sports administration; and the role of the marketing process in sport administration and budgeting.</td>
</tr>
<tr>
<td>EXS 3070</td>
<td>Applied Exercise Anatomy and Biomechanics</td>
<td>4 cr</td>
<td>EXS 1010 BIO 1040 or BIO 2010</td>
<td>A review of musculoskeletal anatomy and an in-depth study of biomechanics and its application to sport.</td>
</tr>
<tr>
<td>EXS 3080</td>
<td>Physiology of Exercise</td>
<td>4 cr</td>
<td></td>
<td>This course is designed to provide the students with an introduction to the discipline of exercise and sport physiology, which is concerned with the study of how the body adapts physiologically to the acute stress of exercise, or physical activity, and the chronic stress of physical training. Emphasis will be placed on neuromuscular adaptation to strength training and cardiorespiratory adaptations to endurance training. This course will also address the importance of exercise in delaying or preventing metabolic syndrome. Prerequisite: BIO 1040 or BIO 2010</td>
</tr>
<tr>
<td>EXS 3090</td>
<td>Sexuality Education</td>
<td>2 cr</td>
<td></td>
<td>This course will emphasize diversity in sexual feeling, behavior, cultural traditions, and moral beliefs related to sex, with an emphasis on the physiology of sex and helping students become comfortable in discussing and teaching sexuality to adolescents.</td>
</tr>
<tr>
<td>EXS 3110</td>
<td>Personal and Community Health</td>
<td>3 cr</td>
<td></td>
<td>An introduction to the field of community health with an exploration of the interplay between individual health-promoting behaviors and the greater impact of the physical, social, and political environment.</td>
</tr>
<tr>
<td>EXS 3120</td>
<td>Issues in Emotional and Mental Health</td>
<td>2 cr</td>
<td></td>
<td>Development of insights into emotional wellness and understanding the body, mind, and spirit connection. Students will be expected to develop strategies to effectively teach the principles and skills learned in this class.</td>
</tr>
<tr>
<td>EXS 3210</td>
<td>Advanced Techniques in Training and Conditioning</td>
<td>4 cr</td>
<td></td>
<td>An in-depth study of the principles, concepts, and guidelines of strength training, conditioning, and personal fitness. Special emphasis will be placed on designing strength and conditioning programs and preparing students for the National Strength and Conditioning Association (NSCA) exams. Prerequisite: EXS 3070</td>
</tr>
<tr>
<td>EXS 3520</td>
<td>Field Placement in Specially Designed Physical Education</td>
<td>4 cr</td>
<td></td>
<td>An off-campus practical experience for students to work with special populations in a physical education setting. (Pass/Fail) Prerequisites: EXS 2620, EDU 1010, 2010, 2050, and 3520, EXS 4200, and PYC 2850</td>
</tr>
<tr>
<td>EXS 3530</td>
<td>Strength and Conditioning Practicum</td>
<td>2 cr</td>
<td></td>
<td>The goal of the course is to allow the student to apply the principles and concepts learned in Advanced Techniques in Training and Conditioning by designing and implementing strength, conditioning, and fitness programs to various populations. Prerequisite: EXS 3210</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Description</td>
<td>Prerequisites/Notes</td>
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<tr>
<td>EXS 3720</td>
<td>General Medical Conditions for the Athletic Trainer</td>
<td>3 cr</td>
<td>This course is designed to introduce the athletic training student to general medical conditions they may be exposed to when working with physically active individuals. It is imperative that the entry-level athletic trainer recognize and manage these conditions for the successful treatment of those under their care. These conditions range from recognizing simple infections to systemic disorders. Prerequisites: AHS 1020 and AHS 2080</td>
<td>Spring</td>
</tr>
<tr>
<td>EXS 4050</td>
<td>Physiology of Exercise (NLAB)</td>
<td>4 cr</td>
<td>An analysis of the effects of exercise on the human body, with an emphasis placed on scientific research and the implications for exercise/sport prescription and programming. Prerequisite: BIO 1040 or BIO 2010</td>
<td>Fall/Spring</td>
</tr>
<tr>
<td>EXS 4060</td>
<td>Fitness Education</td>
<td>4 cr</td>
<td>Fitness education is an integral part of the total physical education program, focusing on helping students acquire the knowledge and habits that contribute to health and wellness (SHAPE America). Students will explore each of the components of the Fitness Education Framework from SHAPE America: technique, knowledge, physical activity, health-related fitness, responsible personal and social behaviors, values and advocates, nutrition, and consumerism. Prerequisite: EXS 1010</td>
<td></td>
</tr>
<tr>
<td>EXS 4080</td>
<td>Assessment for Physical Education</td>
<td>4 cr</td>
<td>This course will prepare students with the skills needed to design and administer assessments in each of the learning domains. Students will learn how to perform data analysis to inform instructional decisions in physical education. Prerequisite: EXS 1010</td>
<td></td>
</tr>
<tr>
<td>EXS 4200</td>
<td>Methods and Materials of Teaching Physical Education</td>
<td>4 cr</td>
<td>A course required of students pursuing the emphasis in physical education K-12 licensure. Emphasizes teaching methods and instructional materials in physical education. Prerequisites: Admission to the Teacher Education Program and junior standing</td>
<td>Spring</td>
</tr>
<tr>
<td>EXS 4210</td>
<td>Methods and Materials of Teaching Health Education</td>
<td>4 cr</td>
<td>Students will learn strategies and techniques for teaching health at an age-appropriate level. Prerequisite: Admission to the Teacher Education Program or permission of the department chair</td>
<td>Fall</td>
</tr>
<tr>
<td>EXS 4900</td>
<td>Field Placement in Exercise and Sport Science</td>
<td>4 cr</td>
<td>An off-campus practical experience for Exercise and Sport Science majors who are not seeking physical education licensure. The student will complete a 100-hour internship in a recreation, sport, clinical, or fitness environment to observe, teach, and manage under a qualified professional in the field. The student will also complete a 30-page Senior Thesis research project. Prerequisite: EXS 3010</td>
<td>Fall/Spring</td>
</tr>
</tbody>
</table>

**General Courses**

Please see the course descriptions below for information on general courses.
GNR 0000

College Success Seminar
0cr
This is Carthage's freshman seminar program. This program intends to help first-year students connect to multiple communities within Carthage in ways that will support and enhance individual confidence and success. The seminar covers topics of academic and extracurricular concerns, such as identity and community, learning and teaching styles, stress management, and academic and career planning. Seminars are led by staff members. S/U only.

GNR 0002

Elements of College Learning
2cr
This course is designed for the specific academic and adjustment needs of the returning student. The theory, examination, and practice of college-level study will include such topics as critical reading and thinking, note taking, reading rate and preparation, use of college resources, stress management, and time management. Students will apply these techniques directly to their coursework as they adjust to their new role of being a college student.

GNR 3510

Immersion Abroad
12-16cr
Linguistic and cultural immersion abroad for one term in an academic setting in a country speaking the target language. Classroom instruction for all courses, regardless of discipline, will be in the target language. (In exceptional cases, approval may be granted for substituting two summers for the term.) P/ F
Prerequisites for applying study abroad to the major in any modern language: MLA 2200, 3010, 3110, and one of 3080 or 3090

Geospatial Science

The Geospatial Science Department at Carthage offers majors in Geoscience and in Geographic Information Science, and minors in Geoscience, Geographic Information Science, and Meteorology and Climatology. Courses and fieldwork in the Carthage Geospatial Science Department emphasize critical thinking and problem-solving, preparing graduates with essential skills for analyzing today’s global challenges: environmental change, water resources, energy supplies and shortages, population growth and shifts, hunger, disease, and regional conflicts. As part of the capstone experience, students develop and conduct original or applied research in their senior year.

GEOSCIENCE

Geospatial scientists study the world by focusing on spatial analysis — studying the processes that determine where and how people interact with their environment. At Carthage, the geoscience curriculum will prepare you to address global challenges ranging from climate change and sustainability to environmental hazards and biodiversity. In geoscience courses, you will learn how to collect and analyze data from the field, in the lab, and from online sources.

The foundation for understanding problems is a thorough knowledge of the Earth’s structure, landforms, hydrology, and patterns of climates, vegetation, and soils. You will develop the analytical and statistical skills to interpret data and construct models and maps. We encourage our students to combine classroom study with internships, community service, and independent research.

GEOGRAPHIC INFORMATION SCIENCE

In Geographic Information Science (GIS), you will learn to use software, web-based geospatial applications, and database management systems, developing skills for cartographic representation, spatial analysis, and geovisualization. GIS students use many tools, including mapping and statistical software, remote sensing, and global positioning systems. In addition to weekly hands-on labs, students in higher level GIS classes routinely engage in service learning projects partnered with local, regional, and national organizations, government agencies, and businesses.

Graduates of the department often are quickly employed in private industry and governmental positions, and many also choose to continue their education in graduate programs. Because of this breadth and depth of opportunity, choices of elective courses outside the major are often as important as the choices within the major. As is the case with all competencies, the desired level of skill varies with an individual’s career goals. Prospective and current students are encouraged to discuss their career goals and opportunities with departmental faculty.

Geoscience Major (40 credits)

Required core courses (16 cr.):
- GEO 1210 Internet Mapping with Web GIS
  - GEO 1610 Introduction to Geographic Information Systems: Mapping Your World
- GEO 1600 Earth Revealed (4 cr.)
- GEO 3900 Methods of Field Research (4 cr.)
- GEO 4000 Senior Seminar in Geospatial Science (4 cr.)

All students must select two 1000- or 2000-level geoscience courses (8 cr.) from the following:
- GEO 1700 Natural Disasters (4 cr.)
- GEO 1800 Great Lakes Basin (4 cr.)
- GEO 2450 Biogeography (4 cr.)
- GEO 2550 Meteorology (4 cr.)
- GEO 2950 Geomorphology (4 cr.)

All students must select two 3000-level geoscience courses (8 cr.) from the following:
- GEO 3200 Hydrology (4 cr.)
- GEO 3400 Forest Ecology (4 cr.)
- GEO 3700 Climatology (4 cr.)
- GEO 3800 Soil Science (4 cr.)

Carthage 2021-2022 Catalog 89
The major in Geographic Information Science (GIS) allows students to focus on the techniques and practice of spatial data analysis and its practice within the larger field of information science. This particular major will be of value to students who intend to pursue a career in data analysis or pursue graduate degrees in the natural or social sciences. The core material highlights the theory and application of Geographic Information Science. The remaining courses offer background in programming, statistics, and other areas of information and computer science.

Required core courses (40 cr.):
- GEO 1210 Internet Mapping and Web GIS (4 cr.)
- GEO 1610 Introduction to Geographic Information Systems: Mapping Your World (4 cr.)
- GEO 1770 Unmanned Aerial Systems (Drones) in Geosciences (4 cr.)
- GEO 2610 Advanced Geographic Information Science and Analytical Cartography (4 cr.)
- GEO 2700 Satellite Image and Air Photo Analysis (4 cr.)
- GEO 3610 Applied Projects in Geographic Information Science (4 cr.)
- GEO 4000 Senior Seminar in Geospatial Science (4 cr.)
- CSC 1100 Introduction to Computing (4 cr.)
- GEO 3200 Hydrology (4 cr.)
- GEO 3400 Forest Ecology (4 cr.)
- GEO 3700 Climatology (4 cr.)
- GEO 3800 Soil Science (4 cr.)

In addition, all students must select two courses (8 cr.) in research techniques in Geospatial Science from the following:
- GEO 1770 Unmanned Aerial Systems (Drones) in Geosciences (4 cr.)
- GEO 2700 Satellite Image and Air Photo Analysis (4 cr.)
- GEO 3610 Applied Projects in Geographic Information Science (4 cr.)
- GEO 3900 Methods of Field Research (4 cr.)

Minor in Geographic Information Science (GIS) (48 credits)

Minor in Climatology and Meteorology (24 credits)

This minor is designed for students interested in pursuing careers related to the study of weather and climate phenomena. This sequence of classes provides a firm foundation needed to pursue graduate studies in meteorology, climate, and the atmospheric sciences. Students should work closely with academic advisors in Geospatial Science when developing a full academic plan for this course of study.

Required core courses (20 cr.):
- GEO 1600 Earth Revealed (4 cr.)
- GEO 2550 Meteorology (4 cr.)
- GEO 3700 Climatology (4 cr.)
- PHY 2200 General Physics I (4 cr.)
- PHY/GEO Science of Global Climate Change (4 cr.)

In addition, all students must complete two elective courses (8 cr.). These may be fulfilled by taking additional courses in the Geospatial Science Department, or by taking GEO 3610 Applied Projects in Geographic Information Science (4 cr.) plus 1 course (4 cr.) in the Geospatial Science Department.

Geographic Information Science Minor (24 credits)

Required core courses (20 cr.):

In addition, all students must select one course (4 cr.) from the following:
- PHY 1200 Fundamental Physics (4 cr.)
- PHY 2100 Physics I (4 cr.)
- PHY 2200 General Physics I (4 cr.)

In addition, all students completing the Meteorology and Climatology minor must select one course (4 cr.) from the following:
- BIO 1011 Exploring Climate Change (4 cr.)
- GEO 2450 Biogeography (4 cr.)

Honors in the Major
Honors are awarded at the discretion of the Geospatial Science Department faculty. Students are eligible for Honors in Geospatial Science if they have:

- Completed all requirements for the major.
- Received a rating of “excellent” on the Senior Thesis from the faculty of the major department.
- Been formally recommended by the faculty of the Geospatial Science Department.
- Maintained an overall GPA of 3.5 at graduation.

Please see department chair for details.

GEO 1210

Internet Mapping and Web GIS (NLAB)

4cr
The Web GIS (geographic information systems) revolution is radically altering how spatially explicit information about the world around us is consumed, applied, and shared. This course aims to enable students from diverse academic backgrounds and interests to (1) search, retrieve, and visualize geographically referenced data using a wide variety of general purpose, government, and specific-purpose web maps and apps; (2) use ESRI ArcGIS Online, Business Analyst Online, and Community Analyst to find geospatial data, create multilayered thematic maps, and conduct spatial analyses; and (3) build their own web apps, story maps, or geo-enabled mobile apps, through individual- or group-based projects. Students need no specialized computer skills to enter the course, but they will be expected to manipulate data and maps using the computer methods discussed in class.

GEO 1600

Earth Revealed (NLAB)

4cr
Earth Revealed examines the earth's lithosphere, hydrosphere, atmosphere, and biosphere, studying the spatial patterns of phenomena at a variety of scales. The course is taught in a studio classroom setting, with lecture/discussion and computer-based analysis of satellite imagery. Environmental issues and sustainability are an integral part of the class.

GEO 1610

Introduction to Geographic Information Science: Mapping Your World (NLAB)

4cr
This course provides an introduction to portraying spatial data and making data maps for a variety of applications. Students work in a hands-on lab/lecture setting while exploring computer mapping production techniques: cartographic design, communication properties of thematic maps, data selection and quality, and the problems of graphic display in print and electronic formats. Students will apply the course material by completing a variety of mapping projects. Students need no specialized computer skills to enter the course, but they will be expected to manipulate data and maps using the computer methods discussed in class. Fall/Spring

GEO 1770

Unmanned Aerial Systems (Drones) in Geosciences (NLAB)

Unmanned Aerial Systems (UAS) in Geosciences is intended for students who are curious about the scientific use of drones in the field. Topics to be addressed include the different forms and functions of UAS, their utility in the field, and the collection and initial analysis of field data in the form of remotely sensed imagery. Specifically, students will learn about UAS technology, develop appropriate flight plans to gather data, and fly missions that acquire remotely sensed imagery. Student missions will be designed to consider various aspects of geosciences, such as meteorology, hydrology, soils, forests, agriculture, and land use.

GEO 1800

Great Lakes Basin (NLAB)

4cr
The Great Lakes hold approximately 20 percent of all surface freshwater on Earth. This large basin gives rise to important spatial variations in hydrology, climatology, glacial history, and biogeography. This class explores these spatial patterns by examining the physical processes that form them. From floods, droughts, and changing lake levels, to rocks that are nearly as old as Earth itself and a variety of forests and prairie grasslands, the Great Lakes offer a wealth of physical geography processes to explore.

GEO 1900

Geology of National Parks (NLAB)

4cr
Geology of National Parks highlights geological features in U.S. National Parks formed by igneous activity, mountain building and uplift, glaciation, weathering and erosion, wave action, and groundwater, as well as human impacts on sustaining national parks. Organized based on key tectonic processes, the course is taught in a studio classroom setting with lecture/discussion, group projects, and computer-based analysis.
GEO 2150

Business Geographics and Data Visualization
4cr
The course focuses on the visual display of quantitative information in a business or organizational context. Students will use advanced software technology to summarize data visually for better business decision-making, increased organizational efficiency, and effective organizational planning.

GEO 2450

Biogeography (NLAB)
4cr
Biogeography investigates spatial patterns in the biosphere to show how Earth history, evolutionary and ecological processes, and contemporary environments have shaped patterns of biodiversity. Using a studio classroom setting, biogeography studies spatial distributions of organisms and the factors influencing those distributions, examining the interactions of the physical environment and sustainability of biological organisms through time.

GEO 2550

Meteorology (NLAB)
4cr
A study of meteorology and weather through the analysis of atmospheric processes and the composition of the atmosphere. Emphasis is placed on dynamic meteorology through understanding the processes responsible for weather, climate change, and related environmental issues.

GEO 2610

Advanced Geographic Information Science and Analytical Cartography (NLAB)
4cr
This course explores advanced problems and techniques in both raster and vector systems. Topics include scientific visualization of problems, layer overlays, distance measurement and transformation, data management, creation and analysis of statistical surfaces, geographic pattern analysis, and data quality. Students will apply the course material by performing a variety of analyses on different types of geographic data. Prerequisite: GEO 1610 or consent of the instructor.

GEO 2700

Satellite Image and Air Photo Analysis (NLAB)
4cr
This course will focus on the use, analysis, and interpretation of aerial photographs and imagery from satellites to evaluate the environment (vegetation, climate, hydrology, etc.) and land-use analysis (urbanization, agriculture, forestry, etc.). Students will be introduced to various methods for obtaining and interpreting this type of data. The class will also discuss various types of data and formats available. Students need no specialized computer skills to enter the course, but they will be expected to manipulate and interpret imagery using the computer methods discussed in class. Prerequisite: GEO 1610

GEO 2810

Geography and Biology of China (NLAB)
4cr
Throughout China's history, the relationship between humans and the native plant and animal communities has fueled the growth of civilizations and created new ecological challenges. This course aims to present students with geographical and biological perspectives to help them understand how the Chinese people have been interacting with their environment through time and across a vast country.

GEO 2950

Geomorphology (NLAB)
4cr
Using a studio classroom setting with lecture, computer simulations, and fieldwork, this course is a systematic analysis of the physical and spatial characteristics of Earth's terrain. The emphasis is on the identification of the formative processes in geomorphology. Prerequisite: GEO 1600 or consent of the instructor.

GEO 3200

Hydrology (LAB SCI)
4cr
An introduction to the physical characteristics of surface and subsurface waters and the hydrologic cycle, detailing its various components. Emphasis is placed on the nature of water movement, the interrelations of surface and groundwater systems, and modeling various aspects of the hydrologic cycle. Water is viewed as a natural resource and questions of sustainability are addressed. Prerequisite: GEO 1600, ENV 1000, or consent of instructor.

GEO 2800

Geography of East Asia (SOC)
4cr
This course provides students with broad exposure to what the "place" East Asia is from physical, cultural, economic, and political perspectives. Emphasis will be placed on dimensions of human geography and human-environment interaction within the specific regional contexts.
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO 3400</td>
<td>Forest Ecology</td>
<td>4cr</td>
<td>Forest Ecology explores the development of sustainable forest communities incorporating climate, topography, geomorphology, hydrology, soils, and human land-use history. The course is taught in a studio classroom setting, with lectures, discussions, group debates, use of dendrochronology lab, and field trips to examine the composition, structure, and function of forest ecosystems. Prerequisite: GEO 1600, ENV 1000 or consent of instructor</td>
</tr>
<tr>
<td>GEO 3610</td>
<td>Applied Projects in Geographic Information Science</td>
<td>4cr</td>
<td>This course is designed to reinforce and expand mapping, spatial analysis, and Web GIS skills acquired from GEO 1610, GEO 2610 and/or GEO 1210 in applied settings. It will focus on project design, project management, team building, and communications with the &quot;client&quot;. Students will be expected to create significant GIS applications using real-world data to address actual spatial problems in various settings (such as business, government, and environmental). Prerequisite: GEO 1610, GEO 1210 or GEO 2210</td>
</tr>
<tr>
<td>GEO 3700</td>
<td>Climatology (LAB SCI)</td>
<td>4cr</td>
<td>An overview of atmospheric processes and climatic elements, followed by a more detailed examination of the spatial distribution of climates. Particular emphasis will be placed upon macroscale climates of the global continents and climate change, culminating with microscale applications of the principles and concepts within the local area. Prerequisite: GEO 1600, ENV 1000 or consent of instructor</td>
</tr>
<tr>
<td>GEO 3800</td>
<td>Soil Science (LAB SCI)</td>
<td>4cr</td>
<td>Soil Science examines soils as both natural bodies and managed resources, integrating the properties of soil with human alterations of soils worldwide. The course is taught in a studio classroom setting, with computer and field labs to explore the formation, classification, biodiversity, and management of soils for agricultural purposes, and for the foundation of sustainable ecosystem development. Prerequisite: GEO 1600 or ENV 1000, or permission of instructor</td>
</tr>
<tr>
<td>GEO 3900</td>
<td>Methods of Field Research</td>
<td>4cr</td>
<td>Methods of Field Research focuses on outdoor sampling design and spatial analyses of field data in geosciences. Combining outdoor fieldwork with computer data processing, this course generates questions that can be answered with field data, explores project planning to focus field effort, teaches methods and techniques of data collection, and analyzes spatial samples. Prerequisite: GEO 1600 or ENV 1000 or consent of instructor</td>
</tr>
<tr>
<td>GEO 4000</td>
<td>Senior Seminar in Geospatial Science</td>
<td>4cr</td>
<td>This course presents an overview of the history of geoscience and geospatial thought. The material emphasizes problem analysis in applied geospatial science through the application of multiple working hypotheses within the framework of inductive and deductive logic. Students will be completing their capstone project in this course. Fall</td>
</tr>
<tr>
<td>GEO 4150</td>
<td>Science of Global Climate Change (NLAB)</td>
<td>4cr</td>
<td>This course is designed to provide an understanding of the science of planetary climates for students with a background in physics and/or geography. Emphasis will be placed on the physical processes that control the state of Earth's climate, which include the roles of energy and moisture, atmospheric circulation, and atmosphere-ocean interaction. Prerequisite: GEO 3700, PHY 2200 or consent of the instructor</td>
</tr>
<tr>
<td>GEO 4500</td>
<td>Independent Study in Geospatial Science</td>
<td>1-4cr</td>
<td>A student can conduct an independent study in a topic of interest in Geospatial Science. It is understood that this course will not duplicate any other course regularly offered in the curriculum, and that the student will work in this course as independently as the instructor believes possible. Prerequisite: Consent of instructor</td>
</tr>
<tr>
<td>GEO 4900</td>
<td>Geospatial Science Research</td>
<td>1-4cr</td>
<td>Work on a research project under the supervision of a faculty member. Students may enroll for credit more than once, but only 4 credits can count toward the major. Prerequisite: Consent of instructor</td>
</tr>
<tr>
<td>GEO 4990</td>
<td>Senior Thesis Completion</td>
<td>0cr</td>
<td>Students should register for GEO 4990 during the semester that they plan to complete their Senior Thesis.</td>
</tr>
<tr>
<td>Great Ideas</td>
<td>Courses in Great Ideas study the works of</td>
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</tbody>
</table>

Carthage 2021-2022 Catalog
some of the greatest minds in the Western tradition, such as Homer, Plato, Virgil, Augustine, Aquinas, Machiavelli, Shakespeare, and Austen. Through careful reading and thoughtful inquiry of foundational texts in philosophy, literature, religion, and science, Great Ideas engages the fundamental and timeless questions that are raised: What is love? What is justice? What is the best way of life? What is the physical world? What is knowledge and how do we come to know things? What is faith and what does faith demand? What is happiness?

In these courses, students grapple with the diversity of approaches and the possible solutions presented by these texts and clarify, reflect upon, and deepen their own understandings. Successful students begin to shape their own responses to these and other questions that necessarily occupy the minds of responsible and thoughtful citizens and human beings.

**GFW 2220**

**Foundations of Western Thought II: Renaissance to Modern**

4cr

One of two seminars on major Western texts and the fundamental questions that they raise. This term covers the Renaissance to the 20th century. Works to be studied will include some of these, among others: Dante's Divine Comedy, Machiavelli's The Prince, Luther's On Christian Liberty, Shakespeare's Antony and Cleopatra, Moliere's The Misanthrope, Locke's Second Treatise, Rousseau's Second Discourse, Freud's Civilization and Its Discontents, and Woolf's A Room of One's Own.

**GFW 2420**

**Foundations of Mathematical Thought (MTH)**

4cr

This course examines the development of Western mathematical thought from its origins in ancient Greece through the modern era. Special attention will be paid to the development of ideas, such as geometry, logic, coordinate systems and algebra, calculus, non-Euclidean geometry, infinity, and proof theory. Works to be studied include selections from Euclid, Aristotle, Descartes, Newton, Lobachevski, Cantor, Boole, and Godel.

**GFW 3010**

**Seminar in Ancient Thought (HUM)**

4cr

Seminar participants spend the full semester in critical engagement with a major thinker, and usually a single text of the ancient West, such as Homer, Aeschylus, Plato, Virgil, or Tacitus. This course seeks to deepen the broad and interdisciplinary work accomplished by participants in Foundations of Western Thought I (GFW 2210) and II (GFW 2220) and in the Western Heritage course sequence.

**GFW 3020**

**Seminar in Medieval Thought**

4cr

Seminar participants spend the full semester in critical engagement with a major thinker, and usually a single text of the medieval West, such as Augustine, Aquinas, Dante, or Chaucer. This course seeks to deepen the broad and interdisciplinary work accomplished by participants in Foundations of Western Thought I (GFW 2210) and II (GFW 2220). Prerequisites: COR 1200
GFW 3030

Seminar in Renaissance
Thought
4cr
Seminar participants spend the full semester in critical engagement with a major thinker, and usually a single text, of the Renaissance West, such as More, Machiavelli, Bacon, or Shakespeare. This course seeks to deepen the broad and interdisciplinary work accomplished in Foundations of Western Thought I (GFW 2210) and II (GFW 2220). Prerequisites: COR 1200

GFW 3040

Seminar in Modern Thought
4cr
Seminar participants spend the full semester in critical engagement with a major thinker, and usually a single text, of the modern West, such as Cervantes, Kant, Dostoevsky, or Freud. This course seeks to deepen the broad and interdisciplinary work accomplished by participants in Foundations of Western Thought I (GFW 2210) and II (GFW 2220) and in the Western Heritage course sequence.

GFW 4000

Capstone Course
4cr
Under the guidance of Great Ideas faculty, students write a thesis whose primary focus is the interpretation of a major Western text or texts. (Junior standing required; senior standing suggested in most cases.)

GFW 4990

Senior Thesis Completion
0cr
Students should register for GFW 4990 during the semester that they plan to complete their Senior Thesis.

History
Few fields of study prepare students more broadly for the future than history. History, as it is taught at Carthage, is far more than just names and dates. History provides students with the tools for a lifetime of meaningful work and intellectual endeavor. Through the lens of history, students learn to appreciate and understand how humans on all levels of society have lived and grappled with war, revolution, social change, and the environment. This knowledge and understanding of the past will ensure that you head, as our college president likes to say, will always be “an interesting place to live.” Just as importantly, the study of history teaches students critical thinking, effective oral communication, and good writing. History majors do well in the job market because they have learned how to ask the right question, and then answer it themselves. They can process large amounts of information, distill it, communicate it, and apply it. These skills provide the foundation for successful careers in everything from law to business, journalism to government, and education to medicine.

History Major (36 credits)
The History major consists of 10 courses (40 cr.) including the following:

- HIS 1000 Issues in American History (4 cr.)
- HIS 2200 Historical Methods (4 cr.)
- HIS 3990 Historiography (4 cr.)
- HIS 4000 Senior Seminar (4 cr.)

And

One additional course in American history
One course in ancient or European history prior to 1600
One course in European history after 1600
One course in Asian history
One course in Latin American history
One additional elective

History Minor (24 credits)
The History minor, including the teaching minor, consists of 6 courses (24 cr.) including the following:

- HIS 1000 Issues in American History (4 cr.)

And

An additional American history course
One course in ancient or European history prior to 1600
One course in European history after 1600
One course in Asian history or the history of Latin America
HIS 2200 Historical Methods or HIS 3990 Historiography or HIS 4000 Senior Seminar.

Courses List:

Europe:
- HIS 1110 Issues in European History I (4 cr.)
- HIS 1120 Issues in European History II (4 cr.)
- HIS 2150 Modern Britain (4 cr.)
- HIS 2250 20th Century Europe (4 cr.)
- HIS 2310 The Greeks (4 cr.)
- HIS 2350 The Romans (4 cr.)
- HIS 2500 Early Medieval History (4 cr.)
- HIS 2550 Later Medieval Europe (4 cr.)
- HIS 3100 The Age of Augustus (4 cr.)
- HIS 3270 Seminar in Medieval Studies (4 cr.)

Asia:
- HIS 1200 Issues in Asian History (4 cr.)
- HIS 3400 Modern China (4 cr.)
- HIS 3410 Modern India (4 cr.)
- HIS 3450 Modern Japan (4 cr.)

Latin America:
- HIS 1410 Issues in South America: Dictatorship and Democracy (4 cr.)
- HIS 2140 Modern Caribbean: From Pirates to the Cuban Missile Crisis (4 cr.)
- HIS 3040 Modern Central America: Inevitable Revolutions (4 cr.)
- HIS 3050 History of Mexico (4 cr.)

United States:
- HIS 1000 Issues in American History (4 cr.)
- HIS 2620 America in the 1960s (4 cr.)
- HIS 2850 Comparative History: Chicago and Milwaukee (4 cr.)
- HIS 2890 19th Century American History (4 cr.)
- HIS 2900 20th Century U.S. History (4 cr.)
- HIS 3000 The American Founding (4 cr.)
- HIS 3150 International Relations (4 cr.)

Research Courses:
- HIS 200T Topics in History (4 cr.)
- HIS 2200 Historical Methods (4 cr.)
- HIS 3990 Historiography (4 cr.)
- HIS 4000 Senior Seminar (4 cr.)

Honors in the Major
Please see department chair for details. Basic requirements are listed under All-College Programs in the catalog.
HIS 1000

Issues in American History (HUM)

4cr
A topical survey of American history from the colonial beginnings to the present with special emphasis on major themes, turning points, and historical interpretations. Introduction to historical method through the study of primary sources also is emphasized. Fall/J-Term/Spring/Summer

HIS 1040

Ancient Greece II: Alexander the Great to Cleopatra (HUM)

4cr
An introduction to the history and culture of ancient Greece from the rise of Alexander the Great in the fourth century BCE to the conflicts with Rome and the death of Cleopatra, the last Ptolemaic queen. Students will be introduced to the various developments in Greek civilization, including art, mythology and religion, archaeology, and literature. Prerequisite: None

HIS 1110

Issues in European History I (HUM)

4cr
A topical survey of Western civilization from earliest times to the Renaissance, with special emphasis on major themes, turning points, and historical interpretations. Introduction to historical method through the study of primary sources also is emphasized. Fall

HIS 1120

Issues in European History II (HUM)

4cr
A topical survey of Western civilization from the Reformation to the present with special emphasis on major themes, turning points, and historical interpretations. Introduction to historical method through the study of primary sources also is emphasized. Spring

HIS 1200

Issues in Asian History (HUM)

4cr
A survey of the cultural, social, political, and economic history of Asia from the 15th century to the present. Fall/Spring

HIS 1410

Issues in South America: Dictatorship and Democracy (HUM)

4cr
A survey of the political and social history of South America from colonization through the 1980s. Spring

HIS 2050

Shamanism (HUM)

4cr
This course will examine the variety of religious experiences, rituals, and belief systems commonly referred to as shamanism. The course will look at these phenomena across history and geographic boundaries. Close attention will be paid to the particular historical and political contexts within which these various experiences have developed. Prerequisite: None

HIS 2100

World War II (HUM)

4cr
Students in this course will examine World War II as a global conflict. Students will assess the origins of the world's bloodiest and most costly war in Europe and Asia, as well as how the war spread to Africa, Oceania, and the Americas. Students will learn about the military, economic, and social consequences of total global conflict. In addition, students will evaluate the effects of the war upon civilian populations, the strategies pursued by the participants, and the major events in both the Pacific and European theaters from the 1930s until 1945. Above all, students will examine the extent to which theories of race and culture contributed to and exacerbated the war. Finally, students will consider the significance of the war for the history of Europe, Asia, Oceania, and the United States.

HIS 2140

Modern Caribbean: From Pirates to the Cuban Missile Crisis (HUM)

4cr
Beginning in 1492, the Caribbean region has vacillated between the periphery and center stage of global history. Its strategic location within the Atlantic basin has, at various points, propelled nations in the Caribbean into importance disproportionate to the nations' size, wealth, or political influence. Examples of this phenomenon include the Encounter (arguably the most important event in world history); the Haitian Revolution, with its profound consequences for the United States, Europe, and Africa; and the Cuban Missile Crisis, which served as a historical fulcrum in the trajectory of the Cold War. This course follows the dramatic trajectory of Caribbean history from 1492 to the present, introducing themes that include the European conquest; transformation into sugar colonies; slavery; the Haitian revolution; abolition; the introduction of U.S. economic, military, and political hegemony; the Cuban revolution and subsequent crises; and some contemporary issues.
HIS 2150
Modern Britain (HUM)
4cr
A study of British history from the beginning of the Tudor dynasty in 1485 to the present with emphasis on constitutional, social, and cultural developments.

HIS 2200
Historical Methods (HUM)
4cr
An introduction to historical research, writing, and criticism through concentrated study of a selected topic or period. Recent topics include the Irish Potato Famine and the Cold War. Fall/Spring

HIS 2250
20th Century Europe (HUM)
4cr
The study of recent European history with emphasis on political, social, economic, and cultural developments.

HIS 2310
The Greeks (HUM)
4cr
A survey of Greek culture that introduces students to the achievements (political, social, intellectual, artistic, etc.) and ideas of the ancient Greeks. This course covers the sweep of Greek culture from the Mycenaean period (1600-1200 BCE) to the world of Alexander the Great and his successors. This course is cross-listed in Classics.

HIS 2350
The Romans (HUM)
4cr
A survey of Roman culture that introduces students to the achievements (political, social, intellectual, artistic, etc.) and ideas of ancient Rome. This course covers Rome from its foundation in 753 BCE to its transformation in late antiquity. Within the chronological sweep of Roman history, the class focuses on special aspects of Roman society: class and status, daily life, slavery, etc. This course is cross-listed in Classics.

HIS 2450
A Social History of 20th Century Japan Through Film (HUM)
4cr
This course will examine the changing representations of women, family, work, and duty, as well as issues such as identity and alienation, as presented in the popular media of Japanese cinema. Through critical viewing of films by directors such as Akira Kurasawa, Mizoguchi, and Teshigahara, students will investigate the relationship of history and its filmic/cinematic representation. Lectures and selected readings will provide the students with the necessary background and tools for critical analysis. It is the goal of this class to come to an understanding, through the lens of a director's camera, of how social networks and their corresponding obligations are created and perpetuated in modern Japanese society. No prior knowledge of either Japanese history or Japanese language is required.

HIS 2500
Early Medieval History (HUM)
4cr
From the collapse of the Roman Empire in the fifth century to the creation of the Carolingian Empire by Charlemagne in the ninth century, early medieval Europe was hardly the dark age it has traditionally been presumed to be. This course will survey major political, social, economic, and cultural developments of Western Europe in the first half of the medieval period.

HIS 2550
Later Medieval Europe (HUM)
4cr
Knights in shining armor. Robin Hood and Friar Tuck. Majestic cathedrals. Heretics burned at the stake. The medieval world that lives in our imaginations derives from the flowering of Western Europe between the 11th and 14th centuries. But how much of what we think of as medieval is actually medieval? This course will answer this question by surveying major political, social, economic, and cultural developments of Western Europe in the second half of the medieval period.

HIS 2620
America in the 1960s (HUM)
4cr
A survey of the major themes, events, and individuals in America in the 1960s.

HIS 2850
Comparative History: Chicago and Milwaukee (HUM)
4cr
A comprehensive history of two major Midwestern cities from the earliest European settlements to the present. Students will prepare three papers for class, presentations, and discussions: one on the history of Chicago, one on the history of Milwaukee, and one comparing the two cities. Field trips to Chicago and Milwaukee are a required part of the course.
HIS 2890

19th Century American History (HUM)
4cr
This course surveys the "long 19th century," from the ratification of the U.S. Constitution to the entry of the United States into the Spanish-American War. General themes include politics, expansion, technology, slavery, gender, immigration, and social change in the American republic. More specific attention will be paid to the development of nationalism and sectionalism, agriculture and industry, reform impulses, the origins of the Civil War and Reconstruction, westward expansion, the rise of big business, populism and progressivism, and the increasing engagement of the United States with the rest of the world.

HIS 2900

20th Century U.S. History (HUM)
4cr
A study of the major political, economic, diplomatic, and social changes in the United States from 1890 to the present.

HIS 3000

The American Founding (HUM)
4cr
This course examines the events and ideas that contributed to the American founding. Topics covered include the Declaration of Independence, the Constitutional Convention, the struggle over ratification of the Constitution, the creation of the Bill of Rights, and the formation of a national government.

HIS 3040

Modern Central America: Inevitable Revolutions (HUM)
4cr
By focusing on the theme of revolution, students will gain a general understanding of the political and social history of Central America from colonization through the contemporary period. Students will learn to take information and form critical analyses of historical trends and events, using both primary and secondary source material.

HIS 3050

History of Mexico (HUM)
4cr
We share almost 2,000 miles of border with Mexico, and nearly eight million Mexicans live in the United States, yet many of us learn next to nothing about this fascinating country's history. This course attempts to address this gap in our education system by providing an in-depth look at Mexican history, with an emphasis on the period from independence to the present. The course will also look at the borderlands between our two countries and the Mexican diaspora living in the United States today.

HIS 3100

The Age of Augustus (HUM)
4cr
An intensive and interdisciplinary approach to one of the most important and seminal periods of Western history, the age of the emperor Augustus. Students study the process of transformation from the Roman Republic to the Roman Empire during the Augustan principate. They also encounter the Augustan authors and creators of the Golden Age of Latin literature (Virgil, Horace, Livy, etc.), as well as the major works of art and the imperial monuments of Augustus. Prerequisite: Junior standing or consent of instructor.

HIS 3150

International Relations (HUM)
4cr
This course examines the engagement of the United States in international affairs during the 20th century. Topics include the emergence of the United States as a global power after the Spanish-American War, the involvement of the United States in World War I and World War II, the emergence of U.S. power during the Cold War, the role of gender and race in the making of U.S. foreign policy, and globalization.

HIS 3260

Seminar in Roman Studies (HUM)
4cr
An in-depth exploration of a particular topic in Roman history or culture. Possible topics include the Fall of the Roman Republic, the Poetry of Virgil, Roman Historians, the Early Roman Emperors, and the Age of Constantine.

HIS 3270

Seminar in Medieval Studies (HUM)
4cr
An in-depth exploration of a particular topic in medieval history or culture. Possible topics include the Fall of Rome, Medieval Monasticism, Crusades, Age of Justinian, and Augustine and His World. The seminar will build on topics covered in a more general way in the World of Late Antiquity, Early Medieval Europe, Later Medieval Europe, and Byzantine History.

HIS 3400

Modern China (HUM)
4cr
An in-depth study of Chinese history from the early 19th century to the present with special emphasis on the role of Mao Tse-tung in shaping the People's Republic of China. Spring.
HIS 3410

Modern India (HUM)
4cr
This course tracks India's development from the Mughal Empire, to the establishment of the British Empire in the 1700s, through independence in 1947, to its present status as a regional superpower and global economic force. Students will assess the many ironies of Indian history, particularly how India has been simultaneously "globalized" by invaders and outsiders, but has also acted as a "globalizer," initiating significant changes in the international political and economic order.

HIS 3450

Modern Japan (HUM)
4cr
A study of Japanese history from the early 19th century to the present with emphasis on native Japanese culture, Western influences, modernization, imperialism, militaristic and democratic forces, World War II, and the recent emergence of the nation as a world economic leader.

HIS 3990

Historiography (HUM)
4cr
An introduction to the method and history of historical writing, acquainting the student with aspects of research and writing and with the work of representative historians and philosophers of history of various periods and approaches, from antiquity to the present.

Management and Marketing
The Management and Marketing Department offers two majors. Recent graduates have obtained employment in social media marketing, business intelligence, media planning, sales and marketing management, customer service, benefits analysis, and human resource management.

Management Major
MGT 3120 Principles of Management (4 cr.)
FIN 3210 Corporate Finance (4 cr.)
MGT 3300 Operations Management (4 cr.)
MGT 3400 Human Resource Management (4 cr.)
MGT 3600 Legal Environment of Business (4 cr.)
BUS 4900 Business Policies Senior Seminar (4 cr.)
MKT 3130 Marketing Principles (4 cr.)
ACC 2010 Financial Accounting (4 cr.)
ECN 1010 Principles of Microeconomics (4 cr.)
ECN 1020 Principles of Macroeconomics (4 cr.)

Choose one of the following:

BUS/ECN 2340 Applied Statistics for Management and Economics (4 cr.)
MKT 3100 Introduction to Business Analytics (4 cr.)
MKT 3140 Marketing Research (4 cr.)
ACC 2040 Cost and Managerial Accounting (4 cr.)

Choose three of the following (course cannot be repeated from the list above):

MGT 3100 Introduction to Business Analytics (4 cr.)
MGT 3140 Consumer Behavior (4 cr.)
MKT 4100 Integrated Marketing Communications (4 cr.)
MKT 4200 Direct Marketing Analytics (4 cr.)
ACC 2020 Managerial Accounting (4 cr.)

Required courses (24 cr.)

Any MGT or BUS course can be used as electives, Marketing (MKT), Accounting (ACC) and Finance (FIN) classes can be used as electives only if the student is not double majoring in one of those fields. Students may petition the department to allow electives from areas outside of business.

Marketing Major

ECN 1010 Principles of Microeconomics (4 cr.)
ECN 1020 Principles of Macroeconomics (4 cr.)
ACC 2010 Financial Accounting (4 cr.)
BUS 1110 Introduction to Business (4 cr.)
MKT 3120 Principles of Management (4 cr.)
BUS 4900 Business Policies Senior Seminar (4 cr.)
MKT 3130 Marketing Principles (4 cr.)
MKT 3230 Personal Selling and Sales Management (4 cr.)
MKT 4220 Business to Business Marketing (4 cr.)

Choose one of the following:

BUS/ECN 2340 Applied Statistics for Management and Economics (4 cr.)
MKT 3100 Introduction to Business Analytics (4 cr.)
MKT 3140 Marketing Research (4 cr.)
ACC 2040 Cost and Managerial Accounting (4 cr.)

Choose three of the following (course cannot be repeated from the list above):

MKT 3100 Introduction to Business Analytics (4 cr.)
MKT 3140 Consumer Behavior (4 cr.)
MKT 4100 Integrated Marketing Communications (4 cr.)
MKT 4200 Direct Marketing Analytics (4 cr.)
ACC 2020 Managerial Accounting (4 cr.)

Required courses (24 cr.)

Any MGT or BUS course can be used as electives, Marketing (MKT), Accounting (ACC) and Finance (FIN) classes can be used as electives only if the student is not double majoring in one of those fields. Students may petition the department to allow electives from areas outside of business.

Marketing Major
8 additional credits from courses with the following prefixes: ACC, BUS, FIN, MGT, and MKT not already counted above.

**Business Administration**

**BUS 1110**

**Introduction to Business**

4cr
This course will introduce the disciplines of business. Through readings, observations, hands-on applications, and cases, students will study current topics and trends relating to business. Students will also develop skills for problem-solving, communication, research, analysis, and presentation. Students will consider and evaluate career pathways. Spring/Fall

**BUS 2000**

**Emerging Markets: Cultures and Languages (HUM)**

4cr
Emerging markets exemplify a symbiotic relation between business and cultures, and serve as the cornerstone of this course. One instructor each from business and modern languages utilize marketplaces as a unifying force of the globe and use numbers as a universal language combined with cultures, languages, and sociopolitics to explain the volatility of development with a humanities and sociologic approach.

**BUS 2110**

**Business Ethics (HUM)**

4cr
In this course, students explore major ethical issues arising in the practice of business and learn to apply various methods of ethics in solving these problems. Whistleblowing, insider trading, employees' rights, multinational corporations, and other topics are discussed.

**BUS 2150**

**Business Geographics and Data Visualization**

4cr
The course focuses on the visual display of quantitative information in a business or organizational context. Students will use advanced software technology to summarize data visually for better business decision-making, increased organizational efficiency, and effective organizational planning.

**BUS 2340**

**Applied Statistics for Management and Economics (MTH)**

4cr
The application of statistics to problems in business and economics, encompassing the gathering, organization, analysis, and presentation of data. Topics include descriptive statistics in tabular and graphical forms, the common measures of central tendency and dispersion, sampling and probability distributions, construction of confidence intervals and hypothesis testing, and correlation analysis. This course is offered as BUS 2340 or ECN 2340. Students who earned less than 20 on the math component of the ACT (or equivalent on the SAT) are encouraged to take a math class to strengthen their preparation for this class. Fall/Spring

**BUS 4900**

**Business Policies Senior Seminar**

4cr
Business Policies Seminar is a capstone course for seniors majoring in marketing, management, accounting, and finance. It is designed to allow students to integrate their knowledge from other Business Department curriculum and apply those insights in seminar discussion of current business topics and readings. Additionally, under the supervision of the instructor, all students will complete a Senior Thesis/Project fulfilling both the seminar requirement and the general college requirement. Senior Thesis/Project choices are determined by each student, presented to the instructor for approval, and completed over the course of the scheduled term. Prerequisites: Senior standing, BUS/ECN 2340 or MGT 3100, and MGT 3120 Fall/Spring

**Management**

**MGT 3100**

**Introduction to Business Analytics**

4cr
A survey of the mathematical models of Management Science and Operations Research (such as linear programming, queuing theory, decision analysis, and simulation) applied to managerial decision-making. Prerequisites: BUS/ECN 2340, SWK 2330, GEO 2900, MTH 1050, or MTH 3050 and sophomore standing or higher.
### MGT 3120
**Principles of Management**
4cr
This course prepares students for future leadership roles and positions in management. The course's main focus is directed toward the behavioral aspects of work cultures and to the development of an effective philosophy and strategy for successful management performance in the 21st century. Topics include the changing workplace; the social, ethical, and legal issues in management; cross-cultural awareness; self-awareness; planning and decision-making; project management; motivation; and leading/working in teams.
Prerequisite: Sophomore standing
Fall/Spring

### MGT 3300
**Operations Management**
4cr
A survey of major management systems and quantitative techniques used in manufacturing and service operations. Subject matter will address operations strategy, product/process design, quality management, inventory management (including MRP and JIT), project management, and other related topics.
Prerequisites: MGT 3120 and BUS/ECN 2340 or MTH 3050 or MGT 3100
Fall/Spring

### MGT 3400
**Human Resource Management**
4cr
An examination of significant behavioral research influencing human resource management. General survey of personnel administration functions and management-labor relations.
Prerequisite: MGT 3120
Fall/Spring

### MGT 3600
**Legal Environment of Business**
4cr
This is an introductory, general survey course of American legal principles and their application to the business world. Students will develop an understanding of the legal system, the litigation process, and the ethical considerations attendant to making important business decisions. Areas of study will include contracts, torts, property, business organization, employment law, discrimination, crimes, the Constitution, and the regulatory process. Oral and written analysis of case law will be utilized to help students appreciate, understand, and explain multiple points of view regarding the legal environment of business.
Prerequisite: Sophomore standing
Fall/Spring

### MGT 3730
**International Legal Environment of Business**
4cr
A survey of various legal systems including common law, civil law, and Islamic law. Students will be introduced to a variety of concepts, including the sources of international law, the distinction between private and public law, and the concept of sovereign nations. The implications of sovereignty as they relate to international business activity are a central theme of the course. Original source materials, case studies, and legal opinions are used. Special schedule.
Prerequisite: Junior standing

### MGT 3710
**International Management**
4cr
A study of management in an international environment, its evolution, and its position in today's society. Students also study the control and decision-making process for management of a worldwide organization, including the financial, marketing, human resource, political, and ethical implications of the worldwide organization in local markets and in the international community.
Prerequisite: Junior standing
Spring

### MGT 3800
**Business Research Projects**
2cr
Students will select a topic or problem in consultation with the course instructor and conduct research on that issue. These projects could be general current events in business or specific problems faced in local business.
Prerequisite: Permission of the instructor

### MGT 4600
**Labor and Employment Law**
4cr
Labor and Employment Law is the comprehensive study of labor relations law, including the development of American labor unions, as well as the National Labor Relations Act, unfair labor practices, and other rights and responsibilities of management and unions. Students will also study equal employment opportunity and related employment law issues including Title VII, EEO legislation, and common law employment issues. This course will be facilitated by the case study method. Significant writing and speaking will be expected of all students.
Prerequisite: MGT 3600
Marketing

**MKT 3130**

*Marketing Principles*

4cr

This course provides a general knowledge of marketing, emphasizing marketing mix elements (Product, Price, Promotion, and Placement) for both consumer and industrial products, marketing strategies, customer behavior, and promotion. Topics include situation analysis techniques; marketing segmentation; identification of target markets; product/brand positioning via the 4 Ps of marketing; development and presentation of a marketing plan for a local business; and the social, ethical, and legal issues in marketing. Prerequisite: Sophomore standing Fall/Spring

**MKT 3140**

*Consumer Behavior*

4cr

This course focuses on the development of successful marketing strategies by analysis of theories of consumer behavior and their application to successful decision-making. The course will incorporate a variety of perspectives from psychology, economics, geography, sociology, and cultural anthropology in acquiring an understanding of consumer thought processes and overt behaviors, and the consumer environment. Topics related to for-profit and not-for-profit institutions are addressed. Prerequisite: MKT 3130

**MKT 3230**

*Personal Selling and Sales Management*

4cr

This class is designed for all marketing majors and those students who are planning a career in professional sales. The course focuses on both personal selling and sales analytics. Students will learn how to communicate with prospective customers to understand their needs, match those needs with the appropriate product or service, and present an effective sales presentation. In addition, students will develop an in-depth understanding of how to analyze and report on sales data using Microsoft Excel. Lectures, role-playing exercises, mock sales calls, class exercises (using salesforce.com), and case studies are used to reinforce the text. Topics also include the social, ethical, and legal issues in selling; handling objections; and closing deals. Prerequisites: MKT 3130 and junior standing, or permission of instructor

**MKT 4100**

*Integrated Marketing Communications*

4cr

This course focuses on the theory and practice of designing and implementing an integrated marketing communications program for maximum impact on customers and constituents. Class lectures and applied activities are designed to foster analytical and critical-thinking skills in campaign design and development; strategic promotional planning; research and assessment of target markets; media buying strategy; and national, global, and ethical issues. A variety of traditional and new communication media are addressed. Recent developments in marketing communications are also addressed. Prerequisites: MKT 3130 and junior standing Fall/Spring

**MKT 4200**

*Direct Marketing Analytics*

4cr

This course focuses on the development of critical thinking and analytical skills in the design of marketing strategy and tactics using databases. Database marketing refers to a company's use of databases to gain a better understanding of customers, and accomplish marketing objectives, by delivering higher levels of customer satisfaction. Topics and applications in this class focus on market segmentation, customer relationship management, trend analysis, and accountability of marketing actions. For-profit and not-for-profit situations are addressed. Prerequisite: MKT 3130

**MKT 4210**

*Marketing Research*

4cr

This course is designed to survey current marketing research practices and procedures. Coursework will focus on the development of reliable and valid measures, and the application of various qualitative and quantitative methods. The emphasis is on providing useful information for marketing decisions. Prerequisites: MKT 3130 and BUS/ECN 2340 or MGT 3100

**MKT 4220**

*Business to Business Marketing*

4cr

This is the capstone class for all marketing majors, and it allows students to apply their knowledge gained from previous courses within the context of the business-to-business environment. Students will find an industrial product, create a feasibility study, develop a business plan and marketing plan, and execute the marketing plan. Executonal elements include branding, logos/icons, website, product brochures, direct marketing campaign, and Google AdWords campaign. Prerequisites: ACC 2000 or ACC 2020 or ACC 2040 and MKT 3230
MKT 4230

Consumer Research

4cr
This course focuses on the successful development of marketing strategies based on an understanding of consumer behavior and current marketing research practices and procedures. Frameworks of consumer decision-making and overt behavior will include perspectives based on psychology, sociology, behavioral economics, and cultural anthropology. Applied research projects will incorporate both qualitative and quantitative methods.
Prerequisites: MKT 3130 and ECN/BUS 2340 or MGT 3100

Mathematics

Courses in the Mathematics Department help students acquire methods of logical reasoning and deduction, and develop problem-solving skills for a wide variety of applications. They also provide techniques for the description and analysis of physical and social phenomena. Department courses provide a foundation for graduate work, prepare students for the teaching profession, or prepare students for careers using problem-solving and analytical skills.

Mathematics Major

The major requires 48 credits, which must include:

- MTH 1120 Calculus I (4 cr.)
- MTH 1220 Calculus II (4 cr.)
- MTH 1240 Discrete Structures (4 cr.)
- MTH 2040 Linear Algebra (4 cr.)
- MTH 2090 Mathematical Computing (4 cr.)
- MTH 3040 Abstract Algebra I (4 cr.)
- MTH 3120 Real Analysis (4 cr.)
- MTH 4300 Senior Research (4 cr.)
- MTH 4990 Senior Thesis Completion (0 cr.)

CSC 1030 Data Science I (4 cr.)

Students must take three additional mathematics courses numbered above 2000 (MTH 4500 and MTH 4900 may only be counted toward major with approval of department chair).

Either of the below classes may be substituted for one mathematics elective.

- PHY 2200 General Physics I (4 cr.)
- PHY 3470 Mathematics for Scientists and Engineers (4 cr.)

Mathematics Minor

A minor consists of four mathematics courses beyond MTH 1220 and one computing course, which may be any one of CSC 1030, Data Science I (4 cr.), CSC 1810 Principles of Computer Science I (4 cr.), or CSC 1100 Introduction to Computing (4 cr.). PHY 2200 or PHY 3470 may be used as one of the mathematics courses.

Additional Information:
The mathematics minor for secondary education should include:

MTH 1120 Calculus I (4 cr.)
MTH 1220 Calculus II (4 cr.)
MTH 2040 Linear Algebra (4 cr.)
MTH 2080 Modern Geometry (4 cr.)
MTH 3040 Abstract Algebra I (4 cr.)
MTH 3050 Abstract Algebra II (4 cr.)
AND
CSC 1100 Introduction to Computing (4 cr.)
OR
CSC 1810 Principles of Computer Science I (4 cr.)
OR
CSC 1030 Data Science I (4 cr.)

The elementary education major desiring licensure for teaching mathematics should include:

MTH 1030 Applied Contemporary Mathematics (4 cr.)
MTH 1040 Principles of Modern Mathematics (4 cr.)
MTH 1120 Calculus I (4 cr.)
MTH 1240 Discrete Structures (4 cr.)
MTH 2080 Modern Geometry (4 cr.)
AND
CSC 1100 Introduction to Computing (4 cr.)
OR
CSC 1030 Data Science I (4 cr.)

The mathematics major planning to attend graduate school should include:

MTH 2020 Differential Equations (4 cr.)
MTH 2120 Multivariate Calculus (4 cr.)
MTH 3220 Complex Variables (4 cr.)
MTH 3180 Introduction to Topology (4 cr.)
MTH 3140 Abstract Algebra II (4 cr.)

The mathematics major planning a career in actuarial science should include:

MTH 2120 Multivariate Calculus (4 cr.)
MTH 2130 Mathematics of Actuarial Science (4 cr.)
MTH 3030 Probability (4 cr.)
MTH 3050 Statistics (4 cr.)

Additionally, contact the chair of the Mathematics Department for information on preparing for the actuarial exams. Students planning to become actuaries may also take MGT 3210 Financial Management, ECN 1010 Principles of Microeconomics, and ECN 1020 Principles of Macroeconomics for VEE credit.

Data Science

Data Science at Carthage is an interdisciplinary academic endeavor focused on understanding quantitative information. The major and minor in Data Science introduce students to contemporary techniques for analyzing, interpreting, and visualizing data, as well as applying these techniques to fields across the curriculum. The major and minor expose students to statistical methods, computational tools, and best practices for communicating results.

The major and minor promote quantitative literacy and effective communication skills that allow technical results to be understood by the general population. Facility with quantitative information is a useful skill in the modern world, where data collection is ubiquitous. Learning from this data can improve decision-making, increase profits, optimize processes, or benefit a higher cause.

Data Science Major

The Data Science Major is composed of 50 credits, including 12 regular courses (48 cr.) and two portfolio seminars (1 cr. each). All students will take the following core courses.
Mathematics

CSC 1100 Introduction to Computing (4 cr.)
OR
CSC 1810 Principles of Computer Science (4 cr.)
AND
CSC 1030 Data Science I (4 cr.)
CSC 1040 Data Science II (4 cr.)
MTH 1120 Calculus I (4 cr.)
MTH 2040 Linear Algebra (4 cr.)
MTH 3090 Mathematics of Data Science (4 cr.)
MTH 3350 Data Science Portfolio I (1 cr.)
MTH 4350 Data Science Portfolio II (1 cr.)
A statistics class chosen from MTH 1050 Elementary Statistics, MTH 3050 Statistics, BUS/ECN 2340 Business Statistics, or EXS/NSG 2330 Applied Statistics for Health and Human Services (4 cr.)
AND
BUS 2150 Business Geographics and Data Visualization (4 cr.)
OR
CSC 2810 Database Design and Management (4 cr.)
AND
MTH 2190 Ethics in Data Science (4 cr.)
OR
BUS 2110 Business Ethics (4 cr.)
In addition, every Data Science Major, in consultation with a faculty mentor, will design and complete a three-course (12-credit) applied concentration. Applied concentrations need to be approved by the chair of the Mathematics Department.

Data Science Minor
The Data Science Minor is composed of 6 courses (24 cr.).

All students will take the following core courses.

CSC 1030 Data Science I (4 cr.)
CSC 1040 Data Science II (4 cr.)
A statistics class chosen from MTH 1050 Elementary Statistics, MTH 3050 Statistics, BUS/ECN 2340 Business Statistics, or EXS/NSG 2330 Applied Statistics for Health and Human Services (4 cr.)

Each student will also take three applied data science electives (12 cr.), chosen from the list below. No more than two of the three electives may be from the student’s major department(s). Other courses may be counted as electives if approved by the chair of the Mathematics Department.

BUS 2150 Business Geographics and Data Visualizations (4 cr.)
CSC 2810 Database Design and Management (4 cr.)
CSC 3530 Artificial Intelligence and Cognitive Modeling (4 cr.)
ECN 3340 Introduction to Econometrics (4 cr.)
GEO 1610 Introduction to Geographic Information Science: Mapping Your World (4 cr.)
GEO 2610 Advanced Geographic Information Science and Analytical Cartography (4 cr.)
GEO 1210 Internet Mapping and Web GIS (4 cr.)
MGT 3100 Introduction to Business Analytics (4 cr.)
MTH 3090 Mathematics of Data Science (4 cr.)

Honors in the Major
Students wishing to earn honors in mathematics must fulfill the following requirements:
1) The student must have a 3.5 GPA in mathematics courses numbered 1120 or above at graduation.
2) The student must present a mathematics talk at an off-campus venue. The talk and venue must be approved by the Mathematics Department chair.
3) The student must pass a mathematics oral examination before a jury composed of members of the Mathematics Department. This examination will usually be administered during the student’s last semester on campus. Please see the department chair for details.

MTH 1030
Applied Contemporary Mathematics (MTH)
4cr
This is an entry-level course appropriate for most college students that emphasizes mathematical reasoning in everyday experiences. The geometry unit deals with form, growth, size, and patterns found in living populations and created art. The mathematics of social choice studies techniques of decision-making, voting, and optimizing alternatives. Operations research discusses algorithms for scheduling, planning, and creating networks. Standard statistical measures also are studied and interpreted. This course is designed for any student who does not need the technical vocabulary of trigonometry or analytic geometry. A student may not receive credit for Applied Mathematics after receiving credit for any course numbered 1120 or above.

Fall/J-Term/Spring

MTH 1040
Principles of Modern Mathematics (MTH)
4cr
An introduction to set theory, problem-solving, geometry, algebra, probability, and statistics, with selected applications for each. The course satisfies teacher certification requirements.

Fall/J-Term/Spring

MTH 1050
Elementary Statistics (MTH)
4cr
Methods of determining averages, variability, hypothesis testing, correlation, and of testing the significance of the statistics, prediction, and distribution-free statistics. A student may not receive credit for Elementary Statistics after receiving credit for any other statistics course.

Fall/Spring
MTH 1060  
Finite Mathematics (MTH)  
4cr  
The main topics covered are Boolean algebra, logic, sets, graph theory, combinatorics, number systems, probability, coding, information theory, recurrence relations, and algorithms. This course cannot be taken for credit after MTH 1240.

MTH 1070  
Functions, Graphs, and Analysis (MTH)  
4cr  
A study of polynomial, rational, trigonometric, and exponential functions and their applications. The nature of functions, equation solving, solution estimation, graphing, and mathematical modeling will be emphasized. A student may not receive credit for this course after receiving credit for any other course numbered 1120 or above.  
Fall/Spring

MTH 1120  
Calculus I (MTH)  
4cr  
This course is a study of coordinate systems, straight lines and conic sections, theory of limits, differentiations of algebraic functions, applications to slopes and curves, and maxima and minima.  
Prerequisite: MTH 1070 or high school preparation  
Fall/Spring

MTH 1240  
Discrete Structures (MTH)  
4cr  
A study of logic, proofs, and sets; graphs, digraphs, trees, colorings, and traversal; permutations and combinations; binomial coefficients; and recurrence relations.  
Prerequisite: MTH 1120, CSC 1100, CSC 1810, or CSC 1030, or departmental approval  
J-Term/Spring

MTH 2020  
Differential Equations (MTH)  
4cr  
A study of common types of ordinary differential equations, their solutions and applications, singular solutions, and an introduction to mathematical modeling.  
Prerequisite: MTH 1220  
Fall

MTH 2040  
Linear Algebra (MTH)  
4cr  
An examination of linear equations, matrices, vector spaces, transformations, and eigensystems.  
Prerequisite: MTH 1220  
Spring

MTH 2080  
Modern Geometry (MTH)  
4cr  
An introduction to the branches of geometry including plane, solid, higher dimensional, fractal, transformational, non-Euclidean, and combinatorial.  
Prerequisite: MTH 1120  
Fall of even-numbered years

MTH 2090  
Mathematical Computing  
4cr  
This course focuses on three classes of computational tools: structured programming languages, computer algebra systems, and spreadsheets. Students will learn Python, Mathematica, and Excel by solving a wide range of mathematical problems from discrete mathematics, number theory, and applied mathematics; and as importantly, students will learn which tools are appropriate for various problems.  
Prerequisite: MTH 1240 or MTH 1220 or instructor approval

MTH 2120  
Multivariate Calculus (MTH)  
4cr  
A study of curvilinear motions, solid analytic geometry, vectors, partial derivatives, and multiple integration. Students completing this course with a grade of C or better will be awarded credit for MTH 1120 and 1220 if not previously taken.  
Prerequisite: MTH 1220  
Spring

MTH 2130  
Mathematics of Actuarial Science (MTH)  
4cr  
This course is designed to help students prepare for a career in the actuarial sciences, and to help students learn material covered on the first actuarial examination. Topics will include limits, series, sequences, derivatives of single and multivariate functions, integrals of single and multivariate functions, general probability, Bayes’ theorem, univariate probability distributions, and multivariate probability distributions.  
Prerequisites: MTH 1220 and MTH 1240 or instructor approval  
Fall
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
<th>Prerequisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 2190</td>
<td>Ethics in Data Science</td>
<td>4cr</td>
<td>This course will help students think critically about the complex ethical issues arising in technological fields. Students will learn some of the indicators of bias hidden by technology, analyze recent cases of ethical misconduct involving big data, and will learn to perform a contextual risk-benefit analysis of implementing.</td>
<td>Spring</td>
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<tr>
<td>MTH 3030</td>
<td>Probability (MTH)</td>
<td>4cr</td>
<td>A second course on discrete structures including probability, combinations and permutations, recursion, and algorithms. Prerequisites: MTH 1220 and MTH 1240 Fall of odd-numbered years</td>
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<tr>
<td>MTH 3040</td>
<td>Abstract Algebra I (MTH)</td>
<td>4cr</td>
<td>A study of groups, Lagrange's theorem, normal subgroups, fields, rings, integral domains, subrings, ideals, and vector spaces. Prerequisites: MTH 1240 and MTH 2040 Fall</td>
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<tr>
<td>MTH 3050</td>
<td>Statistics (MTH)</td>
<td>4cr</td>
<td>Data collection and analysis; continuous and discrete distributions, central limit theorem, sampling theory, confidence intervals and estimation theory, regression analysis and correlation including multiple linear regression models and hypothesis testing and confidence intervals in regression models, chi-square test of independence and other nonparametric statistical tests, time series models and forecasting, linear time series models, moving average and autoregressive models, estimation, data analysis, index numbers, forecasting with time series models, forecasting errors and confidence intervals, and application of statistics to significant real-world data. Prerequisites: MTH 1050 and MTH 1220 or instructor approval Spring of odd-numbered years</td>
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<tr>
<td>MTH 3090</td>
<td>Mathematics of Data Science</td>
<td>4cr</td>
<td>This class dives deeper into the data science process by studying the mathematical foundations of common data science methods and techniques. Methods include linear regression, classification models, and clustering. Techniques include generalized study of functions, best practices for handling data, optimization, and analyzing error measures. Prerequisite: CSC 1810</td>
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<tr>
<td>MTH 3140</td>
<td>Abstract Algebra II (MTH)</td>
<td>4cr</td>
<td>A continuation of Abstract Algebra I, concentrating on topics in ring theory and field theory, including applications. Specially arranged, odd-numbered years. Prerequisite: MTH 3040</td>
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<tr>
<td>MTH 3180</td>
<td>Introduction to Topology (MTH)</td>
<td>4cr</td>
<td>This course will serve as an introduction to the topology of Euclidean spaces and manifolds, with an emphasis on basic sets (disks, spheres, annuli, Cantor sets) in lower dimensional space. Continuous maps, homeomorphisms, and embeddings will be studied in conjunction with connectedness and paths, convergence and compactness, manifolds, homotopy, contractible sets, the Brouwer fixed-point theorem, and covering spaces. At the end of the course, each student will complete an individual project based on a research article that examines one of the major areas (e.g., physical knot theory) in the modern study of topology. Prerequisites: MTH 1220 and MTH 1240</td>
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<tr>
<td>MTH 3220</td>
<td>Complex Variables (MTH)</td>
<td>4cr</td>
<td>This course is an introduction to complex analysis, including the Cauchy-Riemann equations, Cauchy's theorem, residue theory, and conformal mapping. Prerequisite: MTH 1220</td>
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</tbody>
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Spring
MTH 3350
Data Science Portfolio I
1cr
This is the first course in a two-course sequence in which students develop, propose, and refine their three-course applied sequence in data science; learn about the concept of a data science portfolio; and begin the process of planning and assembling their data science portfolio. Students will also engage in career and professional development activities.
Prerequisites: CSC 1040 and MTH 1050, MTH 3050, BUS/ECN 2340, or EXS 2330, or instructor approval
Spring

MTH 3470
Mathematics for Scientists and Engineers (MTH)
4cr
Prerequisite: MTH 2020 with a grade of C- or better
Spring

MTH 4200
Methods and Materials in Teaching Mathematics
4cr
A study of teaching methods and instructional materials in mathematics. Special attention is given to the selection and organization of subject matter and learning activities. Fieldwork required.
Prerequisites: Admission to the Teacher Education Program and to be nearly completed with the major.
Spring

MTH 4300
Senior Research
4cr
Students will engage in mathematics research. Technical oral and written communication skills will be emphasized. Students will produce a high-quality Senior Thesis as part of this course.
Prerequisites: Mathematics Major and junior standing
Fall

MTH 4350
Data Science Portfolio II
1cr
This is the second and final course in the data science portfolio sequence. In this class, students will assemble and present their data science portfolio. In addition, students will reflect upon the learning goals of their three-course sequence and articulate how those learning goals were accomplished. Students will participate in professional and career development activities.
Prerequisite: MTH 3350 or instructor approval
Spring

MTH 4500
Independent Study in Mathematics
2-4cr
Independent study in a topic of interest in mathematics that does not duplicate any other course in the regular course offerings.
Prerequisites: MTH 1220 and instructor approval

MTH 4900
Research in Mathematics
4cr
An opportunity to conduct research in mathematics, culminating in a research paper.
Prerequisites: MTH 1220 and instructor approval

MTH 4990
Senior Thesis Completion
0cr
Students should register for MTH 4990 during the semester in which they plan to complete their Senior Thesis.

Modern Languages
The study of foreign languages and cultures is at the core of a liberal arts education, and the Modern Languages Department embraces this role at Carthage with courses and major and minor programs in Chinese, French, German, Japanese, and Spanish. The department equips students to work, serve, and lead in the world by preparing them to communicate using foreign languages in appropriate and culturally specific manners, and to reflect upon the role of language in human interactions and cultures.

The department provides linguistic and cultural immersion experiences in the classroom, in the community, and abroad that expose students to and allow participation across a breadth of global cultures. The department is committed to providing these opportunities to students at all levels through the College-wide language requirement, majors and minors in five languages, study abroad, and service learning.

The faculty of the Modern Languages Department will use their training as scholars of language, literature, and culture to develop students’ communication skills in understanding, speaking, reading, and writing and to provide students with the tools of textual interpretation so that students may engage with the discourses of our disciplines and with the challenges of cultural difference. Students minoring or majoring in Chinese, French, German, Japanese, and Spanish will use these tools to hone their linguistic skills and deepen their cultural understanding so that they may become more effective communicators and globally sensitive citizens.

When coupled with programs of supporting courses, the major sequence will satisfy the needs of students with widely differing goals: (1) those who desire a broad liberal arts education cutting across several areas of humane studies; (2) those who wish to complete a teaching major or minor in French, German, or Spanish; (3) those who intend to continue their language studies in graduate school; (4) those interested in government service, careers in international commerce and
industry, or in other fields.

Certification for Teaching Modern Languages

In addition to the professional education sequence of courses and 12 credits of student teaching (both required of all students wishing to be certified as teachers), students seeking certification to teach French, German, or Spanish in Wisconsin must have a major or minor in the language and complete these three additional requirements before they begin student teaching:

1. Successfully complete Methods and Materials in Teaching Modern Languages (MLA 4200).
2. Complete at least four weeks of immersion in the target culture (see below).
3. Achieve an ACTFL proficiency level of “Intermediate High” or better on the oral proficiency interview and the written proficiency test (see below).

The Wisconsin Department of Public Instruction requires those seeking certification in a modern language to complete an immersion experience in the target culture. For modern language majors, this will be met by the required semester abroad. Modern language minors wishing to be certified to teach must document an immersion experience of at least four weeks. Students preparing to study abroad are urged to take MLA 2200 (required for majors).

Students who wish to be certified to teach French, German, or Spanish in Wisconsin must take the American Council on the Teaching of Foreign Languages (ACTFL) oral proficiency interview and the written proficiency test and receive a rating of “Intermediate High” or better prior to beginning their student teaching. Students should contact the Modern Languages Department as soon as they have decided to seek certification in French, German, or Spanish in order to receive information about preparing for the exam. The exams are given by examiners who are independent of the College. These examinations are arranged by the Modern Languages Department and the Education Department and are paid for by the student.

Placement and Competency

Students who have studied a modern language and plan to continue their studies in that language will be placed at the appropriate level on the basis of previous courses and grades and/or a departmentally administered placement test. Students who are completing their first college-level language course and complete the Carthage course in which they were placed with at least a grade of C will be awarded credit for the preceding courses in the normal language sequence, to a maximum of 12 credits per language. Please note that Carthage awards transfer credits only for coursework taken and successfully completed. If placed above 3010, the Spanish minor requires students to take a minimum of 14 credits.

Carthage does not administer placement examinations or offer any form of credit by examination in languages not offered at the College. However, for purposes of the College’s Modern Language requirement, please note the following:

You may be exempted from the Modern Language requirement:

(A) If a minimum of 6 credits in a modern language, with grades of C or better, appears on an official postsecondary transcript.

(B) If you are fluent in a modern language other than those offered at Carthage, and…

1. …can document a majority of non-language academic courses (i.e., biology, mathematics), taught in that modern language at the high school level, OR

2. …can pass a proficiency examination in that modern language at the level of two semesters of college coursework. The examination must be administered and documented by another college and/or university. All arrangements and costs are the responsibility of the student.

(C) If you can document having taken 12 credits from an American Sign Language program.

Majors and minors in French, German, and Spanish are required to pass a target language competency exam during the term in which they take 3010.

An Overview: French, German, and Spanish Majors

Immersion in the linguistic and cultural setting of a foreign country is essential to the formation of a modern language major. Our programs for majors are structured around a requisite study abroad experience. The courses that modern language majors take prior to traveling abroad will prepare them both linguistically and culturally to profit from this experience. Students will immerse themselves in real communicative situations with people of other cultures to become culturally aware and linguistically proficient professionals in an interdependent world.

Course requirements for French, German, and Spanish majors:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-2020</td>
<td>Language Acquisition</td>
<td>8 cr.</td>
</tr>
<tr>
<td>2200</td>
<td>Cultural Awareness Orientation</td>
<td>1 cr.</td>
</tr>
<tr>
<td>3010</td>
<td>Language Acquisition</td>
<td>4 cr.</td>
</tr>
<tr>
<td>3010 L</td>
<td>Language Competency Exam</td>
<td>0 cr.</td>
</tr>
</tbody>
</table>

*During the term in which this course is taken, students will take and be required to pass reading and oral competency evaluation.

3010 L. Passing scores on these evaluations are required before a student can enroll in courses numbered 3080 or higher.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>3080</td>
<td>The French/German/Spanish-Speaking World: Social, Political, and Economic Issues</td>
<td>4 cr.</td>
</tr>
<tr>
<td>3090</td>
<td>The French/German/Spanish-Speaking World: Cultural and Intellectual Life</td>
<td>4 cr.</td>
</tr>
<tr>
<td>3110</td>
<td>Interpreting Written Texts in French/German/Spanish</td>
<td>4 cr.</td>
</tr>
<tr>
<td>4010</td>
<td>Senior Seminar</td>
<td>4 cr.</td>
</tr>
<tr>
<td>4240</td>
<td>Theatre</td>
<td>4 cr.</td>
</tr>
<tr>
<td>400T</td>
<td>Special Topics in the Language</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

Also required*:

GMR 3510 Immersion Abroad (12-16 cr.)

Total 45-49 credits

Students preparing to study abroad are urged to take MLA 2200.

Majors are required to study abroad over one term in an academic setting in a country where the target language is spoken. Classroom instruction for all courses, regardless of discipline, will be in the target language. Courses taken at foreign institutions are usually recorded on the student’s Carthage transcript as GNR 3510. This is a global designation for experiential learning and courses that may be in history, economics, political science, linguistics, art history, or a number of other fields supporting the MLA major. When faculty of any department agree, a specific course taken abroad may be accepted in lieu of a course in that department and be so noted on the student’s transcript. Students are strongly urged to get such courses approved by Carthage faculty before taking them.

Prerequisites to apply for study abroad in modern language majors: MLA 2200, 3010, and at least one of the following: 3080, 3090, or 3110. (In exceptional cases, approval may
be granted for substituting two summers for the term. Students must get such courses approved by the Carthage faculty before taking them.)

An Overview: French, German, and Spanish Minors

2010-2020 Language Acquisition (8 cr.)
3010 *Language Acquisition (4 cr.)
3010L Language Competency Exam (0 cr.)

*During the term in which this course is taken, students will take and be required to pass reading and oral competency evaluation 3010L. Passing scores on these evaluations are required before a student can enroll in courses numbered 3080 or higher.

3110 Interpreting Written Texts (4 cr.) in French/German/Spanish

Choice of one from:
3080 The French/German/Spanish-Speaking World: Social, Political, and Economic Issues (4 cr.)
3090 The French/German/Spanish-Speaking World: Cultural and Intellectual Life (4 cr.)

At least two additional credits above 3010 in the target language.

Total 22 credits

Overview of Chinese and Japanese Majors

Required Core:

CHN/JPN Elementary Chinese/ Japanese I (4 cr.)
CHN/JPN Elementary Oral Chinese 2010 (1 cr.)
CHN/JPN Elementary Chinese/ Japanese II 2011 (4 cr.)
CHN/JPN Intermediate Oral Chinese/ Japanese 2020 (1 cr.)
CHN/JPN Intermediate Oral Chinese/ Japanese 2021 (1 cr.)
MLA 2200 Cultural Awareness Orientation (1 cr.)
CHN/JPN Intermediate Chinese/ Japanese 3010 (4 cr.)
CHN/JPN Intermediate Oral Chinese/ Japanese 3011 (1 cr.)
CHN/JPN Intermediate Chinese/ Japanese II 3020 (4 cr.)
CHN/JPN Intermediate Oral Chinese/ Japanese II 3021 (1 cr.)
GNR 3510 Immersion Abroad (12-16 cr.)
CHN/JPN Advanced Chinese/ Japanese 4070 (4 cr.)
CHN/JPN Senior Seminar 4010 (2-4 cr.)

Choose 1 from:
CHN/ JPN 2070 Calligraphy and Chinese/ Japanese Language (4 cr.)
CHN/ JPN 3070 Chinese/Japanese Culture and Language (4 cr.)
CHN/ JPN 3080 Chinese and Japanese Literature and Culture (4 cr.)

Choose 1 from:
HIS 3400 Modern China (4 cr.)
HIS 3450 Modern Japan (4 cr.)
HIS 1200 Issues in Asian History (4 cr.)
MLA 2450 A Social History of 20th Century Japan Through Film (4 cr.)
REL 3130 Buddhism (4 cr.)
REL 3140 East Asian Religions (4 cr.)
ECN 3100 Political Economy of East Asia (4 cr.)
POL 3400 Chinese Politics (4 cr.)

Total 47-53 Credits

Students are urged to take MLA 2200 the semester before studying abroad.

Chinese and Japanese majors are required to study abroad over one term in an academic setting in a country where the target language is spoken. Students should discuss course offerings abroad with their advisor before making course selections. Courses taken at foreign institutions are usually recorded on the student’s Carthage transcript as GNR 3510. This is a global designation for experiential learning and courses that may be in history, economics, political science, linguistics, art history, or a number of other fields supporting the major. With approval of the appropriate department chair, a specific course taken abroad may be accepted in lieu of a course in that department and be so noted on the student’s transcript. Students are strongly urged to get such courses approved by Carthage faculty before taking them.

Prerequisites to apply for study abroad in Chinese or Japanese: MLA 2200 and CHN/ JPN 2020 or approval by the department.

Overview of Chinese and Japanese Minors

CHN/JPN Elementary Chinese/ Japanese I 2010 (4 cr.)
CHN/JPN Elementary Oral Chinese 2011 (1 cr.)
CHN/JPN Elementary Chinese 2020 (4 cr.)
CHN/JPN Intermediate Oral Chinese 3010 (1 cr.)
CHN/JPN Intermediate Chinese/ Japanese II 3020 (4 cr.)
CHN/JPN Intermediate Oral Chinese/ Japanese II 3021 (1 cr.)
CHN/JPN Chinese and Japanese Literature and Culture 3080 (4 cr.)
CHN/JPN Advanced Chinese/ Japanese (4 cr.)
CHN/JPN Japanese 4070 (4 cr.)

Total 24 credits

Honors in the Major

Please see department chair for details. Basic requirements are listed under All-College Programs in the catalog.

Chinese

CHN 1010

Introductory Chinese I (MLA)

4cr

The course exposes beginners to the Mandarin Chinese phonetic system Pinyin, the four tones, and carefully selected Hanzi, the writing system. Listening, speaking, visual recognition, and writing skills are learned through active participation by the students in communicative and hands-on situations. By the end of the course, the students are able to initiate and, to some degree, sustain oral communication in Chinese while gaining recognition and writing ability of Hanzi via email, handwriting, and calligraphy. 30-50 Hanzi is the goal. Cultural elements associated with Hanzi are introduced. Prerequisite: None

Fall
CHN 1020
Introductory Chinese II (MLA)
4cr
In this course students continue learning listening, speaking, reading, and writing skills using visual etymology, the four tones in Mandarin Chinese, and visualizing individual and combined radicals. The three inseparable dimensions of the Chinese language are studied in a more integrated manner: the visual, the phonetic, and the semantic, or Hanzi, Pinyin, and meaning. The interpersonal mode is stressed in communicative contexts. By the end of the course, the students are able to initiate and, to a greater degree, sustain oral communication with some cultural nuances. Hanzi recognition and writing is increased via email, calligraphy, and simple handwriting. 70-80 Hanzi is the goal.
Prerequisite: Chinese 1010 or equivalent
Spring

CHN 2010
Elementary Chinese I
4cr
This course proceeds with an integrated approach to Hanzi/Pinyin and rebalances the four language skills. Speaking and listening continue to be a focal point while more emphasis is placed on writing (handwriting, email, calligraphy) and reading. Listening, speaking, reading, and writing skills are now developed into an interpretative mode as well as the interpersonal one. By the end of the course, students will be able to express simple descriptions, interpretations, questions, ideas, identification, and preferences. Students are expected to recognize and master 100-150 Hanzi. Historical and philosophic aspects are introduced while studying Hanzi.
Prerequisite: Chinese 1020 or equivalent
Corequisite: CHN 2011
Fall

CHN 2011
Elementary Oral Chinese I
1cr
This course must be taken concurrently with Chinese 2010. Chinese 2011 is an oral class and enhances the speaking aspect of Chinese 2010. It meets once a week to expand students' oral competence in dealing with topics and themes presented in the regular Chinese 2010 class.
Prerequisite: CHN 1020 or equivalent
Corequisite: CHN 2010
Fall

CHN 2020
Elementary Chinese II
4cr
The class engages students in more complex communicative contexts. The four basic language skills, listening, speaking, reading, and writing, enter a mainly interpretative mode while students continue to expand the interpersonal one. By the end of the course, the students are expected to interpret, question, identify, negotiate, compare, and choose in orally communicable Chinese. Chinese idioms are taught as both language and culture. Students' ability to write Chinese is evaluated only with Hanzi (calligraphy, emails, and handwriting). 170-200 Hanzi are expected to be recognized and put into use for some daily functions, career objectives, diaries, and memos among other simple writings.
Prerequisites: CHN 2010 and CHN 211 or equivalent
Corequisite: CHN 2021
Spring

CHN 2021
Elementary Oral Chinese II
1cr
This course must be taken concurrently with Chinese 2020. The class enhances the oral aspect of Chinese 2020. It meets once a week to expand students' oral competence in dealing with topics and themes presented in the regular Chinese 2020 class.
Prerequisites: CHN 2010 and CHN 211 or equivalent
Corequisite: CHN 2020
Spring

CHN 2070
Calligraphy and Chinese/ Japanese Language
4cr
This course integrates language and cultural studies through calligraphy, the writing of Chinese Hanzi and Japanese Kanji. It is open to both language and nonlanguage students. This course carries a Global Heritage designation. It is conducted in English.
Fall or Spring

CHN 3010
Intermediate Chinese I
4cr
This course proceeds with an integrated approach to Hanzi and Pinyin, the students continue to increase Hanzi and decrease Pinyin. The four basic language skills, listening, speaking, reading, and writing, are mainly in an interpretative mode. The communicative context is idea- or opinion-oriented and requires interpretative, subjective, and emotional expressions and responses. The students are expected to initiate, sustain, and expand conversations on the topics studied in previous courses as well as the current one. Social relationships, some philosophic concepts, government institutions, and artistic pursuits are taught as vital aspects of cultural studies. 250-300 Hanzi are expected to be recognized and put into use for brief discussions, debates, and exchange of ideas done through handwriting and emails.
Prerequisites: CHN 2020 and CHN 2021 or equivalent
Corequisite: CHN 3011
Fall
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHN 3011</td>
<td>Intermediate Oral Chinese I</td>
<td>1 cr</td>
<td>This course must be taken concurrently with Chinese 3010. Chinese 3011 is an oral class and enhances the speaking aspect of Chinese 3010. It meets once a week to expand students' oral competence in dealing with topics and themes presented in the regular Chinese 3010 class. Prerequisites: CHN 2020 and CHN 2021 or equivalent. Corequisite: CHN 3010. Fall.</td>
</tr>
<tr>
<td>CHN 3020</td>
<td>Intermediate Chinese II</td>
<td>4 cr</td>
<td>In this course students continue to increase Hanzi and decrease Pinyin to attain a more authentic and more native language acquisition. While listening, speaking, reading, and writing skills are still developed in an interpretative mode, they progress toward a presentational direction. The communicative context at the 3020 level represents a bridge for students from the interpersonal to the interpretative and the presentational. Orally, the students are expected to initiate, sustain, and expand conversations on the topics studied from previous courses as well as the current one. Significant individuals and some historic/philosophic/literary aspects are studied together with language acquisition. 350-400 Hanzi are expected to be recognized and put into use for thematic writing (emails and handwriting). Prerequisites: CHN 3010 and CHN 3011 or equivalent. Corequisite: CHN 3021. Spring.</td>
</tr>
<tr>
<td>CHN 3021</td>
<td>Intermediate Oral Chinese II</td>
<td>1 cr</td>
<td>This course must be taken concurrently with Chinese 3020. This is an oral class and enhances the speaking aspect of Chinese 3020. It meets once a week to expand students' oral competence in dealing with topics and themes presented in the regular Chinese 3020 class. Prerequisites: CHN 3010 and CHN 3011 or equivalent. Corequisite: CHN 3020. Spring.</td>
</tr>
<tr>
<td>CHN 3070</td>
<td>Chinese/Japanese Culture and Language</td>
<td>4 cr</td>
<td>Culture is manifested in language and language verbalizes culture. This course studies how Chinese and Japanese languages and cultures reflect this symbiotic relationship. Students are engaged in an intercultural dialogue with a linguistic approach. Open to both language and nonlanguage students, it is conducted in English. Prerequisite: None.</td>
</tr>
<tr>
<td>CHN 3080</td>
<td>Chinese and Japanese Literature and Culture (HUM)</td>
<td>4 cr</td>
<td>In this course students will critically read and interpret translations of literary, filmic, and other texts originally written in Chinese and Japanese. By studying issues such as the spread of classical cultures, cultural relationships throughout antiquity to the modern age, anxiety toward modernization and Westernization, colonialism and imperialism, national identities, ethnicity, gender, East-West relations, popular culture, labor issues, and environmental problems, students will better understand the ways that literature and culture interact and interact with each other throughout the long, intertwined history of the two cultural spheres. Students will develop their intercultural understanding and refine their skills in critical thinking and oral and written expression. Prerequisite: None.</td>
</tr>
<tr>
<td>CHN 4070</td>
<td>Advanced Chinese</td>
<td>4 cr</td>
<td>The course is typically designed for students who have declared their majors (optional for minors) in Chinese. Students are expected to perform advanced-level tasks. The four basic language skills, listening, speaking, reading, and writing, are honed in a presentational mode. Cultivating students' awareness and appreciation of the richness of the culture of the Chinese-speaking world is thematically structured. Authentic materials will be incorporated into reading and listening. Oral communication will be enhanced with a theme or a viewpoint. 500-550 Hanzi are expected to be recognized and put into use for thematic writing (emails and handwriting). Prerequisites: Chinese 3020 and 3021 or GNR 3510. Fall or Spring.</td>
</tr>
</tbody>
</table>
Japanese

**JPN 1010**

*Introductory Japanese I (MLA)*

4cr
The course is an introduction to the Japanese language and culture, stressing both spoken and written Japanese. It teaches listening, speaking, visual recognition, and writing skills through active participation by the students in communicative situations. By the end of the course, the students are able to initiate and, to some degree, sustain oral communication in Japanese, gaining recognition and writing ability of Hiragana, Katakana, and some Kanji, the three sets of symbols used in written Japanese, while understanding some fundamentals of Japanese social values and ways of thinking.

Fall

**JPN 1020**

*Introductory Japanese II (MLA)*

4cr
This course continues to engage students in listening, speaking, reading, and writing. An interpersonal mode is stressed in communicative contexts. By the end of the course, the students are able to initiate and, to a greater degree, sustain oral communication with some cultural nuances. Kanji recognition and writing is increased via email, calligraphy, and simple handwriting. The students are expected to learn approximately 80 Kanji in Japanese.

Prerequisite: JPN 1010

Spring

**JPN 2010**

*Elementary Japanese I*

4cr
This course proceeds with an integrated approach and rebalances the four language skills. Speaking and listening continue to be a focal point while more emphasis is placed on writing and reading. Listening, speaking, reading, and writing skills are developed into an interpretative mode while expanding the interpersonal one. By the end of the course, students are expected to be able to perform communicative tasks such as description, interpretation, comparison, giving suggestions, and asking questions in a culturally acceptable manner. Students are expected to recognize and master 150 Kanji.

Prerequisite: JPN 1020 or equivalent

Corequisite: JPN 2011

Fall

**JPN 2020**

*Elementary Japanese II*

4cr
The class engages students in more complex communicative contexts. The four basic language skills, listening, speaking, reading, and writing, are now entering into a preliminarily interpretative mode while we continue to expand the interpersonal one. Basic grammar patterns will be thoroughly taught. By the end of the course, orally in a communicable manner, the students are expected to have the basic survival abilities to live in Japanese society using fundamental Japanese language structures and common vocabulary related to everyday and communication needs. Some basic Japanese honorific forms will also be introduced. Students are expected to master 200 Kanji and to be able to write greeting letters, career objectives, diaries, and memos among other simple writings.

Prerequisites: JPN 2010 and JPN 2011

Corequisite: JPN 2021

Spring

**JPN 2011**

*Elementary Oral Japanese I*

1cr
This course must be taken concurrently with Japanese 2010 and enhances the oral aspect of Japanese 2010. It meets once a week to expand students' oral competence in dealing with topics and themes presented in Japanese.

Prerequisite: JPN 1020 or equivalent

Corequisite: JPN 2010

Fall

**JPN 2021**

*Elementary Oral Japanese II*

1cr
This course must be taken concurrently with Japanese 2020. Japanese 2021 is an oral class and enhances the speaking aspect of Japanese 2020. It meets once a week to expand students' oral competence in dealing with topics and themes presented in the regular Japanese 2020 class.

Prerequisites: JPN 2010 and JPN 2011

Corequisite: JPN 2020

Spring

**JPN 2070**

*Calligraphy and Chinese/Japanese Language*

4cr
This course integrates language and cultural studies through calligraphy, the writing of Chinese Hanzi and Japanese Kanji. It is open to both language and nonlanguage students. It is conducted in English.

Fall or Spring
**JPN 3010**

**Intermediate Japanese I**

4cr
This course will complete the study of basic Japanese grammar and syntax. The four basic language skills, listening, speaking, reading, and writing, are mainly in an interpretative mode. The communicative context is idea- or opinion-oriented and requires interpretative, subjective, and emotional expressions and responses. Orally in a culturally and pragmatically appropriate manner, the students are expected to initiate, sustain, and expand conversations on various topics beyond their daily lives. Cultural differences and social relationships will be introduced and brought to discussions in Japanese as vital aspects of cultural studies. By the end of the term, the students will have been introduced to all the basic grammar patterns of Japanese and will have mastered a total of at least 300 Kanji.

Prerequisites: JPN 2020 and JPN 2021
Corequisite: JPN 3011
Fall

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**JPN 3011**

**Intermediate Oral Japanese I**

1cr
This course must be taken concurrently with Japanese 3010. Japanese 3011 is an oral class and enhances the speaking aspect of Japanese 3010. It meets once a week to expand students' oral competence in dealing with topics and themes presented in the regular Japanese 3010 class.

Prerequisites: JPN 2020 and JPN 2021
Corequisite: JPN 3010
Fall

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**JPN 3020**

**Intermediate Japanese II**

4cr
In this course we further practice speaking, listening, reading, and writing to attain a more authentic and more native language acquisition. While listening, speaking, reading, and writing skills are still developed in an interpretative mode, they progress toward a presentational direction. The communicative context at the 3020 level represents a bridge for students to cross back and forth from the interpersonal to the interpretative and to the presentational. Orally, the students are expected to initiate, sustain, expand, and deepen conversations on various topics in a culturally appropriate manner. Cultural components will be emphasized and significant individuals and some historic/philosophic/literary aspects are studied together with language acquisition. Approximately 400 Kanji are expected to be recognized and put into use for thematic writing.

Prerequisites: JPN 3010 and JPN 3011
Corequisite: JPN 3021
Spring

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**JPN 3021**

**Intermediate Oral Japanese II**

1cr
This course must be taken concurrently with Japanese 3020. This is an oral class and enhances the speaking aspect of Japanese 3020. It meets once a week to expand students' oral competence in dealing with topics and themes presented in the regular Japanese 3020 class.

Prerequisites: JPN 3010 and JPN 3011
Corequisite: JPN 3020
Spring

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**JPN 3070**

**Chinese/Japanese Culture and Language**

4cr
Culture is manifested in language and language verbalizes culture. This course studies how Chinese and Japanese languages and cultures reflect this symbiotic relationship. Students are engaged in an intercultural dialogue with a linguistic approach. Open to both language and nonlanguage students, it is conducted in English.

Fall or Spring

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**JPN 3080**

**Chinese and Japanese Literature and Culture (HUM)**

4cr
In this course students will critically read and interpret translations of literary, filmic, and other texts originally written in Chinese and Japanese. By studying issues such as the spread of classical cultures, cultural relationships throughout antiquity to the modern age, anxiety toward modernization and Westernization, colonialism and imperialism, national identities, ethnicity, gender, East-West relations, popular culture, labor issues, and environmental problems, students will better understand the ways that literature and culture intersect and interact with each other throughout the long, intertwined history of the two cultural spheres. Students will develop their intercultural understanding and refine their skills in critical thinking and oral and written expression.

Prerequisite: None
**JPN 4010**  
**Senior Seminar in Japanese**  
4cr  
Students have two options to take this course: Senior Project/Thesis in the discipline of Japanese language and culture within the Department of Modern Languages or Interdisciplinary Senior Project/Thesis between the Department of Modern Languages and other departments/programs. Prerequisites: Senior standing or consent of instructor and GNR 3510

**JPN 4070**  
**Advanced Japanese**  
4cr  
The course is typically designed for students who have declared their majors (optional for minors) in Japanese, and who are planning (or occasionally, have already done) study abroad. Students are expected to perform advanced-level tasks. The four basic language skills, listening, speaking, reading, and writing, are honed with the purpose to present a theme, a topic, or to make a point. Authentic materials will be incorporated into reading and listening. Cultivating students' awareness and appreciation of the richness of the culture of the Japanese-speaking world is thematically structured and is the foundation of this class. About 500 Kanji are expected to be recognized and put into use for thematic writing. Prerequisites: Japanese 3020 and 3021 or GNR 3510  
Fall/Spring

**Modern Language Courses**

**MLA 1010**  
**Modern Literature in Translation (HUM)**  
4cr  
Critical reading of modern literary masterpieces translated into English.

**MLA 2000**  
**Emerging Markets: Cultures and Languages (HUM)**  
4cr  
Emerging markets exemplify a symbiotic relationship between business and cultures, and serve as the cornerstone of this course. One instructor each from Business and Modern Languages utilize marketplaces as a unifying force of the globe and use numbers as a universal language combined with cultures, languages, and sociopolitics to explain the volatility of development with a humanities and sociologic approach.

**MLA 2200**  
**Cultural Awareness**  
1cr  
Preparation for encountering cultural differences that will be part of the linguistic and cultural immersion experiences (either in the U.S. or abroad). The focus of the course will include values clarification, cultural diversity, multicultural awareness training, and culture shock orientation. Majors who have returned from study abroad will give presentations on their experiences and be contributors to course content and activities. Prerequisite: 2020 or equivalent in target language

**MLA 2440**  
**Chinese and Japanese Culture Through Films (HUM)**  
4cr  
In this course students will develop an understanding of critical aspects of contemporary Chinese and Japanese cultures and societies through the medium of cinema. Selected films will address topics such as war, family, gender, fine art, education, food culture, life/death, tradition, and modernization. The main purpose of viewing a film in this class is not to analyze the filmmaking; instead, films provide students with insight into Chinese/Japanese experiences that help them identify and understand the traditional rituals, aesthetic norms, relationships, political-economic issues, historical conflicts, and religious beliefs that have significant impacts on contemporary Chinese and Japanese people's daily lives. All sound films have English subtitles, and no prior knowledge of Chinese/Japanese languages is required. The course will be conducted in English.

**MLA 2450**  
**A Social History of 20th Century Japan Through Film (HUM)**  
4cr  
This course will examine the changing representations of women, family, work, and duty, as well as issues such as identity and alienation, as presented in the popular media of Japanese cinema. Through critical viewing of films by directors such as Akira Kurasawa, Mizoguchi, and Teshigahara, students will investigate the relationship of history and its filmic/cinematic representation. Lectures and selected readings will provide the students with the necessary background and tools for critical analysis. It is the goal of this class to come to an understanding, through the lens of a director's camera, of how social networks and their corresponding obligations are created and perpetuated in modern Japanese society. No prior knowledge of either Japanese history or Japanese language is required.
MLA 3050

Community-Based Language Learning
1-4cr
Students in this Service-Learning course are given the opportunity to utilize their language skills in a variety of settings within the greater Kenosha community. Students will work with a local agency approved by Modern Languages faculty, in order to volunteer as language instructors, translators, tutors, support personnel, or other such positions that make use of their language abilities. Students are trained and guided by weekly meetings with the course instructor in order to prepare for their site placement and their volunteer duties. (This course may be repeated for credit.)
Prerequisite: Students must have taken or be enrolled in 3010 or instructor's consent

MLA 4285

Fundamentals of Linguistics for Teachers of Diverse Learners
4cr
This course will provide students with a framework to better understand the parameters of linguistics, including the nature of communication; phonological components such as phonetics, phonology, morphology and syntax; sociolinguistics; and linguistic anthropology. Students will also examine the language acquisition process with regard to its application to student literacy learning outcomes with an emphasis on the unique language acquisition needs of English Language Learners.
Prerequisite: Acceptance into the Teacher Education Program

FRN 1010

Elementary French I (MLA)
4cr
This course teaches listening and speaking skills in French through active participation by the students in communicative situations. By the end of the course, the students are able to comprehend and communicate orally in a culturally acceptable manner, using basic language structures and common vocabulary related to everyday topics and communication needs.
Prerequisite: FRN 1020 or equivalent

FRN 1020

Intermediate French I
4cr
Expanding on French 2010, this course provides original texts, film media, music, and cross-cultural experiences. Students speak and read, using all verb tenses and a broad range of structures and vocabulary. They create original compositions at their level, geared to their interests.
Prerequisite: FRN 2010 or equivalent

FRN 1020

Intermediate French II
4cr
Expanding on French 2010, this course provides original texts, film media, music, and cross-cultural experiences. Students speak and read, using all verb tenses and a broad range of structures and vocabulary. They create original compositions at their level, geared to their interests.
Prerequisite: FRN 2010 or equivalent

FRN 2010

Advanced French
4cr
This course continues the linguistic and cultural experiences of 2010/2020. Grammar and phonetics are studied in relation to the language skills the students have acquired. Cultural inquiry and current foreign events are emphasized. Original compositions are linked to course goals as well as student interests. Majors and minors are required to pass a target language competency exam during the term in which they take 3010.
Prerequisite: FRN 2020 or equivalent
FRN 3030  
French Conversation  
1cr  
An opportunity for extended use of the target language to improve oral fluency and proficiency. A wide range of communicative opportunities will encourage active exploration of the target culture. (The course can be repeated for up to a total of 4 credits.) S or U.  
Prerequisite: FRN 3010 or consent of department chair  
Fall/Spring  

FRN 3080  
French-Speaking World: Social, Political, and Economic Issues (HUM)  
4cr  
Students will learn about social, political, and economic issues affecting the French-speaking world, using a variety of media and texts. Issues will be contextualized in the contemporary world, and examination of their historical background will further students' understanding of these issues in their cultural context.  
Prerequisites: FRN 3010 and FRNL 3010 or consent of instructor  
Alternate Fall semesters  

FRN 3090  
French-Speaking World: Cultural and Intellectual Life (HUM)  
4cr  
Students will study major currents of cultural and intellectual life in French-speaking regions. Topics will range from high culture to daily life. Students will examine the historical background of cultural manifestations. A variety of media including printed texts will guide students' understanding of both past and present cultural life.  
Prerequisites: FRN 3010 and FRNL 3010 or consent of instructor  
Alternate Fall semesters  

FRN 3110  
Interpreting Written Texts in French (HUM)  
4cr  
Students will learn to read and discuss in French a range of French texts. They will be exposed to the French literary tradition and learn to interpret textual intentions and assumptions.  
Prerequisites: FRN 3010 and FRNL 3010  
Spring  

FRN 4010  
Senior Seminar in French  
4cr  
A capstone experience in which the students will study the theoretical foundations of French studies (cultural as well as literary). They will be introduced to the problems of translation. A major component of the course will be the preparation of an independent research paper, the Senior Thesis, which will culminate in a formal oral presentation of the results of the investigation as well as in a major paper written in French.  
Prerequisites: Senior standing or consent of instructor and GNR 3510  
Spring  

FRN 4240  
French Theatre (HUM)  
4cr  
Students stage a play in French. Students also read and discuss related texts; these include such topics as other plays that contextualize the play being performed or texts expanding on cultural or historical issues raised by it. The course fulfills a topics course requirement of the major.  
Prerequisites: FRN 3080 or 3090 and 3110 and GNR 3510 or consent of instructor  

FRNL3010  
French Competency Exam  
0cr  
Majors and minors in French are required to pass a target language Competency Exam during the term in which they take FRN 3010. Consisting of an oral, a written, and a cultural reading part, the competency exam assesses students' ability to incorporate intermediate to advanced linguistic structures in their speaking, writing, and reading. Students will receive a Pass/Fail grade for this zero-credit course.  

German  

GRM 1010  
Elementary German I (MLA)  
4cr  
This course teaches listening and speaking skills in German through active participation by the students in communicative situations. By the end of the course, students are able to comprehend and communicate orally in a culturally acceptable manner, using basic language structures and common vocabulary relating to everyday topics and communication needs.  
Fall/Spring  

GRM 1020  
Elementary German II (MLA)  
4cr  
This course teaches listening, speaking, reading, and some writing skills in German through active participation by the students in a wide variety of communicative contexts. By the end of the course, the students are able to comprehend, communicate orally, read intelligently, and write simply in German, using basic language structures. They will also be able to employ constructively a broad range of vocabulary related to the themes studied and to survival communication and cultural needs.  
Prerequisite: GRM 1010 or equivalent  
Fall/Spring  

Carthage 2021-2022 Catalog
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Semester(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRM 2010</td>
<td>Intermediate German I</td>
<td>4cr</td>
<td>This course teaches listening, speaking, reading comprehension, and basic writing skills in sequential development following 1010/1020, using a variety of original texts in German and exposing students to native German speakers and cultural events.</td>
<td>Prerequisite: GRM 1020 or equivalent</td>
<td>Spring</td>
</tr>
<tr>
<td>GRM 2020</td>
<td>Intermediate German II</td>
<td>4cr</td>
<td>Expanding on German 2010, this course provides original texts, film media, music, and cross-cultural experiences. Students speak and read using all verb tenses and a broad range of structures and vocabulary. They create original compositions at their level, geared to their interests.</td>
<td>Prerequisite: GRM 2010 or equivalent</td>
<td>Fall</td>
</tr>
<tr>
<td>GRM 3010</td>
<td>Advanced German</td>
<td>4cr</td>
<td>This course continues the linguistic and cultural experiences of 2010/2020. Grammar and phonetics are studied in relation to the language skills the students have acquired. Cultural inquiry and current foreign events are emphasized. Original compositions are linked to course goals as well as student interests. Majors and minors are required to pass a target language competency exam during the term in which they take 3010.</td>
<td>Prerequisite: GRM 2020 or equivalent</td>
<td>Spring</td>
</tr>
<tr>
<td>GRM 3030</td>
<td>German Conversation</td>
<td>1cr</td>
<td>An opportunity for extended use of the target language to improve oral fluency and proficiency. A wide range of communicative opportunities will encourage active exploration of the target culture. (The course can be repeated for up to a total of 4 credits).</td>
<td>S or U. Prerequisite: GRM 3010 or consent of department chair</td>
<td>Spring</td>
</tr>
<tr>
<td>GRM 3080</td>
<td>German-Speaking World: Social, Political, and Economic Issues (HUM)</td>
<td>4cr</td>
<td>Students will learn about social, political, and economic issues affecting the German-speaking world, using a variety of media and texts. Issues will be discussed within the context of the contemporary world, and examination of their historical background will further students' understanding of these issues in their cultural context.</td>
<td>Prerequisites: GRM 3010 and GRML 3010 or consent of instructor</td>
<td>Fall/Spring</td>
</tr>
<tr>
<td>GRM 3090</td>
<td>German-Speaking World: Cultural and Intellectual Life (HUM)</td>
<td>4cr</td>
<td>Students will study major currents of cultural and intellectual life in German-speaking regions. Topics will range from high culture to daily life. The course will examine the historical background of cultural manifestations. A variety of media including printed texts will guide students' understanding of both past and present cultural life.</td>
<td>Prerequisites: GRM 3010 and GRML 3010 or consent of instructor</td>
<td>Alternate Fall semesters</td>
</tr>
<tr>
<td>GRM 3110</td>
<td>Interpreting Written Texts (HUM)</td>
<td>4cr</td>
<td>Students will learn to read and discuss in German a range of German texts. They will be exposed to the German literary tradition and learn to interpret textual intentions and assumptions.</td>
<td>Prerequisites: GRM 3010 and GRML 3010</td>
<td>Spring</td>
</tr>
<tr>
<td>GRM 4010</td>
<td>Senior Seminar in German</td>
<td>4cr</td>
<td>A capstone experience in which the students will study the theoretical foundations of German studies (cultural as well as literary). They will be introduced to the problems of translation. A major component of the course will be the preparation of an independent research paper, the Senior Thesis, which will culminate in a formal oral presentation of the results of the investigation as well as in a major paper written in German.</td>
<td>Prerequisites: Senior standing or consent of instructor and GNR 3510</td>
<td>Spring</td>
</tr>
<tr>
<td>GRM 4240</td>
<td>German Theatre (HUM)</td>
<td>4cr</td>
<td>Students in the course stage a play in German. Students also read and discuss related texts; these include such topics as other plays that contextualize the play being performed or texts expanding on cultural or historical issues raised by it.</td>
<td>Prerequisites: GRM 3080 or 3090 and 3110 and GNR 3510 or consent of instructor</td>
<td>Alternate Fall semesters</td>
</tr>
</tbody>
</table>
GRML3010

**German Competency Exam**

0cr
This is a noncredit, pass-fail course for students who will be taking the German Competency Exam (usually while they are also enrolled in German 3010). A passing grade in this course is required for subsequent upper-division German courses.

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**Spanish**

SPN 1010

**Elementary Spanish I (MLA)**

4cr
This course teaches listening and speaking skills in Spanish through active participation by the students in communicative situations. By the end of the course, the students are able to comprehend and communicate orally in a culturally acceptable manner, using basic language structures and common vocabulary related to everyday topics and communication needs.

Fall/Spring

SPN 2010

**Intermediate Spanish I**

4cr
This course teaches listening, speaking, reading comprehension, and basic writing skills in sequential development following 1010/1020, using a variety of original texts in Spanish and exposing students to native Spanish speakers and cultural events.

Prerequisite: SPN 1020 or equivalent
Fall/Spring

SPN 2020

**Intermediate Spanish II**

4cr
Expanding on Spanish 2010, this course provides original texts, film media, music, and cross-cultural experiences. Students speak and read using all verb tenses and a broad range of structures and vocabulary. They create original compositions at their level, geared to their interests.

Prerequisite: SPN 2010 or equivalent
Fall/Spring

SPN 3010

**Advanced Spanish I**

4cr
This course continues the linguistic and cultural experiences of 2010/2020. Grammar and phonetics are studied in relation to the language skills the students have acquired. Cultural inquiry and current foreign events are emphasized. Original compositions are linked to course goals as well as student interests. Majors and minors are required to pass a target language competency exam during the term in which they take 3010.

Prerequisite: SPN 2010 or equivalent
Fall/Spring

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**SPN 1020**

**Elementary Spanish II (MLA)**

4cr
This course teaches listening, speaking, reading, and some writing skills in Spanish through active participation by the students in a wide variety of communicative contexts. By the end of the course, the students are able to comprehend, communicate orally, read intelligently, and write simply in Spanish, using basic language structures. They will also be able to employ constructively a broad range of vocabulary related to the themes studied and to survival communication and cultural needs.

Prerequisite: SPN 1010 or equivalent
Fall/Spring

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**SPN 3030**

**Spanish Conversation**

1cr
An opportunity for extended use of the target language to improve oral fluency and proficiency. A wide range of communicative opportunities will encourage active exploration of the target culture. (The course can be repeated for up to a total of 4 credits.)

S or U.
Prerequisite: SPN 3010 or equivalent
Fall/Spring

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**SPN 3040**

**Spanish Composition**

4cr
The course will focus on writing as a process. Using the workshop format, students will be involved in the different stages of writing from beginning to end. Prerequisites: Students' writing will be evaluated in 3010. Those students who would benefit from further writing opportunities will enroll in 3040 before they are permitted to enroll in courses above 3010.

Prerequisite: SPN 3010
Fall/Spring

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**SPN 3050**

**Intensive Spanish Encounter**

4cr
This intensive conversation course will increase the students' ability to express themselves orally in a wide variety of everyday situations, while interacting with the Hispanic culture. Contact with resources from the Hispanic community as well as contextualized in-class course activities will improve overall oral expression and extend awareness of cultural practices.

Prerequisite: SPN 2020
SPN 3080

Spanish-Speaking World: Social, Political, and Economic Issues (HUM)

4cr
Students will learn about social, political, and economic issues affecting the Spanish-speaking world, using a variety of media and texts. Issues will be discussed within the context of the contemporary world, and examination of the historical background will further students' understanding of these issues in their cultural context.
Prerequisites: SPN 3010 and SPNL 3010 or consent of instructor

SPN 3090

Spanish-Speaking World: Cultural and Intellectual Life (HUM)

4cr
Students will study major currents of cultural and intellectual life in Spanish-speaking regions. Topics will range from high culture to daily life. Students will examine the historical background of cultural manifestations. A variety of media including printed texts will guide students' understanding of both past and present cultural life.
Prerequisites: SPN 3010 and SPNL 3010 or consent of instructor

SPN 3110

Interpreting Written Texts (HUM)

4cr
Students will learn to read and discuss in Spanish a range of Spanish texts. They will be exposed to the Spanish literary tradition and learn to interpret textual intentions and assumptions.
Prerequisites: SPN 3010 and SPNL 3010

SPN 3200

Spanish Literacy for Business and Economics

4cr
This class focuses on Spanish reading and writing for business-related purposes. It is intended to raise the literacy level of heritage speakers of Spanish who intend to pursue business careers, so that they may make better use of their Spanish language skills in the workplace. It is also open to non-heritage speakers of Spanish who have a high level of listening comprehension. All instruction and assignments will be in Spanish.

SPN 4010

Senior Seminar in Spanish

4cr
A capstone experience in which the students will study the theoretical foundations of Spanish studies (cultural as well as literary). They will be introduced to the problems of translation. A major component of the course will be the preparation of an independent research paper, the Senior Thesis, which will culminate in a formal oral presentation of the results of the investigation as well as in a major paper written in Spanish.
Prerequisites: Senior standing or consent of instructor and GNR 3510
Spring

SPN 4240

Hispanic Theatre (HUM)

4cr
Students stage a play in Spanish. Students also read and discuss related texts; these include such topics as other plays that contextualize the play being performed or texts expanding on cultural or historical issues raised by it. The course may fulfill a topics course requirement of the major.
Prerequisites: SPN 3080 or 3090 and 3110 and GNR 3510 or consent of instructor
Spring

SPNL 3010

Spanish Competency Exam

0cr
This is a noncredit, pass-fail course for students who will be taking the Spanish Competency Exam (usually while they are also enrolled in Spanish 3010). A passing grade in this course is required for subsequent upper-division Spanish courses.

Music

The Carthage Music Department creates challenging, humanizing, transforming, and enriching opportunities that advance musical excellence and foster lifelong musical engagement.
Recognizing that the study of music is essential to the full realization of human creativity and expression, the Music Department seeks to:
1. Offer substantial opportunities for those in the general student body to develop the ability to express themselves musically through appreciation courses, performance ensembles, and applied lessons.
2. Provide professional training for music majors who intend to pursue a career in music that is wholly compatible with the College’s liberal arts tradition.
3. Enrich the cultural life of the College and community by presenting a well-supported concert season comprised of world-class guest artists, faculty and student recitals, ensemble concerts, chamber music recitals, and music theatre and opera productions.
4. Assist in proclaiming the Gospel to the campus and world communities through concerts, tours, and music in worship.
5. Provide opportunities for students and faculty to critically engage with musical texts, examining the role of music in society and reflecting on the human condition.

Bachelor of Arts in Music (40 cr.)

Students must take the following:
In addition to the core music major, the following courses are required of students pursuing an emphasis in Instrumental Performance:

**Emphasis in Instrumental Performance (16 cr.)**

- MUS 2180 Conducting Fundamentals (2 cr.)
- MUS 3010 Seminar in Form and Analysis (2 cr.)
- MUS 2000 A Survey of Symphonic Literature (4 cr.)

*Piano performance students take MUS 4101 (2 cr.) and MUS 4102 (2 cr.), not MUS 2000

- MUS 4020 Instrumental Music Pedagogy (4 cr.)
- Additional applied lessons in the principal performing area (4 cr.)
- MUS 4980 Half Recital Completion (0 cr.)
- Satisfactory full recital (0 cr.)

**Emphasis in Piano Pedagogy (16 cr.)**

In addition to the core music major, the following courses are required of students pursuing a BA in Music with an emphasis in Piano Pedagogy:

- MUS 2180 Conducting Fundamentals (2 cr.)
- MUS 2510 Piano Pedagogy and Literature I (2 cr.)
- MUS 2520 Piano Pedagogy and Literature II (2 cr.)
- MUS 3510 Practicum in Piano Pedagogy (2 cr.)
- MUS 4101 Piano Literature I (2 cr.)
- MUS 4102 Piano Literature II (2 cr.)
- Additional applied lessons in principal performing area (4 cr.)
- Satisfactory full recital (0 cr.)

**Emphasis in Music Theatre (56 cr.)**

The Carthage Music Department houses the interdisciplinary emphasis in Music Theatre, which comprises courses in music, theatre, and dance. Students who intend to pursue the emphasis in Music Theatre must pass an entrance audition. The following courses compose the Bachelor of Arts with an emphasis in Music Theatre:

- MUS 2180 Conducting Fundamentals (2 cr.)
- MUS 2510 Piano Pedagogy and Literature I (2 cr.)
- MUS 3510 Practicum in Piano Pedagogy (2 cr.)
- MUS 4101 Piano Literature I (2 cr.)
- MUS 4102 Piano Literature II (2 cr.)
- Additional applied lessons in principal performing area (4 cr.)
- Satisfactory full recital (0 cr.)

**Emphasis in Music Composition (16 cr.)**

In addition to the core music major, the following courses are required of students pursuing an emphasis in Music Composition:

- MUS 1010 Music Theory I (3 cr.)
- MUS 1020 Aural Skills I (1 cr.)
- MUS 1030 Music Theory II (3 cr.)
- MUS 1040 Aural Skills II (1 cr.)
- MUS 2110 Introduction to Western Music History (4 cr.)

**Minor in Music (20 cr.)**

Requirements:
**Music**

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 1010</td>
<td>Music Theory I</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MUS 1020</td>
<td>Aural Skills I</td>
<td>1 cr.</td>
</tr>
<tr>
<td>MUS 1030</td>
<td>Music Theory II</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MUS 1040</td>
<td>Aural Skills II</td>
<td>1 cr.</td>
</tr>
<tr>
<td>MUS 0700</td>
<td>Recital Attendance</td>
<td>0 cr.</td>
</tr>
<tr>
<td>MUS 2110</td>
<td>Introduction to Western History</td>
<td>4 cr.</td>
</tr>
<tr>
<td>MUS 2040</td>
<td>Aural Skills IV</td>
<td>1 cr.</td>
</tr>
<tr>
<td>MUS 2030</td>
<td>Music Theory IV</td>
<td>3 cr.</td>
</tr>
<tr>
<td>MUS 2020</td>
<td>Aural Skills III</td>
<td>1 cr.</td>
</tr>
</tbody>
</table>

*Choose One:
- MUS 3050 Music History I (4 cr.)
- MUS 3060 Music History II (4 cr.)

**Applied music lessons in the principal performance area (4 cr., 1 cr. each term)**

**Ensemble participation (0 cr., 4 terms)**

Music minors are placed in an approved ensemble in their principal performing area.

### Bachelor of Music in Piano Performance and Collaborative Piano (84-98 cr.)

**Core curriculum (72-86 cr.)**

Students must take the following:

- **MUS 0150** Private Piano (12 cr.)
  - (1 cr. course, 12 courses)
- **MUS 0450** Private Organ (2 cr.)
  - (1 cr. course, 2 courses)
- **MUS 0700** Recital Attendance (0 cr.)
  - (0 cr. course, 8 terms)
- **MUS 1010** Music Theory I (3 cr.)
- **MUS 1020** Aural Skills I (1 cr.)
- **MUS 1030** Music Theory II (3 cr.)
- **MUS 1040** Aural Skills II (1 cr.)
- **MUS 1800** Introduction to Music Technology (2 cr.)
- **MUS 2010** Music Theory III (3 cr.)
- **MUS 2020** Aural Skills III (1 cr.)
- **MUS 2030** Music Theory IV (3 cr.)
- **MUS 2040** Aural Skills IV (1 cr.)

**MUS 2075** Instrumental Chamber Music Workshop (0-4 cr.)
- (0-2 cr. course, 2 terms)

**MUS 2180** Conducting Fundamentals (2 cr.)

**MUS 2490** Vocal Diction and Literature (4 cr.)

**MUS 2510** Piano Pedagogy I (2 cr.)

**MUS 2520** Piano Pedagogy II (2 cr.)

**MUS 2530** Fundamentals of Collaborative Piano (2 cr.)

**MUS 3010** Seminar in Form and Analysis (2 cr.)

**MUS 3050** Music History I (4 cr.)

**MUS 3060** Music History II (4 cr.)

**MUS 3510** Piano Pedagogy Practicum (0 cr.)
- (0 cr. course, 2 terms)

**MUS 3520** Performance Practice I (2 cr.)

**MUS 3530** Performance Practice II (2 cr.)

**MUS 400*** Music History Depth Elective (8 cr.)
- (2 courses, 4 cr. each)

**MUS 4101** Piano Literature I (2 cr.)

**MUS 4102** Piano Literature II (2 cr.)

**MUS 4800** Senior Seminar for Pianists (2 cr.)

**MUS 4980** Half Recital Completion (0 cr.)

**MUS 4985** Collaborative Half Recital Completion (0 cr.)

**MUS 4990** Senior Thesis Completion (0 cr.)

**MUS 2549** Collaborative Practicum (0-4 cr.)
- (*students should consult their faculty advisor for appropriate placement)*

**Additional Music Electives (12 cr.)**

Students majoring in Piano Performance and Collaborative Piano will also be required to take 12 credits of additional music electives. These may be chosen from literature courses, courses designed for voice or instrumental principals, and other department offerings.

### Bachelor of Music in Music Education

Carthage offers a Bachelor of Music in Music Education (BMMME) with Certifications in Instrumental Music Education and Vocal Music Education. The BMMME meets Wisconsin licensure requirements as well as the standards set forth by the National Association of Schools of Music. Please note that completion of the BMMME program does not guarantee licensure. State requirements (i.e., student teaching, content tests and other assessments, criminal background checks, etc.) must be met in addition to the completion of the curricular components of the program. Together with their advisor, students pursuing the BMMME must plan their program with care in order to meet both the requirements for graduation and the requirements for a teaching license.

In addition to the Carthage General Education requirements (48 credits), the BMMME program has four components that must be completed: Musicianship and Performance (43 credits); Core Music Education (14 credits); a Concentration area — either Instrumental or Vocal Music Education (14 credits); and Professional Education (20 credits). BMMME students must earn a C or better in all MUS coursework and are exempt from the 82 credits outside the department that are typically required for graduation.

BMMME students must be accepted into the Teacher Education Program (TEP) in order to take any Core Music Education, Concentration, or Professional Education courses above the 2000 level.

Required courses within the Bachelor of Music in Music Education:

**Musicianship and Performance (43 cr.):**

- **MUS 0160** Keyboard Skills I (1 cr.)
- **MUS 0170** Keyboard Skills II (1 cr.)
- **MUS 0180** Keyboard Skills III (1 cr.)
- **MUS 0190** Keyboard Skills IV (1 cr.)
- **MUS 0700** Recital Attendance (0 cr.)
- **MUS 2040** Aural Skills IV (1 cr.)

**Primary Applied Lesson** (7 cr.)
- (1 cr. course, 7 terms)*
- **Primary Large Ensemble** (0-7 cr.)
  - (0-1 cr. course, 7 terms)*

**Additional Music Electives (12 cr.)**

**MUS 1010** Music Theory I (3 cr.)
**MUS 1020** Aural Skills I (1 cr.)
**MUS 1030** Music Theory II (3 cr.)
**MUS 1040** Aural Skills II (1 cr.)
**MUS 1800** Music Technology (2 cr.)
**MUS 2010** Music Theory III (3 cr.)
**MUS 2020** Aural Skills III (1 cr.)
**MUS 2030** Music Theory IV (3 cr.)
**MUS 2040** Aural Skills IV (1 cr.)

*BMMME students must plan their program with care in order to meet both the requirements for graduation and the requirements for a teaching license.

Carthage 2021-2022 Catalog
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<tr>
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<tbody>
<tr>
<td>MUS 2180</td>
<td>Conducting Fundamentals</td>
<td>(2 cr.)</td>
</tr>
<tr>
<td>MUS 3050</td>
<td>Music History I</td>
<td>(4 cr.)</td>
</tr>
<tr>
<td>MUS 3060</td>
<td>Music History II</td>
<td>(4 cr.)</td>
</tr>
<tr>
<td>MUS 400*</td>
<td>Music History Depth Elective</td>
<td>(4 cr.)</td>
</tr>
<tr>
<td>MUS 4980</td>
<td>Half Recital Completion</td>
<td>(0 cr.)</td>
</tr>
</tbody>
</table>

*Students work with their faculty advisor to identify appropriate lesson and ensemble placements. Except for the student teaching semester, students are encouraged to continue with primary applied lessons while enrolled full-time as a music major.

**Core Music Education (14 cr.):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MUS 1180</td>
<td>Introduction to Music Education</td>
<td>(2 cr.)</td>
</tr>
<tr>
<td>MUS 1190</td>
<td>Exploring PreK-12 Music Curriculum</td>
<td>(4 cr.)</td>
</tr>
<tr>
<td>MUS 2710</td>
<td>Culturally Responsive Music Pedagogy</td>
<td>(4 cr.)</td>
</tr>
<tr>
<td>MUS 3200</td>
<td>Field Experience**</td>
<td>(0 cr.)</td>
</tr>
<tr>
<td>MUS 4210</td>
<td>General Music Methods**</td>
<td>(4 cr.)</td>
</tr>
</tbody>
</table>

**To be taken concurrently with MUS 1180, 1190, 2710, 4200, 4210, and 4220.

**Instrumental Music Education Concentration (14 cr.):**

<table>
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<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>MUS 2050</td>
<td>Woodwind Techniques</td>
<td>(1 cr.)</td>
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<tr>
<td>MUS 2060</td>
<td>Brass Techniques</td>
<td>(1 cr.)</td>
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<tr>
<td>MUS 2070</td>
<td>Percussion Techniques</td>
<td>(1 cr.)</td>
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<td>MUS 2080</td>
<td>String Techniques</td>
<td>(1 cr.)</td>
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<tr>
<td>MUS 2740</td>
<td>Choral Pedagogy for Instrumentalists</td>
<td>(2 cr.)</td>
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<tr>
<td>MUS 3100</td>
<td>Instrumental Conducting and Techniques</td>
<td>(2 cr.)</td>
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<tr>
<td>MUS 3120</td>
<td>Orchestration</td>
<td>(2 cr.)</td>
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<tr>
<td>MUS 4200</td>
<td>Instrumental Music Methods</td>
<td>(4 cr.)</td>
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**Vocal Music Education Concentration (14 cr.):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MUS 2750</td>
<td>Band and Orchestra Pedagogy for Vocalists</td>
<td>(2 cr.)</td>
</tr>
<tr>
<td>MUS 3110</td>
<td>Choral Conducting and Techniques</td>
<td>(2 cr.)</td>
</tr>
<tr>
<td>MUS 3130</td>
<td>Choral Literature</td>
<td>(2 cr.)</td>
</tr>
<tr>
<td>MUS 3150</td>
<td>Choral Rehearsal Techniques</td>
<td>(2 cr.)</td>
</tr>
<tr>
<td>MUS 3490</td>
<td>Vocal Pedagogy</td>
<td>(2 cr.)</td>
</tr>
<tr>
<td>MUS 4220</td>
<td>Vocal Music Methods</td>
<td>(4 cr.)</td>
</tr>
</tbody>
</table>

**Professional Education (20 cr.):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 2010</td>
<td>Educational Psychology and Assessment</td>
<td>(4 cr.)</td>
</tr>
<tr>
<td>EDU 3050</td>
<td>Teaching Learners with Diverse Characteristics</td>
<td>(4 cr.)</td>
</tr>
<tr>
<td>EDU 4900</td>
<td>Student Teaching/Seminar</td>
<td>(12 cr.)</td>
</tr>
</tbody>
</table>

**MUS 0010**

**Carthage Choir**

0-2cr

The Carthage Choir presents concerts of both anthems and longer works, sings for school and community functions, hosts an annual choral workshop, takes an annual spring tour, and tours in Europe every third J-Term. Membership by individual audition.

**MUS 0020**

**Carthage Chorale**

0-1cr

The Carthage Chorale is a mixed choral ensemble that regularly sings both sacred and secular music in a variety of venues. Membership by individual audition.

**MUS 0030**

**Lincoln Singers**

0-1cr

The Lincoln Chamber Singers is a select, small vocal ensemble that performs secular and sacred music of a more intimate nature both on and off campus. Membership by individual audition.

**MUS 0050**

**Wind Orchestra**

0-2cr

The Wind Orchestra focuses on developing individual musical expression within a large ensemble setting, presents concerts, and participates in various campus and community events. Membership by individual audition.

**MUS 0070**

**Carthage Philharmonic**

0-1cr

The Carthage Philharmonic is a full orchestra performing standard and nonstandard repertoire. Membership is open to music majors and nonmajors by individual audition.

**MUS 0080**

**Jazz Band**

0-1cr

The Jazz Band is a laboratory ensemble that studies and performs music in various jazz styles, both on and off campus. Membership by individual audition.

**MUS 0090**

**Small Instrumental Ensembles**

0cr

This experience is geared toward individuals or very small groups in order for them to become acquainted with and perform chamber literature. Enrollment with consent of instructor.

**MUS 0120**

**Pep Band**

0cr

The Pep Band regularly plays at all home football and basketball games. Membership by individual audition.
<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 0150</td>
<td>Private Piano</td>
<td>1cr</td>
<td>Applied piano study focused on the development of proper technique, appropriate literature, and performance skills.</td>
</tr>
<tr>
<td>MUS 0160</td>
<td>Keyboard Skills I</td>
<td>1cr</td>
<td>Introduction to the basic fundamentals of keyboard study including elementary solo repertoire. Prerequisite: Music major status or consent of department.</td>
</tr>
<tr>
<td>MUS 0170</td>
<td>Keyboard Skills II</td>
<td>1cr</td>
<td>Accompaniment patterns, transposition, and basic improvisation skills through harmonization study. Continued development of keyboard technique through solo and ensemble literature. Prerequisite: MUS 0160 or consent of instructor.</td>
</tr>
<tr>
<td>MUS 0180</td>
<td>Keyboard Skills III</td>
<td>1cr</td>
<td>Intermediate study of chord progressions, improvisation, harmonization, and accompaniment patterns. Beginning study of four-part sight reading, analysis of hymns, and score reading. Solo and ensemble literature will focus on intermediate-level standard repertoire. Prerequisite: MUS 0170 or consent of instructor.</td>
</tr>
<tr>
<td>MUS 0190</td>
<td>Keyboard Skills IV</td>
<td>1cr</td>
<td>Chord progressions correlated to chromatic harmonic materials of Music Theory III and basic jazz chords. Four-part open choral score, hymn reading, and applied composition. Intermediate-level solo and accompaniment standard literature. Prerequisite: MUS 0180 or consent of instructor.</td>
</tr>
<tr>
<td>MUS 0200</td>
<td>Class Voice</td>
<td>1cr</td>
<td>Class Voice is designed for beginning students who have had no previous voice training. Healthy and efficient singing technique will be covered, including posture, breath, resonance strategies, diction, and phrasing. Students will rehearse and perform solo literature in a group setting.</td>
</tr>
<tr>
<td>MUS 0210</td>
<td>Class Guitar</td>
<td>1cr</td>
<td>Class Guitar is designed for beginning guitar students who have had little or no previous training. The course will focus on music fundamentals applied to guitar playing, including proper technique, reading notation, fingerboard geography, rhythmic skills, style, and interpretation. Students must have their own guitar.</td>
</tr>
<tr>
<td>MUS 0240</td>
<td>Carthage Treble Choir</td>
<td>0-1cr</td>
<td>The Carthage Treble Choir regularly sings both sacred and secular music on and off campus. Membership by individual audition.</td>
</tr>
<tr>
<td>MUS 0250</td>
<td>Private Voice</td>
<td>1cr</td>
<td>Applied voice study focused on the development of technique, literature, and performance skills. Principles of classical vocal technique as well as music theatre style will be studied alongside literature appropriate for the developmental level of the student. Performance opportunities will include formal and informal settings.</td>
</tr>
<tr>
<td>MUS 0300</td>
<td>Keyboard Seminar</td>
<td>0cr</td>
<td>The keyboard seminar provides the opportunity for students to play before an audience of peers, department faculty, and guest artists. Such invaluable experience equips students with confidence, skills, and feedback of multiple angles from colleagues and the keyboard faculty. The seminar will also feature expert talks on special keyboard-related topics. Prerequisite: None</td>
</tr>
<tr>
<td>MUS 0450</td>
<td>Private Organ</td>
<td>1cr</td>
<td>Students with keyboard experience may elect to take applied organ. Weekly private lessons will address technical skill development, building of repertoire, and development of artistic technique.</td>
</tr>
<tr>
<td>MUS 0550</td>
<td>Private Instrument</td>
<td>1cr</td>
<td>Study will focus on development of technique, literature, and performance skills. Principals of technique will be studied alongside developmentally appropriate literature. Performance in formal and informal settings is required. Instruments include flute, oboe, clarinet, bassoon, saxophone, trumpet, trombone, tuba, horn, percussion, violin, viola, cello, string bass, harp, and classical guitar.</td>
</tr>
</tbody>
</table>
MUS 0650

Private Conducting

1cr
Private Conducting is designed for students who have completed Basic Conducting and either Instrumental Conducting or Vocal Conducting. This advanced, private lesson provides opportunities for students to develop score study skills, conducting technique, and rehearsal strategies.

MUS 0700

Recital Attendance

0cr
Required of all music majors each term and of all music minors during their four semesters of applied study. Music education emphasis majors are exempt during their practice-teaching term.

MUS 1010

Music Theory I

3cr
An in-depth study of harmony and musical materials. Includes music notation, rhythm and meter, the concepts of key and scale, interval quality, diatonic harmony, and phrase structure. Prerequisite: Passing grade on Music Literacy Assessment

MUS 1020

Aural Skills I

1cr
The course facilitates the development of aural skills through application of concepts borrowed from music theory: sight singing, basic music analysis, and transcription. Students may be charged a separate fee for access to required digital resources.

MUS 1030

Music Theory II

3cr
A continuation of Music Theory 1010. Includes diatonic and chromatic harmony, nonharmonic tone analysis, and melodic development in various textures and styles. Prerequisite: MUS 1010 or consent of the instructor

MUS 1040

Aural Skills II

1cr
A continuation of Aural Skills I, applied to musical concepts studied in Music Theory II. Students may be charged a separate fee for access to required digital materials. Prerequisite: MUS 1020 or consent of the instructor

MUS 1150

Exploring Music (FAR)

4cr
This course intends to enable students to learn the basic language needed to talk and write about music; to be able to recognize and differentiate the standard styles, structures, and mediums of music; and to appreciate different styles of music in their cultural contexts. Prerequisite: MUS 1180 or permission of the instructor

MUS 1170

Music Technology and Industry

2cr
A course for music majors to explore the range of business applications inherent in the music industry. Certain practical skills in technology, such as recording techniques, website development, and other computer-assisted music applications, will support a general survey of the current climate for professional musicians.

MUS 1180

Introduction to Music Education

2cr
The history of music education as well as traditional music education philosophies and methodologies comprise the basic content of this course. Additionally, students will examine current trends in the field of music education. Observation experience required.

MUS 1190

Exploring PreK-12 Music Curriculum

4cr
An exploration of curricula in, and rationales for music in schools. This course will provide foundational grounding in music teaching and learning processes in instrumental, general, and choral classrooms. Prerequisite: MUS 1180 or permission of the instructor

MUS 1400

Thinking Musically (FAR)

4cr
Students will examine three works of the standard repertory of Western Art Music from the perspective of a conductor to gain an understanding of the knowledge and skills necessary to stand at the podium and lead an ensemble in a successful performance of the works. Prior experience making music may be helpful, but it is not necessary for full engagement in the course.
MUS 1620

Music Theatre Techniques I
2cr
This course for the singer-actor provides foundational instruction in music theatre performance skills: character development and portrayal, scene study, and audition skills. Students will study the history and context of music theatre through the study of performances, and develop as performers through this study. Students will analyze performance text as well as integrate new understandings into solo and small ensemble performances. Prerequisite: Consent of the instructor

MUS 1800

Introduction to Music Technology
2cr
Music Technology software and strategies for music educators, conductors, performers, and composers and songwriters will be explored. Topics include notation; sequencing; sound reinforcement; and recording, editing and mastering of recordings.

MUS 1900

Electronic Music
4cr
A historical survey of art music in the electronic music genre leads students to a strong understanding and composing ability in the genre as found in the 20th and 21st centuries. The focus is specific to the electronic music genre.

MUS 2000

A Survey of Symphonic Literature (FAR)
4cr
A study of music for the symphony orchestra from the Classical, Romantic, and 20th century style periods. Depending on class size and ticket availability, it may be possible to attend orchestra concerts or rehearsals in the evening.

MUS 2010

Music Theory III
3cr
A continuation of Music Theory 1030. Includes advanced chromatic harmony and small forms in various textures and styles. Prerequisite: MUS 1030 or consent of the instructor

MUS 2020

Aural Skills III
1cr
A continuation of Aural Skills II. Students may be charged a separate fee for access to required digital resources. Prerequisite: MUS 1040 or consent of the instructor

MUS 2030

Music Theory IV
3cr
A continuation of Music Theory 2010. Includes large forms in tonal music and an in-depth study of musical materials of the 20th century, including scales, set theory, twelve-tone operations, electronic music, and eclecticism. Prerequisite: MUS 2010 or consent of the instructor

MUS 2040

Aural Skills IV
1cr
A continuation of Aural Skills III. Students may be charged a separate fee for access to required digital resources. Prerequisite: MUS 2020 or consent of the instructor

MUS 2050

Woodwind Techniques
1cr
A course designed to acquaint the music student with techniques and problems involved in the teaching and performance of woodwind instruments in grades five through twelve.

MUS 2060

Brass Techniques
1cr
A course designed to acquaint the music student with techniques and problems involved in the teaching and performance of brass instruments in grades five through twelve.

MUS 2070

Percussion Techniques
1cr
A course designed to acquaint the music student with techniques and problems involved in the teaching and performance of percussion instruments in grades five through twelve.

MUS 2075

Instrumental Chamber Music Workshop
0-2cr
Student ensembles (including accompanists), either preformed or assigned through audition, will participate weekly either in coachings, workshops, lessons and/or master classes to develop their skills as chamber musicians. Full group sessions will cover a broad range of topics, including rehearsal techniques, intonation/ensemble playing, and stage presence, along with creative presentation skills including public speaking, depending on group formation. End-of-semester performances will take place on campus and at community venues throughout the Kenosha area.
**MUS 2080**  
**String Techniques**  
1cr  
A course designed to acquaint the music student with techniques and problems involved in the teaching and performance of stringed instruments in grades five through twelve.

**MUS 2090**  
**Global Music Education**  
2cr  
A survey of materials for teaching global music in the classroom. Emphasis will be placed on non-Western art music, including music from cultures around the world as well as indigenous American music, such as jazz, blues, and Native American music. Students will develop an understanding of culturally authentic music through listening, participating, and leading activities. Global improvisation lab required: a lab experience in the folk, popular, and art music of Western and non-Western cultures, incorporating ethnic and non-Western instruments suitable for classroom use.  
Prerequisite: MUS 1180 or consent of the department

**MUS 2110**  
**Introduction to Western Music History**  
4cr  
This introductory course will survey music in the Western classical tradition from the early Christian era through contemporary Western art music. The course will acquaint the student with major works through musical analysis and critical listening. Significant attention will be paid to musical forms and their cultural context.

**MUS 2180**  
**Conducting Fundamentals**  
2cr  
Create a foundational skill set of conducting fundamentals through the study of non-verbal cues, kinesthetic and proprioceptive exercises, essential musical terminology, functional transposition knowledge, and rehearsal techniques to lead a musical ensemble to its fullest potential.  
Fall

**MUS 2200**  
**Popular Music in America (FAR) (DIV)**  
4cr  
An appreciation course focusing on the broad range of popular music in America. It presents an overview of popular music and demonstrates how the elements of music, rhythm, melody, and instrumentation apply to the style. The heart of the course is devoted to a survey of American popular music from 1840 to the present as well as related musical styles that influenced its development.

**MUS 2210**  
**Opera (FAR)**  
4cr  
Intended for music majors and nonmajors, this course is a study in appreciation of the structure and form of opera, ranging from recitative and aria to the people involved, and a brief overview of the historical development and importance of opera. Emphasis is placed on experiencing opera both through recorded example and live performances.

**MUS 2490**  
**Vocal Diction and Literature**  
4cr  
Fundamentals of phonetics and sound production as applied to singing in English, Italian, German, and French. Study of representative vocal literature of each language.

**MUS 2510**  
**Piano Pedagogy I**  
2cr  
This course will equip students with theory and practical knowledge for successfully teaching piano to pupils at the beginner to intermediate stages.

**MUS 2520**  
**Piano Pedagogy II**  
2cr  
This course will equip students with theory and practical knowledge for successfully teaching piano to pupils at the intermediate to advanced stages.  
Prerequisite: MUS 2510

**MUS 2530**  
**Fundamentals of Collaborative Piano**  
2cr  
This course will equip piano students to be a successful collaborator, including knowledge of collaborative repertoire; the ability to listen, follow, and lead alongside a variety of musicians and ensembles; and the application of coaching techniques.

**MUS 2540**  
**Collaborative Practicum**  
1cr  
Students will get hands-on experience as collaborative pianists from start to finish for a performance or class.  
Prerequisite: MUS 2530
MUS 2620
Music Theatre Workshop
0-2cr
This course for the singer-actor provides formal and informal venues to develop music theatre skills: character development and portrayal, scene study, and audition skills. The laboratory format allows students to learn from the instructor as well as each other as they cover varied repertory. The course culminates in a performance at the end of each term.
Prerequisite: Consent of instructor

MUS 2710
Culturally Responsive Music Pedagogy
4cr
This course is a survey of methods for culturally responsive teaching in the music classroom. Culturally responsive teaching acknowledges, responds to, and celebrates the cultures represented by students in preK-12 music classrooms, and recognizes the importance of including students’ cultural references in all aspects of the music curriculum.
Prerequisite: MUS 1190 or permission of the instructor

MUS 2740
Choral Pedagogy for Instrumentalists
2cr
An overview of methods and materials for teaching vocal music including healthy and efficient singing technique. Observations of choral classrooms are a required part of this course.
Prerequisite: MUS 1190 or permission of the instructor

MUS 2750
Band and Orchestra Pedagogy for Vocalists
2cr
An overview of methods and materials for teaching instrumental music including hands-on experiences to gain competencies in the four basic families of instruments. Observations of instrumental classrooms are a required part of this course.
Prerequisite: MUS 1190 or permission of the instructor

MUS 3000
Opera Production
4cr
The study and application of the various facets involved in opera production. Scenes from the operatic repertoire and/or full-scale operas will be studied and performed. May be repeated.
Prerequisite: Consent of the instructor

MUS 3010
Seminar in Form and Analysis
2cr
Advanced formal and stylistic analysis of selected major works from the Baroque to the present.
Prerequisite: MUS 2010 or consent of the instructor

MUS 3020
Survey of Music Sub-Saharan Africa (FAR)
4cr
A survey of the musics of Sub-Saharan Africa (traditional and contemporary) with a focus on fundamental style concepts among cultures and tribes. Emphasis will be placed upon culture and the role it plays in iñíñí\textsuperscript{2}\textsuperscript{½}musicking.\textsuperscript{2}\textsuperscript{½} In addition to assigned readings and written work, the course will include opportunities to play instruments, sing, and dance.

MUS 3050
Music History I
4cr
This segment of the two-part music history survey covers the music of the Western art tradition from the Renaissance through the early nineteenth century. The course will acquaint the student with a substantial body of musical works by placing them within the larger context of European history. In examining these works and their aesthetic underpinnings, the course employs various techniques, including music analysis, critical listening, cultural critique, and aesthetic theory.

MUS 3060
Music History II
4cr
This final segment of the two-part music history survey covers the music of the Western art tradition from the nineteenth century through the present day. The course will acquaint the student with a substantial body of musical works by placing them within the larger context of European and American history. In examining these works and their aesthetic underpinnings, the course employs various techniques, including music analysis, critical listening, cultural critique, and aesthetic theory.

MUS 3070
Music History: Literature and Depth
4cr
This course is a writing-intensive upper-class seminar that explores in depth a single era, style, or genre in music history. The course centers on the musical, aesthetic, and historical context of the topic, which rotates from semester to semester. Students will focus on the intricacies of music analysis that rest both on the technical knowledge of form and harmony and that of aesthetics and history. Coursework includes individual presentations and a full-length research paper. This course is a variable content course and can be repeated for credit.
MUS 3100
Instrumental Conducting and Techniques
2cr
Continued study of conducting gestures and procedures for developing an instrumental ensemble, focusing on aural acuity and effectiveness of movement. Prerequisite: MUS 2180

MUS 3110
Choral Conducting and Techniques
2cr
Basic gestures of conducting and basic procedures for training a choral ensemble to achieve its musical and technical potential. Prerequisite: MUS 1010 or consent of the instructor

MUS 3120
Orchestration
2cr
Film music and classical music will be the focus in the study of instrumental timbres and idioms. Scoring and arranging for various ensembles with performance whenever possible. Prerequisites: MUS 1010 and MUS 1020

MUS 3130
Choral Literature
2cr
Survey of choral literature of all eras, for all voices, and of all types: major works and short pieces, sacred and secular, accompanied and unaccompanied.

MUS 3140
Learning About Instruments
1cr
A lab course designed for music students in the general and choral music education emphases that will provide the background for teaching about instruments in the elementary general music classroom. By means of hands-on experiences, students will gain competencies with the four basic families of instruments.

MUS 3155
Women in the Visual and Performing Arts (FAR)
4cr
Have there been any great women artists? Have there been ANY at all? This interdisciplinary Art History/Music/Women's and Gender Studies course examines artifactual evidence to discover not only those women and their activities that have fallen from historical record, but also to discover just what women have been doing from eight in the morning until eight at night, what historical conditions have shaped their activities, and what roles they have played as art and music makers, patrons, muses, and subjects. Consider Vinnie Ream Hoxie, our own Madison teenager who sculpted the famous Lincoln statue in the U.S. Capitol! Prerequisite: None

MUS 3200
Field Experience
0cr
Each student is assigned to a specific school. The central feature of the field experience is the opportunity it affords to explore the relationship between professional academic courses and the future teaching experience. Placements require faculty supervision and regular meetings between the student and the supervising faculty member.

MUS 3400
Music Theatre History
4cr
An exploration of how drama, art, movement, and music combine into the "spectacular" form of music theatre. This course is designed to provide foundational grounding in music theatre history and criticism. Specific attention will be paid to developing analytical skills specific to the art form of music theatre. Course activities will include critical listening and analysis as well as research practices in music theatre. Given that music theatre is performance-based, application of course content to performance practice will constitute an important dimension of the course. Ticket fee.

MUS 3490
Vocal Pedagogy
2cr
The course will focus on the study of vocal production as it relates to singing and the specific principles of teaching voice. Students will learn the basics of anatomy and function as well as an introduction to the acoustics of the voice through voice analysis software. Students will also observe studio teaching of peers and professional voice teachers and develop their philosophy of voice teaching. Students will be expected to complete micro-teaching experiences and will develop professional materials in a portfolio. Prerequisite: Junior standing

MUS 3510
Piano Pedagogy Practicum
0cr
This course provides hands-on piano teaching experience under the supervision of a faculty mentor. Prerequisite: MUS 3520
MUS 3520

Performance Practice I
2cr
This course is an in-depth exploration of keyboard performance practices from 1650 to 1750, which give students a solid foundation on which to build their interpretations of solo and collaborative piano music.

Prerequisite: MUS 3520

MUS 3530

Performance Practice II
2cr
This course is an in-depth exploration of keyboard performance practices from 1750 to present day, which will give students a solid foundation on which to build their interpretations of solo and collaborative piano music.

Prerequisite: MUS 3530

MUS 4000

Seminar
4cr
An intensive study of a selected topic or period in music with occasional reports and a final seminar paper.

Prerequisite: Consent of the department chairperson and the instructor

MUS 4020

Instrumental Music Pedagogy
4cr
A fundamental course in instrumental pedagogy focusing on proper performance techniques and supportive literature to instruct beginning, intermediate, and advanced level students.

Prerequisites: Junior standing and consent of the instructor

MUS 4101

Piano Literature I
2cr
Survey of foundational repertoire for early keyboard instruments and piano from the 16th-century virginalists through the mid-19th century.

Prerequisite: None

MUS 4102

Piano Literature II
2cr
Survey of foundational repertoire for the piano from the mid-19th century through present day.

Prerequisite: None

MUS 4110

Senior Seminar in Music Theatre
4cr
This seminar course is the capstone for students in the music theatre program. Students in this course will develop the research ad proposal for the thesis project, and develop the research and portfolio building skills necessary to complete the Senior Thesis. As part of this course, students will also develop professional materials for professional auditions while also developing skills as reflective practitioners of music theatre.

Prerequisite: Must be accepted into the TEP Fall

MUS 4200

Instrumental Music Methods
4cr
A survey of methods and materials for teaching instrumental music in the public schools. Course content will include development of instrumental music programs at the elementary and secondary level, including materials, instructional methods, organization, management, and assessment. A significant portion of the course will involve practice microteachings off campus. Students seeking licensure are required to have a grade of C- or better.

Prerequisite: Must be accepted into the TEP

MUS 4210

General Music Methods
4cr
The survey of methods and materials for teaching general music in the elementary and secondary classroom. Course content will include developing lesson plans, effective classroom management strategies, and evaluation in the general music classroom. A significant portion of the course will involve practice microteachings off campus. Guitar lab required. Students seeking Wisconsin licensure are required to have a grade of C- or better.

Prerequisite: Must be accepted into the TEP

MUS 4220

Vocal Music Methods
4cr
A survey of methods and materials for teaching in the public school vocal program. Course content will include development of choral music programs at the elementary and secondary level, including materials, instructional methods, organization, management, and assessment. A significant portion of the course will involve practice microteaching off campus. Students seeking licensure are required to have a grade of C- or better.

Prerequisite: Must be accepted into the TEP

MUS 4800

Senior Seminar for Pianists
2cr
Students will look toward their next steps in the professional world (e.g. graduate school, private instruction, a collaborative position, or performance) and apply their previous years of study in preparation for those next steps.
MUS 4980

Half Recital Completion

0 cr

Students in this course will successfully perform 30 minutes of solo or chamber repertoire planned in collaboration with the private lesson teacher and appropriate to the student's primary area of study. Students must pass a pre-recital jury at least three weeks in advance of the performance date to be granted permission to give the public performance.

MUS 4985

Collaborative Half Recital Completion

0cr

Students in this course will successfully perform 30 minutes of collaborative repertoire with the consultation of their private lesson teacher. Students must pass a pre-recital jury at least three weeks in advance of the performance date to be granted permission to give the public performance.

MUS 4990

Senior Thesis Completion

0cr

Students should register for MUS 4990 the semester they intend to complete their senior project.

Neuroscience

Neuroscience is an interdisciplinary field dedicated to the scientific study of the structure and function of the nervous system. It encompasses issues such as the molecular and cellular basis of neuronal function, nervous system structure, neural correlates of behavior, and mechanisms of nervous system disorders.

The neuroscience major reflects the interdisciplinary focus of the field. Required courses in the areas of biology, psychological science, and chemistry provide a solid foundation for understanding the methods and principles of the natural and social sciences. The major also provides an opportunity for students to choose elective courses in the above areas. Students interested in the molecular and cellular function of the nervous system are encouraged to take electives in biology. Students interested in the behavioral correlates of nervous system function are encouraged to take electives in psychological science. Students interested in the chemical properties of the nervous system are encouraged to take electives in chemistry.

The neuroscience major provides both a breadth of understanding in basic scientific principles and depth of understanding in the emerging area of nervous system research, preparing students for graduate school and career opportunities in a diverse range of scientific research and medical/therapeutic fields.

Practical, hands-on research experience is an important component for understanding the discipline of neuroscience and is integrated into all upper-level courses. Majors are encouraged to work in the laboratory of a faculty member for at least two semesters to experience the process of obtaining, analyzing, and interpreting neuroscience data.

Neuroscience Major

Students majoring in neuroscience must complete the following nine courses (36 cr.):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 1010 General Chemistry I</td>
<td>4 cr.</td>
</tr>
<tr>
<td>CHM 1020 General Chemistry II</td>
<td>4 cr.</td>
</tr>
<tr>
<td>NEU 2100 Introduction to Behavioral Neuroscience</td>
<td>4 cr.</td>
</tr>
<tr>
<td>BIO 1110 Molecules, Cells, and Organisms</td>
<td>4 cr.</td>
</tr>
<tr>
<td>BIO 1120 Organisms, Populations, and Systems</td>
<td>4 cr.</td>
</tr>
<tr>
<td>NEU 2500 Neuroscience Research Methods and Statistical Analysis</td>
<td>4 cr.</td>
</tr>
<tr>
<td>NEU 3950 Neuroscience II: Cellular and Molecular Neuroscience</td>
<td>4 cr.</td>
</tr>
<tr>
<td>NEU 4000 Senior Thesis in Neuroscience</td>
<td>4 cr.</td>
</tr>
<tr>
<td>NEU 4100 Neuroscience III: Neuroanatomy and Physiology</td>
<td>4 cr.</td>
</tr>
</tbody>
</table>

And three (4 cr.) electives from any of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 2400 Genetics</td>
<td>(4 cr.)</td>
</tr>
<tr>
<td>BIO 3300 Advanced Human Anatomical Systems</td>
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<tr>
<td>BIO 3310 Advanced Human Physiological Systems</td>
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<tr>
<td>BIO 3500 Advanced Cell Biology</td>
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<tr>
<td>BIO 4310 Developmental Biology</td>
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<tr>
<td>CHM 2070 Organic Chemistry I</td>
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<td>CHM 2080 Organic Chemistry II</td>
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<tr>
<td>CHM 3010 Biochemistry</td>
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<tr>
<td>CHM 3250 Analytical Chemistry I</td>
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<td>CHM 3240 Analytical Chemistry II</td>
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<tr>
<td>CHM 4070 Advanced Organic Chemistry</td>
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<tr>
<td>PHY 3120 Electronics</td>
<td>(4 cr.)</td>
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<tr>
<td>PHY 4300 Electricity and Magnetism</td>
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<tr>
<td>PYC 2150 Sensation and Perception</td>
<td>(4 cr.)</td>
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<tr>
<td>PYC 2300 Cognitive Psychology</td>
<td>(4 cr.)</td>
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<tr>
<td>PYC 2850 Child and Adolescent Development</td>
<td>(4 cr.)</td>
</tr>
<tr>
<td>NEU 4900 Research in Neuroscience</td>
<td>(1-4 cr.)</td>
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</tbody>
</table>

NEU 2100

Introduction to Behavioral Neuroscience (NLAB)

4cr

An introduction to psychological processes as they relate to behavior. Basic neurophysiology and sensory processes will be covered along with research relevant to topics or current interest in the field.

Prerequisite: PYC 1500 or BIO 1110

Fall/Spring

NEU 2500

Neuroscience Research Methods and Statistical Analysis (LAB SCI)

4cr

This course is an introduction to the methods used in neuroscience research. Students participate in experimental design, data collection, statistical analysis and interpretation, and manuscript preparation. Students also are exposed to research techniques including surgery, histology, and pharmacological manipulations.

Prerequisite: Grade of C or better in NEU 2100 or consent of instructor

Fall/Spring
NEU 3400

Hormones and Behavior (SOC)
4cr
This course aims to explore the role hormones play in the study of behavior and developmental across various stages in the life course. We will explore how biological mechanisms take part in explaining many different aspects of human (and nonhuman) behavior, and how these explanations fit into discourse from both psychology and the fields of evolutionary biology, neurophysiology, and behavioral economics.
Prerequisites: PYC 2010 and one of PYC 2150, PYC 2200, PYC 2850 or NEU 2100

NEU 3950

Neuroscience II: Cellular and Molecular Neuroscience
4cr
This course is an examination of the fundamental function of the nervous system. Molecular examination of the electrical and chemical properties of the nervous system is studied, then put into systemic context through examination of pharmacological effects and learning paradigms.
Prerequisites: Grade of C or better in NEU 2100 and NEU 2500 or BIO 1120 or consent of instructor

NEU 4000

Senior Thesis in Neuroscience
4cr
This course serves as the capstone to a student's neuroscience studies. The senior seminar course will help the student to organize the analytical frameworks, perspectives, and theories that have been learned throughout the neuroscience career into a coherent structure in the form of a Senior Thesis. The first part of the course will emphasize generating paper ideas, literature research methods and strategies, and scientific writing necessary for the successful completion of the Senior Thesis. The second part of the course will emphasize oral presentations, peer review, and completion of thesis proposals in the form of extensive literature reviews.
Prerequisites: NEU 2500 and senior standing or consent of instructor

Spring

NEU 4100

Neuroscience III: Neuroanatomy and Physiology
4cr
This course provides the student with an understanding and an appreciation of the development and the structural/functional organization of the central nervous system. The architecture of the nervous system is examined with a special emphasis on sensory and motor modalities, functions, and disorders across a variety of species. Students participate in dissection exercises with nervous system tissue.
Prerequisite: Grade of C or better in NEU 3950 or consent of instructor

NEU 4900

Research in Neuroscience
1-4cr
Students work on an independent research project under the direction of a faculty member. Majors may not enroll for more than four terms of this course.

NEU 4990

Senior Thesis Completion
0cr
Students should register for NEU 4990 in the semester that they plan to complete their Senior Thesis.

Nursing

The Nursing Program at Carthage comprehensively prepares students as entry-level nursing generalists. Grounded in the liberal arts, humanities, and sciences, the program facilitates students’ understanding of clinical reasoning processes, how to apply those processes to concepts important in delivering nursing care, and how to address health care needs across the lifespan and continuum of care to improve health care outcomes. Students graduate as competent entry-level clinicians, scholars, and leaders in nursing, and are prepared to take the National Council Licensing Examination for Registered Nurses (NCLEX-RN).

Philosophy:
Nursing is a scientific discipline and a practice profession. The practice of professional nursing is the application of its science. In concert with the American Nurses’ Association, the faculty espouse the belief that nursing is a human science concerned with the protection, promotion, optimization, and restoration of human health and abilities; the prevention of illness and injury; alleviation of suffering through the diagnosis and treatment of human response; and advocacy in the care of individuals, families, communities, and populations (American Nurses Association, 2013). In its scientific and practice endeavors, nursing seeks to understand the dynamic patterns that arise out of the human-health-environment interface. The goal of nursing is to understand these patterns within their unique contexts, and to create innovative and effective approaches to nursing and health care that improve human quality of life, and ensure safe and effective nursing and health care outcomes.

Nursing education is a process whereby the science, art, norms, values, processes, and standards of professional nursing are inculcated in the student. Faculty views the teaching-learning process as an interactive and collaborative relationship with students, who are viewed and valued as junior colleagues. Faculty are responsible for creating and supporting a positive and inspiring learning environment. Students are
accountable for and expected to engage in the learning process. Faculty believe that a broad, liberal education is the essential foundation upon which the education of a competent and compassionate professional nurse is built, and that a conceptual approach to nursing education is crucial for developing the nursing professional needed for tomorrow’s health care system.

**Mission:**
In concert with the mission of Carthage College, and consistent with the faculty’s philosophy of nursing and nursing education, the mission of the Carthage College Nursing Department is to develop excellent nurses who are entry-level:

**Clinical Scholars** who seek truth and are dedicated to a spirit of inquiry to advance the science of nursing and evaluating evidence that leads to better nursing and health care outcomes;

**Leaders** who are committed to excellence, understand the process of change and outcome improvement, and are able to build human capacity and strength to promote innovative approaches that transform practice; and

**Clinicians** who have safe and accurate clinical judgment, who are grounded in professional values and ethics, and who engage in and inspire service to holistically and compassionately improve nursing and health care outcomes.

Faculty and students strive to challenge and support one another, to accept responsibility and require accountability, and collaborate in the best interest of one another and the communities they serve.

**Vision:**
The Carthage Nursing Department will be recognized as a premier baccalaureate nursing program. Faculty and students will strive to improve the health outcomes of the community and beyond, and to actively promote the development of the science and profession of nursing.

**Values:**

1. Collegiality: We will interact and work collaboratively with everyone with whom we come in contact.
2. Respect: We will uphold the worth and dignity of everyone with whom we interact.
3. Excellence: We are committed to producing superior work, going above and beyond what is expected of us.
4. Diversity: We value a multiplicity of views, cultures, values, and opinions, and strive to include these in all that we do.

5. Innovation: We will look at things in novel ways to improve our teaching and our scholarship, and we will encourage innovative thinking in our students.
6. Transparency: All of our interactions will be authentic and truthful; all of our processes will be apparent.

**Program Student Learning Outcomes:**

1. Integrate knowledge from the liberal arts, humanities, and sciences as a foundation for professional nursing practice.
2. Employ safe and effective clinical reasoning to design, implement, deliver, and evaluate nursing care, and to improve health outcomes across the lifespan and care continuum.
3. Develop effective, compassionate, culturally appropriate, and family-centered therapeutic relationships to promote quality health care across the lifespan and care continuum.
4. Demonstrate self-efficacy in applying transformative and collaborative leadership behaviors across diverse constituencies that improve nursing and health care outcomes.
5. Utilize a scholarly approach to evaluate and apply best evidence to design and evaluate nursing and health care practices.
6. Apply informatics and other technologies to plan, improve, and evaluate nursing and health care outcomes.
7. Integrate ethical and professional standards to guide professional nursing practice.
8. Analyze the influence of socio-political-economic factors that influence the provision of nursing and health care.

1. NSG 2010 Pathophysiologic Concepts for Nursing Practice
2. NSG 2015 Fundamental Core Concepts for Nursing Practice (includes practicum)
3. NSG 2016 Advanced Core Concepts for Nursing Practice (includes practicum)
4. NSG 3010 Principles of Pharmacotherapeutics in Nursing Practice
5. NSG 3012 Nursing Practice I: Improving Adult Health Outcomes (includes practicum)
6. NSG 3014 Nursing Practice II: Improving Children’s Health Outcomes (includes practicum)
7. NSG 3015 Assuring Quality and Safety in Health Care Settings
8. NSG 3020 Nursing Practice III: Improving Mental Health Outcomes (with practicum)
9. NSG 3022 Nursing Practice IV: Improving Maternal and Newborn Health Outcomes (with practicum)
10. NSG 3024 Clinical Scholarship: Applying Evidence to Improve Health Outcomes (WI)
11. NSG 4020 Nursing Practice V: Improving Health Outcomes of Populations (with practicum)
12. NSG 4022 Nursing Practice VI: Improving Health Outcomes in Complex Situations (with practicum)
13. NSG 4024 Leading Systems of Care to Improve Health Outcomes
14. NSG 4026 Advanced Systems of Nursing (practicum and Senior Thesis)

**Required Support Courses for the Major (24 cr.):**

1. BIO 2010 Human Anatomy and Physiology for the Health Professional I
2. BIO 2020 Human Anatomy and Physiology for the Health Professional II
3. CHM 1010 General Chemistry I
4. CHM 1020 General Chemistry II
5. PYC 1850 Lifespan Developmental Psychology for the Health Professional
6. Sociology Elective (SOC 1000 Introduction to Sociology, SOC 2010 Social Problems, or SOC 2020 Cultural Anthropology)

**Requirements Outside the Major:**
(Necessary to meet Carthage degree requirements)

**Courses Required for the Nursing Major (56 cr.):**

1. NSG 2020 Nursing Practice I: Safety in Health Care Settings (includes practicum)
2. NSG 3013 Nursing Practice II: Concepts for Nursing Practice (includes practicum)
3. NSG 3021 Nursing Practice III: Complex Situations (with practicum)
4. CHM 1010 General Chemistry I
5. CHM 1020 General Chemistry II
6. Sociology Elective (SOC 1000 Introduction to Sociology, SOC 2010 Social Problems, or SOC 2020 Cultural Anthropology)
requirements, 58+ credits)
1. COR 1200 Intellectual Foundations
2. REL 1000 Understandings of Religion
3. Modern languages requirement*
4. Humanities elective
5. Fine Arts elective
6. Mathematics (EXS 2330 Applied Statistics for Health and Human Services or equivalent)
7. Global Heritage elective
8. EXS 0010 Concepts of Physical Fitness
9. Lifetime/Fitness elective
10. Electives (16-24) hours, depending on need
11. 2 J-Term courses
12. 2 additional Writing Intensive courses (can be combined with other requirements)

* Students who do not test out of a foreign language are required to take two terms of a modern foreign language. Students should consult with their advisors regarding courses that would most appropriately fulfill this requirement.

Admission Policies
Students are admitted to the nursing major in one of three ways: 1) direct freshman entry, 2) delayed admission (i.e., internal transfer), or 3) external transfer. Admission to the nursing major is competitive, and meeting minimal requirements does not guarantee admission to the major.

Freshman Entry:
Freshmen applying to Carthage College may be directly admitted to the BSN Program if they meet the following criteria:
1. High school GPA of 3.2 or higher on a 4.0 unweighted scale.
2. ACT or SAT-I score showing comparable aptitude.

As a minimum, students will have completed the following courses in high school:
1. 4 units of English, including composition
2. 1 unit of algebra
3. 1 unit of geometry
4. 1 unit of biology
5. 1 unit of chemistry

Delayed Admission (Internal Transfers):
Students who have enrolled at Carthage but have not been admitted to the BSN Program may apply for admission to the program upon satisfaction of the following criteria, all of which must be met prior to beginning the clinical sequence:
1. Meet all admission requirements of Carthage College.
2. Permission of the Director of Nursing to apply to the program.
3. Completion of nursing program application.
4. Completion of an interview.
5. Minimum cumulative GPA of 2.75 or higher at the time of application to the nursing major.
6. All college-level coursework must have a minimum grade of C; a C-minus or less is not acceptable in any course.
7. Completion of the following courses with a grade of C or better:
   1. BIO 2010 and 2020 (Human Anatomy and Physiology for the Health Professional I and II or equivalent)
   2. CHM 1010 and 1020 (General Chemistry I and II or equivalent)
   3. REL 1000 (Understanding of Religion or equivalent)
   4. PYC 1850 (Lifespan Developmental Psychology for the Health Professional or equivalent)
   5. COR 1200 (or equivalent)
   6. Able to meet modern language requirement
7. No course may be repeated more than once. The most recent grade will be used in the calculation of the GPA.
8. Nursing courses from other programs are NOT transferable into the nursing program at Carthage College.

External Transfer Students:
A limited number of transfer students will be considered for admission to the clinical sequence of the Carthage BSN Program. Transfer students will be considered for admission if they meet the following minimum criteria:
1. Meet all admission requirements of Carthage College.
2. Completion of nursing program application.
3. Complete an interview.
4. Minimum cumulative GPA of 3.0 or higher at the time of application to the nursing major.
5. All college-level coursework must have a minimum grade of C; a C-minus or less is not acceptable in any course.
6. Completion of the following courses with a grade of C or better prior to beginning the clinical sequence:
   1. BIO 2010 and 2020 (Human Anatomy and Physiology for the Health Professional I and II or equivalent)
   2. CHM 1010 & 1020 (General Chemistry I and II or equivalent)
   3. REL 1000 (Understanding of Religion or equivalent)
   4. PYC 1850 (Lifespan Developmental Psychology for the Health Professional or equivalent)
   5. COR 1200 (or equivalent)
   6. Able to meet modern language requirement

The more general education courses that have been completed, the higher the likelihood that a student will be able to seamlessly transfer into the program and complete the degree in a timely manner.

Progression Requirements:
To ensure the rigor of the nursing program, the department of nursing uses the following grading scale:
A nursing major must maintain a cumulative GPA of 2.75 or better throughout their time in the nursing program.

1. **Cumulative GPA of 2.75 or better:**
   1. Nursing majors must maintain a cumulative GPA of 2.75 or greater throughout their time in the nursing program.
   2. Nursing majors must have a minimum cumulative GPA of 2.75 or greater to graduate.
   3. Students whose cumulative GPA falls below 2.75 will be placed on academic probation within the program and will be allowed one semester to bring their GPA to the requisite 2.75 cumulative average. A student who does not raise their GPA to 2.75 within one semester may be dismissed from the nursing major.
   4. Faculty will evaluate a student’s progress toward the requisite GPA and may, if the student demonstrates sufficient progress, extend the probationary term by a semester to allow the student time to raise the GPA.
   5. A third probationary event (i.e., GPA below minimum requirement, or a non-progressing grade in a nursing or correlative course) may result in dismissal from the program.
   6. Dismissal from the nursing major does not necessary mean dismissal from Carthage College. Students should confer with their advisor to ascertain their eligibility to continue at Carthage.

2. **Course Grades:** Nursing majors may not receive any grade less than a C in any course while in the nursing major. A C-minus or below is an unacceptable grade and is considered a non-passing/non-progressing grade.

Earning a non-passing grade places the student at risk for dismissal from the program.

1. A student who receives a C-minus or below in any course must successfully repeat that course, or its equivalent, when the course is next offered before graduating.
2. All nursing (NSG) and correlative courses (BIO, CHM, PYC, SWK, or SOC) must be passed with a grade of “C” or better. A C-minus is a non-passing grade in the BSN program.
3. Students must receive a “pass” for all clinical experiences (i.e., NSGC 2015, NSGC 2016, NSGC 3012, NSGC 3014, NSGC 3020, NSGC 3022, NSGC 4020, NSGC 4022, NSGC 4026). A student who receives a “no pass” for any clinical experience must repeat both the didactic and clinical portions of that course at its next iteration before progressing to the next grade level.
4. If a student receives a grade of C-minus or below in the didactic portion of a clinical nursing course (i.e., NSG 2015 NSG 2016, NSG 2010, NSG 3010, NSG 3012, NSG 3014, NSG 3020, NSG 3022, NSG 4020, NSG 4022, NSG 4026), the student must repeat said course at its next iteration.
5. The student must successfully complete each level of nursing courses before progressing to the next level (e.g., all sophomore nursing courses must be completed before progressing to the junior year, and all junior nursing courses must be completed successfully before progressing to senior year).
6. Students should be aware that the need to repeat the didactic and/or clinical section portion of a course may delay the student’s graduation date due to availability of these courses.
7. A student may repeat an individual nursing course or a correlative course only once. If the student is not successful in the second attempt of the course (i.e., grade of C or better), the student will be dismissed from the nursing program.
8. A student will be dismissed from the nursing major if they receive a third non-progressing grade (any grade of C-minus or below) in any combination of nursing or correlative courses.
9. A student may repeat any course, other than nursing or correlative courses, as many times as necessary to maintain a 2.75 GPA, but the student should be aware that repeating a course may delay graduation.

Additional student policies may be found in the Carthage College Nursing Department Student Handbook.

**Honors in the Major:**
See the Honors section of the Carthage College Catalog.

## RN-to-BSN Program

Students in the RN-to-BSN Program must complete 56 credits at Carthage College. The credit hours from the Associate Degree in Nursing (ADN) will be accepted as a package (typically approximately 65 credits). A minimum of 121 credits is required to earn the BSN in the RN-to-BSN program. The following courses are required to earn the Bachelor of Science in Nursing (BSN).

### Required Nursing Courses (28 cr.)

- **NSG 1050** Contemporary Professional Nursing (4 cr.)
- **NSG 2330** Applied Statistics for Health and Human Services (4 cr.)
- **NSG 3004** Clinical Science Integration Seminar (4 cr.)
- **NSG 3015** Assuring Quality and Safety in Health Care Settings (4 cr.)
- **NSG 3024** Clinical Scholarship: Applying Evidence to Improve Health Outcomes (4 cr.)
- **NSG 4020** Improving Health Outcomes of Populations (4 cr.)
- **NSG 4024** Leading Systems of Care to Improve Health Outcomes (4 cr.)
General Education Requirements (28 cr.)
(categories)
Exploring Health and Wellness (4 cr.)
Exploring Intellectual Traditions (4 cr.)
Intercultural Literacy (4 cr.)
Inquiry (4 cr.)
Leadership Development (4 cr.)
Interdisciplinary Thinking (4 cr.)
Religious Diversity (4 cr.)
Electives (4 cr.)

Admission Policies
The following criteria are required for admission to the RN-to-BSN Program:
A 3.0 cumulative GPA
A valid RN license from Illinois or Wisconsin
An associate degree in nursing from an accredited program

Progression Requirements
To ensure the rigor of the nursing program, the Nursing Department uses the following grading scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>95% or above</td>
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<tr>
<td>A-</td>
<td>93 - 94</td>
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<tr>
<td>B+</td>
<td>90 - 92</td>
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<tr>
<td>B</td>
<td>87 - 89</td>
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<tr>
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<td>D+</td>
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<td>D</td>
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<tr>
<td>D-</td>
<td>65 - 67</td>
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<td>F</td>
<td>&lt;65</td>
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</tbody>
</table>

To continue in the RN-to-BSN Program, students must meet the following progression requirements:
A. Maintain a cumulative GPA of 2.75 or greater throughout their time in the nursing program.
B. Have a minimum cumulative GPA of 2.75 or greater to graduate.
C. A GPA of less than 2.75 will place the student on academic probation. The student must meet with his/her advisor to develop an academic success plan to raise the GPA within two terms. If the requisite GPA is not achieved within two terms, the student may be dismissed from the program.
D. A C-minus is not allowed in any course. If a student receives a C-minus in any course, that course must be repeated prior to graduation.
E. A student who receives a No Pass (NP) for any clinical nursing experience will be required to repeat the didactic and clinical portion of the course in which the NP was earned.
F. Any nursing course can only be repeated once. A second non-passing grade (any grade less than C or an NP) in any nursing course will result in dismissal from the program.
G. Dismissal from the nursing program does not necessarily mean dismissal from Carthage College. Students should confer with their advisor to ascertain their eligibility to continue in another program at Carthage.

Additional student policies may be found in the Carthage College Nursing Department RN-to-BSN Program Student Handbook.

NSG 1050
Contemporary Professional Nursing
4cr: Didactic
Historical, theoretical, and ethical underpinnings of the discipline, as well as professional standards that guide practice, are used to assist the learner in understanding nursing as a scientific discipline and a social phenomenon, and in developing a personal philosophy to guide professional nursing practice.
Prerequisite: Admission to the nursing major

NSG 2010
Pathophysiologic Concepts for Nursing Practice
4cr: Didactic
This course will present the students with the necessary background needed to understand mechanisms of disease processes, their risks and common complications, resulting signs and symptoms, and their implications for nursing practice. A conceptual approach will be used to present commonly occurring diseases/disease processes across the lifespan. Genetic and genomic implications are integrated. Principles of microbiology are integrated within the course to provide students with a basis for modes of infection, infectious processes, and infection control. Emphasis is placed on correlating disease processes with signs and symptoms, as well as with diagnostic data, and how this information is applied in the delivery of nursing care.
Prerequisites: BIO 1110, CHM 1010, CHM 1020, BIO 2010, and BIO 2020

NSG 2015
Fundamental Core Concepts for Nursing Practice
3cr: Didactic
This course introduces students to the process of conceptual thinking in nursing. Professional and disciplinary concepts are presented upon which students will build a knowledge base for practice. Emphasis will be placed on understanding nursing as a profession and a scientific discipline. Fundamental abilities in communication and providing basic nursing care are presented. This course includes a clinical practicum.
Prerequisites: Admission to the nursing program and BIO 2020
### NSG 2016

**Advanced Core Concepts for Nursing Practice**  
3cr: Didactic  
This course builds on the content of Fundamental Core Concepts by expanding upon and integrating advanced nursing concepts into the planning and provision of patient care. Clinical reasoning and health assessment are emphasized as students build and utilize a conceptual framework from which to practice. Dosage calculation and medication administration are introduced.  
Prerequisites: NSG 2010 and NSG 2015

### NSG 2330

**Applied Statistics for Health and Human Services (MTH)**  
4cr  
This course presents a practical approach to utilizing statistics in situations encountered in the Health and Human Services professions. Fundamental statistical theories and concepts are presented to help students understand the rationale and purpose of using statistical computations. Basic parametric statistical analyses, as well as the mathematical logic behind these calculations, will be presented. Students will learn how to perform hypothesis testing with normal distributions and also learn to interpret and critically evaluate research outcomes. This knowledge will allow students to be evidence-based practitioners and critical consumers of peer reviewed research.  
Prerequisite: Junior standing and accepted Nursing majors or declared Exercise and Sport Science or Allied Health majors.

### NSG 3004

**Clinical Science Integration Seminar**  
4cr  
This course will help students come to integrate knowledge of disease mechanisms, pharmacological therapy, and advanced health assessment concepts through a case study approach. A conceptual approach will be used to present commonly occurring diseases and disease processes across the lifespan, their pharmacological therapy, and related physical and laboratory assessments. Genetic and genomic implications are integrated. Emphasis is placed on correlating disease processes with clinical pharmaco-therapeutics, physical and mental manifestations, diagnostic data, and application to the delivery of nursing care.

### NSG 3010

**Principles of Pharmacotherapeutics in Nursing Practice**  
4cr  
This course presents fundamental concepts of pharmacology and pharmaco-therapeutics. The course focuses on the basic drug classifications, and concepts and principles of pharmacology with special consideration for the nursing role in developing a comprehensive approach to the clinical application of drug therapy through the use of the nursing process. Nursing implications relative to the utilization of drug therapy are examined. Dosage calculation competency is evaluated.  
Prerequisites: NSG 2010 and NSG 2015

### NSG 3012

**Nursing Practice I: Improving Adult Health Outcomes**  
4cr: 3 Didactic, 1 Clinical  
This course builds upon and deepens conceptual knowledge learned in previous courses to enable the learner to develop strategies for planning and evaluating nursing care in adults with common health care patterns. Clinical reasoning and clinical judgment are emphasized to assist the learner in integrating and applying knowledge to improve adult health outcomes. Application of the concepts learned in the course occurs within the context of the clinical practicum.  
Prerequisites: Successful completion of sophomore-level nursing courses

### NSG 3014

**Nursing Practice II: Improving Children's Health Outcomes**  
4cr: 3 Didactic, 1 Clinical  
This course builds upon and deepens conceptual knowledge learned in previous courses to enable the learner to develop strategies for planning and evaluating nursing care in children with common healthcare needs. Clinical reasoning and clinical judgment are emphasized to assist the learner in integrating and applying knowledge to improve children's health outcomes. Application of the concepts learned in the course occurs within the context of the clinical practicum.  
Prerequisites: Successful completion of sophomore-level nursing courses
NSG 3015

Assuring Quality and Safety in Health Care Settings
4cr
This course uses the Quality and Safety Education Network for Nurses (QSEN) as a framework for exploring quality and safety issues in health care. The nurse's role in assessing and improving quality at the point of care is emphasized. Models of quality improvement are introduced, and strategies for applying these models to improve health care outcomes is explored.
Prerequisite or Corequisite: SWK 2330 or NSG 2330

NSG 3020

Nursing Practice III: Improving Mental Health Outcomes
4cr: 3 Didactic, 1 Clinical
This course builds upon and deepens conceptual knowledge learned in previous courses to enable the learner to develop strategies for planning and evaluating nursing care for individuals with common mental health needs. Clinical reasoning and clinical judgment are emphasized to assist the learner in integrating and applying knowledge to improve mental health outcomes. Application of the concepts learned in the course occurs within the context of the clinical practicum.
Prerequisites: Successful completion of sophomore-level nursing courses

NSG 3022

Nursing Practice IV: Improving Maternal and Newborn Health Outcomes
4cr: 3 Didactic, 1 Clinical
This course builds upon and deepens conceptual knowledge learned in previous courses to enable the learner to develop strategies for planning and evaluating nursing care for mothers, newborns, and families with common maternal-child health needs. Clinical reasoning and clinical judgment are emphasized to assist the learner in integrating and applying knowledge to improve maternal-child health outcomes. Application of the concepts learned in the course occurs within the context of the clinical practicum.
Prerequisites: Successful completion of sophomore-level nursing courses

NSG 3024

Clinical Scholarship: Applying Evidence to Improve Health Outcomes
4cr
This course introduces the learner to the methods for developing and applying nursing knowledge through the research process and data synthesis. Evaluating the relevance of research and the process of applying evidence in practice are emphasized.
Prerequisite or Corequisite: SWK 2330 or NSG 2330

NSG 4020

Nursing Practice V: Improving Health Outcomes of Populations
4cr: 3 Didactic, 1 Clinical
This course builds upon and deepens conceptual knowledge learned in previous courses, and presents strategies for planning and evaluating nursing care in groups, aggregates, communities, and populations. Health promotion and disease prevention are emphasized. The ecological model is used as the organizing framework for this course. The nurse's role in promoting healthy communities and improving population health outcomes is explored. Diagnostic reasoning and clinical judgment are emphasized to assist the learner in integrating and applying knowledge of human health patterns. Application of the concepts learned in the course occurs within the context of the clinical practicum.
Prerequisite: Successful completion of junior-level nursing courses

NSG 4022

Nursing Practice VI: Improving Health Outcomes in Complex Situations
4cr: 3 Didactic, 1 Clinical
This course builds upon and deepens conceptual knowledge learned in previous courses, and presents strategies for planning and evaluating nursing care in complex health care situations across the lifespan and the continuum of care. The nurse's role in the coordination of care is emphasized. Diagnostic reasoning and clinical judgment are emphasized to assist the learner in integrating and applying knowledge, and improving health outcomes in individuals with complex nursing and health care needs. Application of the concepts learned in the course occurs within the context of the clinical practicum.
Prerequisite: Successful completion of junior-level nursing courses
**NSG 4024**

**Leading Systems of Care to Improve Health Outcomes**

4cr

Conceptual foundations of leadership theory are presented. The nurse's role as leader and collaborator of health care teams is emphasized. The processes of change, delegation, supervision, and system improvement are explored as fundamental characteristics of nursing leadership.

Prerequisite: Successful completion of junior-level nursing courses

**NSG 4026**

**Advanced Clinical Synthesis and Capstone**

4cr

Equates to 36 hours per week for 10-12 weeks (depending on preceptor schedule). This course provides the learner with an opportunity to synthesize conceptual knowledge gained in the program and begin the transition from student to professional nurse. Students will have the opportunity to explore an area of practice that suits their professional goals. The course culminates in the development and presentation of a capstone project (i.e., research or quality improvement project) that aligns with the student's area of clinical interest.

Prerequisite: Successful completion of junior-level nursing courses

**Philosophy**

Philosophy, in its broadest sense, is the sustained and thoughtful inquiry into the nature of the universe and the role of human beings within it. To this end, philosophy aims to develop students' capacity for independent, critical thinking and to acquaint them with humankind's efforts to carry out this investigation. The courses offered emphasize both the mastery of the material and the development of skills, such as patient, careful reading; recognition, analysis, and evaluation of arguments; and the clear presentation and justification of one's own beliefs. Students thus become more capable of thinking independently.

**PHL 1000**

**Introduction to Philosophy (HUM)**

4cr

The course introduces the student to major problems discussed by key figures in the history of Western philosophy. Problems, such as the proof of God's existence, the nature of reality, and what counts as knowledge, are examined through a careful study of selected writings of Plato, Hume, and others. Basic skills of careful reading, critical analysis, and argumentative writing and discussion are stressed.

Fall/Spring

**PHL 1100**

**Contemporary Ethical Issues (HUM)**

4cr

This course introduces the student to methods of ethical thinking by applying them to specific issues such as abortion, human sexuality, nuclear weaponry, and preservation of the environment, among others. The course also examines the nature of morality itself and the central role that moral character plays in making moral decisions.

Fall

**PHL 1200**

**The Art of Thinking (HUM)**

4cr

This course aims at sharpening the critical thinking skills of the student by examining in some depth the nature of inductive reasoning, the fallacies that may be committed, and the nature of certain classical and contemporary forms of deductive argument.

Fall/Spring

**PHL 1300**

**Philosophy and Literature (HUM)**

4cr

This course, taught by a philosopher and a member of a language department when possible, examines philosophical concepts, insights, and positions as they emerge from the study of selected literary works. Issues such as the relationship between literary form and philosophical content also will be examined.

Fall/Spring

**PHL 2000**

**Studies in the History of Philosophy (HUM)**

4cr

This variable content course covers major epochs and figures in the history of philosophy. Courses offered on a periodic, rotating basis include surveys of ancient and medieval philosophy, modern philosophy, recent continental philosophy, and courses on major figures such as Plato, Aristotle, Kierkegaard, and Nietzsche. This course satisfies the Humanities or a second Religion requirement.

Prerequisite: 1000-level philosophy course

Fall/Spring

**PHL 2010**

**Introduction to Ancient Greek Philosophy (HUM)**

4cr

This course will engage the history of Ancient Greek Philosophy. Students will read and interpret classic works by such philosophers as the Pre-Socratics (e.g., Heraclitus and Parmenides), Plato, Aristotle, and the Stoics. The course will give students an opportunity to think through a number of classic philosophical questions as they were posed by the thinkers who originated philosophy as we know it. Such questions could include: What is good? What is just? What is beautiful? What is human nature? What is knowledge?
PHL 2100

Topics in Ethics (HUM)

4cr
This class will feature a close reading of Aristotle’s Nichomachean Ethics, after a mini-course in elementary reasoning techniques and logic.
Prerequisite: One ethics course
Fall/Spring

PHL 2110

Business Ethics (HUM)

4cr
In this course, students explore major ethical issues arising in the practice of business and learn to apply various methods of ethics in solving these problems. Whistle-blowing, insider trading, employees’ rights, multinational corporations, and other topics are discussed. Course offered as BUS 2110 and PHL 2110.

PHL 2400

Philosophy of Religion (HUM)

4cr
A philosophical examination of the traditional issues raised by the Judeo-Christian religious tradition, e.g., the proofs for God’s existence, the question about knowing the nature of God, the meaning of religious language, the problem of evil, etc. The course will also briefly examine what philosophical problems arise in a non-Western religion, e.g., Hinduism or Buddhism. This course satisfies the Humanities or a second Religion requirement.

PHL 2750

Research Methods

4cr
An introduction on how to conduct research through the focus on one topic from the following disciplines: Philosophy, Religion, or Classics. The class will focus on learning how to distinguish and evaluate primary and secondary sources, write a researched paper, recognize different approaches (theoretical) to a given topic, and become familiar with the work of representative classicists/philosophers/theologians/historians.

PHL 3400

Homer’s Iliad and Odyssey as Literature and Philosophy (HUM)

4cr
The Iliad and the Odyssey are the earliest texts of the Western tradition. Though everyone recognizes the sophistication of their poetic style and the breadth of their epic vision, too many readers have assumed that Homer composed in an oral tradition that had no conscious interest in philosophy or cultural critique. This course will investigate the philosophy that is embedded, implied, and elaborated in each epic as well as through a comparison of the two. Why is each story told so differently? How do Achilles, Agamemnon, Hector, and Helen compare to Odysseus, Telemachos, and Penelope? We will especially study Penelope for what she reveals about the Homeric view of ethics and epistemology, of what should be done, and of what can be known.

PHL 3420

Socrates: Then and Now (HUM)

4cr
This course will investigate Socrates from three points of view. First, it will investigate the historical Socrates and his profound but vexed relationship to Athenian history in the fifth century. Next, the course will look at the philosophical Socrates, concentrating on the innovations that he brought to philosophy before people began to write about him: ethics, elenchus, irony, self-examination, independence, inwardness, and rationality. It will then study what subsequent classical philosophers made of the innovations and to what extent Socrates was eclipsed by their writings. Finally, it will look at the cultural Socrates beginning in the Renaissance rediscovery of him and continuing through the great reinvigoration of his significance for the problems of modernity.

PHL 3440

Herodotus and Thucydides: History, Philosophy, or Literature? (HUM)

4cr
Unlike previous writers, Herodotus and Thucydides attempted to explain human nature and human institutions through humanistic inquiry, not divine revelation. In this, they earned the claim to be the first historians. But is reading them as though they privileged the reporting of fact over imaginative interpretation to blind ourselves to much of what is best in them? Were they not also artists strongly influenced by the poets who had gone before? Herodotus, who traveled Greece entertaining people with his colorful stories, patterned himself on Homer and the Homeric bards. Thucydides, though scornful of romantic escapism, seems to have been bent on outdoing the tragic dramatists. And both seem to anticipate the philosophical concerns of Plato and Aristotle.
PHL 3460

Thoreau’s Walden: the Practical, Poetic Life (HUM)

4cr
Few have ever tried so hard to lead as sincere and integrated a life as Thoreau, as well as one that could be open to all who make the effort. In Walden: or Life in the Woods, the great American writer Henry David Thoreau does not report wonders that only a few lucky people could experience, but the wonders that are around every man or woman who is awake to the world. If you are interested in philosophy that can be applied to your life, are keen to study the writing of one of the best American writers, or are passionate about nature and environmentalism, this is a course for you. We will be spending most of our time on a careful and thorough reading of Walden, but students will be asked to become authorities in some aspect of the text that most interests them. Students from all disciplines are encouraged. Class time will be devoted to discussion, and grades will rest on the writing of four or five short papers.

PHL 4000

Senior Seminar in Philosophy (HUM)

4cr
This course is the thesis seminar in philosophy. Students should register for this course when completing their Senior Thesis.

PHL 4990

Senior Thesis Completion

0cr
Students should register for PHL 4990 during the semester that they intend to complete their Senior Thesis.

Physics and Astronomy

The Physics and Astronomy Department offers classes that introduce students to the fundamental physical principles that govern phenomena in the natural world, from the interactions of subatomic particles to the mergers of supermassive black holes. A strong physics background is essential preparation for many science careers, such as engineering, astronomy, teaching, and medicine. In studying physics, students gain high levels of competency in computing, mathematics, problem-solving, and conceptual model building. A physics major develops discipline and habits of mind that are valued and lead to success in a wide range of careers that depend upon strong analytical skills. Recent physics graduates have gone on to graduate school in physics, mathematics, science journalism, aerospace engineering, and education while others have gone on to careers in finance, technical project management, public education, data science and others.

The Physics Major (56 credits), which must include:

- PHY 1200 *Fundamental Physics (4 cr.)
- PHY 2200 General Physics I (4 cr.)
- PHY 2210 General Physics II (4 cr.)
- PHY 2300 Modern Physics (4 cr.)
- PHY 2970 Portfolio Seminar A (1 cr.)
- PHY 3960 Portfolio Seminar B (1 cr.)
- PHY 3970 Portfolio Seminar C (1 cr.)
- PHY 4120 Experimental Physics (4 cr.)
- PHY 4960 Portfolio Seminar D (1 cr.)
- PHY 4970 Portfolio Approval (0 cr.)

*With departmental approval, CHM 1020 or EGR 1100 may be substituted for PHY 1200.

Required MTH Courses:

- MTH 1120 Calculus I (4 cr.)
- MTH 1220 Calculus II (4 cr.)
- MTH 2020 Differential Equations (4 cr.)
- MTH 2120 Multivariate Calculus (4 cr.)

In addition to the classes listed above, physics majors are required to take 16 credits of coursework at the 3000 level or higher. With approval of the department chair, up to 8 credits may be selected from an approved list of science courses outside the Physics and Astronomy Department.

The physics major elective courses may be selected to accommodate a wide variety of interests and career objectives. Students are encouraged to develop individual plans in consultation with a faculty advisor.

Students with an interest in astrophysics or the space sciences may choose to pursue the astrophysics concentration within the physics major. The astrophysics concentration is a graduate school preparatory track variant of the physics major that includes the following upper-level elective classes:

- PHY 3100 Optics and Waves (4 cr.)
- PHY 4100 Astrophysics (4 cr.)
- PHY 4110 Observational Astrophysics (4 cr.)

Students must also take two courses from the following list:

- PHY 4100* Mechanics (4 cr.)
- PHY 3300 Thermodynamics (4 cr.)
- PHY 4200 Quantum Mechanics (4 cr.)
- PHY 4300 Electricity and Magnetism (4 cr.)

Students planning to pursue graduate education in engineering should consult a faculty advisor to select electives to support their intended engineering specialty.

Students intending to pursue advanced degrees in physics should take electives that cover the core material required for admission to graduate school. These include:

- PHY 3200 Mechanics (4 cr.)
- PHY 3300 Thermodynamics (4 cr.)
- PHY 4200 Quantum Mechanics (4 cr.)
- PHY 4300 Electricity and Magnetism (4 cr.)

Students planning to teach physics at the secondary level are recommended to include the following electives in their coursework for the physics major:

- PHY 3120 Electronics (4 cr.)
- PHY 3200 Mechanics (4 cr.)
- PHY 4150 Science of Global Climate Change (4 cr.)

The Physics Minor (24 credits):

- PHY 1200* Fundamental Physics (4 cr.)
- PHY 2200 General Physics I (4 cr.)
- PHY 2210 General Physics II (4 cr.)
- PHY 2300 Modern Physics (4 cr.)

Students must also take two additional courses (8 cr.) of 3000 level or higher in the Physics Department.

*With departmental approval, CHM 1020 may be substituted for PHY 1200.

The Engineering Science Major (57 credits)

In addition to the Physics major, the department offers a major in Engineering Science that blends the essentials of engineering with broad education in the liberal arts. Engineering Science is an interdisciplinary major focused on learning how to design, analyze, and test devices and processes needed to solve human problems. Engineering Science is a more flexible course of study than a traditional engineering degree and is intended to be paired with a minor in complementary disciplines, such as Business, Physics, Mathematics, Environmental Science, and others. The major incorporates early design and project experiences to provide real world contexts and early authentic engineering practice for students to gain the practical skills that employers are...
Science and Mathematics Core (24 cr.)

- MTH 1120 Calculus I (4 cr.)
- MTH 1220 Calculus II (4 cr.)
- PHY 2200 General Physics I (4 cr.)
- PHY 2210 General Physics II (4 cr.)
- MTH 2020 Differential Equations (4 cr.)
- CHM 1010 General Chemistry I (4 cr.)
or
- CHM 1020 General Chemistry II (4 cr.)

Engineering Core (17 cr.)

- EGR 1100 Introduction to Engineering Design (4 cr.)
- EGR 1700 Engineering Project Experience (4 cr.)
- EGR 2100 Engineering Statics (4 cr.)
- EGR 3100 Engineering Materials (4 cr.)
- PHY 3120 Electronics (4 cr.)

*Students must achieve a final grade of C- or better in all Engineering Core classes

Engineering Electives (12 cr.)

Choose 3 courses (12 cr.) from the list below:

- PHY 3100 Optics and Waves (4 cr.)
- PHY 3200 Thermodynamics (4 cr.)
- PHY 3300 Thermodynamics (4 cr.)
- PHY 3450 Data Analysis for Scientists and Engineers (4 cr.)
- PHY 3470 Mathematics for Scientists and Engineers (4 cr.)
- MTH 3050 Statistics (4 cr.)
- EGR 3500 Field Placement (2-8 cr.)
- EGR 3550 Internship in Engineering (1-12 cr.)
- NAT 400A Technical Project Management (4 cr.)
- CHM 2120 Inorganic Chemistry (4 cr.)
- ENV 2010 Environmental Chemistry (4 cr.)
- ENV 2610 Case Studies in Environmental Science (4 cr.)
- GEO 3200 Hydrology (4 cr.)
- GEO 3800 Soil Science (4 cr.)
- MGT 3300 Operations Management (4 cr.)

EGR 4900 Senior Capstone Project (4 cr.)

EGR 4990 Senior Capstone Completion (0 cr.)

Honors in the Major

Honors are awarded at the discretion of the Physics and Astronomy Department. Students are eligible for Honors if they: maintain an overall GPA above 3.5 and a GPA in the major above 3.3 at graduation, undertake scholarly physics research or a substantial engineering design project that is presented in public or published, complete an honors thesis, and receive the formal recommendation of the department.

For science designation: Check course descriptions to see if a laboratory is included in order to fulfill a lab science requirement.

EGR 1100

Introduction to Engineering Design

4cr

This class introduces the principles of engineering problem identification and solution, including the tools used in engineering practice. The course is based on a design challenge in one or more areas drawn from the domains of energy, transportation, environment, consumer technology, health, and exploration. Students will learn to use Computer Aided Design (CAD) tools and common engineering analysis tools as they design, build, and verify solutions to problems in the domain of the design challenge. The course incorporates key aspects of professional engineering in which critical thinking, teamwork, and creativity are essential attributes of the successful practitioner.

EGR 1700

Engineering Project Experience

1cr

Engineering Project Experience (EPE) is a companion course to the Introduction to Engineering Design (IED) course. Students complete individual and small group projects associated with engineering team activities mentored by faculty. Projects are expected to emerge from company sponsored engineering competitions such as the recent "Smart Cities" competition hosted by Foxconn, the Wisconsin Space Grant's Collegiate Rocket Competition, or space sciences projects such as the RockSat-C or the Carthage Microgravity Team. EPE is a laboratory with no lecture component.

Prerequisites: Declared Engineering Science major and co-enrollment in any of the science and math core classes in the Engineering Science major curriculum.

EGR 2100

Engineering Statics

4cr

This course examines force systems under equilibrium conditions; vector properties of forces, moments, couples, and resultants; rigid body structures; hydrostatics; shear and bending-moment diagrams; friction; centroids; area/mass moments of inertia. The course uses graphical, algebraic, and numerical (computer) methods to solve the vector mechanics problems posed by static equilibrium.

Prerequisites: PHY 2210 and MTH 1220 or permission of instructor.
EGR 3100

Engineering Materials (LAB SCI)
4cr
This course examines the nature, mechanical behavior, and design applications of materials. The structure-property relationships of metals, ceramics, polymers, and semiconductors are studied, and their mechanical properties are understood as arising directly from their atomic/molecular structure. The mechanics of deformable bodies, and the effects of externally applied loads on materials, are also studied. Materials selection to match design requirements to mechanical attributes is also introduced. The laboratory component of the course emphasizes measurement of the mechanical properties of engineering materials with modern hardware and software tools. Lecture and laboratory.
Prerequisites: EGR 2100 and CHM 1010 or 1020. Concurrent enrollment in MTH 2020 or permission of the instructor.

EGR 3500

Field Placement in Engineering
2-8cr
Enables the student to explore a possible engineering career and to work in an individual, academically oriented position designed to supplement or complement the student's academic experience. All field placements require faculty supervision and regular meetings between the student and the instructor.
Prerequisite: Permission of the instructor

EGR 3550

Internship in Engineering
1-12cr
An internship enables students to gain practical experience in engineering. Such internships are longer in duration than field placements. All internships require faculty supervision and regular meetings between the student and the instructor.
Prerequisite: Permission of the instructor

EGR 4900

Senior Capstone Project
4cr
This course requires students to carry out a culminating project within an engineering context. Students engage in a formal design experience that starts with design requirements, proceeds to idea generation for design, then prototyping and testing, concluding with a comprehensive written report and oral presentation. Senior Capstone is intended to aid students in consolidating content knowledge acquired in earlier parts of the engineering curriculum with technical skills needed to execute a full design project.
Prerequisites: EGR 3100 and senior standing, or permission of the instructor.

PHY 1000

Physics for Future Presidents (NLAB)
4cr
This course presents a topical introduction to the key principles and concepts of physics in the context of the world events and natural phenomena that confront world leaders and that require informed decisions and responses. Energy, health, counterterrorism, remote sensing, space programs, nuclear proliferation, and a host of other modern challenges have technological and scientific dimensions, the understanding of which is essential to avoiding disastrous policy decisions. This course considers the application of physics to these societal challenges. The material is covered at a level and pace that a future world leader should be able to handle; the emphasis is on the development of physical reasoning skills, and not on detailed, mathematical problem-solving.
Prerequisite: High school algebra
Fall/J-Term/Spring

PHY 1030

Astronomy (LAB SCI)
4cr
A study of astronomy beginning with its historical roots and leading to our current understanding of the sun and other components of the solar system, stars, galaxies, and the universe. Students study the night sky and methods used by astronomers. Lecture and laboratory. Some evening laboratories may be required.
Prerequisite: High school algebra
Fall/Spring

PHY 1050

Cosmology (NLAB)
4cr
A study of the people and ideas that have shaped our current view and understanding of the cosmos. Topics will include astronomy of ancient civilizations, the development of the Copernican solar system, the size of the galaxy and the cosmological distance ladder, relativity and black holes, Hubble and the expanding universe, big-bang cosmology and the history of the early universe, exotic particles, dark energy, and the fate of the universe.
Prerequisite: High school algebra
Fall/Spring

PHY 1200

Fundamental Physics (LAB SCI)
4cr
This course covers fundamental physical principles including descriptions of mechanical, electrical, wave, and atomic phenomena. The course highlights ways in which physical principles are used to describe and understand the vast array of observable phenomena in the universe. Students will study applications of physics to a range of important historical and contemporary scientific and technological questions. This course is intended for potential physics majors or students planning further study in the physical sciences. Lecture and laboratory.
Prerequisite: Concurrent enrollment in MTH 1070, 1120, or 1220 or departmental approval
Fall
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>PHY 2100</td>
<td>Physics I (LAB SCI)</td>
<td>4cr</td>
<td>This non-calculus-based course provides an introduction to the essentials of mechanics, heat, and sound for students with no prior training in physics or chemistry. PHY 2100 in combination with 2110 is the preferred sequence for majors in health and life sciences. Lecture and laboratory. Prerequisite: High school algebra. Fall.</td>
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<tr>
<td>PHY 2110</td>
<td>Physics II (LAB SCI)</td>
<td>4cr</td>
<td>This non-calculus-based course provides an introduction to electricity and magnetism, light, and atomic physics, with many examples and applications drawn from biology and medicine. PHY 2110 is specifically targeted to majors in health and life sciences. Lecture and laboratory. Prerequisite: PHY 2100. Spring.</td>
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<tr>
<td>PHY 2200</td>
<td>General Physics I (LAB SCI)</td>
<td>4cr</td>
<td>This course provides a calculus-based introduction to 3D kinematics, Newton's laws, simple harmonic motion, mechanical properties, rotational kinematics, and heat. PHY 2200 is required for physics majors, engineering students, and chemistry majors, and it can be counted as an elective toward a math major or minor. Lecture and laboratory. Prerequisites: PHY 1200 or CHM 1020 with a grade of C- or better, MTH 1120 with a grade of C- or better, and concurrent enrollment in MTH 1220, or departmental approval. Fall/Spring.</td>
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<tr>
<td>PHY 2210</td>
<td>General Physics II (LAB SCI)</td>
<td>4cr</td>
<td>This course is a continuation of PHY 2200 and provides a calculus-based introduction to electricity, magnetism, light, and wave phenomena. This course is required for physics majors, engineering students, and chemistry majors. Lecture and laboratory. Prerequisites: PHY 2200 and MTH 1220 with a C- or better. Fall/Spring.</td>
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<tr>
<td>PHY 2300</td>
<td>Modern Physics (LAB SCI)</td>
<td>4cr</td>
<td>This course introduces relativity, quanta, wave-particle duality, atomic physics, and spin. Quantum mechanics is introduced and applied to the hydrogen atom and periodic table. Properties of the atomic nucleus and radioactivity may also be discussed. Data analysis and technical writing tools and techniques will be introduced. Lecture and laboratory. Prerequisite: PHY 2210 with a grade of C- or better, or departmental approval. Spring.</td>
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<tr>
<td>PHY 2970</td>
<td>Physics Portfolio Seminar A</td>
<td>1cr</td>
<td>The first course in the Physics Portfolio Seminar concentrates on building student experience and expertise in using physics principles to solve problems and approach complex scenarios. Emphasis is on group work and the informal and formal presentations of solutions to open-ended questions. Students will also participate in a handful of career and professional development exercises and be introduced to the concept of a physics portfolio. Prerequisite: PHY 2210 or departmental approval. Spring.</td>
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<tr>
<td>PHY 3100</td>
<td>Optics and Waves (NLAB)</td>
<td>4cr</td>
<td>A detailed treatment of oscillations, waves, and optics. Topics include oscillatory behavior, traveling waves, reflection and refraction, geometric optics, interference, and mathematical techniques used to treat oscillations. Prerequisites: PHY 2210 with a grade of C- or better and concurrent enrollment in MTH 2020, or departmental approval. Fall/Spring.</td>
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<tr>
<td>PHY 3120</td>
<td>Electronics (LAB SCI)</td>
<td>4cr</td>
<td>Introduction to analog and digital circuits. Topics include passive and active analog electronic components, DC and AC circuit analysis, amplifiers, filters, binary and digital systems, logic gates, and microcontroller programming. Prerequisite: PHY 2110 or 2210, or departmental approval. Fall/Spring.</td>
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<tr>
<td>PHY 3170</td>
<td>Introduction to Computational Physics</td>
<td>4cr</td>
<td>This course introduces computational physics: the set of techniques and algorithms necessary to represent physical systems on the computer, determine their properties, predict their behavior, and visualize the results. The course covers these topics as a series of projects, including studies of the stability of structures like bridges, the motion of objects like stars in galaxies, the behavior of continuous systems like sound waves or fluids, and understanding the limitations of such studies. These studies are carried out with tools commonly used in scientific computing and introduces software development best practices. Prerequisites: PHY 2210 and MTH 2020 OR PHY 2210 and concurrent enrollment in MTH 2020.</td>
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PHY 3200
Mechanics (NLAB)
4cr
Study of particle dynamics in inertial and accelerated reference frames, gravitational potential, motion in a central force field and an introduction to Lagrangian methods. Prerequisites: PHY 2210 with a C- or better and concurrent enrollment in MTH 2020, or departmental approval
Fall

PHY 3300
Thermodynamics (NLAB)
4cr
A study of the thermodynamic concepts used to describe the macroscopic properties and behavior of systems, namely, temperature, internal energy, and entropy; and the relationship of these to microscopic behavior of systems as developed through statistical mechanics. Prerequisites: PHY 2210 with a grade of C- or better and concurrent enrollment in MTH 2020, or departmental approval
Fall

PHY 3450
Data Analysis for Scientists and Engineers
4cr
This course introduces students to computational data analysis tools and methods used most frequently in physics and engineering. Topics include data visualization, statistical methods and descriptions of measurement uncertainty, the method of least squares, chi-squared testing, multivariable regression, Fourier series and transforms, filtering, an introduction to image analysis, and others. Students learn relevant data skills through immersion in projects involving messy real-world data, beginning with the common challenge of wrangling data into computational analysis tools, proceeding through exploratory data analysis, consolidating results and reporting the 'story of the data'. Prerequisites: MTH 1220 and PHY 2210. Or MTH 3090 or instructor permission.

PHY 3470
Mathematics for Scientists and Engineers (MTH)
4cr
An advanced study of differential equations, partial differential equations, multiple integration, Laplace transforms, Fourier transforms, and vector analysis. Prerequisite: MTH 2120 with a grade of a C- or better, or departmental permission
Spring

PHY 3500
Field Placement in Physics
2-8cr
Enables the student to explore a possible physics career and to work in an individual, academically oriented position designed to supplement or complement the student's academic experience. All field placements require faculty supervision and regular meetings between the student and the instructor. Prerequisite: PHY 2970 or departmental approval
Fall

PHY 3550
Internship in Physics
1-12cr
An internship enables students to gain practical experience in physics. Such internships are longer in duration than field placements. All internships require faculty supervision and regular meetings between the student and the instructor. Prerequisite: Permission of the instructor

PHY 3960
Physics Portfolio Seminar B
1cr
The second course in the Physics Portfolio Seminar sequence is focused on the personal and professional development of third year physics majors. This includes introducing students to possible career and post-baccalaureate opportunities, communicating physics ideas to nonspecialists, and encouraging them to reflect upon their own growth and accomplishments. Students in this seminar will begin in earnest the process of developing their own professional portfolio of work in physics. Prerequisite: PHY 2970 or departmental approval
Fall

PHY 3970
Physics Portfolio Seminar C
1cr
The third course in the Physics Portfolio Seminar presents students with more opportunities to approach scenario-style problems using physics principles. Emphasis is on group work and the informal and formal presentations of solutions to increasingly complex open-ended questions. Students will also continue to build and reflect upon their physics portfolios. Prerequisite: PHY 3960 or departmental approval
Spring

PHY 3990

PHY 4100
Astrophysics (NLAB)
4cr
Covers key elements of the field of astrophysics. Topical areas may include stellar atmospheres, structure and evolution, galactic structure, interstellar matter, general relativity, and cosmology. Prerequisites: PHY 2210 with a grade of C- or better and concurrent enrollment in MTH 2020, or departmental approval
Fall
PHY 4110

**Observational Astrophysics**

4cr

An introduction to the observational equipment, professional databases, software, and data analysis methods used by research astrophysicists. The topics to be addressed in this class include quantitative imaging in various forms of electromagnetic radiation, methods for investigating time-dependent phenomena, and spectroscopic analysis methods. In each case, the emphasis will be on how the techniques are used to uncover physical properties of astronomical objects. Prerequisite: PHY 2300 or departmental approval

J-Term

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PHY 4120

**Experimental Physics**

4cr

An advanced laboratory course for senior physics majors. Students are expected to draw heavily upon their previous coursework in physics and mathematics, and to apply their acquired skills and knowledge in planning and carrying out significant experimental work in physics. Laboratory. Prerequisite: PHY 2300 or departmental approval

J-Term

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PHY 4150

**Science of Global Climate Change (NLAB)**

4cr

This course is designed to provide an understanding of the science of planetary climates for students with a background in physics and/or geography. Emphasis will be placed on the physical processes that control the state of Earth's climate, which include the roles of energy and moisture, atmospheric circulation, and atmosphere-ocean interaction. Cross-listed in Geospatial Science. Prerequisite: GEO 3700, PHY 2200 or consent of the instructor

Fall/J-Term/Spring

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PHY 4200

**Quantum Mechanics (NLAB)**

4cr

A study of the principles of quantum mechanics. Schrodinger theory and operator algebra are applied to the study of such problems as potential wells and barriers, tunneling, the harmonic oscillator, and the hydrogen atom. Prerequisites: PHY 2210 and MTH 2020 with a grade of C- or better and concurrent enrollment in MTH 2120, or departmental approval

Spring

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PHY 4300

**Electricity and Magnetism (NLAB)**

4cr

The study of the electric and magnetic effects of charges and currents leading to a presentation of Maxwell's equations and including such topics as electrostatic fields, electrostatic and magnetic energy, and potential theory. Prerequisites: PHY 2210 and MTH 2020 with a grade of C- or better and concurrent enrollment in MTH 2120 or departmental approval

Spring

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PHY 4500

**Independent Study in Physics**

2-4cr

A student can conduct independent study in a topic of interest in physics. It is understood that this course will not duplicate other courses regularly offered in the curriculum, and that the student will work in this course as independently as the instructor believes possible. Prerequisite: Permission of the instructor

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PHY 4900

**Independent Research**

2-4cr

An opportunity for students to conduct original research in physics. Suitable topics are those that require substantial library and/or laboratory research, reading, and in-depth study. Prerequisite: Permission of the instructor

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PHY 4960

**Physics Portfolio Seminar D**

1cr

This is the fourth and final course in the Physics Portfolio Seminar sequence. This seminar focuses on preparing students to present and defend their physics portfolios, a collection of work each student has produced while a physics major. Other elements of this seminar will include strategies for exploring postgraduate employment or further education, development of interview skills, and the production of effective resumes and CVs. Prerequisite: PHY 3970 or departmental approval

Fall

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PHY 4970

**Physics Portfolio Approval**

0cr

Department approval of portfolios for graduation occurs after the completion of PHY 4970 after they have completed their portfolios.

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**Political Science**

The study of political science is designed to widen cultural perspectives by providing an insight into political institutions and behavior; to impart an interest in, and an understanding of, the responsibilities of intelligent citizenship; and to promote understanding of the realities of politics and political behavior. The department seeks further to provide a foundation for graduate study; to provide, with other social science courses, preparation for careers in government service, teaching, journalism, and related professions; and to afford the prelaw student preparation for
professional legal study.

**Political Science Major (Required Core):**
A major in political science consists of 10 courses. These must include:
- One course from the area of American Government and Politics
- One course from the area of Public Law and Judicial Politics
- One course from the area of Comparative Government
- One course from the area of International Relations
- Political Science 3100
- Political Science 4000
- Political Science 1070 and one additional Political Thought and Theory course

All majors must take at least three courses in one of the five areas of the discipline to define an associated concentration. All political science majors must have a concentration on file with the registrar’s office.

Students fulfilling their Political Thought and Theory two-course requirement may take any Political Theory course in addition to Political Science 1070: Introduction to Political Theory. For students who select Political Theory as their area of emphasis, Political Science 1070 and 3250 are both required courses in addition to a third Political Theory course. The CRJ 3300 Mock Trial course may count as an elective for political science. It can count as part of the Public Law and Judicial Politics concentration (one of the three required courses in this area), but it cannot be used to meet the breadth requirement (one course from the area of Public Law and Judicial Politics) on its own, for students pursuing other concentrations.

**Political Science Minor:**
A minor in political science consists of five courses. These courses must be chosen from at least three of the five areas designated for political science. Those courses under the heading “General Courses” do not constitute an area of political science but may be chosen as electives. CRJ 3300 Mock Trial can count as one of the five courses needed to complete a minor in political science.

Although not required for the major, it is **strongly recommended** that students take a course in statistics, especially those planning to attend graduate and/or professional school. Possible courses include MTH 1050: Elementary Statistics, SOC 3900 Data Analysis, or BUS 2340 Applied Statistics. Recommended supporting areas include courses from other areas in the Division of Natural and Social Sciences (economics, geography, psychological science, and sociology) and from the Division of Arts and Humanities (English, history, and philosophy).

The Political Science Department also offers a number of J-Term courses and study tours that are not listed in the catalog. Please check the department’s website or consult a political science faculty member for more information about these options.

More information on the Political Science Department can be found at http://www.carthage.edu/political-science

**American Government and Politics**

<table>
<thead>
<tr>
<th>Course</th>
<th>CRs</th>
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<tbody>
<tr>
<td>POL 1040 Introduction to Public Policy</td>
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<tr>
<td>POL 2400 American Government: National, State, and Local</td>
<td>4</td>
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<tr>
<td>POL 3510 Campaigns and Elections</td>
<td>4</td>
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<tr>
<td>POL 3520 America at War</td>
<td>4</td>
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<tr>
<td>POL 3530 Congress and the Presidency</td>
<td>4</td>
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<tr>
<td>POL 3580 American Foreign Policy</td>
<td>4</td>
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<tr>
<td>POL 3620 Environmental Politics</td>
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**Comparative Politics**

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<tr>
<td>POL 1030 Introduction to Comparative Politics</td>
<td>4</td>
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<tr>
<td>POL 3030 Women of Africa</td>
<td>4</td>
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<td>POL 3040 African Transitions</td>
<td>4</td>
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<tr>
<td>POL 3200 Women and Politics</td>
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<td>POL 3330 Middle East Politics</td>
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<td>POL 3360 Latin American Politics</td>
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<td>POL 3370 Russian/East European Politics</td>
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<td>POL 3380 West European Politics</td>
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<td>POL 3400 Chinese Politics</td>
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<td>POL 3450 Global Poverty</td>
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**General Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>CRs</th>
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<tbody>
<tr>
<td>POL 200T Topics in Political Science</td>
<td>1-4</td>
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<tr>
<td>POL 2100 Politics and Film</td>
<td>4</td>
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<tr>
<td>POL 3100 The Logic of Political Inquiry</td>
<td>4</td>
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<tr>
<td>POL 4000 Senior Seminar</td>
<td>4</td>
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<tr>
<td>POL 4050 Seminar in International Political Economy</td>
<td>4</td>
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**International Relations**

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<th>Course</th>
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<tr>
<td>POL 1050 Introduction to International Relations</td>
<td>4</td>
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<tr>
<td>POL 3350 Human Rights</td>
<td>4</td>
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<tr>
<td>POL 3330 Middle East Politics</td>
<td>4</td>
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<tr>
<td>POL 3600 International Security</td>
<td>4</td>
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<tr>
<td>POL 3610 Nuclear Proliferation</td>
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<td>POL 3620 Environmental Politics</td>
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**Political Thought and Theory**

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<th>Course</th>
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<tbody>
<tr>
<td>POL 1070 Introduction to Political Theory</td>
<td>4</td>
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<tr>
<td>POL 2050 Philosophical Foundations of Political Economy</td>
<td>4</td>
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<tr>
<td>POL 3110 Women’s and Gender Studies Theory</td>
<td>4</td>
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<tr>
<td>POL 3240 Contemporary Political Theory</td>
<td>4</td>
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<tr>
<td>POL 3250 Classics of Political Thought</td>
<td>4</td>
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<tr>
<td>POL 3260 Studies in Political Theory</td>
<td>4</td>
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<tr>
<td>POL 3270 Religion and Politics in the United States</td>
<td>4</td>
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**Public Law and Judicial Politics**

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<th>Course</th>
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<tr>
<td>POL 1900 Constitutional Rights: Freedom of Expression</td>
<td>4</td>
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<td>POL 1910 Law and Society</td>
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<tr>
<td>POL 2900 Constitutional Law and the Separation of Powers</td>
<td>4</td>
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<tr>
<td>POL 2910 Constitutional Law: Civil Liberties and Civil Rights</td>
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<tr>
<td>POL 3900 Comparative Law</td>
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<tr>
<td>POL 3930 Environmental Law</td>
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**Honors in the Major**

Honors in the major requires a minimum 3.5 GPA in political science and achieving an assessment of Honors on the Political Science Senior Thesis.

**POL 1030**

**Introduction to Comparative Politics (SOC)**

4cr

This course is an introduction to the study of comparative politics. The first half of the term focuses on the nature of comparative politics while the second half looks at a range of specific countries. The readings and assignments do not merely consider governmental institutions but the broader range of political activity, from grassroots organizing to social movements and formal political participation.

Spring
Introduction to Public Policy (SOC)

4cr
Introduction to Public Policy examines the actions undertaken by government. The course explores theoretical explanations and justifications for government actions, as well as quantitative and qualitative techniques for evaluating alternative courses of government action. These theories and concepts will be used to analyze specific policy issues and the political environments in which they exist.

Introduction to International Relations (SOC)

4cr
This course offers an introduction to the major concepts and theories in international politics and their application to the events of the postwar world, particularly the Cold War and the North-South conflict. Attention is also given to disruptive forces in the international community, such as the nuclear arms race and ethnic conflict, as well as those forces, such as the United Nations, that contribute to world order.

Introduction to Political Theory (SOC)

4cr
This course will introduce the student to a variety of political theorists. Included would likely be theorists such as Aristotle, St. Thomas, Machiavelli, Locke, Madison, etc., as well as more contemporary theorists such as Rawls and Nozick. The empirical and normative features of theories will be identified and examined. The course also will focus on how effective or adequately theories integrate critically necessary, yet apparently inconsonant, political principles and values.

Constitutional Rights: Freedom of Expression (SOC)

4cr
The assertion of a right to freedom of expression has come to refer broadly to a variety of rights that find their support in guarantees provided by the First and Fourteenth Amendments of the U.S. Constitution. The term "expression" has come to be a generic reference to rights such as speech, press, assembly, protest, strike, symbolic speech, artistic expression, etc. Judgments respecting the acceptability of instances of various forms of expression have been determined by judicial standards, such as bad tendency, clear and present danger, fighting words, balancing, etc. These matters will be explored through the reading of Supreme Court decisions and the discussions that these decisions have provoked.

Law and Society

4cr
Law and Society introduces how disputes are authoritatively resolved and how the mechanisms for resolving disputes actually work. Students will examine legal institutions (the bar, courts, prisons, interest groups), rules (bills of rights, criminal procedure, contract law), and participants (parties, judges, prosecutors, police, attorneys) and ask when, why, and how they come into play. The course will also investigate the potential for bias in law and the uses of law as a tool for political and social change.

Philosophical Foundations of Political Economy (SOC)

4cr
An introduction to the philosophical foundations of political economy from classical times through the Enlightenment to the modern era. Students will read, discuss, and analyze the works of both European political economists (Smith, Ricardo, Mill, and Marx) and American thinkers and statesmen in the field (Jefferson, Mason, Hamilton, and Madison).

Politics and Film

4cr
This course examines various political themes as expressed in films. Film serves as an important medium for political critique of institutions, behaviors, and norms. Students will learn to perform textual analyses of films to interpret the possible political narratives they contain, and engage with those narratives through discussion and critique. This is a variable content course with different versions which investigate particular themes and topics through particular films.

American Government: National, State, and Local (SOC)

4cr
This course involves a study of the institutions of American government at the national, state, and local levels and is designed to serve students seeking teacher certification. It will stress the informal as well as the formal dimensions of government and will, and thereby attempt to broaden and deepen insight into the processes of policy-making and implementation.
POL 2900  Constitutional Law and the Separation of Powers (SOC)  4cr
An examination of the U.S. Supreme Court and its interpretation of the U.S. Constitution over time on such topics as judicial review, executive and legislative branch powers, federalism and the role of states, and political and economic regulation.
Prerequisite: Sophomore standing

POL 2910  Constitutional Law: Civil Liberties and Civil Rights (SOC)  4cr
An examination of the U.S. Supreme Court's interpretation of the U.S. Constitution over time on such topics as freedom of expression and religion, criminal and civil due process, privacy, equal protection, and the nationalization of the Bill of Rights.
Prerequisite: Sophomore standing

POL 3030  Women of Africa  4cr
The study of the countries in Africa has frequently focused on public events: colonialism, political change, war, government actions, and the formal economy. In recent years, researchers have begun to explore in more depth how women's lives are impacted by these events, and how women in Africa are active participants in the various sectors of their societies.
This course will look at life in various African countries through the eyes of women and will examine how women of Africa actively engage in and are affected by political, cultural, and economic events both domestically and internationally. Themes will include human rights issues of women, the impact of modernity and tradition on women's lives, images of appropriate female behavior, economic hardship and survival techniques, cultural issues surrounding marriage and motherhood, and women's participation in the public spheres of their countries.

POL 3040  African Transitions  4cr
African countries and peoples have often been examined through the lenses of European and North American cultures. These analyses have sometimes been helpful and other times have resulted in inaccurate portrayals of African life and people. This course uses texts written predominantly by African authors from various parts of the continent to provide African perspectives on transitions that have occurred on the continent. These transitions include the transition from traditional life to colonial rule, the shift to independence, attempts at democratization, adaptations rural Africans make when moving to urban areas, and the clashes between Western and African cultures that continue today. Using themes of governance, community, and reference groups to examine different African cultures, the course incorporates theories and concepts from the disciplines of political science and sociology.

POL 3100  The Logic of Political Inquiry (SOC)  4cr
This class is an introduction to the research process in political science. Questions about the history and structure of the discipline, how inquiry is framed by philosophical assumptions, and the role of observation and experimental design are all examined. Students will use their understanding of these issues to plan a research project, collect and analyze data, and effectively present their findings. This course is a prerequisite for the Senior Seminar/Senior Thesis.
Prerequisite: Junior standing or instructor permission.
Spring

POL 3110  Women's and Gender Studies Theory (DIV)  4cr
This is a reading seminar that will investigate the writings of feminist theorists as well as the critical questions raised by feminism pertinent to the academic disciplines. "Sexes (gender), difference between the sexes, man, woman, race, black, white, nature are at the core of [the straight minds'] set of parameters. They have shaped our concepts, our laws, our institutions, our history, and our cultures. To reexamine the parameters on which universal thought is founded requires a reevaluation of all the basic tools of analysis, including dialectics. Not in order to discard it, but to make it more effective" (Monique Wittig). This course will examine the feminist critique of culture as a way of examining our philosophical heritage and understanding the relationship of culture to academic inquiry.

POL 3200  Women and Politics (SOC) (DIV)  4cr
This class is an examination of the political roles and activities of women internationally. Exploring cultural, religious, racial, economic, and social constraints, as well as opportunities for women's involvement in politics, the course will keep in mind theory and practice as well as the problems in specific countries. Attention will be given to how the discipline defines political participation, how various feminists may influence change, and what it means to look for common differences.
**POL 3240**

**Contemporary Political Theory (SOC)**

4cr
This course features the themes and thinkers of political theory dominant in the 20th century and our era. It will consider such themes as pluralism, democratic theory, legitimation, secularization, liberalism, and communitarianism and thinkers such as Nietzsche, Heidegger, Arendt, Foucault, Habermas, and Rawls. By considering the foundations of contemporary political theory, it will place current political debates in the context of the philosophical themes behind them.
Prerequisite: POL 1070

**POL 3250**

**Classics of Political Thought (SOC)**

4cr
An analysis, interpretation, and synthesis of the major trends of Western political thought and philosophy from Machiavelli to the present. The course emphasis will be on the development of constitutional democratic thought. The approach emphasizes the connection between normative and empirical matters.
Prerequisite: POL 1070

**POL 3260**

**Studies in Political Theory (SOC) (DIV)**

4cr
This course covers a major figure or epoch in the history of political philosophy; on a rotating basis this will include individual authors such as Plato, Augustine, Machiavelli, or Tocqueville, or specific periods of political philosophy and thought such as ancient, medieval, early modern American, or contemporary.
Prerequisite: POL 1070 or consent of instructor

**POL 3270**

**Religion and Politics in the United States (SOC)**

4cr
This course examines legal, political, historical, and theoretical aspects of the relationship between religion and politics in the United States. Works of political and social theory and important constitutional law cases will be used to explore the liberal democratic understanding of religion's place in politics. The American approach will be compared with that found in several other countries. Specific topics covered include the ?secularization thesis? (and its critics), the role of the ?religious right,? the adoption of civil rights/anti-discrimination tactics by religious groups, and controversies over gay rights.
Prerequisite: REL 1000

**POL 3280**

**Human Rights**

4cr
This course examines the politics of human rights and the changing nature of sovereignty in the international system. To do this it will explore the major threats to human rights in the contemporary world as well as the cultural and political obstacles to international consensus on human rights norms. Finally, it will attempt to determine the appropriate mechanisms for their implementation.

**POL 3290**

**Latin American Politics**

4cr
This course examines the origin and development of Latin American political institutions by exploring the history, politics, economics, and social issues of the region. While examining the remaining effects of colonialism on Latin America, this course also investigates questions of political and economic development and dependency, democratization, political culture, and relations with extra-regional actors. Individual countries will be examined as a way to discuss the status and prospect of democracies and dictatorships in the region.

**POL 3300**

**Russian/East European Politics (SOC)**

4cr
This course will focus on the changes that have occurred in the countries that occupy the territory of the former Soviet Union and Eastern Europe. The newly independent states that succeeded the disintegration of the former Soviet Union are still struggling with the Soviet legacy. We will explore whether the successor states will be able to throw off their past and become "successful" independent countries.
POL 3380

West European Politics (SOC)
4cr
This course will focus on Western Europe's historical experience, the organization of its decision-making institutions, and its electoral politics after 1945, with a largely contemporary emphasis. The country or countries that receive the most attention will vary from topic to topic. In general, the approach will be comparative across countries. This course will also explore the European Union by examining its history, institutions, policies, and future.

POL 3400

Chinese Politics (SOC)
4cr
Chinese Politics surveys the organization and policies of the post-1949 Chinese state, with a focus on state building, economic reform, and the problems created by economic change. The course covers both the Maoist and Reform periods and explores politics and policy in a Leninist party-state that has organized its economy using market mechanisms.

POL 3450

Global Poverty
4cr
While the focus of this course will be theoretical, the class will begin by introducing some general background information on global stratification. We will examine the geography of stratification (i.e., which countries are rich, which countries are poor, etc.). The basic demographics of poverty will also be explored. Particular attention will be paid to infant mortality rates, life expectancy rates, health care quality and access, education, the status of women, and the availability of foreign and domestic assistance. Finally, we will analyze various concepts of poverty, measures of poverty, and different kinds of stratification systems.

POL 3510

Campaigns and Elections (SOC)
4cr
This course focuses on three institutions of American politics that serve as the linkage between the average citizen and the government. We will examine the role of political parties, interest groups, and elections in the American political system. Specifically, we will examine how a political campaign is conducted during election season. Prerequisite: POL 2400 or instructor's consent

POL 3520

America at War
4cr
This course covers events and debates surrounding major military conflicts in U.S. history. It will focus on particular conflicts, such as the Vietnam War; consider specific periods, such as the emergence of the United States as a great power at the end of the 19th century; and survey military developments over broader periods of time. The ultimate purpose of the course is to understand and evaluate the principles governing the United States' defense policies and practices.

POL 3530

Congress and the Presidency (SOC)
4cr
This course provides an examination of the principal policy-making institutions of the United States government: the Congress and Presidency. The political and Constitutional dimensions of these institutions will be addressed as well as the administrative structures and processes that allow them to carry out their legislative and executive functions.

POL 3550

Nuclear Proliferation (SOC)
4cr
Is it important for a country to acquire nuclear weapons? This is the question with which countries both with and without nuclear weapons are dealing. This course will explore the costs and benefits of acquiring nuclear weapons both to the country trying to gain them and the countries that have to deal with the new nuclear power(s). Moreover, if the world community has come to the conclusion that we do not want more countries to possess them, how can the acquisition of nuclear weapons and materials be prevented?
**POL 3620**

**Environmental Politics (SOC)**

4cr

This course introduces students to important theoretical and policy issues in the study and practice of environmental politics. It is designed to provide a better understanding of past, present, and future events by framing environmental issues within various theories of political science; introducing prominent actors, institutions, and issues; and examining recent attempts to create effective institutions to address specific environmental problems. This course examines the politics of environmental problems at all geographic scales; however, depending upon the professor, emphasis will either be on domestic or international issues.

**POL 3900**

**Comparative Law**

4cr

Comparative Law examines the role of written constitutions, legal institutions, and legal traditions across countries. Special attention will be given to the role of constitutional courts and judicial organization. While the course will focus on the Anglo-American and Civil Law traditions, students will also read on Islamic and other legal systems.

**POL 3930**

**Environmental Law (SOC)**

4cr

This course provides an introduction to the field of environmental law and the legal processes and outcomes that affect environmental policies. Both statutory and case law will be explored in ways that will develop students' analytical skills and abilities to form legal arguments related to the fields of natural resource management and pollution regulation. Political, economic, and philosophical issues are interwoven throughout the subject and speak to the complexity that characterizes the relationships between society and nature.

**Pol 4000**

**Senior Seminar in Political Science (SOC)**

4cr

This course serves as the capstone to a student's political science studies. The Senior Seminar will help students to organize the analytical frameworks, perspectives, and theories they have learned throughout their political science career into a coherent structure in the form of a Senior Thesis. Students are required to present their Senior Thesis as part of the course.

Prerequisites: Senior standing and POL 3100 or instructor approval

**Fall**

**Pol 4050**

**Seminar in International Political Economy (SOC)**

4cr

Serving as a capstone for the International Political Economy major, the seminar goes beyond disciplinary lines in an attempt to further integrate diverse and often competing perspectives, methodologies, and values. A research thesis, on a topic of the individual student's choice made in consultation with an advisor, is required along with an oral presentation to faculty and students involved in the program.

Prerequisite: Senior standing

**Psychological Science**

Courses in psychological science provide a background for a better understanding of the modern world, other academic fields, and oneself. Classes can be taken as courses for a major or minor concentration in psychological science, as supporting courses for other majors, or because of general interest.

The major concentration in psychological science is designed to encourage an understanding of human behavior from a broad scientific perspective, to prepare students for graduate study in psychological science, for employment in a psychology-related field, or for further education or career training in a variety of other fields.

**Psychology Major** (44 credits):

Requirement 1: Four courses are required (no substitutions) of all psychology majors:

- PYC 1500 *Introduction to Psychological Science* (4 cr.)
- PYC 2010 *Research Methods and Statistics I* (4 cr.)
- PYC 3010 *Research Methods and Statistics II* (4 cr.)

*Minimum grade of C- required.

and one of the following:

- PYC 4700 Fieldwork in Psychological Science (4 cr.)
- PYC 4800 Thesis in Psychological Science (4 cr.)

Students will be assigned to PYC 4990 Senior Thesis Completion at the time they are completing their Senior Thesis requirement.

Requirement 2: Majors are required to take four of the following breadth courses:

- NEU 2100 Introduction to Behavioral Neuroscience (4 cr.)
- PYC 2150 Sensation and Perception (4 cr.)
- PYC 2200 Social Psychology (4 cr.)
- PYC 2300 Cognitive Psychology (4 cr.)
- PYC 2850 Child and Adolescent Development (4 cr.)

Requirement 3: Majors are required to take two depth courses (3000 or higher) after they have met the prerequisites for the respective depth course. These depth courses include:

- PYC 3200 Psychological Science of Teaching and Learning (4 cr.)
- PYC 3500 Abnormal Psychology (4 cr.)
- PYC 3600 Organizational Psychology (4 cr.)
- PYC 3650 Childhood Psychopathology (4 cr.)
- PYC 3750 Psychology of Personality (4 cr.)
- PYC 3850 Adult Development and Aging (4 cr.)
- NEU 3950 Neuroscience II: Cellular and Molecular Neuroscience (4 cr.)
- PYC 4010 Psychology of Stress (4 cr.)
- PYC 4150 Globalization and Psychology (4 cr.)
- PYC 4700 Fieldwork in Psychological Science (4 cr.)

Requirement 4: Majors are required to take one elective course labeled as PYC (which can include PYC 200T: Topics in Psychological Science).

**Psychology Minor** (24 credits):

Requirement 1:
Three courses are required (no substitutions) of all psychological science minors.

PYC 1500 *Introduction to Psychological Science (4 cr.)
PYC 2010 *Research Methods and Statistics I (4 cr.)
PYC 3010 *Research Methods and Statistics II (4 cr.)

*Minimum grade of C- required.

Requirement 2: In addition to these three courses, students must choose three additional courses (12 cr.) from the listings in the department.

**Independent Study, Fieldwork, and Thesis**
Enrolling in Thesis in Psychological Science, Fieldwork in Psychological Science, or independent study requires permission of the department chair.

**Honors in the Major**
Honors in the Major is attained by an exemplary experimental thesis completed in PYC 4700 or 4800, and a public presentation. Basic requirements are listed under All-College Programs in the catalog.

**PYC 1500**
Introduction to Psychological Science (SOC)  
4cr  
A team-taught introduction to the methods and principles of psychological science.  
NOTE: Majors must pass this course with a C- or better to move on in the major courses. Fall/Spring

**PYC 1850**
Lifespan Developmental Psychology for the Health Professional  
4cr  
The course integrates theory and research as they relate to neurobiological, cognitive, social, and emotional development of individuals in cultural context from conception throughout adulthood. The course emphasizes normal developmental stages and patterns of adjustment to differing lifetime demands. This course is designed for students in the health professions. This course may not be applied to the Psychological Science major or minor.  
Prerequisite: None

**PYC 1900**
The Cognitive Science of Magic (SOC)  
4cr  
This course will provide an immersive introduction to the burgeoning psychological "science of magic" with a specific focus on the contributions that stage magic can make to the study of cognition. Students will explore how magicians exploit the fallibility of the human mind through an examination of experimental work from the world of psychology and theoretical work from the world of magic. During the course, students will be exposed to a variety of magical styles and schools of thought via occasional visits from prominent magicians and scientists with an interest in magic as well as field trips to magical performance venues.  
Prerequisite: PYC 1500

**PYC 2010**
Research Methods and Statistics I (SOC)  
4cr  
An introduction to statistical and research methods in psychological science, including the design and execution of research projects and the organization, analysis, and interpretation of results.  
Prerequisite: PYC 1500 with a grade of C- or better  
Fall/Spring

**PYC 2020**
Comparative Psychology (SOC)  
4cr  
In this course, students will explore the key themes and classic studies of comparative psychology, or the psychological investigations of the similarities and differences of animal species. This course will cover the types of comparisons made in the discipline, the overarching questions that provide structure to the field, and the more recent expansion of new technologies and taxonomic scope that comparative psychology has experienced. Students will both critique and implement the way in which comparative psychology bridges both subfields of psychology (e.g. neurophysiology, cognition, emotion, perception) and other realms of social sciences and natural sciences (e.g. ethology, behavioral economics, evolutionary biology, artificial intelligence).  
Prerequisite: PYC 1500

**PYC 2110**
Interpersonal Dynamics  
4cr  
A study of issues and concepts related to human interactions in pairs, triads, and small groups. Theoretical perspectives are reviewed with a focus on practical strategies and problem-solving in everyday encounters.  
Prerequisite: PYC 1500

**PYC 2150**
Sensation and Perception (SOC)  
4cr  
A survey of research and theory that addresses the complex question of how our sense organs communicate with our brain to process and organize the vast amount of sensory information available in the environment. Particular emphasis is placed on applying the scientific method to perceptual psychology.  
Prerequisite: PYC 2010 with a grade of C- or better
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<th>Course Code</th>
<th>Course Title (SOC)</th>
<th>Credits</th>
<th>Description</th>
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<tr>
<td>PYC 2200</td>
<td>Social Psychology (SOC)</td>
<td>4cr</td>
<td>A survey of research and theory that illuminates how the thoughts, feelings, and behaviors of individuals are influenced by the presence of others. Topics include social cognition, attitudes, social influence, conformity, stereotyping and prejudice, emotions, attraction, close relationships, group processes, aggression, and prosocial behavior. Prerequisite: PYC 2010 with a grade of C- or better or permission of instructor Fall/Spring</td>
</tr>
<tr>
<td>PYC 3010</td>
<td>Research Methods and Statistics II (SOC)</td>
<td>4cr</td>
<td>An advanced introduction to statistical and research methods in psychological science, including the design and execution of research projects and the organization, analysis, and interpretation of results. Prerequisites: PYC 2010 with a grade of C- or better and PYC 2150, PYC 2200, PYC 2300 or NEU 2100 Spring</td>
</tr>
<tr>
<td>PYC 3500</td>
<td>Abnormal Psychology (SOC)</td>
<td>4cr</td>
<td>This course is an introduction to the study of abnormal behavior and psychological or mental disorders. Major psychological disorders will be reviewed. Each disorder will be examined by its description, the etiology of the disorder, and treatment. Prerequisites: Any PYC breadth course and PYC 2010 Fall/Spring</td>
</tr>
<tr>
<td>PYC 3200</td>
<td>Psychological Science of Teaching and Learning</td>
<td>4cr</td>
<td>The Psychological Science of Teaching and Learning helps us understand the social, emotional, and cognitive processes that constitute learning throughout the lifespan. Psychological theory and research address the multiple factors (e.g., cognition, creativity, social environment, motivation) that should inform the design of educational programs and interventions for learners in settings that include schools, communities, and organizations. Participants in the class will research, design, and test an evidence-based educational intervention for a specified learner, or group of learners. Prerequisites: PYC 2010 and PYC 2850</td>
</tr>
<tr>
<td>PYC 3600</td>
<td>Organizational Psychology</td>
<td>4cr</td>
<td>Organizational Psychology applies social psychological methods and principles to understand how interactions among individuals, groups, and the broader social context impact organizations. By examining topics such as motivation, leadership, intergroup dynamics, conflict, and organizational culture, this course will prepare students to be successful members and leaders in organizations. Prerequisite: PYC 2200</td>
</tr>
<tr>
<td>PYC 3650</td>
<td>Childhood Psychopathology (SOC)</td>
<td>4cr</td>
<td>This course concerns the diagnosis of, assessment of, and intervention with children and adolescents who are experiencing or are at risk for significant emotional, cognitive, or mental disabilities. Specific risk factors for children of the disadvantaged will also be studied. Prerequisites: PYC 2850 and PYC 2010 Spring</td>
</tr>
<tr>
<td>PYC 2300</td>
<td>Cognitive Psychology (SOC)</td>
<td>4cr</td>
<td>A survey of research and theory that attempts to explain human thought processes. Topics include perception, attention, memory, language, and problem-solving. An emphasis is placed on research methodology and the evaluation of data from online laboratories. Prerequisite: PYC 2010 with a grade of C- or better Fall/Spring</td>
</tr>
<tr>
<td>PYC 2850</td>
<td>Child and Adolescent Development (SOC)</td>
<td>4cr</td>
<td>A study of behavioral changes during the first years of life through adolescence and of the important theories and models about these changes. Physical, language (normal and atypical), cognitive, and socioemotional changes will be considered with specific emphasis on the practical significance of these changes for educators and others. Fall/Spring</td>
</tr>
<tr>
<td>PYC 3400</td>
<td>Hormones and Behaviors (SOC)</td>
<td>4cr</td>
<td>This course aims to explore the role hormones play in the study of behavior and developmental across various stages in the life course. We will explore how biological mechanisms take part in explaining many different aspects of human (and nonhuman) behavior, and how these explanations fit into discourse from both psychology and the fields of evolutionary biology, neurophysiology, and behavioral economics. Prerequisites: PYC 2010 and one of PYC 2150, PYC 2200, PYC 2850 or NEU 2100</td>
</tr>
</tbody>
</table>
**PYC 3750**

**Psychology of Personality (SOC)**

4cr
An examination of the major approaches to the explanation of personality. How do various theorists understand the basic processes that are common to all people, the traits that are shared by some people, and the specific ways in which individuals are unique?
Prerequisites: PYC 2200 and PYC 3010

**PYC 3850**

**Adult Development and Aging (SOC)**

4cr
The psychology of adult development and the processes of aging will be studied. Theories and empirical study of adult functioning during the contemporary long lifespan will be considered, including the cognitive, social, emotional, and physical domains. Practical implications for the education and societal care of a growing population of middle-aged and aging persons will be emphasized.
Prerequisite: PYC 2850
Fall

**PYC 4010**

**Psychology of Stress**

4cr
This course places a timely emphasis on the role of stress in production of disorders in health and psychological status. Some treatment of subcultural and cultural definitions of stress will be included. This course can be counted as a depth course.
Prerequisite: PYC 2200 or PYC 2150 or PYC 2850 or NEU 2100

**PYC 4150**

**Cultural Psychology**

4cr
This course places a timely emphasis on the global applicability of principles and research on human behavior. Further, cross-cultural research methodologies will be considered.
Prerequisite: PYC 2200 or PYC 2150 or PYC 2850 or NEU 2100

**PYC 4700**

**Fieldwork in Psychological Science**

4cr
Seminar class with psychology instructor combined with field experience under the supervision of psychologists and other professionals in various selected agencies in the community.
Prerequisites: By permission of the department chair, junior standing, and PYC 3010 with a grade of C- or better.
Fall/Spring

**PYC 4800**

**Thesis in Psychological Science**

4cr
In this course students develop a Senior Thesis. The course will culminate in a thesis and an oral presentation. Exceptional thesis will be considered for Honors in the Major.
Prerequisites: By permission of the department chair, junior standing, and PYC 3010 with a grade of C- or better.
Fall/Spring

**PYC 4990**

**Senior Thesis Completion**

0cr
Students should register for PYC 4990 during the semester that they intend to complete their Senior Thesis.

**Religion**

The Religion Department aims to provide all students with an introduction to the scholarly study of religion, to give them the conceptual skills to interpret religious experience in its varying manifestations, and to instill in all students a sense of religion as a fundamental dimension of human experience.

**Religion Major** (38 credits)
REL 1000 Understandings of Religion (4 cr.)
REL 2700 Research Methods Experience (1 cr. course, taken twice) (2 cr.)
REL 4000 Senior Seminar in Religion (4 cr.)
Two courses from each of areas I, II and III (8 cr.)
One additional course from area I, II or III (4 cr.)
Any course listed in more than one category may only count once.

**Religion Minor** (24 credits)
REL 1000 Understandings of Religion (4 cr.)
Five other courses (20 cr.)

At least one course must be taken from each of the following three categories. The two remaining courses may be taken from any content area. Any course listed in more than one category may only count once.

**I. Sacred Texts**
REL 2010 Jewish Bible-Old Testament (4 cr.)
REL 2020 The Gospels (4 cr.)
REL 2030 The Letters of the New Testament (4 cr.)
REL 3010 Post-Exilic Judaism (4 cr.)
REL 3020 Women and the Bible (4 cr.)
REL 3400 Biblical Images of Christ (4 cr.)
REL 3500 Shared Sages in Sacred Scriptures (4 cr.)
REL 3510 Christians and Muslims: Conflict vs. Dialogue (4 cr.)
REL 3700 The Dead Sea Scrolls (4 cr.)
II. Global Religious Diversity

REL 2000 History of Christian Thought (4 cr.)
REL 2040 Christian Spirituality (4 cr.)
REL 2210 Christianities in the Global South (4 cr.)
REL 2220 Jesus Beyond Christianity (4 cr.)
REL 3040 Church History (4 cr.)
REL 3060 Luther and the Reformation (4 cr.)
REL 3070 Religion in America (4 cr.)
REL 3100 Judaism (4 cr.)
REL 3110 Hinduism (4 cr.)
REL 3120 Islam (4 cr.)
REL 3130 Buddhism (4 cr.)
REL 3140 East Asian Religions (4 cr.)
REL 3150 The Sikhs (4 cr.)
REL 3300 Theologies of Liberation (4 cr.)
REL 3310 Greek Religions (4 cr.)
REL 3320 Roman Religions (4 cr.)
REL 3360 Religion and Society in Modern India (4 cr.)
REL 3700 The Dead Sea Scrolls (4 cr.)

III. Religion, Culture, and Society

REL 2070 Understandings of Love (4 cr.)
REL 2200 Faith, Love, and Ethics (4 cr.)
REL 2300 Issues in Living and Dying (4 cr.)
REL 3020 Women and the Bible (4 cr.)
REL 3030 Creation and Apocalypse (4 cr.)
REL 3070 Religion in America (4 cr.)
REL 3080 Practicum in Religion (4 cr.)
REL 3300 Theologies of Liberation (4 cr.)
REL 3350 Religion and Society (4 cr.)
REL 3360 Religion and Society in Modern India (4 cr.)
REL 3510 Christians and Muslims: Conflict vs Dialogue (4 cr.)
SOC 2040 Sociology of Religion (4 cr.)

Interfaith Studies Minor (24 credits)
REL 1000 Understandings of Religion (4 cr.)
REL 1000 Understandings of Religion (4 cr.)
Five other courses (20 cr.)

Two courses (8 cr.) must be taken from Category I, two courses (8 cr.) must be taken from Category II, and one course (4 cr.) from Category III.

Category I (8 cr.)
REL 3500 Shared Sages in Sacred Scriptures: An Interreligious Exploration (4 cr.)
REL 3110 Judaism (4 cr.)
REL 3120 Islam (4 cr.)
REL 3130 Buddhism (4 cr.)
REL 3150 The Sikhs (4 cr.)

Category II (8 cr.)
REL 2000 History of Christian Thought (4 cr.)
REL 3100 Judaism (4 cr.)
REL 3110 Hinduism (4 cr.)
REL 3120 Islam (4 cr.)
REL 3130 Buddhism (4 cr.)
REL 3150 The Sikhs (4 cr.)

Category III (4 cr.)
REL 3080 Practicum in Religion (4 cr.)
REL 4000 Senior Seminar in Religion (4 cr.)

Honors in the Major
Please see department chair for details. Basic requirements are listed under All-College Programs in the catalog.

REL 2010

Jewish Bible-Old Testament (REL)

4cr
Concentrating on a representative sampling of texts from the Torah (Law), Prophets, and Writings, students will be introduced to the current methods of biblical studies. Attention will be directed to the historical periods in which this literature developed and to the basic theological concepts in the literature. Students will also become acquainted with the history of Israel, prominent Hebrew leaders, covenants, laws, and worship practices of Hebrew life.

REL 2020

The Gospels (REL)

4cr
Concentrating on the New Testament Gospels (Matthew, Mark, Luke, and John), students will be introduced to the basic methods of biblical studies. Specifically, students will examine the particular historical, theological, and literary emphasis of each biblical author in light of modern biblical research.

REL 2030

The Letters of the New Testament (REL)

4cr
Concentrating on the letters of the New Testament (e.g., Romans, Galatians, Ephesians), students will be introduced to the basic methods of biblical studies to examine the theological, historical, and literary questions raised by each letter. Careful attention will be given to matters of structure and authorship, as well as to the information contained in these letters about the early Christian communities.
REL 2040

Christian Spirituality (REL)

4cr
An in-depth exploration of Christian spirituality, or how ardent Christians throughout history have variously understood and sought a relationship with their God. Inquiry into the writings and activities of the earliest desert-dwelling monastic is followed by readings from such great mystics of the Middle Ages as Teresa of Avila, Meister Eckhart, Julian of Norwich, and John of the Cross. These are supplemented by the works of contemporary advocates of the inner life, including Thomas Greene, Henri Nouwen, and Thomas Merton. Literature study is balanced by practical exploration of Christian and other forms of prayer and meditation, and with dialogue in religious communities with monks and nuns who have elected a contemplative lifestyle.

REL 2050

Shamanism (REL)

4cr
This course will examine the variety of religious experiences, rituals, and belief systems commonly referred to as shamanism. The course will look at these phenomena across history and geographic boundaries. Close attention will be paid to the particular historical and political contexts within which these various experiences have developed. Prerequisite: None

REL 2070

Understandings of Love (REL)

4cr
The course is a study of understandings of love, expressions of love, and failures to love in the light of biblical, Christian, Jewish, and Muslim traditions, and in the light of contemporary experience. Special attention is given to exploring the dynamics of liking, romantically loving, romance, sexuality, intimacy, and mature, disciplined love. The course aims at opening participants to the many rewards awaiting persons, couples, families, and communities that cultivate an understanding and observance of the distinction between love as romance and love as disciplined intervention to foster the welfare of another. This is achieved through reading, analysis, and debate of several case studies using a collection of diverse interpretive models.

REL 2200

Faith, Love, and Ethics (REL)

4cr
Students will concentrate on the nature and bases of ethics and morality as informed by the Bible, Christian theology, and tradition. Special attention will be given to specific issues such as human sexuality, divorce, war and peace, personal and corporate responsibility, poverty, and world hunger.

REL 2220

Jesus Beyond Christianity (REL)

4cr
This course explores the figure of Jesus on the frontier between Christianity and other world religions. It pursues this topic comparatively examining the images of Jesus (Christologies) of both Christians and non-Christians, particularly the views of Jesus in Judaism, Islam, Hinduism, Confucianism, and Buddhism. Prerequisite: REL 1000

REL 2300

Issues in Living and Dying (REL)

4cr
Students will concentrate on concepts and issues related to illness, dying, death, and grief. Special attention will be given to issues such as definitions of death, attitudes toward death, rights and wishes of the dying, forms of euthanasia, views of suffering and death, funeral packages, and the grief process. A particular effort will be made to enable students to see the issues in the light of Christian understanding and to help students arrive at their own positions.

REL 2700

Research Methods Experience

1cr
An intensified research experience to be carried out in conjunction with one of the major's core area classes, under the supervision of that course's primary instructor. This will focus on learning to distinguish and evaluate primary and secondary sources, and on learning and using appropriate theoretical methods for that particular topic. Prerequisite: REL 1000
REL 3010

Post-Exilic Judaism (REL)

4cr
Concentrating on the period from the end of the Babylonian exile to the first century of the Common Era (c. 500 BCE-100 CE), students will explore the various ways Judaism evolved into its present "rabbinic" form, and simultaneously unfolded in other diverse ways. Students will explore such topics as Messianic expectations, apocalyptic Judaism, the Dead Sea Scrolls, Philo, the expansion of the law, and the emergence of Christianity. This range of issues will focus students on that period of Israel's life not specifically covered by study of the biblical texts.

REL 3020

Women and the Bible (REL) (DIV)

4cr
This course is an opportunity to study the situation of women at the time of the biblical writings, to investigate evidence for how women were treated in the earliest Christian churches, and to take seriously the impact that the interpretation of biblical texts has had on women's social roles throughout history and in our own day.

REL 3030

Creation and Apocalypse: Explorations in Religion and Science (REL)

4cr
This course will look at themes of human origin and destruction as articulated in the Bible and related Jewish and Christian material. We will also consider how different views on creation and the end of the world have influenced theological beliefs, social issues, and scientific investigation throughout Western history, and in contemporary U.S. culture. Students will have the opportunity to analyze modern-day debates about creation, evolution, and the end of the world based on their interaction with these ancient texts and ideas.

REL 3040

Church History (REL)

4cr
A study of the Christian church from apostolic times to the present with special attention to the sociological, economic, psychological, and doctrinal factors in its development. While primary emphasis is placed on the Western European tradition, consideration is given to the worldwide development of Christianity. A background of world history or religion is beneficial.

REL 3060

Luther and the Reformation (REL)

4cr
Students will concentrate on the Reformation era and give special attention to the life and thought of Martin Luther and other reformers. Specific attention will be given to the Protestant and Roman Catholic Reformation and to the religious, political, intellectual, cultural, social, and economic influences and issues of the 16th century.

REL 3070

Religion in America (REL)

4cr
From the earliest explorers to the latest modern "cult," this course will consider the impact that religion has had on the United States, and the impact that the United States has had on religion. The focus in this historical survey will be on both large-scale movements or denominations and the personal experience of small groups and individual believers.

REL 3080

Practicum in Religion

4cr
The student is assigned to a congregational or other religiously affiliated service agency in order to practice leadership in several self-chosen areas of religious ministry. Students will meet regularly with their placement supervisor and will participate in classroom conferences with the professor and other students. Each student will submit complete reports of plans, activities, and complete supplemental readings. Prerequisite: REL 1000

REL 3090

African-American Religion (REL)

4cr
The experience of African slaves in North America - from the time of capture off the Guinea Coast of Africa to becoming American citizens - is one of the most intriguing phenomena in American history. This course examines the crucial and ambiguous role of religion in that transformation process. The major thesis of the course is that a proper understanding of African-American religion stems from knowledge of the African religious heritage of the slaves. Thus a large section of the course is devoted to the study of African traditional religion. The mutual impact of Christianity and African traditional religion in the context of North American slavery also receives substantial attention.

REL 3100

Judaism (REL)

4cr
This course is an introduction to the self-definition of Judaism. It will analyze Judaism by examining such central concepts as God, Torah, and Israel. This central self-definition will then be tested by means of close readings of representative texts, and by investigating the range of Jewish history. The course will also examine significant events that shaped 20th century Judaism, including the creation of the State of Israel, the Holocaust, and modern American Jewish movements.
REL 3110

Hinduism (REL)
4cr
This course will provide an in-depth introduction to those social, philosophical, and religious phenomena that western observers have called Hinduism. The first part of the course will focus on religious texts, as we explore the roots of the tradition and the flowering of the devotional movement. The latter part of the course will focus more on modern Hindu life in an attempt to give some appreciation of its religious quality. This process will provide some opportunity to reflect on the nature and meaning of religious life, and to consider the ways in which the faith of these men and women can inform our own lives.

REL 3120

Islam (REL)
4cr
This course will provide an in-depth introduction to the world of Islam, the most recent of the great faiths tracing its descent from the prophet Abraham. The beginning of the course will examine the roots and development of Islam, and the gradual growth of Islamic institutions. The latter part of the course will focus on modern Muslim life, partly on its individual dimensions, in an effort to convey some appreciation for its religious quality, and to consider the ways in which the faith of these men and women can inform our own lives; but more pointedly on the political influence of Islam, and the ways in which growth of Islamic revivalism has shaped and continues to shape the world in which we live.

REL 3130

Buddhism (REL)
4cr
An intensive look at the world's oldest missionary religion, from its origin in the Ganges basin in 500 BCE to its contemporary manifestations. The course's primary emphasis will be on the historical development of the tradition, and the ways that its message has been transformed through the influence of different cultures, including the United States. An important part of this will be closely examining the Buddhist way of life throughout the centuries, and the ways in which this ancient message is still relevant in the modern world.

REL 3140

East Asian Religions (REL)
4cr
An intensive look at religion in East Asia, focusing both on the region's indigenous religious traditions - Confucianism, Daoism, and Shinto - as well as Buddhism, its best-known and most successful transplant. The primary emphasis will be on the historical development of these traditions, their mutual influence on one another, and the way that their values have shaped and continue to shape the cultures in which they appear. This process will provide some opportunity to reflect on the nature and meaning of religious life, and to consider the ways in which the faith of these men and women can inform our own lives.

REL 3150

The Sikhs (REL)
4cr
This course will trace the history and development of the Sikh religious community. The early part of the course will focus on its origins in the Punjab; the social, political, and religious forces shaping its development in the milieu; and the community's evolution over time. The course will then examine 19th and 20th century Sikh efforts to stress their identity as a distinct religious community, both inside and outside of India. Finally, the course will look at contemporary Sikh piety and practice in an effort to convey some appreciation for its religious message, and to consider the ways in which Sikh faith and concerns can illuminate and inform our own.

REL 3250

Field Archaeology (REL)(TRIP)
4cr
Students gain archaeological experience in the field with an orientation that focuses on the period(s) of the site, its history, its ancient context, and so forth.
Prerequisite: Instructor permission
Summer

REL 3270

Religion and Politics in the United States (REL)
4cr
This course examines legal, political, historical, and theoretical aspects of the relationship between religion and politics in the United States. Works of political and social theory and important constitutional law cases will be used to explore the liberal, democratic understanding of religion's place in politics. The American approach will be compared with that found in several other countries. Specific topics covered include the ?secularization thesis? (and its critics), the role of the ?religious right,? the adoption of civil rights/anti-discrimination tactics by religious groups, and controversies over gay rights.
Prerequisite: REL 1000
REL 3300

Theologies of Liberation (REL)

4cr
Exploration of the historical roots, characteristics, methods, central themes, and current expressions of liberation theology. After an initial consideration of the origins and development of liberation theology in Latin America and the second half of the 20th century, the course will turn to the various currents of liberation theology that have emerged in different contexts across the globe, particularly how representatives of those theologies use Christian (and other) traditions to understand and respond to historical contexts and experiences of oppression.
Prerequisite: REL 1000

REL 3310

Greek Religions (REL)

4cr
Like most ancient peoples, the Greeks believed that a pantheon of heavenly, sublunar, and subterranean divinities controlled or supervised every detail of life on earth, and they often went to great extremes to appease certain of these gods and goddesses. In this course we will consider the history and practice of Greek religion in the public sphere and the relationship between religious practices, rites, and beliefs, as well as the rich body of Greek myth.
Prerequisite: REL 1000 or consent of instructor

REL 3320

Roman Religions (REL)

4cr
Like most ancient peoples, the Romans believed that a pantheon of heavenly, sublunar, and subterranean divinities controlled every detail of life on earth, and they often went to great extremes to appease certain of these gods and goddesses. In this course we will consider the history and practice of Roman religion in both the public and private spheres, including Roman mystery religions. We also will discuss how Romans, particularly the elite, reacted to new and different religious cults and how they wove religious practices into every aspect of ancient Roman life.
Prerequisite: REL 1000 or consent of instructor

REL 3350

Religion and Society (REL)

4cr
Students will examine various perspectives on the relationship between religion and society. This study will encourage students to explore such diverse themes as the relationship of religion and the state, national, and global economic structures; ethics; countercultural religious movements; and the religious principles that may undergird a social matrix. Students will write a series of analytical essays, applying some of the religious principles encountered to the analysis of political, social, or economic issues.

REL 3350

Religion and Society in Modern India (REL)

4cr
Selected topics illustrating the mutual involvement of religion and society in India since the 16th century. Major themes will include Hindu devotional movements, the rise and development of the Sikhs, Hindu reform movements, Islamic self-definition, the rise of nationalistic (or independence) movements in each of these three groups, and responses to the pressures of globalization.
Prerequisite: REL 1000

REL 3370

Religion in Africa (REL)

4cr
An examination of the foundations of African religious thought via the indigenous religious heritage of select (sub-Saharan) African people. Special attention to the historical interaction with Christianity and Islam, and the role of religion in post-colonial African societies.
Prerequisite: REL 1000

REL 3400

Biblical Images of Christ (REL)

4cr
The Christologies of the New Testament will be examined both by investigating their background in the history of religions and by analyzing the images of Christ presented in various documents of the New Testament (e.g., Mark, John, Paul, Hebrews). Specific attention will be given to Christological titles and to the pre-Christian figures with whom Jesus is identified.

REL 3500

Shared Sages in Sacred Scriptures: An Interreligious Exploration (REL)

4cr
The traditions of Judaism, Christianity, and Islam share accounts about prominent figures and have significantly different interpretations of what they share. This course will examine the Jewish, Christian, and Muslim sacred scriptures through a comparative reading of shared key personalities. Similarities and differences of interpretation will be analyzed with reference to historical and modern forms of analysis of texts, special emphasis being on developing mutual understanding and cooperation between the religious traditions. The shared key persons include but will not necessarily be limited to Adam, Noah, Abraham, Joseph, Moses, Solomon, Mary, and Jesus.
Prerequisite: REL 1000
Social Work

REL 3510

Christians and Muslims: Conflict vs. Dialogue (REL)

4cr

Christians and Muslims have been living together, and actively engaged with each other, for over 1400 years. Despite sharing common beliefs such as faith in one Creator, Jesus as the Messiah, and the Day of Judgment, relations between these two communities have often (though not always) been marked by conflict and confrontation. The course examines this often-troubled history of Christian-Muslim dialogue to illuminate the two communities' current relationship.

Prerequisite: REL 1000

REL 3700

The Dead Sea Scrolls (REL)

4cr

Through a careful examination of some of the texts discovered at Qumran on the Dead Sea, students will investigate the history and theology of the Jewish sect known as the Essenes. This investigation will include an examination of the archaeological evidence uncovered at the site as well as an analysis of the relationship of this community with other contemporary Jewish sects (the Pharisees and the Sadducees). In addition, students will examine possible points of contact between the Essenes and early Christian communities.

REL 4000

Senior Seminar in Religion

4cr

The Senior Seminar is taught and directed by one member of the department with the assistance and participation of other members. The seminar will lead the student toward the completion of the Senior Project, which will be determined by the student and the directing professor.

Social Work

The undergraduate major in social work prepares students for beginning generalist social work practice and is fully accredited by the Council on Social Work Education (CSWE).

It is very important that all transfer students see the department chair immediately upon acceptance to Carthage. The Social Work Department does not offer course credit for life experience or previous work experience.

Admission to Social Work Program

Students must be an approved social work major before enrolling in courses above the 2600 level. The admissions process is as follows:

1. Students enroll in SWK 1300 and pass this course with a grade of C or better.
2. Students enroll in SWK 2400 and, during the same semester, complete an application for the social work major as a part of this course. Students must pass SWK 2400 with a grade of C- or better to be formally admitted into the social work major.

Once students are formally admitted to the social work major:

1. Students must maintain a cumulative GPA of 2.0 on a 4.0 scale at the time of admission and throughout their academic career.
2. In addition, students must earn a C- or better in all social work courses in order to remain in the major.
3. Juniors are required to attend 2 pre-internship meetings with the director of field education during their Junior J-Term session. These meetings will not conflict with J-Term course schedules.
4. In addition to completing the pre-internship meetings, students must be approved by the department faculty to enter into senior-level courses and senior-level field placements.
5. To enroll in senior classes, students must demonstrate social work competencies, skills, values, and ethics in supervisory practice and academic settings. Academic and nonacademic performance requirements are defined on the social work website. Nonacademic standards measure a student’s “likely performance as a social work generalist practitioner.” Termination from the program is based on the student’s failure to demonstrate the social work competencies as outlined by the Council of Social Work Education (CSWE), and academic/nonacademic behavior consistent with the National Association of Social Workers (NASW) Code of Ethics.

Social Work Major

The social work major consists of 11 social work courses (44 credits) and four supporting courses (16 credits):

- SWK 1300 Introduction to Social Justice and Social Welfare (4 cr.)
- SWK 2400 Human Behavior in the Social Environment (4 cr.)
- SWK 2600 Ethics and Leadership in a Multicultural Society (4 cr.)
- SWK 3000 Social Welfare Research (4 cr.)
- SWK 3100 Social Welfare Policy Analysis (4 cr.)
- SWK 3300 Introduction to Social Work Practice (4 cr.)
- SWK 4200 Advanced Social Work Practice (4 cr.)
- SWK 4300 Integrative Seminar (4 cr.)
- SWK 4610 Social Work Field Placement I (4 cr.)
- SWK 4620 Social Work Field Placement II (4 cr.)

Choice of one:

- SWK 2650 Wounded Hearts: Interdisciplinary Exploration of Trauma and Recovery (4 cr.)
- SWK 2700 Trauma Across Social Context (4 cr.)

Three prerequisite courses to be completed by end of sophomore year:

- WMG Any course offering in Women’s and Gender Studies (4 cr.)
- POL 2400 American Government: National, State, and Local (4 cr.)
- SOC 1000 Introduction to Sociology (4 cr.)

Choice of one additional supporting course:

- ECN 1030 Issues in Economics (4 cr.)
- ECN 3250 Economics of Poverty and Income Inequality (4 cr.)
- POL 3450/WMG 3500 Global Poverty (4 cr.)

Senior Thesis

All students will complete a senior project in SWK 4300.

Honors in the Major

Please see department chair for details.

Social Justice Minor

24 credits

The social justice minor is designed for non-
social work majors who want to learn how to critically examine issues of equity and access in terms of “economic, political and social rights” within a wide range of disciplines. Through this minor, students will examine the complex relationships that exist between social justice and broader cultural, economic, educational, social, environmental, and political structures, policies, and practices. By providing an opportunity for students from any major to examine their work through a social justice lens, they can bring great benefits to their communities. We imagine business leaders, health care providers, scientists, musicians, artists, and entrepreneurs grounding their work in an overall commitment to leadership in the development of more socially just communities.

Required courses (16 credits)

SWK 1300 Introduction to Social Justice and Social Welfare
SWK 2400 Human Behavior in the Social Environment
SWK 2600 Ethics and Leadership in a Multicultural Society
SWK 3100 Social Welfare Policy Analysis

Students must select 2 courses (8 credits) from any discipline that includes a focus on social justice. Students will work with the Social Work Department chair to receive approval for elective courses that have a focus on social justice. This is not a complete or exhaustive list, but rather a sampling of possible electives that have a focus on social justice:

CDM 2400 Gender Communications
EDU 2340 Foundations in Urban Education
EDU 4340 Urban and Cultural Leadership
ENG 3030 Major Texts in Critical Theory
GNR 200P Challenging White Supremacy and Practicing Anti-Racism
GNR 200R Legacies of Race and Racism in the U.S.
POL 3110 Women’s and Gender Studies Theory
POL 3450 Global Poverty
POL 3620 Environmental Politics

PYC 3460 Psychology of Women and Gender
SOC 2530 Race and Racisms
SOC/WMG 2770 Sex, Gender, and Sexuality in a Diverse World
SOC/WMG 2800 Decoding Disney
SWK 2200 Child Welfare Policy and Practice
SWK/WMG 2210 Family Violence
SWK 2500 Engaging Multicultural Students and Family
SWK 2650 Wounded Hearts: Interdisciplinary Study of Trauma and Recovery
SWK 2700 Trauma Across Social Contexts
SWK 400* Special Topics in Social Work
WMG 3010 Feminist Theory
WMG 4200 The Gendering of Leadership

SWK 1300 Introduction to Social Justice and Social Welfare
4cr
This course introduces students to foundational critical theories used in deconstructing one's own identity, privilege, and oppression. Utilizing these critical theories, students will examine the lived experiences of people with intersecting identities and identify how policies, laws, and culture impact different groups. Using a historical lens, this course examines how social injustices were created and perpetuated within the U.S. By understanding historical context, students will critically evaluate systems and institutions that maintain inequities and discrimination. Students will engage in self-awareness, building critical cultural consciousness for social change, develop culturally sensitive practices to manage bias and privilege, and challenge institutionalized discrimination within their fields of study.

Fall/Spring

SWK 2200 Child Welfare Policy and Practice
4cr
This course is designed to provide an overview of current issues in child welfare and will explore practice and policy interventions in the child welfare settings. Students will examine the pillars of permanency, safety, and well-being in the child welfare arena and will develop a foundational understanding of issues related to race, age, gender, culture and socio-economic status.

Fall

SWK 2210 Family Violence
4cr
This course addresses concerns about violence against women, specifically domestic violence. The course will discuss historical and cultural factors, feminist origins of the domestic violence movement, dating violence, dynamics of captivity, trauma and recovery, child witnesses, human trafficking, offender issues, treatment, prevention and social change approaches, and nonviolent men's movements.

Spring
SWK 2400

Human Behavior in the Social Environment (SOC)

4cr
This course will focus on human development and behavior across the life span with a particular focus on how people interact with, adapt to, and are constrained by the world around them. Specifically, we will examine the impact of systems and structures of oppression on human development and well-being. Using an anti-oppression lens, this course focuses on bodies of knowledge and theory that help to explain the intimate and extended contexts that shape human development and the complex interactions between person and context. Content on individuals, families, groups, organizations, communities, culture, social structure, and political and economic forces will be covered. Prerequisites for Social Work majors and Social Justice minor: SWK 1300 and SOC 1000 or department approval
Prerequisite for all other majors: SOC 1000 or department approval
Spring

SWK 2500

Engaging Multicultural Students and Families

4cr
This course will examine the relationship between schools, families, and communities with a particular emphasis on human diversity in urban environments. Students will explore the diverse range of backgrounds of children who comprise today's school population, family structures from yesterday to today, schools as social institutions, and schools in their broader contexts, and examine methods, policies, and practices that would lead to improved school, family, and community relationships.
Fall

SWK 2600

Ethics and Leadership in a Multicultural Society

4cr
This course is designed for students coming from any major at the College and examines ethics and leadership from a wide range of professional and disciplinary perspectives. Students will learn about various ethical frameworks, and multicultural understandings of ethics and leadership. Students will apply these ethical frameworks to contemporary case studies as a way to develop critical ethical thinking skills, particularly as it relates to socially responsible leadership in our contemporary global society.
Prerequisites for Social Work major and Social Justice minors: SWK 2400 or department approval
Prerequisite for others: Sophomore standing

SWK 2650

Wounded Hearts: Interdisciplinary Exploration of Trauma and Recovery

4cr
The understanding and interest in the study of trauma has increased dramatically in the past twenty years. The impact of trauma has been shown to affect social institutions including hospitals, schools, criminal justice systems, local and national economics and more. The effective recovery from trauma requires an understanding of neuroscience, genetics, psychology, sociology and the arts. This course offers a unique opportunity to study the subject of psychological trauma through an interdisciplinary lens. This course is distinct from other trauma courses offered at the college in that this course focused on the breadth of trauma's connection to other disciplines as opposed to the depth of study offered by one disciplinary lens.

SWK 2700

Trauma Across Social Contexts (DIV)

4cr
Why are so many community leaders talking about trauma? Research is growing on the impact of traumatic stress on the brain, on communities, and on social institutions. This course is intended to broadly cover the implications of trauma across social contexts so that cross-disciplinary learners can approach their clients, patients, students, etc. in a trauma-informed manner.
Prerequisite: Sophomore standing

SWK 3000

Social Welfare Research (SOC)

4cr
An introduction to the methods of social science research. Emphasis on research consumership and on practical experience in gathering, organizing, and analyzing data. Must be taken with SWK 4200 and SWK 4610.
Prerequisite: SWK 3300
Fall

SWK 3100

Social Welfare Policy Analysis (SOC) (DIV)

4cr
Study of the past, present, and possible future of social welfare programming with an emphasis on the general process of policy making, including the interaction of social, economic, and political influences. The course will include critical analysis of several specific social welfare issues and problems. Social Work majors should take this course in the spring of Junior year.
Prerequisite for Social Work majors and Social Justice minors: SWK 2600
Prerequisite for others: Sophomore standing or instructor permission
Spring
SWK 3300

Introduction to Social Work Practice
4cr
This is the first course in the generalist practice sequence required for the social work major and is designed to provide opportunities for students to apply and integrate previous course learning in the development of their social work practice skills. This course will provide social work majors with opportunities to deepen the development of their social work practice by using bodies of knowledge from anti-oppressive, critical social work and ethical decision-making frameworks. Students will develop more complex and theory-informed practice applications with individuals, groups, and families. Requires 52 hours of observational pre-field experience. Prerequisite: SWK 2600
Spring

SWK 4200

Advanced Social Work Practice
4cr
Advanced study of generalist social work intervention with agencies and community systems with emphasis on the acquisition of values, knowledge, and practice skills. Requires 52 hours of volunteer field experience. Must be taken with SWK 3000 and SWK 4610. Prerequisite: SWK 3300
Fall

SWK 4610

Social Work Field Placement I
4cr
Field instruction under the supervision of an MSW in a social service agency for 225 hours. Application of generalist skills to provide services to individuals, groups, families, and communities. Must take with SWK 3000 and SWK 4200.
Fall

SWK 4620

Social Work Field Placement II
4cr
Field instruction under the supervision of an MSW in a social service agency for 225 hours. Application of generalist skills to provide services to individuals, groups, families, and communities. Must be taken with SWK 4300.
Spring

Sociology

Sociology, which is the science of society, examines social patterns and social change wherever found: in small groups; in a range of political, economic, and cultural organizations; in whole societies; and in world systems. It liberates our thinking from a host of social myths. It reveals the social forces constraining our lives and discloses the critical play of economic, racial, and gender inequalities. The sociological imagination illuminates the roots of social problems and devises potential remedies. It probes the links between historical eras and personal biographies, between social structures and private lives. This modern mode of thought is useful in diverse walks of life, which benefit from an informed, critical view of the society’s master, middle-range, and minor institutions.

Sociology Major (36 credits)
The sociology major consists of 36 credit hours including a 4-credit senior seminar. A total of five courses (20 cr.) constitute the core. These courses include the following:

SOC 1000 Introduction to Sociology (4 cr.)
SOC/CRJ/WMG Race and Racisms (4 cr.) 2530
SOC 3020 Sociological Research Methods (4 cr.)
SOC 3250 Sociological Inquiry and Practice (4 cr.)
SOC 4990 Senior Seminar in Sociology (4 cr.) An additional 16 hours of sociology electives are required for the major. A minimum of 12 hours must be completed by taking any course offered in sociology with a 2000 or higher designation that is not required for the core. Frequently offered courses include the following:

SOC 2010 Social Problems (4 cr.)
SOC 2020 Cultural Anthropology (4 cr.)
SOC 200*/400*Topics in Sociology (4 cr.)
SOC/CRJ 2270 Juvenile Delinquency (4 cr.)
SOC 2770 Sex, Gender, and Sexuality (4 cr.) in a Diverse World (4 cr.)
SOC/SWK/WMG 2800 Decoding Disney (4 cr.)
SOC/CRJ 3025 Social Problems in the City (4 cr.)
SOC/WMG 3030 Women of Africa (4 cr.)
SOC/WMG 3040 African Transitions (4 cr.)
SOC/CRJ 3035 Wrongful Convictions (4 cr.)
SOC 3110 Deviance (4 cr.)
SOC/CRJ 3120 Crimes of the Powerful (4 cr.)
SOC/POL 3450 Global Poverty (4 cr.)
SOC 3500 Field Placement (4 cr.)
SOC 3550 Internship (4 cr.)

Finally, students must take ONE of the following courses outside the Sociology Department:

SOC 2000 Comparative Systems (4 cr.)
SOC 2010 Social Problems (4 cr.)
SOC 2020 Cultural Anthropology (4 cr.)
SOC 200*/400*Topics in Sociology (4 cr.)
SOC 2770 Sex, Gender, and Sexuality (4 cr.) in a Diverse World (4 cr.)
SOC/SWK/WMG 2800 Decoding Disney (4 cr.)
SOC/CRJ 3025 Social Problems in the City (4 cr.)
SOC/WMG 3030 Women of Africa (4 cr.)
SOC/WMG 3040 African Transitions (4 cr.)
SOC/CRJ 3035 Wrongful Convictions (4 cr.)
SOC 3110 Deviance (4 cr.)
SOC/CRJ 3120 Crimes of the Powerful (4 cr.)
SOC/POL 3450 Global Poverty (4 cr.)
SOC 3500 Field Placement (4 cr.)
SOC 3550 Internship (4 cr.)

Finally, students must take ONE of the following courses outside the Sociology Department:
SOC 2010  
Social Problems (SOC)  
4 cr  
Studies the social structural bases of current social problems with a particular focus on the inequities of socioeconomic condition, race, and gender. Students develop transnational comparisons concerning such areas of social life as employment, the workplace, health care, energy use, environmental imbalances, and crime. Analyzes policies designed to remedy specific problems.  
Fall/Spring

SOC 2210  
Family Violence  
4 cr  
This course is an overview of family violence. Particular attention will be given to groups that have been disproportionately affected by family violence, namely women, older adults, and children. Emerging knowledge related to violence in gay and lesbian families, minority families, and special populations will be included.  
Spring

SOC 2270  
Juvenile Delinquency  
4 cr  
Studies causes of unconventional youthful behavior, societal reactions to it, specialized agencies, treatment strategies, policy proposals for prevention of juvenile delinquency, and the juvenile justice system with its competing functions and personnel.  
Prerequisite: SOC 1000  
Fall

SOC 2520  
Marriage and the Family  
4 cr  
Traces the development of the modern American family as a social institution. Stresses the values and problems of the modern family in comparative perspective.  
Prerequisite: SOC 1000

SOC 2530  
Race and Racisms (DIV)  
4 cr  
Examines the sociological, economic, and psychological nature of the relationships between racial and ethnic groups with differential access to political and economic power. Focus is on the United States, with some discussion of racism, cultural discrimination, and sexism in other parts of the world.  
Prerequisite: SOC 1000 or CRJ 1000  
Fall/Spring
SOC 2770

Sex, Gender, and Sexuality in a Diverse World (SOC) (DIV)

4cr
This course examines the sociological perspectives of sex, gender, and sexuality, while incorporating interdisciplinary texts when necessary. The course will locate sex, gender, and sexuality within contemporary sociohistorical context; examine practices and relationships of power; and analyze both institutional and interpersonal forms of inequality based on sex, gender, and sexuality. Prerequisite: SOC 1000 or WMG 1100

Spring

SOC 3020

Sociological Research Methods (SOC)

4cr
Studies the sociological methods of research, including their relation to social theory. Examines the main types of research designs, research ethics, the writing of reports, and the evaluation of research information. Prerequisite: SOC 1000

Fall

SOC 3025

Social Problems in the City

4cr
This course presumes social problems in the city as products of oppression, marginalization, and social control. Students will learn how economic forces and social structures such as race, class and government policies influence how cities are socially and spatially organized, and how that has changed over time. Students cover topics like the Great Migration, systemic racism, policing, inequality, poverty, segregation, and joblessness. We will also discuss the interrelations between different social issues and the prospects for social change. Prerequisite: CRJ 1000 or instructor permission

SOC 3030

Women of Africa

4cr
The study of the countries in Africa has frequently focused on public events: colonialism, political change, war, government actions, and the formal economy. In recent years, researchers have begun to explore in more depth how women's lives are impacted by these events, and how women in Africa are active participants in the various sectors of their societies. This course will look at life in various African countries through the eyes of women and will examine how women of Africa actively engage in and are affected by political, cultural, and economic events both domestically and internationally. Themes will include human rights issues of women, the impact of modernity and tradition on women's lives, images of appropriate female behavior, economic hardship and survival techniques, cultural issues surrounding marriage and motherhood, and women's participation in the public spheres of their countries.

SOC 3040

African Transitions

4cr
African countries and peoples have often been examined through the lenses of European and North American cultures. These analyses have sometimes been helpful and other times have resulted in inaccurate portrayals of African life and people. This course uses texts written predominantly by African authors from various parts of the continent to provide African perspectives of transitions that have occurred on the continent. These transitions include the transition from traditional life to colonial rule, the shift to independence, attempts at democratization, adaptations rural Africans make when moving to urban areas, and the clashes between Western and African cultures that continue today. Using themes of governance, community, and reference groups to examine different African cultures, the course incorporates theories and concepts from the disciplines of political science and sociology.

SOC 3035

Wrongful Convictions

4cr
This course is intended to help students understand relevant research on the causes and effects of wrongful convictions. The course draws upon research across several academic disciplines like sociology, psychological sciences, legal studies, and criminology in order to understand wrongful convictions as social processes that occur at different levels of social reality (i.e. individual to systemic), and several points within criminal justice systems (from law-making to conviction). Prerequisite: CRJ 1000 or instructor permission

SOC 3110

Deviance

4cr
This course examines deviance as a sociological concept. Students will gain a theoretical understanding of the ways in which deviance has been defined historically, as well as contemporary definitions. Societal reactions, ranging from informal social control to formal control, are also examined. Prerequisite: SOC 1000 or CRJ 1000

SOC 3120

Crimes of the Powerful

4cr
This course explores the social and institutional contexts of various forms of corporate and governmental deviance and/or crime. A range of cases that constitute elite deviance and/or criminal activity will be examined (e.g., insider trading, political corruption, corporate harm caused to consumers and the environment). Each case will be discussed within its larger political, social, and historical context. Prerequisite: SOC 1000 or CRJ 1000
**SOC 3240**

**Logic of Sociological Inquiry**

4cr
This course provides the sociology major with an intermediate overview of sociological theories and research methods. Students will read original research monographs and journal articles representing both historical and contemporary research and theory within the discipline of sociology. Finally, the history of the discipline in relation to other social and natural sciences will be explored (i.e., how are the ways in which a sociologist understands the world different or similar to those in other disciplines?).
Prerequisites: SOC 1000 and sophomore or higher standing
Spring

**SOC 3250**

**Sociological Inquiry and Practice**

4cr
This course is designed to provide sociology majors and minors with advanced sociology research and analysis skills. Students will read and analyze empirical research articles, original theoretical texts, and examine social issues/problems using a critical sociological lens.
Prerequisite: SOC 1000 or instructor permission

**SOC 3450**

**Global Poverty**

4cr
While the focus of this course will be theoretical, the class will begin by introducing some general background information on global stratification. We will examine the geography of stratification (i.e., which countries are rich, which countries are poor, etc.). The basic demographics of poverty will also be explored. Particular attention will be paid to infant mortality rates, life expectancy rates, health care quality and access, education, the status of women, and the availability of foreign and domestic assistance. Finally, we will analyze various concepts of poverty, measures of poverty, and different kinds of stratification systems.

**SOC 3900**

**Data Analysis**

4cr
Quantitative data analysis is an integral part of the work of sociologists. In this course, students will learn how to use SPSS to analyze data from various secondary data sources. Students will learn common statistical analysis used in sociology, data base management, and how to summarize and interpret statistical outcomes.
Prerequisite: SOC 3020
Spring

**SOC 4010**

**Social Theory Seminar (SOC)**

4cr
Investigates the development of the sociological understanding of modern societies. Focuses on major classical and contemporary, European and American social theories. Stresses the application of theoretical concepts to contemporary social realities.
Prerequisites: SOC 1000 and junior standing
Fall

**SOC 4990**

**Senior Seminar in Sociology**

4cr
The capstone experience for all majors in the department, the primary emphasis of this course will be writing the Senior Thesis. An oral presentation of the thesis is required for this course.
Prerequisites: Senior standing and SOC 3240, SOC 3020, and SOC 4010
Spring

**Theatre**

The Carthage Theatre Department guides, encourages, and cultivates students as they flourish into mature, well-rounded, and capable theatre artists and critics. It seeks to produce excellent, diverse, innovative theatre that educates, challenges, entertains, and addresses the needs of the full Carthage community. The Theatre Department’s curriculum and its theatre and dance productions are vibrant components of Carthage’s liberal arts curriculum. Through its productions and general education offerings, the program helps students from all disciplines to become sophisticated audience members and skillful communicators. Theatre forms a lens through which to examine all areas of human behavior, including religion, politics, history, science, psychology, and art.

The department offers several majors in theatre, an interdisciplinary music theatre emphasis (in conjunction with the Music Department), a theatre minor, and a dance minor. Additionally, Carthage offers certification in theatre education.

**Theatre Major Admission Policy**

An audition and interview or a portfolio presentation and interview before members of the theatre faculty are required for entrance into any of the theatre majors. At the end of their sophomore year, all theatre majors are evaluated for junior standing. Students must have a GPA of 2.5 or better in their theatre major, demonstrate participation in and commitment to the curricular elements of the theatre program, and have fulfilled the necessary service requirements to the department. If this junior-standing jury is insufficient in any area, the faculty may choose to admit the student provisionally to junior standing in the major or advise the student to discontinue the theatre major.

Note: Theatre majors and minors who receive a theatre or dance scholarship will be required to fulfill additional sections of THR 0100.

**Theatre Major (44 cr.)**

**Core (20 cr.):**
- THR 2110 Acting I: Fundamentals of Acting (4 cr.)
- THR 2900 Play Reading and Analysis (4 cr.)
- THR 2910 Play Production I: Stagecraft (4 cr.)
- THR 2920 Play Production II: Costumes and Makeup (4 cr.)
- THR 4010 Senior Seminar in Theatre (4 cr.)
- THR 4990 Senior Thesis Completion (0 cr.)
- THR 0100 Theatre Service and Practice (two sections) (0 cr.)

**24 additional credits:**
Eight credits from the following courses:
- THR 3260 Premodern Theatre Survey (4 cr.)
- THR 3270 Classical Theatre Survey (4 cr.)
- THR 3280 Modern Theatre Survey (4 cr.)
- THR 3290 Contemporary Theatre Survey (4 cr.)

**Two credits from the following:**

166
Two credits from the following (any combination, repeatable):
- THR 0200 Applied Technical Production (1 cr.)
- THR 0300 Applied Acting and Directing (1 cr.)
- THR 1200 Advanced Theatre Lab (1 cr.)

Twelve additional THR credits at or above the 2000 level.

Teacher Licensure: Theatre

Students pursuing teacher licensure in theatre must declare a general theatre major and a secondary education minor, and fulfill all requirements for acceptance into the Teacher Education Program (TEP). In addition to fulfilling all secondary education minor requirements, the student must also take:
- THR 2180 Theatre for Children (4 cr.)
- THR 4200 Methods and Materials in Teaching Theatre (4 cr.)
- THR 4550 Directing (4 cr.)

Students should consult with their advisor on the exact sequence of courses.

Theatre Minor (24 cr.)

Core (8 cr.)
- THR 2110 Acting I: Fundamentals of Acting (4 cr.)
- THR 2900 Play Reading and Analysis (4 cr.)

Four credits from the following:
- THR 3260 Premodern Theatre Survey (4 cr.)
- THR 3270 Classical Theatre Survey (4 cr.)
- THR 3280 Modern Theatre Survey (4 cr.)
- THR 3290 Contemporary Theatre Survey (4 cr.)

Four credits from the following:
- THR 2910 Play Production I: Stagecraft (4 cr.)
- THR 2920 Play Production II: Costumes and Makeup (4 cr.)

And eight additional THR and/or DNC credits.

Theatre Major in Performance (52 cr.)

Core (20 cr.):
- THR 2110 Acting I: Fundamentals of Acting (4 cr.)
- THR 2900 Play Reading and Analysis (4 cr.)
- THR 2910 Play Production I: Stagecraft (4 cr.)
- THR 2920 Play Production II: Costumes and Makeup (4 cr.)
- THR 4010 Senior Seminar in Theatre (4 cr.)
- THR 4990 Senior Thesis Completion (0 cr.)
- THR 0100 Theatre Service and Practice (two sections) (0 cr.)

28 additional credits

Technical Direction (56 cr.)

Core (20 cr.):
- THR 2110 Acting I: Fundamentals of Acting (4 cr.)
- THR 2900 Play Reading and Analysis (4 cr.)
- THR 2910 Play Production I: Stagecraft (4 cr.)
- THR 2920 Play Production II: Costumes and Makeup (4 cr.)
- THR 4010 Senior Seminar in Theatre (4 cr.)
- THR 4990 Senior Thesis Completion (0 cr.)
- THR 0100 Theatre Service and Practice (two sections) (0 cr.)

28 additional credits

Technical Costume Design (56 cr.)

Core (20 cr.):
- THR 2110 Acting I: Fundamentals of Acting (4 cr.)
- THR 2900 Play Reading and Analysis (4 cr.)
- THR 2910 Play Production I: Stagecraft (4 cr.)
- THR 2920 Play Production II: Costumes and Makeup (4 cr.)
- THR 4010 Senior Seminar in Theatre (4 cr.)
- THR 4990 Senior Thesis Completion (0 cr.)
- THR 0100 Theatre Service and Practice (two sections) (0 cr.)

28 additional credits

Teacher Licensure: Theatre

Students pursuing teacher licensure in theatre must declare a general theatre major and a secondary education minor, and fulfill all requirements for acceptance into the Teacher Education Program (TEP). In addition to fulfilling all secondary education minor requirements, the student must also take:
- THR 2180 Theatre for Children (4 cr.)
- THR 4200 Methods and Materials in Teaching Theatre (4 cr.)
- THR 4550 Directing (4 cr.)

Students should consult with their advisor on the exact sequence of courses.

Theatre Minor (24 cr.)

Core (8 cr.)
- THR 2110 Acting I: Fundamentals of Acting (4 cr.)
- THR 2900 Play Reading and Analysis (4 cr.)

Four credits from the following:
- THR 3260 Premodern Theatre Survey (4 cr.)
- THR 3270 Classical Theatre Survey (4 cr.)
- THR 3280 Modern Theatre Survey (4 cr.)
- THR 3290 Contemporary Theatre Survey (4 cr.)

Four credits from the following:
- THR 2910 Play Production I: Stagecraft (4 cr.)
- THR 2920 Play Production II: Costumes and Makeup (4 cr.)

And eight additional THR and/or DNC credits.

Theatre Major in Performance (52 cr.)

Core (20 cr.):
- THR 2110 Acting I: Fundamentals of Acting (4 cr.)
- THR 2900 Play Reading and Analysis (4 cr.)
- THR 2910 Play Production I: Stagecraft (4 cr.)
- THR 2920 Play Production II: Costumes and Makeup (4 cr.)
- THR 4010 Senior Seminar in Theatre (4 cr.)
- THR 4990 Senior Thesis Completion (0 cr.)
- THR 0100 Theatre Service and Practice (two sections) (0 cr.)

28 additional credits

Technical Direction (56 cr.)

Core (20 cr.):
- THR 2110 Acting I: Fundamentals of Acting (4 cr.)
- THR 2900 Play Reading and Analysis (4 cr.)
- THR 2910 Play Production I: Stagecraft (4 cr.)
- THR 2920 Play Production II: Costumes and Makeup (4 cr.)
- THR 4010 Senior Seminar in Theatre (4 cr.)
- THR 4990 Senior Thesis Completion (0 cr.)
- THR 0100 Theatre Service and Practice (two sections) (0 cr.)

28 additional credits

Teacher Licensure: Theatre

Students pursuing teacher licensure in theatre must declare a general theatre major and a secondary education minor, and fulfill all requirements for acceptance into the Teacher Education Program (TEP). In addition to fulfilling all secondary education minor requirements, the student must also take:
- THR 2180 Theatre for Children (4 cr.)
- THR 4200 Methods and Materials in Teaching Theatre (4 cr.)
- THR 4550 Directing (4 cr.)

Students should consult with their advisor on the exact sequence of courses.

Theatre Minor (24 cr.)

Core (8 cr.)
- THR 2110 Acting I: Fundamentals of Acting (4 cr.)
- THR 2900 Play Reading and Analysis (4 cr.)

Four credits from the following:
- THR 3260 Premodern Theatre Survey (4 cr.)
- THR 3270 Classical Theatre Survey (4 cr.)
- THR 3280 Modern Theatre Survey (4 cr.)
- THR 3290 Contemporary Theatre Survey (4 cr.)

Four credits from the following:
- THR 2910 Play Production I: Stagecraft (4 cr.)
- THR 2920 Play Production II: Costumes and Makeup (4 cr.)

And eight additional THR and/or DNC credits.

Theatre Major in Performance (52 cr.)

Core (20 cr.):
- THR 2110 Acting I: Fundamentals of Acting (4 cr.)
- THR 2900 Play Reading and Analysis (4 cr.)
- THR 2910 Play Production I: Stagecraft (4 cr.)
- THR 2920 Play Production II: Costumes and Makeup (4 cr.)
- THR 4010 Senior Seminar in Theatre (4 cr.)
- THR 4990 Senior Thesis Completion (0 cr.)
- THR 0100 Theatre Service and Practice (two sections) (0 cr.)

28 additional credits

Technical Direction (56 cr.)

Core (20 cr.):
- THR 2110 Acting I: Fundamentals of Acting (4 cr.)
- THR 2900 Play Reading and Analysis (4 cr.)
- THR 2910 Play Production I: Stagecraft (4 cr.)
- THR 2920 Play Production II: Costumes and Makeup (4 cr.)
- THR 4010 Senior Seminar in Theatre (4 cr.)
- THR 4990 Senior Thesis Completion (0 cr.)
- THR 0100 Theatre Service and Practice (two sections) (0 cr.)

28 additional credits

Teacher Licensure: Theatre

Students pursuing teacher licensure in theatre must declare a general theatre major and a secondary education minor, and fulfill all requirements for acceptance into the Teacher Education Program (TEP). In addition to fulfilling all secondary education minor requirements, the student must also take:
- THR 2180 Theatre for Children (4 cr.)
- THR 4200 Methods and Materials in Teaching Theatre (4 cr.)
- THR 4550 Directing (4 cr.)

Students should consult with their advisor on the exact sequence of courses.

Theatre Minor (24 cr.)

Core (8 cr.)
- THR 2110 Acting I: Fundamentals of Acting (4 cr.)
- THR 2900 Play Reading and Analysis (4 cr.)

Four credits from the following:
- THR 3260 Premodern Theatre Survey (4 cr.)
- THR 3270 Classical Theatre Survey (4 cr.)
- THR 3280 Modern Theatre Survey (4 cr.)
- THR 3290 Contemporary Theatre Survey (4 cr.)

Four credits from the following:
- THR 2910 Play Production I: Stagecraft (4 cr.)
- THR 2920 Play Production II: Costumes and Makeup (4 cr.)

And eight additional THR and/or DNC credits.

Theatre Major in Performance (52 cr.)

Core (20 cr.):
- THR 2110 Acting I: Fundamentals of Acting (4 cr.)
- THR 2900 Play Reading and Analysis (4 cr.)
- THR 2910 Play Production I: Stagecraft (4 cr.)
- THR 2920 Play Production II: Costumes and Makeup (4 cr.)
- THR 4010 Senior Seminar in Theatre (4 cr.)
- THR 4990 Senior Thesis Completion (0 cr.)
- THR 0100 Theatre Service and Practice (two sections) (0 cr.)

28 additional credits
### Theatre

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>THR 0200</td>
<td>Applied Technical Production (two 1-credit sections)</td>
<td>(2 cr.)</td>
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<td>THR 1200</td>
<td>Advanced Theatre Lab (two 1-credit sections)</td>
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<td>THR 2950</td>
<td>Play Production V: Advanced Makeup Techniques</td>
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<td>THR 2960</td>
<td>Play Production VI: Draping and Pattermaking</td>
<td>(2 cr.)</td>
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<td>THR 3610</td>
<td>History of Clothing: Ancient Egypt to Modern</td>
<td>(4 cr.)</td>
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<td>THR 4610</td>
<td>Costume Design</td>
<td>(4 cr.)</td>
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<td>ART 1070</td>
<td>FOUNDATIONS, SURFACE: Images + Design</td>
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<td>FOUNDATIONS, MATERIAL: Objects + Spaces</td>
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<td>ART 2000</td>
<td>Drawing I</td>
<td>(4 cr.)</td>
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**Eight credits from the following:**

- THR 3260 Premodern Theatre Survey (4 cr.)
- THR 3270 Classical Theatre Survey (4 cr.)
- THR 3280 Modern Theatre Survey (4 cr.)
- THR 3290 Contemporary Theatre Survey (4 cr.)

**Technical Stage Management (52 cr.)**

**Core (20 cr.)**

- THR 2110 Acting I: Fundamentals of Acting (4 cr.)
- THR 2900 Play Reading and Analysis (4 cr.)
- THR 2910 Play Production I: Stagecraft (4 cr.)
- THR 2920 Play Production II: Costumes and Makeup (4 cr.)
- THR 4010 Senior Seminar in Theatre (4 cr.)
- THR 4990 Senior Thesis Completion (0 cr.)
- THR 0100 Theatre Service and Practice (two sections) (0 cr.)

**20 additional credits**

- THR 0200 Applied Technical Production (2 cr.)
- THR 1200 Advanced Theatre Lab (2 cr.)
- THR 3010 Stage Management (4 cr.)
- THR 4550 Directing (4 cr.)
- BUS 1110 Introduction to Business (4 cr.)
- CDM 1150 Human Communication (4 cr.)

**Choose four credits:**

- THR 400T Advanced Topic in Theatre (4 cr.)
- THR 2390 Theatrical Lighting and Sound (4 cr.)
- THR 2940 Play Production IV: Scenic Painting (2 cr.)
- THR 2950 Play Production V: Advanced Makeup Techniques (2 cr.)
- THR 2960 Play Production VI: Draping and Pattermaking (2 cr.)

### Dance Minor (24 cr.)

The dance minor consists of 6 credits of applied dance, 10 credits in foundations, and 8 additional credits in recommended complementary courses. All applied DNC courses are repeatable for credit. They all fulfill the college’s applied EXS requirement as well.

**Applied Dance (6 cr.):**

- DNC 1041 Applied Dance: Ballet I (1 cr.)
- DNC 1043 Applied Dance: Tap I (1 cr.)
- DNC 1044 Applied Dance: Jazz I (1 cr.)
- DNC 1047 Applied Dance: Modern I (1 cr.)
- DNC 1050 Pilates (1 cr.)
- DNC 2041 Applied Dance: Ballet II (1 cr.)
- DNC 2043 Applied Dance: Tap II (1 cr.)
- DNC 2044 Applied Dance: Jazz II (1 cr.)
- DNC 2047 Applied Dance: Modern II (1 cr.)
- DNC 2051 Applied Dance Styles (1 cr.)
- DNC 3041 Advanced Ballet (1 cr.)
- DNC 3044 Advanced Jazz (1 cr.)

**Foundation credits (10 cr.):**

- DNC 1120 Dance Theory and Practices (2 cr.)
- DNC 2060 Dance Theory and Composition (2 cr.)
- DNC 2070 Dance Choreography and Repertory (2 cr.)
- DNC 3050 Dance History (4 cr.)

**Eight additional credits required from the following:**

- DNC 200T Topics in Dance (4 cr.)
- BIO 1040 Human Anatomy and Physiology (4 cr.)
- MUS 1150 Exploring Music (4 cr.)

**Honors in the Major**

Please see department chair for details.

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### DNC 1041

**Applied Dance: Ballet I (PE)**

1cr

Beginning ballet instruction in fundamental movement including ballet positions and barre and center exercises. Open to all students. Fulfills general education requirement for Exercise and Sport Science experience and is a graded course.

Fall

### DNC 1043

**Applied Dance: Tap I (PE)**

1cr

Beginning tap dance skill in steps at the barre and on the floor. Open to all students. Fulfills general education requirement for Exercise and Sport Science experience and is a graded course.

Fall/Spring

### DNC 1044

**Applied Dance: Jazz I (PE)**

1cr

Beginning level instruction in the fundamentals of jazz dance, including jazz positions, barre and center exercises, progressions, and longer movement combinations. Open to all students. Fulfills general education requirement for Exercise and Sport Science experience and is a graded course.

Fall
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNC 1047</td>
<td>Applied Dance: Modern I (PE)</td>
<td>1cr</td>
<td>This course offers a form of contemporary theatrical and concert dance employing a special technique for developing the use of the entire body in movements expressive of abstract ideas. Each class begins with a structured warm-up designed to prepare the entire body for full-out moving. Center combinations, turning, partnering, small jumps, and leaps, as well as traveling across the floor, develop a strong foundation for future study. Fulfills general education requirement for EXS experience and is a graded course. Fall</td>
<td></td>
</tr>
<tr>
<td>DNC 1050</td>
<td>Pilates (PE)</td>
<td>1cr</td>
<td>In this course, students will be given instruction in fundamental Pilates mat exercises focusing on coordination, posture, body awareness, and strength. The specific approach designed for this course will emphasize neutral spine and proper pelvic alignment to improve core stability and overall health. Open to all students. This course fulfills the EXS experience requirement. Spring</td>
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</tr>
<tr>
<td>DNC 1120</td>
<td>Dance Theory and Practices</td>
<td>2cr</td>
<td>Dance Theory and Practices surveys concert dance in America and establishes dance as a form of expression and creativity. Through readings, discussions, and practice, students will experience a variety of dance forms and learn about the contexts from which they emerged. Each class will begin with time to tune in and warm up and will follow with stylistic lessons and/or explorations within improvisational structures. Fall</td>
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</tr>
<tr>
<td>DNC 2041</td>
<td>Applied Dance: Ballet II (PE)</td>
<td>1cr</td>
<td>Continued ballet instruction in floor combinations and beginning allegro and adagio. Fulfills general education requirement for Exercise and Sport Science experience and is a graded course. Prerequisites: DNC 1041 and consent of the instructor. Spring</td>
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</tr>
<tr>
<td>DNC 2043</td>
<td>Applied Dance: Tap II (PE)</td>
<td>1cr</td>
<td>Tap II is a continuation of tap technique instruction for students who have a foundation in tap technique. Students will further develop technical skills through classwork that includes progressions, stylized routines, and combinations that build on tap skills level I as well as reflect various stylistic and historical influences. This class fulfills the general education requirement for Exercise and Sport Science experience and is a graded course. Prerequisite: DNC 1043 or consent of Instructor. Spring</td>
<td></td>
</tr>
<tr>
<td>DNC 2044</td>
<td>Applied Dance: Jazz II (PE)</td>
<td>1cr</td>
<td>Continued jazz dance instruction in a variety of steps and combinations including floor combinations and stylized dances. Fulfills general education requirement for Exercise and Sport Science experience and is a graded course. Prerequisite: DNC 1044 or consent of instructor. Spring</td>
<td></td>
</tr>
<tr>
<td>DNC 2047</td>
<td>Applied Dance: Modern II (PE)</td>
<td>1cr</td>
<td>This course offers continued instruction in modern technique. Classes will incorporate both floor and standing exercises, progressions that travel through space, and longer movement combinations. Prerequisite: DNC 1047</td>
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</tr>
<tr>
<td>DNC 2051</td>
<td>Applied Dance Styles (PE)</td>
<td>1cr</td>
<td>An applied dance course with variable content that provides students the opportunity to experience and apply unique dance inquiries. Prerequisite: Any level I applied dance course or instructor permission</td>
<td></td>
</tr>
<tr>
<td>DNC 2060</td>
<td>Dance Theory and Composition</td>
<td>2cr</td>
<td>Dance Theory and Composition navigates the creative process of dance making through reflection, exploration, and composition. Students will explore a variety of approaches in dance composition and will consider and discuss the concepts, choices, and craft of other dance makers. This course will culminate in an informal presentation of dance works. Prerequisite: DNC 1120 or consent of the instructor. Spring</td>
<td></td>
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</tbody>
</table>
**DNC 2070**

**Dance Choreography and Repertory**

2cr
Dance Choreography and Repertory is a performance and choreography course that continues skills developed in applied dance technique, improvisation, and theory and composition courses. The course provides students opportunities to further understand modes of choreographic and performance inquiry and will culminate in a final performance presentation.

Prerequisite: DNC 1120 or consent of instructor

Spring

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**DNC 3044**

**Advanced Jazz (PE)**

1cr
This course will build upon the technical foundation of Jazz I and Jazz II. Students will further develop jazz dance skills through class work that includes warm-up exercises, progressions, and combinations that progress beyond intermediate level skills and reflect specific stylistic and historical influences. This course fulfills the general education requirement for Exercise and Sport Science experience and is a graded course. This course can be repeated for credit.

Prerequisite: DNC 2044

Spring

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**DNC 3050**

**Dance History**

4cr
This course is designed to provide a contextual understanding of American concert dance from the early 1900s until today. The course will look at significant artists and works that have influenced and shaped dance in America, including those within the styles of ballet, modern, jazz, and music theatre. Through reading, discussion, written work, and independent research, students will develop an understanding of the historical threads that have converged into the multiplicity of American concert dance today.

Prerequisite: DNC 1120 or consent of instructor

Spring

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**THR 0100**

**Theatre Service and Practice**

0cr
Hands-on training and work, completed while fulfilling the technical and artistic production needs of the theatre department.

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**THR 0200**

**Applied Technical Production**

1cr
Students may receive one credit hour for assuming significant responsibility as an assistant stage manager, assistant designer, stage crew member, assistant director, or assistant dramaturg of a production. Course may be repeated if a student has successfully completed one production/design course.

Limit: one credit hour per semester or January term.

Prerequisite: Consent of the instructor

Fall/Spring

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**THR 0300**

**Applied Acting and Directing**

1cr
Students may receive one credit hour for assuming significant responsibility for a sizable role in a preapproved theatre production, or by directing a one-act or full-length play for public performance. The actor or director will keep a journal documenting the learning experience and upon completion will write a short self-assessment paper.

Prerequisite: Consent of instructor

Fall/Spring

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**THR 1110**

**Introduction to Acting (FAR)**

4cr
This course offers an examination of the basic concepts, vocabulary, and techniques of acting. The class will include improvisation, monologue preparation, scene study, character development, and textual analysis.

Fall/J-Term/Spring
THR 1150
Introduction to Theatre (FAR) 4cr
An introduction to texts, practice, and production in the theatre in order to understand it as a social and aesthetic experience and as a reflection of culture. Various aspects of theatre, a broad view of theatre history, and a study of representative plays of the past and present will constitute the content of the course.
Fall/Spring

THR 1200
Advanced Theatre Lab 1cr
Students may receive one credit hour for assuming significant responsibility as a stage manager, properties master, master carpenter, lead designer, or technical director of a production. Course may be repeated if a student has successfully completed one production/design course. Limit: one credit hour per semester or January term.
Prerequisites: THR 0200 and consent of the instructor.

THR 1620
Music Theatre Techniques I 2cr
This course for the singer-actor provides foundational instruction in music theatre performance skills: character development and portrayal, scene study, and audition skills. Students will study the history and context of music theatre through the study of performances, and develop as performers through this study. Students will analyze performance text as well as integrate new understandings into solo and small ensemble performances.
Prerequisite: Consent of the instructor

THR 1630
Music Theatre Techniques II 2cr
This course for the singer-actor builds on the foundational instruction in music theatre performance skills established in Music Theatre Techniques I. Students in this course will develop deeper understandings of vocal storytelling for character development and portrayal, using the musical score as the text. Students will develop a refined understandings of the vocal mechanism as well as the potential for vocal color and expression to tell the story.
Prerequisite: MUS/THR 1620 or consent of the instructor

THR 2110
Acting I: Fundamentals of Acting (For Majors and Minors) 4cr
A beginning course for the theatre major or minor, with an introduction to the art of acting through individual and group work. Students will develop basic acting skills with a strong emphasis on the Stanislavski system. The class will include improvisation, monologue preparation, scene study, character development, textual analysis, vocal development, and historical research.
Prerequisite: Theatre major or minor or music theatre major
Fall

THR 2120
Acting and Directing One Acts 4cr
The objective of this project-driven course is to explore the process of new play development. The specific focus is an ensemble-driven approach to play development. Students will participate in a highly collaborative team consisting of directors and performers. The students will showcase scripts at the end of the semester.
Prerequisites: Theatre majors and minors or THR 1110 and consent of the instructor
THR 2620

Music Theatre Workshop

0-2cr
This course for the singer-actor provides formal and informal venues to develop music theatre skills: character development and portrayal, scene study, and audition skills. The laboratory format allows students to learn from the instructor as well as each other as they cover varied repertory. The course culminates in a performance at the end of each term. May be repeated for credit.
Fall/Spring

THR 2630

Movement Techniques for Performers

2cr
A variable content course allowing theatre majors to experience and become versed in different movement disciplines.
Prerequisite: Instructor permission required

THR 2900

Play Reading and Analysis

4cr
The course will include a critical examination of dramatic literature for the purpose of production. Students in this course will consider representative dramatic works from the ancient Greeks into the 21st century. Students will study the play script as literature, an historical artifact, and a blueprint for production. Course materials may be linked to Carthage theatre productions. This course involves extensive play reading and analysis, historical research, practical application, and a major project.
Prerequisite: Sophomore standing
Fall

THR 2910

Play Production I: Stagecraft

4cr
A beginning stagecraft course for all theatre majors and minors. This course introduces students to the basic aspects of technical theatre production and construction of theatrical scenery. Students will learn how to operate the necessary power tools and stage machinery safely. Students will be involved directly with the Carthage theatre productions. Lecture and laboratory.
Prerequisite: Theatre major or minor or music theatre major or minor, or permission of the instructor
Fall/Spring

THR 2920

Play Production II: Costumes and Makeup

4cr
Practical study and experiences to develop technical skills including effective planning and safety practices for basic elements of costume design, acquisition and construction, and makeup design and application. Students will work on projects currently in production by the department.
Prerequisite: Theatre major or minor or music theatre major or minor, or permission of the instructor
Fall/Spring

THR 2940

Play Production IV: Scenic Painting

2cr
This course introduces students to the basic practices of theatrical scenic painting. The class will cover color theory, scenic painting techniques, and the use of color renderings and elevations. Students will be involved directly with Carthage theatre productions.
Prerequisite: Theatre or studio art major
Spring

THR 2950

Play Production V: Advanced Makeup Techniques

2cr
This course will study advanced techniques in makeup that are not covered in the Play Production II course. Makeup techniques could include but are not limited to airbrush, prosthetics, advanced aging, wig ventilating, and fantasy and special effects. Drawing and rendering techniques for makeup design will be practiced.
Prerequisite: THR 2920 or consent of instructor
Spring

THR 2960

Play Production VI: Draping and Patternmaking

2cr
This course will introduce students to draping and patternmaking for costumes. It is a hands-on course with emphasis on learning techniques used in professional costume shops to create patterns used to build costumes from a costume-design rendering. Students will drape/make patterns from various sources, as well as work on Theatre Department productions.
Prerequisite: THR 2920
Spring

THR 3000

Playwriting

4cr
In this workshop, students examine great plays of the 20th century in order to develop a deeper understanding of the playwright's craft. Students then develop their own writing skills by creating an original dramatic work.
Prerequisite: Junior or senior standing
Spring
THR 3010

Stage Management
4cr
This course is an examination and exploration of the role and function of the stage manager in theatrical productions including plays, musicals, and dance performances. This course provides a specific framework emphasizing organization, documentation, and dissemination of information. With paper projects and case studies, students will gain insight into management strategies and develop critical-thinking skills.
Prerequisite: THR 2900
Fall

THR 3020

Verbatim Theatre Techniques
4cr
A course in how to create theatre by using existing text sources, including in-person interviews. Students will learn and practice methods for choosing subjects, interviewing participants, transcribing and storage of interviews, and editing verbatim texts for performance. The course will include staged readings of works created by the class.
Prerequisite: THR 2900 or consent of the instructor

THR 3100

Voice for the Stage
4cr
This course provides instruction in the proper use and maintenance of the performer's voice, with special attention given to the unique needs of the stage actor. Exercises and training will help students to understand and develop breath control, resonance, vocal range, and articulation. Accurate vocal style and characterization will be taught as key components to performing various historical periods and styles. Students will also work to minimize vocal tension, improve body alignment and awareness, and acquire or shed dialects as required for a role.
Prerequisite: THR 2110, declared performance major, or instructor consent
Spring

THR 3110

Acting II: Character and Scene Study
4cr
An intermediate course for the theatre major or minor. A continuation of the acting skills presented in Acting I. A process-oriented course exploring modern and contemporary playwrights. The class will include scene study, character development, textual analysis, vocal development, and historical research.
Prerequisite: THR 2110, declared performance major, or instructor consent
Spring

THR 3200

Premodern Theatre Survey (FAR)
4cr
This survey course introduces students to the major playwrights and movements in the European theatre from 1650-1850, from the beginning of the English restoration until the rise of Romanticism. Coursework will include both practical applications and written evaluations of play texts and theatre productions.
Prerequisite: Junior or senior standing

THR 3210

Ensemble and Experimental Theatre
4cr
Students in this course will develop and perform scenes through the use of ensemble/ experimental acting techniques. They will develop a deep and practical understanding of the theories and practices of a significant modern theatre movement, theorist, or practitioner, applying what they learn to new or preexisting play texts. Content for this course varies; the course is therefore repeatable for credit.
Prerequisite: THR 2110

THR 3260

Modern Theatre Survey (FAR)
4cr
This course provides a detailed study of theatre and its development in the West since the rise of modernism. Particular attention is given to the immeasurable influence of Marx, Darwin, and Freud on the world, and therefore on the theatre. Students will consider representative works from several late 19th and 20th century movements, such as realism, naturalism, symbolism, German expressionism, futurism, dadaism, and absurdism. Coursework will include both practical applications and written evaluations of play texts and theatre productions.
Prerequisite: Junior or senior standing

THR 3270

Contemporary Theatre Survey
4cr
Students in this course will examine the movements and innovators shaping theatre today. Special attention will be paid to new modes of theatre-making, the inclusion of increasingly diverse voices, and changing roles of theatres in their communities.
THR 3400

Music Theatre History
4cr
An exploration of how drama, art, movement, and music combine into the “spectacular” form of music theatre. Students survey and study a variety of works from music theatre's operatic beginnings through present-day patchwork rock shows. We will attend at least four live productions. Ticket fee.
Fall

THR 3600

History of Scenic and Lighting Design
4cr
A survey course in the history of scenic design in the Western world, from the golden age of Greece until today.
Prerequisite: Sophomore standing
Fall

THR 3610

History of Clothing: Ancient Egypt to Modern
4cr
This course will study the history of Western fashion from ancient times to modern day with emphasis on understanding the basic psychology of why people wear clothes. Additionally, it will fine-tune historical research skills and analysis of both the play text and characters. Classwork will include research projects as well as using research skills to do character analysis for a costume design.
Prerequisite: Sophomore standing
Fall

THR 3910

Advanced Play Production
2cr
An advanced stagecraft course for all theatre production majors. This course is designed to give students hands-on experience in the processes involved in successful technical direction. This course challenges students with the advanced aspects of technical theatre production and construction of theatrical scenery. Particular emphasis will be given to problem-solving, budgeting, theatre safety, structural design, and project management (how to plan an effective build, load-in, and strike). Students will work independently, in teams, and as team leaders in support and oversight of Carthage theatre productions.
Prerequisites: THR 2910 and two credits of THR 0200

THR 4010

Senior Seminar in Theatre
4cr
A guided preparation and revision process for the completion of a Senior Thesis or Senior Project.
Fall

THR 4110

Acting III: Periods and Styles
4cr
An advanced course for the theatre major, focusing on the techniques needed for classical drama. The course will include advanced acting techniques exploring period and style work from the Greek/Roman theatre, Shakespeare and the English Renaissance, and Moliere and the French Restoration. Activities will include scene study, textual analysis, vocal development, and historical research.
Prerequisites: THR 3110 and THR 3100, declared performance major, or consent of the department chair
Fall

THR 4200

Methods and Materials in Teaching Theatre
4cr
A study of theatre teaching methods and instructional materials. Special attention is given to the selection and organization of subject matter and learning activities. Fieldwork required.
Prerequisite: Acceptance into the Teacher Education Program

THR 4550

Directing
4cr
This course is designed to introduce students to the fundamentals of directing plays for the stage. We will carefully examine play structure and analysis, interpretation, and communication with the actor and designer, as well as the rehearsal process and performance.
Prerequisite: THR 2900, 3110, 2910, 2920, or consent of the instructor
Fall

THR 4600

Scenic Design
4cr
A course in theatrical design focusing on scenic design. Students will learn the process, vocabulary, and conventions of designing theatrical scenery for plays. Students will then design scenery for a play and realize their designs through sketching, drawing, and drafting, as well as with computers, 3-D models, and paint renderings.
Prerequisites: ART 1070, 1071, and 2000, and THR 2900 and 2910 or consent of instructor
Spring
THR 4610

Costume Design
4cr
This course will be both an intellectual study of costume design for theatre as well as work on practical skills of drawing and rendering. The student will read and analyze a play from a costume design point of view, learn about directing and design concepts, and use research skills, culminating in a design project that can be entered in the Kennedy Center American College Theatre Festival's design competition and presented in their portfolio. Prerequisites: ART 1070, 1071, and 2000, THR 2900 and 2920, or consent of the instructor
Spring

THR 4990

Senior Thesis Completion
0cr
Students should register for THR 4990 during the semester they intend to complete their Senior Thesis.

Women’s and Gender Studies

Women’s and Gender Studies at Carthage is a cross-disciplinary academic program that studies how intersecting identity categories such as race, ethnicity, gender, sex, class, religious beliefs, and physical ability are socially constructed and strategically mobilized. Courses in the program study the systemic operations of power, as well as strategies of community-building, coalition, and resistance, to become more conscious and knowledgeable actors in an increasingly diverse world. The minor in Women’s and Gender Studies introduces students at the undergraduate level to some of the most important ways in which the study of women and gender is transformative in various academic disciplines and addresses why gender, race, and ethnicity matter in society and human history. The program’s courses promote critical thinking and effective communication skills that prepare students to work in a world where companies increasingly require their employees to be conversant on issues relating to diversity and equity. Self-designed majors in Women’s and Gender Studies are possible. Consult the director of the Women’s and Gender Studies program if you are interested in creating a Women’s and Gender Studies major or need more information about the program.

The minor consists of five courses (20 cr.), three required and two electives.

Minor:
Required:
WMG 1100 Introduction to Women’s and Gender Studies (4 cr.)
WMG 3110 Women’s and Gender Studies Theory (4 cr.)
WMG 4200 The Gendering of Leadership (4 cr.)
Choose two of the following:
WMG 2210 Family Violence (4 cr.)
WMG 2450 Race, Gender, and Sex in Ancient Greece and Rome (4 cr.)
WMG 2500 Blacks in Antiquity: Race in the Ancient Mediterranean World (4 cr.)
WMG 2530 Race and Racisms (4 cr.)
WMG 2660 Psychology of Women and Gender (4 cr.)
WMG 2770 Sex, Gender, and Sexuality in a Diverse World (4 cr.)
WMG 2800 Decoding Disney (4 cr.)
WMG 2910 Constitutional Law: Civil Liberties and Civil Rights (4 cr.)
WMG 3020 Women and the Bible (4 cr.)
WMG 3030 Women of Africa (4 cr.)
WMG 3040 African Transitions (4 cr.)
WMG 3090 Literature of Diversity (4 cr.)
WMG 3100 Literature and Gender (4 cr.)
WMG 3200 Women and Politics (4 cr.)
WMG 3250 Advanced Feminist Theory (4 cr.)
WMG 3330 The Economics of Love and Sex (4 cr.)
WMG 3350 Human Rights (4 cr.)
WMG 3500 Global Poverty (4 cr.)
WMG 3760 Women in the Arts (4 cr.)
WMG 675L Cinema of African American Women (4 cr.)

WMG 1100

Introduction to Women’s and Gender Studies (DIV)
4cr
This course will begin by drawing a distinction between biology (the body) and current theories of gender (culture and biology) and identity formation. The course concentrates on Western interpretations of ?woman? and ?man? as cultural symbols using a variety of disciplinary approaches.

WMG 2060

Psychology of Women and Gender
4cr
This course examines the psychology of women and gender from a social constructivist theoretical framework. In addition to gender, the course utilizes intersectional theory to explore the ways that race, ethnicity, class, sexual orientation, age, and physical ability interact and operate at individual, interpersonal, and cultural levels to modify experiences. Finally, the course examines the social and political implications of our cultural understandings of woman, man, and gender.
Prerequisite: WMG 1100

WMG 2210

Family Violence
4cr
This course is an overview of family violence. Particular attention will be given to groups that have been disproportionately affected by family violence, namely women, older adults, and children. Emerging knowledge related to violence in gay and lesbian families, minority families, and special populations will be included.
**WMG 2450**

**Race, Gender, and Sex in Ancient Greece and Rome (HUM)**

4cr

A study of how the Greeks and Romans perceived those who lived outside their respective cultures, how they interacted with them, how they treated marginalized elements of their society (women, slaves, foreigners), and how they reacted to physical differences that existed among races. In sum, the course deals with definitions of gender, sexuality, race, ethnicity, and "otherness" in general (using both modern and ancient definitions).

**WMG 2500**

**Blacks in Antiquity: Race in the Ancient Mediterranean World (HUM)**

4cr

Students will examine and learn how the ancients understood color, ethnicity, and race in the Ancient Mediterranean World (North Africa, Greece, and Rome) through reading of ancient and modern texts and an examination of ancient art, particularly the role of sub-Saharan Africans in the world around the Mediterranean Sea.

**WMG 2530**

**Race and Racisms (DIV)**

4cr

Examines the sociological, economic, and psychological nature of the relationships between racial and ethnic groups with differential access to political and economic power. Focus is on the United States, with some discussion of racism, cultural discrimination, and sexism in other parts of the world.

Prerequisite: SOC 1000 or permission of the instructor

**WMG 2770**

**Sex, Gender, and Sexuality in a Diverse World (DIV)**

4cr

This course examines the sociological perspectives of sex, gender, and sexuality, while incorporating interdisciplinary texts when necessary. The course will locate sex, gender, and sexuality within contemporary sociohistorical context; examine practices and relationships of power; and analyze both institutional and interpersonal forms of inequality based on sex, gender, and sexuality.

Prerequisite: SOC 1000 or WMG 1100

**WMG 2910**

**Constitutional Law: Civil Liberties and Civil Rights (HUM)**

4cr

An examination of the U.S. Supreme Court's interpretation of the U.S. Constitution over time on such topics as freedom of expression and religion, criminal and civil due process, privacy, equal protection, and the nationalization of the Bill of Rights.

Prerequisite: Sophomore standing

**WMG 2970**

**Women of Africa**

4cr

The study of the countries in Africa has frequently focused on public events: colonialism, political change, war, government actions, and the formal economy. In recent years, researchers have begun to explore in more depth how women's lives are impacted by these events, and how women in Africa are active participants in the various sectors of their societies.

This course will look at life in various African countries through the eyes of women and will examine how women of Africa actively engage in and are affected by political, cultural, and economic events both domestically and internationally. Themes will include human rights issues of women, the impact of modernity and tradition on women's lives, images of appropriate female behavior, economic hardship and survival techniques, cultural issues surrounding marriage and motherhood, and women's participation in the public spheres of their countries.

**WMG 3040**

**African Transitions**

4cr

African countries and peoples have often been examined through the lenses of European and North American cultures. These analyses have sometimes been helpful and other times have resulted in inaccurate portrayals of African life and people. This course uses texts written predominantly by African authors from various parts of the continent to provide African perspectives of transitions that have occurred on the continent. These transitions include the transition from traditional life to colonial rule, the shift to independence, attempts at democratization, adaptations rural Africans make when moving to urban areas, and the clashes between Western and African cultures that continue today. Using themes of governance, community, and reference groups to examine different African cultures, the course incorporates theories and concepts from the disciplines of political science and sociology.
Literature of Diversity (HUM)

WMG 3090

4cr

Each offering in this rotating selection of courses explores a single diverse ethnic literature, such as African-American, Asian-American, Hispanic-American, and Native American. While content will vary according to the discretion of the instructor, this group of courses is united by a common desire to read a diverse literature according to its own heritage double-voiced as it is further complicated by issues of gender and class. To this end, a course in Native American literature, for example, might begin with a study of the creation myths in the oral tradition, then move to historical, anthropological, autobiographical, and fictional accounts of the Native American experience as the two (often conflicting) voices of Native American and American describe it.

Literature and Gender (HUM)

WMG 3100

4cr

In this course the literature chosen for study will reflect issues relevant to considerations of gender. In some instances, works will be chosen in order to explore the idea of how literature portrays what it means to be gendered. In other instances, literature will be chosen in order to explore how writers of one gender portray characters of the opposite gender. In some instances the choice of literature will be based on extending awareness of writers who, because of their gender, have not historically been included within the canon. The historical and social contexts of these works will be an integral part of the conversation within the course.

Women's and Gender Studies Theory (DIV)

WMG 3110

4cr

This is a reading seminar that will investigate the writings of feminist theorists as well as the critical questions raised by feminism pertinent to the academic disciplines. "Sexes (gender), difference between the sexes, man, woman, race, black, white, nature are at the core of [the straight minds'] set of parameters. They have shaped our concepts, our laws, our institutions, our history, and our cultures. To reexamine the parameters on which universal thought is founded requires a reevaluation of all the basic tools of analysis, including dialectics. Not in order to discard it, but to make it more effective" (Monique Wittig). This course will examine the feminist critique of culture as a way of examining our philosophical heritage and as a way of understanding the relationship of culture to academic inquiry.

Prerequisites: It is recommended that students first take Introduction to Women's and Gender Studies, then their elective credits, and then this course. Students may also seek consent of the instructor.

Women and Politics (SOC) (DIV)

WMG 3200

4cr

This is a rotating content course reading primary texts in one area of feminist theory, for example, Womanist Theory, Queer Theory, French Feminist Theory, etc. This course presumes a baseline understanding of feminist theory and its critique of culture as a way of examining our philosophical heritage. As an advanced study, it expands students' flexibility in scholarly dialogues and academic inquiry. While the course is part of the WMG offerings and counts as an elective toward the minor, it also has the potential to enrich other disciplines by providing an alternative lens for examining many core presumptions.

Prerequisite: WMG 1100 or WMG 3110

Advanced Feminist Theory

WMG 3250

4cr

This course examines the politics of human rights and the changing nature of sovereignty in the international system. To do this we will explore the major threats to human rights in the contemporary world as well as the cultural and political obstacles to international consensus on human rights norms. Finally, we will attempt to determine the appropriate mechanisms for their implementation.

Global Poverty

WMG 3500

4cr

While the focus of this course will be theoretical, the class will begin by introducing some general background information on global stratification. It will examine the geography of stratification (i.e., which countries are rich, which countries are poor, etc.). The basic demographics of poverty will also be explored. Particular attention will be paid to infant mortality rates, life expectancy rates, health care quality and access, education, the status of women, and the availability of foreign and domestic assistance. Finally, it will analyze various concepts of poverty, measures of poverty, and different kinds of stratification systems.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMG 3760</td>
<td>Women in the Arts</td>
<td>4cr</td>
<td>Why have there been no great women artists? Have there been none? Prepare to be amazed! This course takes up Nochlin's famous question by examining artifacts from prehistory and surveying evidence of women's roles and creativity in the arts up through the present.</td>
</tr>
<tr>
<td>WMG 4200</td>
<td>The Gendering of Leadership (DIV)</td>
<td>4cr</td>
<td>This interdisciplinary course includes experiential learning. The course has three components: first, an overview of gender operations in organizations and human interactions; second, a self-evaluation of the student's personality traits and goals; and lastly, research into strategies for leadership in a variety of institutions and personality types. Prerequisite: WMG 3110 or permission of the program director</td>
</tr>
</tbody>
</table>
Graduate Academic Program of Study

Master of Education

The Master of Education program at Carthage fosters intellectual and professional learning opportunities within the context of a liberal arts education. Classes enable teachers to keep abreast of current issues relating to education, such as curricula, counseling, guidance, and administration. Initial licensure is available in Education Administration and Reading. A program of study may be devised for add-on licenses.

After admission to the graduate school, an individualized program of study will be developed by the student and advisor. The graduate program will accept no more than 12 transfer credits earned at another institution within the past five years prior to choosing a program of study. The graduate admissions coordinator and primary advisor will approve the program of study with the student and ensure that the Office of the Registrar has assigned the program and advisor appropriately for the course of study. The student will reach out to the primary advisor prior to or during the advising period, each semester, before enrolling in courses. Students must consult their degree audit in the my.carthage portal before meeting with the primary advisor. The program consists of 38-44 credits of coursework (depending upon chosen concentration). All students pursuing an M.Ed. must complete the four CORE M.Ed. courses which include EDU 5060 Foundations of Education, EDU 5240 Qualitative Methods, EDU 5250 Quantitative Methods, and then the EDU 5550 Master’s Degree Capstone Experience or EDU 5950 Master’s Comprehensive Exam for those who started an M.Ed. program Fall 2019 or later. The required 38-44 credits of coursework must include these four courses with EDU 5060 Foundations of Education being a prerequisite for the other three courses. Students must sign up for EDU 5550 Master’s Degree Capstone Experience or EDU 5950 Master’s Comprehensive Exam. Students who began their M.Ed. studies in or after fall 2019 are eligible to pursue the EDU 5950 Master’s Comprehensive Exam option. This seven-week capstone independent study exam option requires the student to work with the primary advisor to determine two distinct courses and professors for which they would like to review research and study directly related to core content and student learning objectives for the course. The course of study cannot include any of the four core M.Ed. courses. This is a “no notes” exam and only charts, diagrams, or reading scenarios will be permitted to pass any given course. Students who do not pass one or more of the course exam questions will be permitted to re-enroll for EDU 5950 the following seven weeks (four for summer), at their own cost.

Students pursuing the EDU 5550 Master’s Degree Capstone Experience option will be granted two terms to successfully defend the project or thesis as well as other requirements for the master’s degree. If a student plans to use the full two terms for completion of the thesis or project, they should register for EDU 5550 Master’s Degree Capstone Experience in the first term and EDU 5990 Master’s Degree Capstone Completion (0 cr) in the following term. If a student plans to complete their project or thesis in one semester, they should register for both EDU 5550 and EDU 5990 concurrently. Students who do not defend their thesis in the second semester will need to repeat EDU 5550 at their own cost. Students will be granted up to four semesters to successfully defend their thesis. If they are unable to do so, the student can pursue the EDU 5950 Master’s Comprehensive Exam option.

Master of Education Core Classes:

All M.Ed. candidates are required to take the following (12 cr.):

- EDU 5060 Foundations of Education (4 cr.)
- EDU 5240 Qualitative Methods in Educational Research (4 cr.)
- EDU 5250 Quantitative Methods in Educational Research (4 cr.)
- EDU 5990 Master’s Degree Capstone Completion (0 cr.)

All students must choose one of the following (2-4 cr.):

- EDU 5550 Master’s Degree Capstone Experience (4 cr.)
- EDU 5950 Master’s Comprehensive Exam (2 cr.)

Students must then select from one of the following concentrations:

Option One: Curriculum and Instruction

Option Two: Curriculum and Instruction with Reading License #316

Option Three: Teacher Leadership

Option Four: Teacher Leadership with Reading License #17

Option Five: Higher Education

Option Six: Education Administration (K-12) with #51 License

Option Seven: English as a Second Language with #1395 License

Option Eight: Bilingual with #1023 License

Option Nine: ACT with M.Ed.

Option Ten: Sports Leadership in Education

Option One: Curriculum and Instruction (38-40 cr.)

M.Ed. core classes listed above (14-16 cr.) and
EDU 5110 Curricular Issues (4 cr.)
EDU 5140 Development of Curricula (4 cr.)

Then students must choose four (16 cr.):

EDU 5230 Reading and Research in Multicultural Children’s and Young Adult Literature (4 cr.)
EDU 5410 Curriculum and Instruction in Reading (K-12) (4 cr.)
EDU 5120 Urban Issues in Education (4 cr.)
EDU 5130 Methods and Materials in Urban Education (4 cr.)
EDU 5190 Teaching in a Multicultural Classroom (4 cr.)
EDU 5282 Culturally Responsive Instruction (4 cr.)

Option Two: Curriculum and Instruction with Reading License #316/1316 (38-40 cr.)

M.Ed. core classes listed above (14-16 cr.) and
EDU 5110 Curricular Issues (4 cr.)
EDU 5140 Development of Curricula (4 cr.)

Then students must take the following DPI-approved courses (16 cr.):
Graduate Academic Program of Study

EDU 5281 English Language Learner: Methods and Study in Education (4 cr.)
EDU 5410 Curriculum and Instruction in Reading (K-12) (4 cr.)
EDU 5420 Diagnostic and Remediation Techniques for Reading Disabilities (K-12) (4 cr.)
EDU 5430 Practicum A and B in Reading Disabilities (K-12) (4 cr.)

Option Three: Teacher Leadership (38-40 cr.)
Developed collaboratively by a team of K-12 teachers and administrators and Carthage professors, the leadership in teaching concentration prepares educators for leadership roles in site-based management, curriculum developments, assessment programs, and data-based decision-making. Innovative coursework on curriculum issues, assessment, professionalism, and action research enables teachers to develop professionally as the educational environment continues to change.

M.Ed. core classes listed above (14-16 cr.) and
Choose one (4 cr.):
Then choose five of the following (20 cr.):
EDU 5030 Evidence-Based Decision-Making (4 cr.)
EDU 5140 Development of Curricula (4 cr.)
EDU 5150 Student Achievement and Learning (4 cr.)
EDU 5160 Professionalism and Leadership in Today’s Schools (4 cr.)
EDU 5281 English Language Learner: Methods and Study in Education (4 cr.)
EDU 5282 Culturally Responsive Instruction (4 cr.)
EDU 5285 Fundamentals of Linguistics for Teachers of Diverse Learners (4 cr.)

Option Four: Teacher Leadership with Reading Specialist License #17/5017 (50-52 cr.)
M.Ed. core classes listed above (14-16 cr.) and
Choose one (4 cr.):
EDU 5110 Curricular Issues (4 cr.)
EDU 5050 Leadership in Sport (4 cr.)

Then complete the following 32 cr.:
Please note: EDU 5360 and EDU 5370 will be taken post-master’s degree. All courses necessary for the Reading License #316 must be taken first.
EDU 5230 Reading and Research in Multicultural Children’s and Young Adult Education (4 cr.)
EDU 5340 Psycholinguistics and Developing Effective Readers in Content Area (K-12) (4 cr.)
EDU 5350 Seminar in Reading Research (4 cr.)
EDU 5360 Supervision, Administration, Guiding, and Directing Reading Programs (K-12) (4 cr.)
EDU 5370 Field Experience in Supervision, Administration, Guiding, and Directing Reading Programs (K-12) (4 cr.)
EDU 5410 Curriculum and Instruction in Reading (K-12) (4 cr.)
EDU 5420 Diagnostic and Remediation Techniques for Reading Disabilities (K-12) (4 cr.)
EDU 5430 Practicum A and B in Reading Disabilities (K-12) (4 cr.)

Option Five: Higher Education (38-40 cr.)
M.Ed. core classes listed above (14-16 cr.)
Then complete the following 24 cr.:
EDU 5010 Organizational Management in Educational Settings (4 cr.)
EDU 5020 School Finance (4 cr.)
EDU 5030 Evidence-Based Decision-Making (4 cr.)
EDU 5040 School Principalship (4 cr.)
EDU 5110 Curricular Issues (4 cr.)
EDU 5160 Professionalism and Leadership in Today’s Schools (4 cr.)

Option Six: Educational Administration (K-12) with License #51 (42-44 cr.)
Developed by a team of administrators from the Kenosha Unified and Racine Unified school districts and the Carthage Education Department, the administration concentration prepares educators for leadership roles as building principals in the K-12 setting. The coursework focuses on site-based management, school law, school finance, and leadership development. Eligible candidates must hold a valid education license or be licensed as a school counselor, school psychologist, or a school social worker and have at least three years and 540 hours of successful experience in these areas. The program’s capstone course is the seminar and practicum in field experience as a principal, which will be the foundation for the master’s thesis. Students who already possess a master’s degree and who wish to gain the Wisconsin Principal #51 license will need to complete the required courses only. No culmination experience or research courses will be required. EDU 5040 is the capstone practicum experience and can only be taken in conjunction with one final course.

M.Ed. core classes listed above (14-16 credits)
Then students must complete the following required courses (28 credits):
EDU 5000 School Law (4 cr.)
EDU 5010 Organizational Management in Educational Settings (4 cr.)
EDU 5020 School Finance (4 cr.)
EDU 5030 Evidence-Based Decision-Making (4 cr.)
EDU 5040 School Principalship (4 cr.)
EDU 5110 Curricular Issues (4 cr.)
EDU 5160 Professionalism and Leadership in Today’s Schools (4 cr.)

Option Seven: English as a Second Language and License #1395 (38-40 cr.)
M.Ed. core classes listed above (14-16 cr.) and then complete the following courses (24 cr.):
EDU 5010 Organizational Management in Educational Settings (4 cr.)
EDU 5020 School Finance (4 cr.)
EDU 5030 Evidence-Based Decision-Making (4 cr.)
EDU 5065 History and Governance of Higher Education (4 cr.)
EDU 5066 Student Development Theory (4 cr.)
EDU 5160 Professionalism and Leadership in Today’s Schools (4 cr.)
EDU 5230 Reading and Research in Multicultural Children’s and Young Adult Literature (4 cr.)
EDU 5280 ELL Literacy and Accommodations (4 cr.)
EDU 5281 English Language Learner: Methods and Study in Education (4 cr.)
EDU 5282 Culturally Responsive Instruction (4 cr.)
EDU 5284 Practicum in ESL Classrooms (4 cr.)
EDU 5282 Fundamentals of Linguistics for Teachers of Diverse Learners (4 cr.)

Additional DPI Licensure Requirement:
Candidates must successfully complete the Praxis 2 Test: Teaching English to Speakers of Other Languages (TESOL) or meet Carthage’s waiver criteria of at least a 3.00 average GPA in all ESL licensure courses.

Option Eight: Bilingual with #1023 License (42-44 cr.)

M.Ed. core classes listed above (14-16 cr.)
Beyond or as part of initial licensure, candidates must have completed the following prerequisite requirements:
• Teaching license in another field
• Coursework in accommodating learning differences
• 8 credits of study in a modern language (must meet ACTFL requirements as noted following coursework for bilingual licensure)

and then the following courses (28 cr.):
EDU 5230 Reading and Research in Multicultural Children’s and Young Adult Literature (4 cr.)
EDU 5280 ELL Literacy and Accommodations (4 cr.)
EDU 5281 English Language Learner: Methods and Study in Education (4 cr.)
EDU 5282 Culturally Responsive Instruction (4 cr.)
EDU 5279 Bilingual Methods (4 cr.)
EDU 5285 Fundamentals of Linguistics for Teachers of Diverse Learners (4 cr.)
EDU 5286 Practicum in Bilingual Classrooms (4 cr.)

Additional DPI Licensure Requirement:
For bilingual certification, ACTFL World Language Tests: Wisconsin requires both the Oral Proficiency Interview (OPI-OPIc) and Writing Proficiency Test (WPT). The qualifying score for Wisconsin licensure on both tests is Intermediate High.

Option Nine: Accelerated Certification Teacher Program with M.Ed. (CCSE or Secondary Education)
Accelerated Certification for Teachers and Master of Education (ACT/M.Ed.) is a post-bachelor teacher certification and master of education graduate program that leads to an initial Wisconsin teaching license for middle and secondary grades (grades 6-12) and includes ACT/M.Ed. courses to meet teaching licensure requirements.
EDU 5001 Seminar/Portfolio (once a month Saturday class) (2 cr.)
EDU 5560 Field Experience (clinical experience at an elementary, middle, or high school; no class time)
EDU 5520 Developmental and Content Area Reading in Secondary Schools (4 cr.)
EDU 5540 Developmental Reading Instruction (4 cr.)
EDU 5820 Introduction to Child and Adolescent Psychology (4 cr.)
EDU 5450 Characteristics and Assessment of Learners with Exceptionalities (4 cr.)
EDU 5451 Academic and Behavioral Interventions for Learners with Exceptionalities (Elementary) (4 cr.)
EDU 5452 Academic and Behavioral Interventions for Learners with Exceptionalities (Secondary) (4 cr.)
EDU 5282 Culturally Responsive Instruction (4 cr.)
EDU 5120 Urban Issues in Education (4 cr.)
EDU 5453 Instructional and Assistive Technology for Learners with Exceptionalities (cross-categorical special education concentration) (2 cr.)
EDU 5281 English Language Learner: Methods and Study in Education (4 cr.)
EDU 5454 Collaboration with Parents and Professionals (4 cr.)

The ACT/M.Ed. allows cohorts the opportunity to complete a more comprehensive M.Ed. directly upon completing their initial license requirements, as required by the Wisconsin Department of Public Instruction.
Several M.Ed. courses are embedded within the ACT program and students will then complete the M.Ed. within one semester upon completion of their teaching license requirements through the additional courses listed below. If students already have a master’s degree, the ACT program duration is 1.5 years.
EDU 5060 Foundations of Education (4 cr.)
EDU 5240 Qualitative Methods in Educational Research (4 cr.)
EDU 5250 Quantitative Methods in Educational Research (4 cr.)
EDU 5550 Master’s Degree Capstone Experience (4 cr.)

Option Ten: Sports Leadership in Education with M.Ed. (38–40 cr.)
The Sports Leadership in Education M.Ed. program was designed for those involved in or interested in coaching and athletics in school settings. This accelerated, hybrid concentration offers a unique internship custom-designed to meet a student’s sport leadership interests. This concentration is a sports-appropriate, challenging, and time-manageable M.Ed. track. The leadership concentration was designed to fully prepare students for sports education-related careers.
M.Ed. core classes listed above (14-16 cr.)
Then complete the following (24 cr.):
EDU 5050 Leadership in Sport (4 cr.)
EDU 5070 Advanced Techniques in Coaching Psychology (4 cr.)
EDU 5000 School Law (4 cr.)
EDU 5090 Conflict Resolution (4 cr.)
EDU 5030 Evidence-Based Decision-Making (4 cr.)
EDU 5530 Sports Education Leadership Internship (4 cr.)
EXS 5120* Advanced Principles of Training and Conditioning *optional, offered only as a winter/J-Term course (4 cr.)

Additional Licenses:
1. Wisconsin Reading Teacher License (K-12) #316/1316
2. Cross-Categorical Special Education License #801

Carthage 2021-2022 Catalog
3. **English as a Second Language License #395**

4. **Bilingual License #1023**

### Wisconsin Reading License (K-12) License #316/1316

To earn the #316 Reading Teacher license, the student must receive the institutional endorsement for the license and meet all the following requirements:

1. Be eligible to hold a Wisconsin license to teach or complete an approved teacher education program.
2. Have two years of successful regular classroom teaching experience.
3. Complete four courses, with at least 12 credits earned, beyond the bachelor’s degree. The four courses shall include a practicum in teaching reading at the elementary level and at the middle/secondary level.

   In addition, students must complete and maintain a high standard of performance in all coursework and program requirements (with a minimum grade of B) in the following areas:
   - Developmental reading K-12
   - Assessment and instructional techniques for readers with special needs
   - Language development
   - Content area reading
   - English language learner methods

To achieve the required 18 credits for this licensing program, students may apply up to six credits in the study of reading at the undergraduate level. The program requires all teachers seeking #316 licensure to apply to the graduate program and to schedule an appointment with the director of the reading program at the beginning of the coursework. Completion of the Miller Analogies Test is not required for #316 license candidates unless they also are pursuing a master’s degree.

**Required Courses:**

- EDU 5281 English Language Learner: Methods and Study in Education (4 cr.)
- EDU 5410 Curriculum and Instruction in Reading (K-12) (4 cr.)
- EDU 5420 Diagnostic and Remediation Techniques for Reading Disabilities (K-12) (4 cr.)
- EDU 5430 Practicum A and B in Reading Disabilities (K-12) (4 cr.)

**Cross-Categorical Special Education License #801 (Candidates must hold a valid Wisconsin teaching license.)**

**Requirements:**

- EDU 5450 Characteristics and Assessment of Learners with Exceptionalities (4 cr.)
- EDU 5451 Academic and Behavioral Interventions for Learners with Exceptionalities (Elementary) (4 cr.)
- EDU 5452 Academic and Behavioral Interventions for Learners with Exceptionalities (Secondary) (4 cr.)
- EDU 5453 Instructional and Assistive Technology for Learners with Exceptionalities (2 cr.)
- EDU 5454 Collaboration with Parents and Professionals (4 cr.)
- EDU 5090 Conflict Resolution (4 cr.)
- EDU 5901 Student Teaching (Add-On License) (4 cr.)

**English as a Second Language Add-On License (Candidates must hold a valid Wisconsin teaching license):**

- EDU 5230 Reading and Research in Multicultural Children’s and Young Adult Literature (4 cr.)
- EDU 5280 ELL Literacy and Accommodations (4 cr.)
- EDU 5281 English Language Learner: Methods and Study in Education (4 cr.)
- EDU 5282 Culturally Responsive Instruction (4 cr.)
- EDU 5279 Bilingual Methods (4 cr.)
- EDU 5285 Fundamentals of Linguistics for Teachers of Diverse Learners (4 cr.)
- EDU 5286 Practicum in Bilingual Classrooms (4 cr.)

**Additional DPI Licensure Requirement:**

For bilingual certification, by completion of the first semester of bilingual courses, ACTFL World Language Tests: Wisconsin requires both the Oral Proficiency Interview (OPIc) and Writing Proficiency Test (WPT). The qualifying score for Wisconsin licensure for both tests is Intermediate High.

**Additional Options for Certification**

**ACT/M.Ed. Program (Secondary Teachers and Special Education Teachers)**

**Accelerated Certification for Teachers and Master’s Program** (an M.Ed. is included in the program if students do not already hold a master’s degree in education)

The ACT/M.Ed. allows cohorts the opportunity to complete a more comprehensive M.Ed. directly upon completing their initial license requirements, as required by Wisconsin Department of Public Instruction. Several M.Ed. courses are embedded in the program, and students will then have the option to complete the M.Ed. within one semester upon completion of their teaching license requirements. If students do not need a M.Ed., the program duration is 1.5 years.

**Eligibility Requirements**

Accelerated Certification for Teachers is
dedicated to high standards that are reflected in the admissions and course requirements:

1. Obtain an application from the Office of Continuing Studies or Education Department.
2. Be currently employed (or will be employed) by a public or private middle or high school.
3. Receive admission to the Carthage Education Program by providing evidence of:
   - 3.0 GPA in all courses taken.
4. A record demonstrating the completion of a bachelor’s or advanced degree from an accredited institution. (An official transcript evaluation will be completed to determine if additional courses may be needed in the teaching content area prior to admission into the ACT program.)
5. Passing the Praxis I Pre-Professional Skills Tests
6. Passing the appropriate Praxis II content knowledge test for their area.

If the applicant wishes to be admitted to the program, he or she should complete the application for admission.

Individuals who have failed a teacher preparation program are not eligible for Accelerated Certification for Teachers.

Students accepted into the program who fail to demonstrate appropriate dispositions for the field of education, such as through excessive absences or nonparticipation, may face academic suspension by the program director.

Special Education Track:
(Early Adolescent Through Adolescent or Middle Childhood Through Early Adolescent)
62 credits without M.Ed.
76 credits with M.Ed.

First Summer Session (8 weeks):
EDU 5820 Child and Adolescent Development Psychology (4 cr.)
EDU 5540 Developmental Reading Instruction (4 cr.)

Second Summer Session (8 weeks):
EDU 5520 Development and Content Area Reading in Secondary Schools (4 cr.)
EDU 5450 Characteristics and Assessment of Learners with Exceptionalities (4 cr.)

Fall Session 1:
EDU 5560 Field Placement (no class time) (4 cr.)
EDU 5451 Academic and Behavioral Interventions for Learners with Exceptionalities (Elementary) (4 cr.)
EDU 5001 Seminar/Portfolio Development (4 cr.)
EDU 5282 Culturally Responsive Instruction (4 cr.)

Fall Session 2:
EDU 5452 Academic and Behavior Interventions for Learners with Exceptionalities (Secondary) (4 cr.)
EDU 5120 Urban Issues in Education (4 cr.)

Spring Session 1:
EDU 5560 Field Placement (clinical experience at an elementary, middle or HS) (4 cr.)
EDU 5060 Foundations of Education Development (4 cr.)
EDU 5001 Seminar/Portfolio Development (4 cr.)
EDU 5453 Instructional and Assistive Technology for Learners with Exceptionalities (2 cr.)

Spring Session 2:
EDU 5281 English Language Learner: Methods and Study in Education (4 cr.)
EDU 5454 Collaboration with Parents and Professionals (4 cr.)

For students pursuing a M.Ed.:
Summer Session 1 (2nd year):
EDU 5110 Curricular Issues (4 cr.)
EDU 5240 Qualitative Methods (4 cr.)

Fall Session (2nd year):
EDU 5550 Master’s Degree Capstone Experience (4 cr.)
OR
EDU 5950 Master’s Comprehensive Exam (2 cr.)

Additional sessions as needed:
EDU 5990 Master’s Degree Capstone Completion (0 cr.)

Secondary Education Teachers Track (License and M.Ed.):
60-62 cr. without M.Ed.
72-74 cr. with M.Ed.

First Summer Session (8 weeks):
EDU 5850 Child and Adolescent Development Psychology (4 cr.)
EDU 5540 Developmental Reading Instruction (4 cr.)

Second Summer Session (8 weeks):
EDU 5520 Development and Content Area Reading in Secondary Schools (4 cr.)
EDU 5450 Characteristics and Assessment of Learners with Exceptionalities (4 cr.)

Fall Session 1:
EDU 5560 Field Placement (no class time) (4 cr.)
EDU 5060 Foundations of Education Development (4 cr.)
EDU 5001 Seminar/Portfolio Development (4 cr.)
EDU 5451 Academic and Behavioral Interventions for Learners with Exceptionalities (Elementary) (4 cr.)

Fall Session 2:
EDU 5452 Academic and Behavior Interventions for Learners with Exceptionalities (Secondary) (4 cr.)
EDU 5120 Urban Issues in Education (4 cr.)

Spring Session 1:
EDU 5560 Field Placement (clinical experience at an elementary, middle, or high school) (4 cr.)
EDU 5001 Seminar/Portfolio Development (4 cr.)
EDU 5060 Foundations of Education Development (4 cr.)
EDU 5453 Instructional and Assistive Technology for Learners with Exceptionalities (2 cr.)
For students pursuing a M.Ed.:

**Summer Session 1 (2nd year):**
- EDU 5110 Curricular Issues (4 cr.)
- EDU 5240 Qualitative Methods (4 cr.)

**Fall Session (2nd year):**
- EDU 5550 Master’s Degree Capstone Experience (4 cr.)
- OR
- EDU 5950 Master’s Comprehensive Exam (2 cr.)

**Additional sessions as needed:**
- EDU 5990 Master’s Degree Capstone Completion (0 cr.)

**ACT (Teacher Certification) with Master of Education Completion**

After completion of the teacher certification courses, participants in Accelerated Certification for Teachers may choose to continue their Carthage studies in pursuit of a Master of Education degree. The following additional courses are required for the master’s degree:
- EDU 5240 Qualitative Methods in Educational Research (4 cr.)
- EDU 5250 Quantitative Methods in Educational Research (4 cr.)
- EDU 5550 Master’s Degree Capstone Experience (4 cr.)

**Courses**

**EDU 5000**

**School Law**

4cr
A review of laws that directly impact students, teachers, and the educational enterprise. These would include special education laws, landmark cases in education, hiring and termination issues, and other topical issues related to the law and schools.

**EDU 5001**

**Seminar/Portfolio (ACT)**

**EDU 5010**

**Organizational Management in Educational Settings**

4cr
The analysis of human behavior in organizations in terms of the individual, small group and intergroup relationships, and the total organization. Includes change management process and interventions.

**EDU 5020**

**School Finance**

4cr
Financing and reporting from a budgeting and managerial decision-making perspective.

**EDU 5030**

**Evidence-Based Decision-Making**

4cr
Data analysis, statistical models, estimation, tests or hypotheses, review of qualitative and quantitative data, and score comparisons and analyses, including item analyses, processes of building achievable goals related to data, and process of aligning staff professional development to curricular goals. In this course, the emphasis will be on the use of data to make effective educational decisions.

**EDU 5040**

**School Principalship**

4cr
A practicum or field experience with seminars in the principalship included in this course may be the foundation for the master's thesis. A practicum will be arranged by the master's candidate, his or her employer, and his or her advisor. This will be a part-time assignment that may be following a principal, substituting for a principal, acting as an assistant principal, or some other mutually agreed-upon and mutually beneficial arrangement. Seminar discussions will revolve around topical issues such as scheduling, community relationships, suspension, bullying and harassment, and conflict resolution.

**EDU 5050**

**Leadership in Sport**

4cr
This course is an advanced seminar course in the area of sport leadership. The focus of the course will be on both the theoretical and practical applications of leadership concepts and theories and assist the student in examining and creating an authentic personal theory of leadership in sport settings.

**EDU 5060**

**Foundations of Education**

4cr
As a comprehensive overview of the foundations of education in the United States, this course provides a historical perspective of the philosophical and psychological underpinnings of the field of education. The purpose of this course is twofold. First, it provides teachers with the background needed to understand issues confronting the U.S. educational system. Second, it provides students the opportunity to begin examining current scholarly research pertaining to this course and to practice conducting and writing annotated bibliographies and research papers with proper American Psychological Association or (APA) formatting.

**EDU 5065**

**History and Governance of Higher Education**

4cr
This course is an advanced seminar on the topic of higher education history, organization, and leadership. The focus of the course will be on the historical development of, and current organizational models of, American higher education institutions.
EDU 5066

Student Development Theory
4cr
This course is an advanced seminar on the topic of student development of college students. This course will deal with the background, motivations, and characteristics of the American college student overall. Specific theories of development and their applications will be explored.

EDU 5070

Advanced Techniques in Coaching Psychology
4cr
This is an advanced seminar course in the area of coaching and sport psychology. The focus of the course will be on both the theoretical and practical applications of sport and exercise psychological process and approaches to increase sport and exercise teaching effectiveness.

EDU 5090

Conflict Resolution
4cr
This course is designed as a comprehensive study to understanding the role and function of the professional educator working with students, parents, and colleagues on how to resolve conflicts in an appropriate manner. Conflict is a normal part of organizational life that with improved insight and understanding can provide numerous opportunities for growth. Students will practice skills for dealing with conflict and rehearse possible strategies and techniques for future use.

EDU 5110

Curricular Issues
4cr
This course is required for the teacher leadership program. Historical and current trends in curriculum development are studied. The relationship among curriculum, instructional methodology, and assessment is addressed, as well as the role of national, state, and local standards in classroom curriculum.

EDU 5120

Urban Issues in Education
4cr
The focus is on defining issues and problems related to education in urban settings and on discovering solutions to existing problems. Some of the issues that will be explored include the education of diverse populations, living conditions in urban settings and how it might impact education, parental and community support, and empowering students from urban settings.

EDU 5130

Methods and Materials in Urban Education
4cr
This practical approach to education in urban settings will include the use of methods and materials and pedagogical strategies designed for instructing a culturally diverse group of students. Emphasis will be given to examining and closing the achievement gap between suburban and urban students through academic expectations for success. Urban education models also will be reviewed.

EDU 5140

Development of Curricula
4cr
This practical approach to writing curriculum includes the development of standards-based goals, objectives, outcomes, benchmarks, rubrics, and assessment. Special emphasis is placed on student-developed curricula.

EDU 5150

Student Achievement and Learning
4cr
This graduate course of study explores and examines the meaning of student achievement and learning within the contextual framework of effective student engagement and motivation through research-based theories of practice as it relates to district/school leadership, school culture and climate, teacher behaviors and instruction, and standards, curriculum, and assessment. All aspects of these components are interwoven to develop deeper understanding of ?what? and ?how? successful student achievement and learning can occur regardless of student demographics and institutional labels. The goal is construction of a professional framework of action to promote and influence student achievement and learning for authentic, real-world application.

EDU 5160

Professionalism and Leadership in Today's Schools
4cr
The role of the professional educator as leader and change agent is studied. Emphasis is placed on data-based decision-making, team-building, facilitation, and shared decision-making. The intent of this course is the rejuvenation of professionalism.

EDU 5190

Teaching in a Multicultural Classroom
4cr
This course addresses the increasing racial, ethnic, cultural, and social diversity concerns in the nation's schools and classrooms. This critical overview of the major issues and concepts in multicultural education clarifies racial and ethnic attitudes and develops the pedagogical knowledge and skills needed to work effectively with students from diverse cultures.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 5230</td>
<td>Reading and Research in Multicultural Children's and Young Adult Literature</td>
<td>4 cr</td>
<td>An opportunity for graduate students to investigate the nature of children's and young adult literature; the uses of children's and young adult literature in school, public, and special library settings; and the trends in children's and young adult literature as a part of the total body of literature and as an educational force; as well as current research in the field.</td>
</tr>
<tr>
<td>EDU 5240</td>
<td>Qualitative Methods in Educational Research</td>
<td>4 cr</td>
<td>The course prepares educators to interpret and critique educational research employing qualitative methods and to demonstrate understanding of qualitative methods of inquiry through design of research proposals. Emphasis will be placed on traditional methods, such as case study analysis, interviews, and focus groups, and on mixed model (blend of qualitative and quantitative) approaches that involve questionnaires and surveys. Prerequisite: EDU 5060</td>
</tr>
<tr>
<td>EDU 5250</td>
<td>Quantitative Methods in Educational Research</td>
<td>4 cr</td>
<td>The course addresses quantitative research and complements a second, qualitative course. Together they will form the foundation for analysis and evaluation of educational literature in subsequent classes. Prerequisite: EDU 5060</td>
</tr>
<tr>
<td>EDU 5270</td>
<td>Instructional Strategies</td>
<td>4 cr</td>
<td>This course emphasizes learning strategies suited to gifted, talented, and creative students. These strategies highlight each student's unique combination of skills, multiple intelligences, and capacities for self-expression, using individual activities, cooperative groups, and multicultural perspectives. Prerequisite: Consent of director of graduate program or admission into the Master of Education program.</td>
</tr>
<tr>
<td>EDU 5279</td>
<td>Bilingual Methods</td>
<td>4 cr</td>
<td>This course will draw upon theory, methodology, and research-based best practices for instructing and assessing bilingual students. It will include a focus on contemporary social problems (for the bilingual-bicultural student); culture of the target group; and competency foundations including rationale, historical, and legal requirements; and a survey of existing bilingual models including clinical experiences in bilingual classrooms. The course will also include an analysis of current, authentic Spanish language development assessments. Educator cultural competency and the unique learning needs of ELLs from diverse backgrounds, including those with disabilities, will be meaningfully incorporated into course study and application. This course includes 10 hours of clinical experience in a dual-language or bilingual classroom. Prerequisite: Instructor permission</td>
</tr>
<tr>
<td>EDU 5280</td>
<td>ELL Literacy and Accommodations</td>
<td>4 cr</td>
<td>Instruction will cover five broad areas that participants will use as they work with learners who have varying levels of language and literacy delays. The areas of focus: relevant criteria used for determining language and literacy delays in children; relationships between cognition, speech, and language; cultural and linguistic differences; instructional arrangements for diverse learning styles; and core components of effective literacy instruction. This class includes 10 hours of clinical work in an ESL classroom in addition to the coursework.</td>
</tr>
<tr>
<td>EDU 5281</td>
<td>English Language Learner: Methods and Study in Education</td>
<td>4 cr</td>
<td>This course will provide foundational knowledge and experiences in the effective instruction of students whose native language is not English. Students will become familiar with major theories, educational issues, and instructional methods that are related to working with this specific population of students across all grade levels, K-12. Observational field experiences will be required.</td>
</tr>
<tr>
<td>EDU 5282</td>
<td>Culturally Responsive Instruction</td>
<td>4 cr</td>
<td>Students will examine the cultural diversity that exists locally, nationally, and globally in order to develop a positive appreciation for the contributions of other cultures. Students will gain personal contact with members of other cultures and learn effective intercultural communication skills for our diverse world.</td>
</tr>
</tbody>
</table>
EDU 5283

Reading and Language Arts II: Methods and Linguistics
4cr
This course covers the development and mastery of information that involves the integrated process of reading and thinking. Emphasis will be placed on the reader, especially the bilingual reader. The elements of linguistics, including a study of the phonetic alphabet and morphology, are a part of this course. This class includes 10 hours of clinical work in an ESL classroom in addition to the coursework.

EDU 5284

Practicum in ESL Classrooms
4cr
This capstone course provides students with observation and analysis skills to apply to their own ESL teaching for this practicum experience, as well as with techniques for working with paraprofessionals in ESL/bilingual classrooms in schools. ESL components/artifacts will be added to the existing portfolio for teaching licensure. Prerequisite: Instructor permission

EDU 5285

Fundamentals of Linguistics for Teachers of Diverse Learners
4cr
This course will provide students with a framework to better understand the parameters of linguistics including the nature of communication; phonological components such as phonetics, phonology, morphology and syntax; sociolinguistics; and linguistic anthropology. Students will also examine the language acquisition process with regard to its application to student literacy learning outcomes with an emphasis on the unique language acquisition needs of English Language Learners. This course includes 10 hours of clinical work in an ESL or bilingual classroom in addition to the coursework.

EDU 5286

Practicum in Bilingual Classrooms
4cr
Students seeking licensure in Bilingual Education will apply what they have learned about the unique needs of additional language-learners in a practicum experience. A strong bilingual and ELL learning foundation (based on in-class study, scholarly research, and clinical experiences) will be applied to additional language learning classroom settings. Students will attend an independent seminar with their professor and will journal, share experiences, and create lesson plans to be critiqued by peers and the course instructor based on a rubric devised specifically with English Language Learning needs in mind. Student portfolios will be completed and reviewed by the course instructor. Prerequisite: Instructor permission

EDU 5340

Psycholinguistics and Developing Effective Readers in Content Area (K-12)
4cr
This course focuses on research in psycholinguistics, metacognition, interactive model theories, and language learning, and their application to the reading curricula in elementary and junior/middle/high schools. An investigation of social cultural factors that affect the acquisition of reading skills. Special attention is placed on the relationship between learning styles and reading comprehension and the development of methods and materials to enhance comprehension in the content areas.

EDU 5360

Supervision, Administration, Guiding, and Directing Reading Programs (K-12)
4cr
This course studies the roles of reading specialists and their relationships to the guiding and directing of reading programs ranging from kindergarten to high school level. Special emphasis is placed on the role the specialist plays in the coordination and facilitation of the total reading program. Students will examine the responsibilities of staff development leader, researcher, diagnostician, and facilitator of individual needs programs.

EDU 5370

Field Experience in Supervision, Administration, Guiding, and Directing Reading Programs K-12
4cr
Students will discover skills to guide, administer, and direct effective reading programs in cooperation with a qualified reading specialist. They will study the interactive model of comprehension, metacognition, and scope, and of sequence of reading skills in EDU 5360.

EDU 5410

Curriculum and Instruction in Reading (K-12)
4cr
This course explores the psychology and pedagogy of reading instruction and evaluation of reading curricula and programs on the elementary, junior, and senior high school levels. Analysis of recent trends and theories in reading instruction are included, such as interactive models, cognitive processes, development of word recognition competence, and improvement in reading instruction.
EDU 5420
Diagnostic and Remediation Techniques for Reading Disabilities (K-12)
4cr
Students will study the types of reading abilities and disabilities; the processes related to the cognitive function; the interaction among the reader, writer, and text; the schema theory; and other related theories to enable assessment and instruction in reading in K-12. Emphasis is on interview procedures, informal diagnostic testing, case study writing; and methods and materials of instruction. Special emphasis is placed on the individualization of reading instruction.

EDU 5451
Academic and Behavioral Interventions for Learners with Exceptionalities (Elementary)
4cr
Participants will learn the role that academic and behavioral interventions play in the successful managing of the middle/secondary classroom. Participants will learn academic strategies that produce effective classroom learning with elementary exceptional students.

EDU 5452
Academic and Behavioral Interventions for Learners with Exceptionalities (Secondary)
4cr
Participants will learn the role that academic and behavioral interventions play in the successful managing of secondary education students. Participants will learn academic strategies that produce effective classroom learning with secondary exceptional students.

EDU 5453
Instructional and Assistive Technology for Learners with Exceptionalities
2cr
Participants will demonstrate fluency in describing pedagogical approaches to incorporate technology into the instruction of exceptional learners.

EDU 5454
Collaboration with Parents and Professionals
4cr
Readings and assignments in this course will develop participants' abilities to successfully interact with colleagues and parents to support student learning and well-being as well as successful implementation of the students' I.E.P.

EDU 5520
Development and Content Area Reading in Secondary Schools
4cr
This course will explore reading instruction theory and application. Students will understand the developmental stages of reading and identify the most effective practices for teaching students in each phase. Special emphasis will be given to analyzing effective instructional techniques for each stage. Additionally, structures for differentiation - guided reading, strategy reading groups, book clubs, and reading conferences - will be explored.

EDU 5530
Sports Leadership in Education Internship
4cr
In this course students will be involved in a cooperative field experience, on or off the Carthage campus. The field supervisor/course instructor and student will design a field of study best suited to the student's career aspirations. The student will be placed with a mentor who volunteers relevant expertise and time. The student is required to keep a log of work hours and a biweekly journal log and final research paper linking theory to practice. This internship will require a minimum of 35 hours for 4 credits of study. Prerequisites: EDU 5050, EDU 5070, and EDU 5250

EDU 5540
Developmental Reading Instruction
4cr
A study of the content, organization, and methods of integrating reading and language arts across the content areas of elementary through high school. Emphasis will also be placed on written communication. Fieldwork required. Fall/Spring
EDU 5550  
Master's Degree Capstone Experience  
4cr  
This course is taken by thesis and integrative project writers to aid in the development and execution of this major research paper. Graduate candidates arrange this course with their advisor. Prerequisites: EDU 5240 and EDU 5250

EDU 5570  
Classroom Management and Conflict Resolution in Secondary Schools  
4cr  
This course will prepare Accelerated Certification for Teachers (ACT) teacher candidates to implement effective policies and strategies for creating a productive and safe classroom environment. Materials will cover basic teaching strategies for a wide discipline of programs. Students will review and evaluate effective education management strategies. Conflict resolution will be addressed.

EDU 5820  
Introduction to Child and Adolescent Psychology  
4cr  
Introduction to the science of child psychology emphasizing physical, psychological, cognitive, and social development from conception through adolescence. The concern is with those aspects of human behavior that change from childhood to adulthood with an emphasis on the middle and adolescent years of development and with the factors that account for those changes as specifically related to an educational setting.

EDU 5901  
Student Teaching (Add-On License)  
4cr  
The teacher candidates observe and teach in the new subject area on the job in a classroom for nine weeks under supervision of a qualified professionally licensed teacher in the subject field and by a qualified supervisor from the Education Department. This course addresses issues specific to the new license subject area and reinforces application of current educational expectations in the new teaching content area. Prerequisites: Students must complete all coursework needed for the add-on license, pass appropriate Praxis II content test, and pass the FORT (Cross-Categorical Special Education and ELL only).

EDU 5950  
Master's Comprehensive Exam  
2cr  
As a comprehensive study of significant courses taken throughout the M.Ed. experience, students will be evaluated on their ability to analyze, critique, and apply core content knowledge in their graduate concentration area of study. At the beginning of the semester, students collaborate with three assigned instructors with whom they have completed coursework. Students will collaborate with each instructor and be assigned curriculum with a theme focus to prepare for their comprehensive exam. After completing the written exam, students will meet with their instructors for an oral exam discussion. This is a capstone course experience and will be taken during the last semester of M.Ed. study. Students will be permitted to take one course concurrently with the Comprehensive Exam. Students will also be enrolled in EDU 5990 (0 cr) signifying that they will have met M.Ed. requirements after completing these course requirements.

EDU 5990  
Master's Degree Capstone Completion  
0cr  
Students should register for EDU 5990 during the semester that they intend to complete their capstone requirement.
Graduate Academic Program of Study

Master of Science – Business Design and Innovation

The Master of Science program in Business Design and Innovation (BDI), first accredited by the Higher Learning Commission in August 2016, provides an educational experience grounded in independent and critical thinking, creative problem-solving, and solution finding. The master’s program builds upon a liberal arts education where the curriculum streams of design, innovation, and sustainability are taught through the critical concepts of theory, knowledge, application, and continuous learning at the individual level, team level, and organization level to build mastery.

The BDI program prepares graduates to work in collaboration, leading and managing high-performing cross-functional teams. The program develops student capacity for design thinking, as well as innovative solutions, strategies, programs, and services for the private, nonprofit, and government sectors. On their journey, students master analytical methods through research-informed and evidence-based frameworks.

The intensive 39-credit, cohort-based graduate program is completed over 10 months. A series of workshops to further develop experiential/action-based learning is also built into the curriculum. Graduates will master organizational development skills including human-centered design, leadership development, change management, and team building; understand and apply innovative design solutions to businesses and organizations; apply group-level development knowledge including leading and motivating high-impact teams to facilitating team learning; utilize creativity and innovation both in theory and in practice; and bridge the gap between theory and practice through internship, capstone, and experiential learning.

Students can focus their studies on either Design and Innovation or Sports Management through tracks outlined below.

Design and Innovation Track Requirements:

Fall (18 credits)

- MGT 5005 Complementary Workshop I (0 cr.)
- MGT 5010 Innovative Leadership (3 cr.)
- MGT 5015 Complementary Workshop II (0 cr.)

Workshop III (3 cr.)

- MGT 5020 Business Metrics (3 cr.)
- MGT 5025 Complementary Workshop V (0 cr.)
- MGT 5030 Strategic Market Analysis (3 cr.)
- MGT 5035 Complementary Workshop VI (0 cr.)
- MGT 5040 Nonprofit Administration, Design, and Development (3 cr.)
- MGT 5050 Financial Analysis for Decision-Making (3 cr.)
- MGT 5060 Designing and Developing High-Impact Teams (3 cr.)

Spring (21 credits)

- MGT 5100 BDI Internship (3 cr.)
- MGT 5105 Complementary Workshop II (0 cr.)
- MGT 5110 Design, Innovation, and Sustainability (3 cr.)
- MGT 5115 Complementary Workshop III (0 cr.)
- MGT 5120 Disruptive Innovation (3 cr.)
- MGT 5125 Complementary Workshop IV (0 cr.)
- MGT 5130 Designing for Logistical Optimization (3 cr.)
- MGT 5135 Complementary Workshop V (0 cr.)
- MGT 5140 Change Management (3 cr.)
- MGT 5150 Ethical Decision-Making (3 cr.)
- MGT 5160 BDI Capstone (3 cr.)

Sports Management Track Requirements:

Fall (18 credits)

- MGT 5005 Complementary Workshop I (0 cr.)
- MGT 5020 Business Metrics (3 cr.)
- MGT 5015 Complementary Workshop II (0 cr.)
- MGT 5010 Innovative Leadership (3 cr.)
- MGT 5025 Complementary Workshop III (0 cr.)
- MGT 5240 Sports Media - Digital and Traditional (3 cr.)
- MGT 5035 Complementary Workshop IV (0 cr.)
- MGT 5150 Ethical Decision-Making (3 cr.)
- MGT 5210 Sport Industry, Economics, and Financial Analysis (3 cr.)
- MGT 5060 Designing and Developing High-Impact Teams (3 cr.)

J-Term (3 credits)

- MGT 5100 BDI Internship (3 cr.)

Spring (18 credits)

- MGT 5105 Complementary Workshop V (0 cr.)
- MGT 5200 Sales (3 cr.)
- MGT 5115 Complementary Workshop VI (0 cr.)
- MGT 5120 Disruptive Innovation (3 cr.)
- MGT 5125 Complementary Workshop VII (0 cr.)
- MGT 5230 Sports Marketing, Public Relations, and Promotion (3 cr.)
- MGT 5135 Complementary Workshop VIII (0 cr.)
- MGT 5250 Sports Business and Player Analytics (3 cr.)
- MGT 5260 Esports (3 cr.)
- MGT 5160 BDI Capstone (3 cr.)

Admission to the Program:

Qualified candidates seeking admission to the BDI must:

Successfully complete a bachelor’s degree from an accredited institution by August 1 of the entry year.

Complete and submit the required admissions items:

- Online application and application fee
- Official transcripts of all college work
- Two letters of recommendation
- A statement of purpose
- Resume/CV
- Entrance interview
- GRE or GMAT test scores (recommended but not required)

Courses

MGT 5010

Innovative Leadership

3cr

This course addresses the skills, concepts, and mindset that support leadership in complex, innovative organizations. Topics include self-leadership, critiquing diverse models of leadership, creating vision and strategy, understanding people, power and influence, motivation, and organizational culture. The course begins with creative exercises in leadership-style self-assessment and extrapolates these results to leadership in new, innovative organizational structures.
MGT 5020

Business Metrics
3cr
In this course, students will learn principles of financial accounting, managerial accounting, financial analysis, statistics, and quantitative methods used for short- and long-term decisions. An emphasis will be placed on the use of financial information for decisions and performance measurement.

MGT 5030

Strategic Market Analysis
3cr
This leverages core competencies developed throughout the program to formulate and implement global marketing strategies. A focus on strategic and competitive advantage in managing the global value chain will allow students to promote a unified marketing and management vision. Students will additionally develop an organizational infrastructure capable of solving problems and achieving operational synergies.

MGT 5040

Nonprofit Administration, Design, and Development
3cr
This course explores the administration and leadership of nonprofit organizations including arts management, fundraising and financial management, performance measurement, strategic planning, governance, and the respective roles of board, staff, and volunteers. Students will utilize techniques associated with design thinking, integrative thinking, sustainability, and the management of complexity for nonprofit organizations.

MGT 5050

Financial Analysis for Decision-Making
3cr
In this course students integrate principles of financial accounting and managerial accounting. The financial accounting portion covers interpretation of financial statements and basics of transaction analysis. The managerial accounting component covers cost-volume-profit analysis, job costing, activity-based costing, economic value added, capital budgeting, the balanced scorecard, strategic cost analysis, and the potential contribution of these advancements to organizational effectiveness.

MGT 5060

Designing and Developing High-Impact Teams
3cr
In this course students develop skills pertaining to team assessment, team development, team leadership, team coaching, facilitation of diverse teams, and project management skills. Course includes team project work, group decision-making exercises, learning situations, conflict resolution, and strengths and weaknesses of working in teams. Students will learn how to enhance the collective experience of teams to achieve greater levels of performance, productivity, flexibility, and innovation.

MGT 5110

Design, Innovation, and Sustainability
3cr
This course focuses on the intersection between design-thinking methodologies and opportunity-finding for strategy development. It covers theory and practice related to innovation, complexity, emergence, and principles of systems thinking to address the potential of strategy to drive organizational change and new value propositions. It begins with a review of frameworks for strategy development and explores approaches to engaging stakeholders in that development. Students use logic models to redesign an existing organizational strategy and develop actionable and sustainable plans and strategies.

MGT 5120

Disruptive Innovation
3cr
This course teaches students how to develop, design, and create ideas. Students explore the entrepreneurial mindset, creativity and idea generation, and assessing entrepreneurial opportunities. This course focuses on creative and innovative solutions to both business problems and business opportunities.

MGT 5130

Designing for Logistical Optimization
3cr
This course examines the path from creation to delivery for a product or service emphasizing the relationship of operations to the vision, mission, and goals of the organization. In addition to learning traditional operational concepts, such as operational strategy, process and supply chain management, and production, students will utilize principles, tools, and techniques associated with design thinking, integrative thinking, sustainability, and the management of complexity in order to effectively execute strategy.
MGT 5140

Change Management
3cr
In this course students develop skills as diagnosticians and designers of unique interventions. Students learn strategies, tactics, and issues relevant to successful organizational change. They learn how to select the most appropriate change-management intervention, modify a preexisting intervention strategy to address a specific project, assign roles for consultants and clients, and assess outcomes. Students will also learn negotiation skills and strategies.

MGT 5150

Ethical Decision-Making
3cr
This course examines ethical issues and dilemmas facing managers in most business organizations. Students will learn about ethical dilemmas at work, to place ethical issues within a management context subject to analysis and decision-making action, and to enhance and improve the ability of students to reason toward a satisfactory resolution of an ethical dilemma. Students will explore information ethics, ethics and diversity, organizational ethics, and global ethics. Students will also learn about discrimination, equal employment opportunity (EEO), and business law, and understand the distinction between law and ethics.

MGT 5160

BDI Capstone
3cr
As a cohort, students connect with an organization from the private, nonprofit/non-governmental, or government sector with an innovative business design and development challenge.

MGT 5200

Sales
3cr
Sales are the lifeblood of the sports business model. Students will be knowledgeable of the theory and practice of sales and promotions. This course examines the fundamental concepts, principles, and application associated with sales and promotions in the sport industry. The course covers several topics ranging from developing a sales management function and developing winning strategies to sponsorship activation. This course develops knowledge of sales and promotional theory and best practice encountered in professional careers in the sports industry.

MGT 5220

Management and Leadership in Sports
3cr
This course examines the principles of leadership and management within the sports industry. This course examines principles and foundations of sports management and leadership along with how the functions of planning, organizing, leading, and controlling (or directing) apply to a sports enterprise. The course focuses on the application of core management principles (including ethics) to provide a basis for understanding the development and governance of the sports industry as well as for addressing contemporary problems and issues.

MGT 5210

Sports Industry, Economics, and Financial Analysis
3cr
This course focuses on understanding the implications of industry structure of both the amateur and professional sport sectors of the industry. It introduces students to the economic impact of sports on the local, state, national, and global economies. This class also equips students with the skills to enhance their financial decision-making in a management role, applying concepts to the continually evolving landscape of the sports industry through understanding financial concepts for effective financial analysis and strategic planning.

MGT 5230

Sports Marketing, Public Relations, and Promotion
3cr
This course helps students gain a deeper understanding of the sports marketing mix of product, price, place, and promotion as well as marketing research, marketing strategy, market segmentation, branding, sponsorships, licensing venue and event marketing, global sport marketing, and public relations.

MGT 5240

Sports Media - Digital and Traditional
3cr
This course introduces students to a range of professional settings and challenges/opportunities related to the growth of sports media with a focus on social platforms. Additionally, traditional media delivery vehicles, such as print and broadcast, will be reviewed and analyzed for content impact, delivery, and effectiveness. Students will be exposed to the opportunities and constraints posed by the distinct roles of reporters, fans, players, publicists, agents, teams, and league officials.
MGT 5250

Sports Business and Player Analytics
3cr
The use of data-driven decision-making for managers is an essential strategic component of the success of individual teams and the future of the sports industry. Throughout this course, students will examine the use of analytical techniques and quantitative methods in the areas of marketing, active demand planning, ticket sales, and business operations. Skills such as critical thinking, mathematical modeling, statistical analysis, predictive analytics, and optimization are crucial skills needed by sport managers. The course seeks to develop and refine these skills in the business application area of sports management.

MGT 5260

Esports
3cr
This course introduces students to the business model framework in application of the Esports industry, the essential foundation of how to create value via solving problems and fulfilling consumers' wants and needs. This course assumes continued rapid cycles of industry shock and disruption, and as such, students learn the concepts of business model development and critique to be adaptive thinkers and agile learners, and how to seek and create new value generation.

Master of Music in Music Theatre Vocal Pedagogy
The Master of Music (M.M.) in Music Theatre Vocal Pedagogy provides opportunities for creative endeavor, inquiry, and investigation into the field of professional voice use in music theatre style.

This 10-month full-time master’s program features seminar courses in vocal pedagogy, application and integration courses in voice performance in music theatre style, and analysis courses that focus on repertoire and rehearsal techniques.

M.M. students will be able to employ a variety of instructional techniques that support efficient and effective voice performance practice. They will develop individual research and creative projects that allow them to engage musically, artistically, and intellectually in the field of music theatre voice performance.

The M.M in Music Theatre Vocal Pedagogy is accredited by the National Association of Schools of Music (NASM).

Graduates of the M.M. program at Carthage will be able to:
- Analyze and interpret music theatre repertoire from a broad range of styles, and apply those understandings in performance.
- Demonstrate an awareness of a broad range of pedagogical concepts, and apply these concepts appropriately in a variety of educational settings.
- Conduct scholarly research in music theatre vocal pedagogy.
- Demonstrate and apply understandings of equity and inclusion within applied voice teaching and the field of music theatre.
- Understand the connections among the subdisciplines of music theatre and the impact and intersection with music theatre vocal pedagogy.
- Describe basic information about health and safety within the context of practice, performing, teaching, and listening.

To earn the M.M., students must earn a cumulative GPA of 3.0 or higher. They must successfully complete all 36 credits in the program, including the Competency Exam and Capstone. The M.M. includes the following required courses:

- MUS 5100 Voice Pedagogy: Anatomy and Function (4 cr.)
- MUS 5200 Contemporary Vocal Pedagogy and Styles (4 cr.)
- MUS 5300 The Voice Profession: Readings and Issues (4 cr.)
- MUS 5400 Supervised Teaching Practicum (1 cr. course, taken 2 times)
- MUS 5500 Advanced Applied Music Study (1 cr. course, taken 6 times)
- MUS 5600 Movement and Voice Integration (1 cr. course, taken 2 times)

MUS 5900 Literature and Coaching (2 cr.) (1 cr. each, taken 2 times)
MUS 6000 Seminar in Analysis and Interpretation of Music Theatre (4 cr.)
MUS 6100 Music Theatre Collaboration: Music Theatre Directing and Rehearsal Techniques (4 cr.)
MUS 6300 Master of Music Competency Exam (0 cr.)
MUS 6310 Master of Music Thesis Project (4 cr.)

Courses

MUS 5100

Voice Pedagogy: Anatomy and Function
4cr
This course examines respiration, phonation, resonance, and articulation in speech and song as well as pedagogical strategies for working with voices of various age levels and experiences. Students will explore practical approaches to evaluating voices and remediating inefficiencies in voice production. Students will develop a familiarity with traditional and modern writings in voice pedagogy, and utilize this research in applied voice settings. This course will include the use of technology in pedagogical settings.
Prerequisite: None

MUS 5200

Contemporary Vocal Pedagogy and Styles
4cr
Students will develop an in-depth understanding of the technical recipes for music theatre vocal styles, including resonance and articulation interaction and musical style options. This course will focus on efficient vocal technique that is grounded in a secure understanding of musical style elements as well as the integration of these elements with dramatic storytelling.
Prerequisite: MUS 5100
MUS 5300
The Voice Profession: Readings and Issues
4cr
Through readings, discussion, and application, course participants will develop an understanding of the issues in music theatre voice training and the role of the voice teacher in the studio setting. Building on skills developed in MUS 5100 and MUS 5200, this course provides students with the skills to develop a personal identity as a voice teaching professional with a focus on developing individual learning plans for students in private and educational settings. Students will also develop an understanding of the entrepreneurial skills needed for music theatre voice professionals, including the development of a website and other online materials as well as professional-quality audition materials.
Prerequisite: MUS 5200

MUS 5400
Supervised Teaching Practicum
1cr
Students in this course will apply theoretical knowledge to develop their own unique teaching style. Students will have a practicum cohort for discussion and reflection on teaching practices. Students will be expected to teach two to three private students throughout the course of the term as assigned by the instructor. Repeatable.
Prerequisite: MUS 5100 or MUS 5200

MUS 5500
Advanced Applied Music Study
1cr
This course provides opportunities for advanced, applied music study. Through technical exercises, repertoire study, and research of performance practice, participants will develop musical and artistic skills for the purpose of education and performance. Repeatable.
Prerequisite: None

MUS 5600
Movement and Voice Integration
1cr
This course provides opportunities for music theatre students to develop and somatically experience better physical organization, reducing effort, enhancing coordination, and expanding movement options. Movement and voice explorations will provide tools for creative expression. As part of the course, students will be introduced to the bodies of research of Linklater, Lessac, Fitzmaurice, Alexander, and/or Feldenkraus visvisvis. Students will learn the basic elements of these pedagogical frameworks and apply these understandings to the analysis of performances and individual research projects. Repeatable.
Prerequisite: None

MUS 5900
Literature and Coaching
1cr
Students in this course will explore performance literature through individual coaching and biweekly group master class format. Repeatable.
Prerequisite: None

MUS 6000
Seminar in Analysis and Interpretation of Music Theatre
4cr
Students in this course will develop a thorough understanding of performance practices and stylistic characteristics of American music theatre through this variable-content course. This course explores the interdisciplinary art form of music theatre through the integration of musical analysis with traditional performance-based textual analysis. Repeatable.
Prerequisite: None

MUS 6100
Music Theatre Collaboration: Music Theatre Directing and Rehearsal Techniques
4cr
This course prepares the music theatre voice specialist to collaborate as part of an integrated team with other music theatre specialists including stage directors, designers, and choreographers. This course focuses on the unique roles of the collaborative team as well as tools for integrating and developing effective practices. This course will also address rehearsal techniques, musical arrangements, licensing, auditions, and rehearsal planning.
Prerequisite: MUS 6000

MUS 6300
Master of Music Competency Exam
0cr
This is a written competency exam to demonstrate broad knowledge as well as specific expertise related to the courses in the Master of Music in Music Theatre Vocal Pedagogy.
Prerequisite: None

MUS 6310
Master of Music Thesis Project
4cr
This capstone course provides the opportunity for the music theatre voice specialist to demonstrate sophisticated understandings of the historical, cultural, and stylistic contexts of music theatre through the completion of a capstone project. Students will apply research techniques appropriate to the discipline in order to develop an individual research line or curricular project.
Prerequisite: Completion of at least 28 graduate credits in Music

Master of Arts in Athletic Training
The Master of Athletic Training program at Carthage is accredited by the Commission on
Accreditation of Athletic Training Education (CAATE). The program is designed to develop academic competence, evidence-based practice, and clinical reasoning skills through a sequence of didactic, laboratory, and clinical experiences.

**3 + 2 Accelerated Track**

This is a rigorous and intense 3 + 2 curriculum model.

**PRE-PROFESSIONAL PHASE: Allied Health Science Major, 44 credits**

The allied health science (AHS) major is an interdisciplinary and liberal arts foundation to recognize and understand key theories and concepts associated with health, wellness, and pathophysiologic conditions. It will prepare students for admission into the professional phase of the Master of Arts in Athletic Training (MA-ATH) program. Twenty-four core credits emphasize human science; the remainder of major credits are provided in a pre-professional athletic training phase.

A secondary application is submitted by September 15 of the student’s junior year for admission into the professional phase. All students applying for admission will be notified in writing of their acceptance or rejection into the program by October 15 of the application year.

Acceptance into the program is based on the following criteria:

1. Current pre-professional phase course sequence progression with a minimum 3.0 GPA
2. Submission of the professional phase application packet by September 15.
   Required documentation: caregiver background and criminal history check, immunization records, program physical exam including 10-panel drug test, TOEFL documentation (for non-native English speakers)
3. Completion of Jump Start Experiences (faculty- and mentor-led activities)
4. Fulfill the technical standards verified by a health care provider
5. Entrance interview with the Program Admission Committee

*Technical Standards: Candidates for selection into the Athletic Training Educational Program must demonstrate the following.*

1. The mental capacity to assimilate, analyze, synthesize, and integrate concepts to problem-solve, to formulate assessment and therapeutic judgments, and to distinguish deviations from the norm.
2. Sufficient postural and neuromuscular control, sensory function, and coordination to perform appropriate physical examinations using accepted techniques; and to accurately, safely, and efficiently use equipment and materials during the assessment and treatment of patients.
3. The ability to effectively communicate with patients and colleagues, and to show sensitivity to individuals from different cultural and social backgrounds; to effectively communicate judgments and treatment information; and to understand and speak the English language at a level consistent with competent professional practice.
4. The ability to clearly and accurately record the physical examination results and a treatment plan.
5. The capacity to maintain composure and continue to function well during periods of high stress.
6. The perseverance, diligence, and commitment to complete the Athletic Training Education Program as outlined and sequenced.
7. The flexibility and ability to adjust to changing situations and uncertainty in clinical situations.
8. Affective skills, appropriate demeanor, and rapport that relate to professional education and quality patient care.

Candidates for selection into the Athletic Training Educational Program will be required to verify that they understand and meet these technical standards, or that they believe that, with certain accommodations, they can meet the standards.

Students with disabilities who request accommodations to meet the program standards must provide the program director with documentation appropriate to the condition from an appropriate authority. The program director will have the Learning Accessibility Services personnel evaluate documentation and determine whether the stated condition qualifies as a disability. The Learning Accessibility Services personnel, together with the program director, will determine what appropriate accommodations will be provided to a student so that he or she can meet the program’s technical standards.

Students accepted into the program begin the professional phase enrolled in graduate-level courses to fulfill institutional credit requirements during their senior year. Students not accepted into the program will collaborate with their advisors to pursue another major.

See Allied Health Science for major requirements.

**PROFESSIONAL PHASE: Athletic Training Master Program, 65 credits**

Students accepted into the professional phase enroll in dual designated (*) graduate-level courses to fulfill institution credit requirements beginning the summer between the student’s junior and senior year.

**The professional phase includes:**

- ATH 5400* Principles of Athletic Training (4 cr.)
- ATH 5401* Traditional Athletic Training Placement I (2 cr.)
- ATH 5101* Practicum I (1 cr.)
- ATH 5110* Clinical Skills I (4 cr.)
- ATH 5201* Practicum II (2 cr.)
- ATH 5210* Clinical Skills II (4 cr.)
- ATH 5439* Health Care Informatics (2 cr.)
- ATH 5440* Emergency Medical Response for Athletic Trainers (4 cr.)
- ATH 5469* Evidence-Based Practice in Health Care (4 cr.)
- ATH 5420* Psychological Aspects of Athletic Training (2 cr.)
- ATH 5461 General Medical Condition (4 cr.)
- ATH 5501 Traditional Athletic Training Placement II (2 cr.)
- ATH 5080 Administration in Athletic Training (2 cr.)
- ATH 5130 Therapeutic Interventions I (4 cr.)
- ATH 5250 Pharmacologic Agents in Athletic Training (2 cr.)
- ATH 5301 Practicum III (2 cr.)
- ATH 5310 Clinical Skills III (4 cr.)
- ATH 5731 Therapeutic Interventions II (4 cr.)
- ATH 5851 Immersive Clinical Experience in Athletic Training (4 cr.)
- ATH 5666* Health and Fitness Principles (4 cr.)
- ATH 5990 Capstone in Athletic Training (4 cr.)

**Prerequisite courses:**

- See Allied Health Science for major requirements.
Graduate Academic Program of Study

AHS 1020 Introduction to Health Care Professions (2 cr.)
AHS 3080 Structural Kinesiology (4 cr.)
BIO 1010 Concepts of Biology (4 cr.)
BIO 2010 Human Anatomy and Physiology for the Health Professional I (4 cr.)
BIO 2020 Human Anatomy and Physiology for the Health Professional II (4 cr.)
CHM 1010 General Chemistry I (4 cr.)
CHM 1020 General Chemistry II (4 cr.)
EXS 4050 Physiology of Exercise (4 cr.)
EXS 2330 Applied Statistics for Health & Human Services (4 cr.)
PHY 2100 Physics I (4 cr.)
PYC 1500 Introduction to Psychological Science (4 cr.)

Additional Program Fees*:
Apparel $45
Criminal Background Check $20-$100
Physical Exam Costs will depend on health insurance
Drug Screening Test Approximately $80
ACES Workshop $160 (one-time fee)
Annual Tuberculosis Test $15
Annual Flu Vaccine Costs will depend on health insurance
Annual NATA Dues $75-$115
Annual EMR/CPR certification renewal $45

Program fees do not include books. In addition to the above, the student will maintain health insurance. Auto expenses, including insurance and all travel, are the responsibility of the student.

*All fees are subject to change

Courses

ATH 5101 Practicum I
1cr
The course is a companion laboratory course for ATH 5110. The athletic training student will practice the skills taught in the classroom for evaluation and assessment of orthopedic injuries and conditions of the lower extremity. Laboratory/clinical rotation experience.
Fall

ATH 5110 Clinical Skills I
4cr
The course is designed to prepare the athletic training student in the area of evaluation and assessment of orthopedic injuries and conditions of the lower extremity. This course has a companion laboratory course ATH 5101 to be taken simultaneously.
Fall

ATH 5130 Therapeutic Interventions I
4cr
This course provides an introduction to the theory and application of rehabilitation and reconditioning techniques used for promotion, maintenance, and restoration of optimal health and function in the physically active population.
Fall

ATH 5210 Clinical Skills II
4cr
The course is designed to prepare the athletic training student in the area of evaluation and assessment of orthopedic injuries and conditions of the upper extremity. This course has a companion laboratory course ATH 5201 to be taken simultaneously.
Spring

ATH 5250 Pharmacologic Agents in Athletic Training
2cr
The course will introduce the principles of drug therapy and study of medications commonly used in the physically active population. Pharmacodynamics, pharmacokinetics, and drug interactions will be discussed.
Fall

ATH 5301 Practicum III
2cr
The course is a companion laboratory course for ATH 5310. The athletic training student will practice the skills taught in the classroom for evaluation and assessment of head and spine injuries, and general medical conditions. Laboratory/clinical rotation experience.
Fall

ATH 5310 Clinical Skills III
4cr
The course is designed to prepare the athletic training student in the area of evaluation and assessment of head and spine injuries, and general medical conditions. This course has a companion laboratory course ATH 5301 to be taken simultaneously.
Fall

ATH 5080 Administration in Athletic Training
2cr
This course will provide the knowledge and skills necessary for the administration of an athletic training program. An overview of program, human, and financial resources; risk management; ethical issues; and leadership theories will be covered.
Fall
ATH 5400
Principles of Athletic Training
4cr
The course provides an overview of the principles of injury for the physically active population including, but not limited to, etiology, environmental conditions, protective equipment/taping, and injury risk factors.
Fall

ATH 5401
Traditional Athletic Training Placement I
2cr
The course is an immersive clinical experience to familiarize the novice athletic training student to the practice of athletic training during the collegiate preseason. Clinical rotation experience.
Summer

ATH 5420
Psychological Aspects of Athletic Training
2cr
The course will provide the student methods to improve patient care by understanding the relationship between psychological issues and athletic performance, illness, injury, treatment, and return to activity.
Spring

ATH 5439
Health Care Informatics
2cr
The course provides the student with the fundamental knowledge of the concepts of health informatics and how technology can be used in the delivery of health care.
Spring

ATH 5440
Emergency Medical Response for Athletic Trainers
4cr
The course is designed to provide the student with the knowledge and skills necessary to work as an Emergency Medical Responder (EMR) to help sustain life, reduce pain, and minimize the consequence of injury or sudden illness until more advanced medical help takes over. Additional certification fee.
Fall

ATH 5461
General Medical Conditions
4cr
The course is a review of systemic conditions and mental health disorders found in the physically active population. Lecture/clinical rotation experience.
Spring

ATH 5469
Evidence-Based Practice in Health Care
4cr
The course will provide a framework for the health care student to systematically review the best evidence to make informed choices and improve patient outcomes.
Fall

ATH 5501
Traditional Athletic Training Placement II
2cr
The course is an immersive clinical experience that allows the advanced athletic training student to experience the preseason athletic training activities at the collegiate level. Clinical rotation experience.
Summer

ATH 5566
Health and Fitness Principles
4cr
The course will examine the principles of wellness and nutrition as it relates to the physically active population. It will focus on the necessary knowledge to apply sound nutritional, strength and conditioning, and wellness practices.
Spring

ATH 5731
Therapeutic Interventions II
4cr
This course is a continuation of Therapeutic Interventions I advancing the students' therapeutic techniques through the design, implementation, and supervision of rehabilitation programs for the physically active population. Lecture/clinical rotation experience.
Spring

ATH 5851
Immersive Clinical Experience in Athletic Training
4cr
The course is an immersive clinical experience that allows the students to experience the totality of care provided by athletic trainers. Clinical rotation experience.
J-Term/Spring

ATH 5990
Capstone in Athletic Training
4cr
The capstone project will expand upon and integrate work completed in previous courses. It will provide the student with an opportunity to apply methods of scholarly research to athletic training issues found in the physically active population.
Spring
Admissions

Admission to Carthage
Freshman Entrance Requirements
Test Optional Policy
Self-Reported Test Scores
Early Review/Early Notification (EREN) Program
Early Admission
Advanced Placement
GED Applicants
International Students
Transfer Students
Application Procedures for Part-Time Students
Admission to the Graduate Program

Admission to Carthage
Carthage offers educational opportunities for full-time or part-time students in both undergraduate and graduate programs. Students interested in full-time, undergraduate study may obtain more information and an application by calling the Office of Admissions at 262-551-6000 or 800-351-4058, or by contacting the office in person, by mail, or email:

Office of Admissions
Carthage College
2001 Alford Park Drive
Kenosha, WI 53140-1994
admissions@carthage.edu

Students interested in part-time or graduate study should contact the Office of Admissions at 800-551-4058 or 262-551-6000. Carthage welcomes students of all races and religious preferences.

Students considering Carthage are encouraged to visit the campus. The Carthage Office of Admissions is open year-round, Monday through Friday, with group visit days on most Saturdays during the school year. Reservations are recommended. These visits include a student-led campus tour and a meeting with admissions and financial aid representatives. If prearranged, your visit also may include meetings with professors and coaches, or an opportunity to observe a class.

Admission to the Undergraduate Program
Freshmen and transfer students usually enter in the Fall term, but applications also are considered for terms beginning in January, February, and June. The College operates on a year-round calendar and accepts applications on a rolling admission basis. Applications are reviewed upon completion. High school seniors who wish to enter Carthage during the Fall term are strongly encouraged to apply by December of their senior year. A nonrefundable application fee of $35 must accompany the application. A waiver of this fee is possible if the applicant demonstrates financial limitation and submits the College Board application fee waiver, usually sent by the student’s high school guidance office. The application fee also is waived for children and grandchildren of Carthage alumni.

Freshman Entrance Requirements
During the evaluation process, admissions representatives consider all aspects of a student’s academic background. Primary emphasis focuses on the secondary school record, including the number and nature of courses completed, grade point average in academic courses, rank in class, and scores from the ACT (American College Testing program) or the SAT I (Scholastic Assessment Testing program). Carthage will accept these scores from your official high school transcript.

Students graduating from an accredited secondary school with a strong college preparatory background are best prepared for academics at Carthage. The College strongly recommends that students complete a minimum of 16 academic units in high school, including English, foreign language, science, mathematics, and social studies.

High school students should submit the following when applying for admission: (1) a completed application, (2) an official high school transcript, (3) official results from the SAT or ACT program, and (4) a $35 application fee.

Students seeking acceptance to the Nursing program will require an essay and interview. All freshman applicants are encouraged to apply by December 3 of their senior year in high school.

Test Optional Policy
Students who believe that standardized test scores do not accurately reflect the strength of their academic achievements can choose to be considered as test optional in the admissions process.

This policy aligns with our admissions philosophy of holistic review and aligns with the College’s strategic plan on access. Standardized testing is not always the strongest indicator for successful performance in college. We look at the student’s high school performance through grades and strength in their coursework.

Who is required to submit test scores?
The following applicants must submit SAT/ACT scores:

Applicants to the direct entry Carthage Nursing Program
Applicants who are homeschooled
International students for whom English is not their native language (TOEFL results or SAT/ACT required)

Students who wish to be considered for our competitive scholarship programs (Presidential, Business, Modern Language, Math/Science Scholarship Program)

We ask that you submit a graded paper from your junior or senior year of high school and complete an admission interview with a member of the admissions staff. Please contact the Office of Admissions directly at 262-551-6000 or admissions@carthage.edu.

Self-Reported Test Scores
Students have the option to self-report their test scores from the ACT or SAT. Applicants will be asked to send an official record of their score once they’ve been admitted and have decided to enroll.

Early Review/Early Notification (EREN) Program
Students who have completed three years of high school may apply early for admission under the EREN program. Applicants whose applications are received by mid-July are notified of their admission status in late September. All applications received by October 15 are treated equally.

Applications, transcripts, and other credentials become part of the permanent file of the College and may not be returned or forwarded.

Once a student has been admitted to Carthage, an advance payment of $300 is requested to hold a place in the entering class. For students starting in the Fall term, this deposit is completely refundable up to May 1 of the initial year of attendance. The deposit is nonrefundable after November 1 for the Spring term and Summer Sessions.

Early Admission
It is possible for a student to be accepted for admission to Carthage after completing
secondary school in three years. On the basis of outstanding academic achievement, a student may be admitted to the College in lieu of completing the senior year of secondary school.

Additional information may be obtained from the high school guidance office or by contacting the Office of Admissions.

Advanced Placement
A maximum of 32 credit hours of alternative credit may be counted toward graduation. This includes IB, AP, and CLEP. No credit will be awarded for subsidiary level examinations. For additional information, contact the Office of Admissions.

Advanced Placement Courses and Carthage Policy
Advanced Placement Examinations, consisting of both objective and free response sections, are administered by the College Board to students who have completed college-level Advanced Placement courses in high school. A score of 1 through 5 is assigned by a group of evaluators based on the score for the objective section and review of the free response questions. Carthage awards credit in recognition of scores 3 through 5. Entering students who wish credit for Advanced Placement must submit official results to the Office of the Registrar.

All Advanced Placement courses are subject to departmental review of scores and/or booklet before credits are awarded. AP scores must be 3 or above to receive Carthage credit, unless a higher score requirement is specified below.

Art History: ARH 2701 Art Survey II with a score of 4 or 5 (4 cr.)

Biology: BIO 1010 Concepts in Biology (4 cr.)

Calculus AB: MTH 1120 Calculus I with a score of 4 or 5 (4 cr.)

Calculus BC: 4 credits in Math 1120 Calculus I with a score of 4; see department chair to discuss credits for Math 1220 Calculus II. 8 credits in Math 1120 Calculus I and Math 1220 Calculus II with a score of 5.

Chemistry: 4 credits in CHM 1010 General Chemistry I with a score of 3 or 4; 8 credits in CHM 1010 General Chemistry I and CHM 1020 General Chemistry II with a score of 5.

Computer Science A: CSC 1810 Principles of Computer Science I (4 cr.)

Computer Science Principles: General Elective credit (4 cr.)

Macroeconomics: ECN 1020 Principles of Macroeconomics (4 cr.)

Microeconomics: ECN 1010 Principles of Microeconomics (4 cr.)

English Language: General Elective credit (4 cr.)

English Literature: ENG 1060 Interpreting Literature (4 cr.)

Environmental Science: GEO 1600 Earth Revealed (4 cr.)

European History: HIS 1120 Issues in European History II (4 cr.)

French Language/Literature: Placement indicator at Carthage College required.

German Language: Placement indicator at Carthage College required.

Government and Politics (Comparative): POL 1030 Introduction to Comparative Politics (4 cr.)


Human Geography: GEO 1500 Human Geography: An Introduction (4 cr.)

Latin: Placement indicator at Carthage College required.

Music Theory (Aural): General Elective credit (1 cr.)

Music Theory (Non-Aural): General Elective credit (3 cr.)

Physics 1, Algebra Based: PHY 1200 Fundamental Physics (LAB). Score of 4 or 5 required.

Physics 2, Algebra Based: PHY 1200 Fundamental Physics (LAB). Score of 4 or 5 required. If a score of 4 is received in both Physics 1 and 2, credit will also be given for PHY 2100 Physics I (LAB).

Physics C (Electricity/Magnetism): 8 credits in PHY 1200 Fundamental Physics (LAB) and PHY 2200 General Physics I (LAB). Score of 4 or 5 required.

Physics C (Mechanics): PHY 1200 Fundamental Physics (LAB). Score of 4 or 5 required.

Psychology: Social Science Elective (4 cr.)

Seminar: General Elective credit (4 cr.)

Spanish Language/Literature: Placement exam at Carthage College required.

Statistics: MTH 1050 Elementary Statistics (4 cr.)

Studio Art/Drawing: Submit scores and booklet for departmental review. Score of 4 or 5 required.

U.S. History: HIS 1000 Issues in American History (4 cr.)

World History: Asian History Elective (4 cr.) and credit for Global Heritage (GH)

International Baccalaureate
The International Baccalaureate (IB) is an internationally recognized program that enables students to follow a special curriculum and take specific examinations to fulfill secondary school graduation requirements. The IB diploma program is recognized by Carthage for purposes of admission, course credit, and advanced standing or placement. These examinations are given in high schools that have the IB program. Credit is based on a review of the candidate’s IB program. Credit may be given for scores of 4 or higher in selected higher level examinations.

GED Applicants
Students having completed the Graduated Equivalency Diploma (GED) program must provide evidence of their achievement by submitting an official copy of the GED certificate that includes the score. The certificate must be provided in addition to a transcript of the applicant’s high school grades.

International Students
In addition to submitting the application and official copy of secondary school transcripts, international students must demonstrate proficiency in the English language by completing the TOEFL (Test of English as a Foreign Language), SAT, ACT, or IELTS. Students who meet academic requirements but who do not have the English language proficiency may be eligible for conditional admission to Carthage College. Upon successful completion of required coursework at an ESL Language Center, students may enroll as degree-seeking students. Preference is given to international students who score at least 78 on the TOEFL-IBT, a 6 on the IELTS, or have completed 112 at an ESL Language Center. For secondary school transcripts in a language other than English, English language translation is required. A nonrefundable fee of $40 must accompany the application. The I-20 form is issued once a student has been admitted to the College and has paid the $300 advance payment. Students who have taken courses at an institution that is not on the American system will need to have their transcripts evaluated by an accredited agency such as ECE (Educational Credential Evaluators). The College will use that evaluation to make an admissions decision.

Transfer Students
Carthage welcomes students who have completed coursework at other institutions. Students wishing to transfer college credits to Carthage should contact the Office of Admissions to complete the application process and submit transcripts for evaluation.
The Office of the Registrar completes all transfer credit evaluations in consultation with department chairs. No credit will be transferred until official transcripts from all previous institutions are received and evaluated.

Transfer students planning to enroll full-time (12 or more credits) should submit the following to the Office of Admissions: (1) a completed application, (2) an official and final high school transcript, (3) official transcripts from all college-level coursework and each previously attended college/university, (4) the $35 application fee, and (5) Admission with Advance Standing Form.

Students considered for transfer admission to Carthage should be in good standing with all previous or current colleges and have a minimum grade point average of 2.0 (on a 4.0 scale).

Carthage gives appropriate value to transcripts and records from institutions accredited by the North Central Association of Colleges and Secondary Schools and similar regional associations when comparable courses or areas are taught at Carthage.

Students enrolling in traditional undergraduate programs can transfer in a maximum of 68 credits earned at a two-year institution.

Students enrolling in a 2+2 or degree completion program at Carthage will be granted the number of credits outlined in their specific program admissions process. Students who transfer from a degree completion program at Carthage to a traditional undergraduate program will have previous transcripts re-evaluated as a part of the internal transfer process.

Credits will be transferable for courses in which grades of C- (or its equivalent at Carthage) or above are earned. Credits transferred will be entered on the student’s permanent record without reference to the grade earned. Grades are not transferred.

Grades from all attended institutions are used in computing the cumulative grade point average for teacher education.

**Application Procedures for Part-Time Students**

Prospective students considering part-time study (fewer than 12 credits) may choose from a variety of day or evening courses. Full-and part-time students apply through the Office of Admissions.

**Degree Seeking:** All part-time students interested in earning an undergraduate degree must apply for degree status. To apply for degree status, submit an application for part-time enrollment and official college transcripts of all prior college coursework. Students who have never attended college must submit official high school transcripts.

**Nondegree Seeking:** Applicants who do not plan to earn a degree but wish to take courses for personal or professional enrichment should apply for nondegree status. To apply for nondegree status, submit an application. High school/college transcripts are not required.

**Admission to the Graduate Program**

Applicants to the Master of Education or Advanced Licensure programs are considered throughout the year, with matriculation occurring in Summer, Fall, January, or Spring term. Qualifications for admissions include successful completion of a bachelor’s degree, employment in a profession that is educational in nature, and a grade point average indicating capacity for graduate study. Each applicant must submit an application and personal statement, official transcripts of all college work, proof of a valid teaching license, two letters of recommendation, and possible interview with the director of the Graduate Program. A nonrefundable application fee of $35 must accompany the application.

Applicants to the Master of Science (MSc) in Business, Design and Innovation, and Sports Management Track are considered throughout the year to seat the Fall cohort. Qualifications for admissions include successful completion of a bachelor’s degree and a grade point average indicating capacity for graduate study. Each applicant must submit an application and personal statement, official transcripts of all college work, two letters of recommendation, and have an interview with the program director. A nonrefundable application fee of $35 must accompany the application.

Applicants to the Master of Music (M.M.) in Music Theatre Vocal Pedagogy are considered throughout the year to seat the Fall cohort. Qualifications for admissions include successful completion of a bachelor’s degree in music or music theatre. Students without a bachelor’s degree in music or music theatre must take a proficiency examination. Students requiring additional work in areas such as music theory or music theatre history will be asked to complete specific courses during their study in order to complete the M.M. The application process will include a review of transcripts, interview, and performance audition. Non-native speakers will have to demonstrate language competency through transcript review and interview or a TOEFL score of 78 or above. A résumé and two letters of recommendation are required, as well as a nonrefundable application fee of $35.
Tuition and Fees

Carthage Student Fees

Advance Payments

Billing Procedures

2021-22 Undergraduate Tuition and Fees

Late Payment Fees

2021-22 Graduate Tuition and Fees

Fees for Optional Services

Refund Schedule

Veterans Administration

Educational Program

Payment Options

Carthage Student Fees

The College operates on an annual budget with commitments for faculty, student services, and facilities made one year in advance. Since Carthage develops its operational plan based on anticipated enrollment, the College must have a firm commitment from all students regarding their educational intentions.

Carthage operates under a comprehensive fee program covering standard charges for the academic year for all full-time students. This comprehensive fee includes tuition for 12 to 18 credit hours during each of the Fall and Spring terms and up to four credit hours during the January Term; and charges for a double room and standard meal plan for resident students. For the 2021-22 academic year, the comprehensive fee is $33,000 for commuting students and $45,400 for resident students.

All full-time undergraduate students who are not commuting from their parent or legal guardian’s primary address must reside in a College residence hall and participate in a meal plan, in accordance with the College’s residency requirement policy.

Advance Payments

Carthage requires all new, full-time students to make a $300 advance payment to confirm their enrollment at the College. This advance payment is fully refundable through the Office of Admissions, if requested in writing on or before May 1. After May 1, this advance payment will be credited to a student’s account but will be forfeited to the College by any student who fails to register for the Fall term.

Returning students will have an opportunity to register for the Fall term during the prior Spring term. This registration process gives returning students preference in the selection of classes, as registration for new students does not begin until the close of this registration period.

Returning students electing not to sign up for classes or a room assignment during the appropriate period in the spring will be allowed to register for classes and/or a room at any time until mid-August with the appropriate registration payment. However, the selection of classes, rooms, or roommates may be severely limited.

Billing Procedures

College policy requires payment of all charges to be received prior to the start of classes, unless arrangements for a budget payment plan have been completed. In May, all returning and newly admitted students are billed for tuition plus room and board, where applicable, for a full academic year. No payment is required immediately, but each student may select a payment program with as many as 11 or as few as one scheduled payments during the academic year.

Financial aid will be applied to student accounts in essentially equal amounts during the Fall and Spring terms.

Students registering for only one term will be responsible for the advance payment plus the appropriate charge for the term attended.

2021-22 Undergraduate Tuition and Fees

In addition to the cost of tuition, room, and board, Carthage provides other student services at additional costs. Following are the fees for the 2021-22 academic year:

<table>
<thead>
<tr>
<th>Annual Fee</th>
<th>Per Term (with J-Term)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Tuition (12-18 credits per semester plus J-Term)</td>
<td>$33,000</td>
</tr>
<tr>
<td>Residence Fee (Double Room)</td>
<td>$12,400</td>
</tr>
<tr>
<td>Total Fee</td>
<td>$45,400</td>
</tr>
</tbody>
</table>

Late Payment Fees

A $150 late registration fee will be assessed to any full-time student failing to complete the registration process during the scheduled period.

Carthage does not charge interest on student accounts if payments are received as scheduled. However, the College will charge a fee for late receipt of a scheduled payment. The late fee is equal to 1 percent per month of the past-due balance.

2021-22 Graduate Tuition and Fees

| Tuition: Full-time per term (12-18 credits, excludes J-Term) | $22,550 |
| Tuition: Summer Session (per credit hour) | $669 |
| Tuition: Part-time (per credit hour) | $595 |
| Tuition: Master of Music | $27,000 |
| Application fee (full-time) | $35 |
| Master’s degree graduation fee | $25 |

Carthage reserves the right to change the amount charged for tuition or related fees at any time without prior notification. Please visit www.carthage.edu/graduate for the most up-to-date program information and cost.

Fees for Optional Services

| Overload fee (per credit hour exceeding 18 hours Fall and Spring terms) | $1,500 |
| Second J-Term (per credit hour) | $595 |
| Tuition: Part-time semester students (per credit hour, maximum 11 credit hours) | $595 |
| Tuition: Part-time 7-week format (per credit hour) | $525 |
| Resident student parking | $150-1,735 per permit per academic year |
| Full-time Summer Session (7 weeks) 12 credits | $8,025 |
| Summer Session residence fee (includes 730 meal points) | $3,500 |
| Summer semester tuition (part-time) | $595 per credit hour |
Tuition and Fees

Transcript fee (each)* $10
Audit fee per credit hour $180
Examination for credit (per course) $800
Music lesson fee per semester:
- day students $360
- evening students $525
Late registration fee $150
Return check fee (each occurrence) $30
ID replacement $30
Mailbox $25
Room lock replacement $85
C.O. key $35
Full-time, undergraduate application fee $35
Part-time, undergraduate application fee $10

* To obtain an official transcript, the student must submit a written request to the Office of the Registrar.

Refund Schedule
Refunds for the 2021-22 academic year are made for tuition, meals, and auditing fees only. No refunds or adjustments will be made for residency charges (except meals), late fees, course or lesson fees, parking permits, or other administrative or miscellaneous charges.

ALL NOTICES OF WITHDRAWAL MUST BE MADE IN WRITING

All notices of withdrawal and/or requests for refunds from the College, including cancellation of registration and/or residential status, must be in writing and addressed to either the Office of Student Life, the Office of the Registrar, or Office of Student Accounts. The official date of withdrawal will be earliest of: the date the student appears in person at one of the designated offices and signs an appropriate withdrawal document, the date of receipt of any faxed or email message indicating withdrawal from the College or specific class, or the postmark on the envelope containing the request.

Tuition and Audit Fee Refunds
Refunds are based upon the percentage of the term that has elapsed during the period of attendance. This percentage of attendance is determined by dividing the number of term days elapsed by the total days in the term. A student withdrawing after one-third of the term has been completed will receive a tuition credit equal to two-thirds of the tuition charge. All Carthage and federal scholarship or loan awards will be applied to the student account in proportion to period of attendance and federal guidelines. Again, the student withdrawing after completing one-third of the term will receive one-third of the scholarship and loan awards for the term.

AFTER 60 PERCENT OF THE TERM HAS ELAPSED, NO TUITION OR AUDIT FEES WILL BE REFUNDED AND 100 PERCENT OF THE SCHOLARSHIP AND LOAN AWARDS WILL BE CREDITED TO THE STUDENT’S ACCOUNT.

Billing and Refund Policy for Accelerated Certification for Teachers (ACT)
Billing:
This is a 14-month, cohort-based program taught over four consecutive semesters. The entire tuition for the 2021-22 cohort is $30,000, which is billed to students in three equal amounts at the beginning of each of the first three semesters. There is no billing for the fourth and final semester.

ACT Program Refund Policy:
All notices of withdrawal and/or requests for refunds must be in writing and addressed to the ACT Program and the Office of Continuing Studies. The official date of withdrawal will be the earliest of: the date the student appears in person at the Office of Continuing Studies and signs an appropriate withdrawal document, the date of receipt of any faxed message indicating withdrawal from the program, or the postmark on the envelope containing the withdrawal request.

Refunds can only be made during the first 60 percent of the term. After 60 percent of the term, no program tuition will be refunded and 100 percent of the scholarship and loan awards will be credited to the student’s account.

The percentage of the term completion is determined by dividing the number of calendar days elapsed since the start of the program by the total number of calendar days in the term.

Residency Refunds
Resident students withdrawing from Carthage during an academic term are entitled to an adjustment based only upon the meals not provided. Board adjustment will be based upon the rate of $70.00 multiplied by the number of board weeks remaining between the official withdrawal date and the last day of the final examination period.

Special Note:
Students beginning the academic year during the Fall term will be billed for the full academic year unless Carthage is notified of an intention to attend a single term only. Students who are billed for the full academic year and withdraw during the Fall term will receive credit for the term of nonattendance at an amount equal to the difference between these posted rates, plus the appropriate Fall term refund as defined above.

Final Accounting
A final statement showing all final charges, credits, and/or adjustments normally will be mailed within 30 days of the notice of withdrawal. This final statement will show any balance due to the College, or indicate an amount to be returned to the student. Refund checks will be available approximately 10 days following the preparation of this final statement.

Appeal Process
Students wishing to appeal the refund decision may do so by writing to the Vice President for Administrative Planning and Innovation and Chief Organizational Development Officer.

Veterans Administration Educational Program
Students who plan to attend Carthage under the Veterans Administration Educational Program are urged to promptly apply to the appropriate VA agency for necessary authorization well in advance of their registration date. The proper authorization should be presented to the Office of the Registrar immediately after admission to the College.

Veterans enrolling under the educational program should be prepared to pay all charges in full or make application for a Deferred Payment Plan if their educational benefit is paid directly to the student (rather than paid to the College). Whether the benefit is paid to the student or to the College is determined by the veteran’s benefit chapter.

Students receiving VA benefits will not be removed from coursework if the institution is awaiting receipt of a pending payment of benefit. In addition, students receiving VA benefits will not be placed on a financial hold if the institution is awaiting receipt of a pending payment of benefit.

Payment Options
Carthage allows students to pay for tuition and room and board in regular installments during the academic year. Specific information regarding these payment options is provided at the time of the initial billing of the comprehensive annual fee, or may be obtained directly from the Business Office.
Financial Aid Rights and Responsibility

As a financial aid recipient, you have the right to:

• Seek financial aid counseling.
• Know how much aid you will receive each term and when it will be disbursed. Contact the Office of Student Financial Planning for disbursement dates.
• Know the terms of any work-study awards you are offered.
• Know the interest rate, repayment terms, and procedures for any loan(s) you are offered.
• Access your financial aid file.
• Privacy of information regarding your financial aid file. Information from your student file will not be released without your permission to anyone except College staff and financial aid donors requesting such information.
• Receive financial aid as long as you are eligible and as long as funds are available.
• Appeal any award decisions you feel warrant consideration due to emergency circumstances beyond your control, or office error.

As a financial aid recipient, you have the responsibility to:

• Check your Carthage email account regularly. College-assigned email accounts are the College’s official means of communication with you.
• Update your address, phone, and cell numbers as soon as you become aware of a change.
• Read all materials sent to you.
• Be prepared to provide the expected family contribution (EFC).
• Provide accurate, factual information on all financial aid forms requested, within 30 days of the request, but no later than the last date of attendance, whichever is earlier. Failure to do so will result in cancellation of part or all of your financial aid awards.
• Register early. Registration after the start of a term may result in additional fees, plus a delay or cancellation of part or all of your financial aid and/or additional fees.
• Once admitted, maintain satisfactory academic progress.
• Understand that if you withdraw from any or all of your classes, federal regulations require that all or a portion of any tuition refund you receive be credited to the financial aid funds from which you received assistance. You may also be required to repay any funds you received in excess of your tuition costs that were intended to assist you with living expenses while you attended school.
• Check your financial aid awards disbursed against your Financial Aid Award Letter each semester on your bill from Finance and Administrative Services.
• Know that if you are in default on any loans and/or owe aid repayments, you will be denied further aid.
• Know that if you receive aid that exceeds your calculated need, you must repay the excess.
• Notify the Office of Student Financial Planning if you drop below half-time enrollment (fewer than 6 credits each term).
• Notify the Office of Student Financial Planning if you change your name.
• Apply for financial assistance annually.
• Keep copies of all billing statements.
• Seek clarification if you do not understand any portion of the financial aid process.

Carthage Scholarship/Grant Program

Carthage administers an aggressive merit scholarship program. These awards are made at the time of admission without regard to financial need. Several of these scholarships are competitive and require a special application, while others are automatically awarded. They are based upon demonstrated academic achievement to date and potential to succeed. Available for up to four years of continuous, full-time undergraduate enrollment, each award requires maintenance of a minimum cumulative grade point average (GPA) at the end of each Spring term as indicated below:
**Student Financial Planning**

<table>
<thead>
<tr>
<th>Scholarship/Grant</th>
<th>Minimum GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Honors Scholarship</td>
<td>2.75</td>
</tr>
<tr>
<td>Alumni Grant</td>
<td>2.00</td>
</tr>
<tr>
<td>Anderson Scholarship</td>
<td>3.25</td>
</tr>
<tr>
<td>Art Scholarship</td>
<td>2.00</td>
</tr>
<tr>
<td>Badger Boys/Girls State Scholarship</td>
<td>2.50</td>
</tr>
<tr>
<td>Bridges Scholarship</td>
<td>2.25</td>
</tr>
<tr>
<td>Business Scholarship</td>
<td>3.00</td>
</tr>
<tr>
<td>Campbell Scholarship</td>
<td>3.25</td>
</tr>
<tr>
<td>Carthage Scholarship</td>
<td>2.00</td>
</tr>
<tr>
<td>Clausen Scholarship</td>
<td>3.25</td>
</tr>
<tr>
<td>Communication Scholarship</td>
<td>2.00</td>
</tr>
<tr>
<td>Dahl Scholarship</td>
<td>3.25</td>
</tr>
<tr>
<td>Dance Scholarship</td>
<td>2.00</td>
</tr>
<tr>
<td>Dean’s Scholarship</td>
<td>2.50</td>
</tr>
<tr>
<td>Diversity, Equity, and Inclusion</td>
<td>3.00</td>
</tr>
<tr>
<td>Leadership Fellows Scholarship</td>
<td></td>
</tr>
<tr>
<td>ELCA Grant</td>
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</tr>
<tr>
<td>Faculty Scholarship</td>
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</tr>
<tr>
<td>Founders Scholarship</td>
<td>2.75</td>
</tr>
<tr>
<td>Graphic Design Scholarship</td>
<td>2.00</td>
</tr>
<tr>
<td>Hay Scholarship</td>
<td>3.25</td>
</tr>
<tr>
<td>Highest Honors Scholarship</td>
<td>3.00</td>
</tr>
<tr>
<td>Hillsboro Grant</td>
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</tr>
<tr>
<td>Kenosha Police and Fire Scholarship</td>
<td>2.00</td>
</tr>
<tr>
<td>Kenosha Scholarship</td>
<td>2.75</td>
</tr>
<tr>
<td>Laura Kaeppler Kenosha Scholarship</td>
<td>2.75</td>
</tr>
<tr>
<td>Lentz Scholarship</td>
<td>3.25</td>
</tr>
<tr>
<td>Lincoln Scholarship</td>
<td>3.25</td>
</tr>
<tr>
<td>Mary Lou Mahone Kenosha Scholarship</td>
<td>2.75</td>
</tr>
<tr>
<td>Math/Science Scholarship</td>
<td>3.00</td>
</tr>
<tr>
<td>Ministerial Grant</td>
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</tr>
<tr>
<td>Modern Language Scholarship</td>
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</tr>
<tr>
<td>Multicultural Scholarship</td>
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</tr>
<tr>
<td>Music Scholarship</td>
<td>2.00</td>
</tr>
<tr>
<td>Phi Theta Kappa Scholarship</td>
<td>2.75</td>
</tr>
<tr>
<td>President Anderson Scholarship</td>
<td>3.25</td>
</tr>
<tr>
<td>President Dahl Scholarship</td>
<td>3.25</td>
</tr>
</tbody>
</table>

President Lentz Scholarship  3.25  
President Scholarship       2.75  
Public Relations Scholarship 2.00  
Ruud Scholarship            3.25  
Sibling Grant               2.00  
Springfield Scholarship     2.75  
Spring Scholarship          3.00  
Tarble Scholarship          2.50  
Theatre Scholarship         2.00  
Transfer Scholarship        3.00  
Tri-County Grant            2.00

Each year, at the end of the Fall term, the cumulative grade point average (GPA) is reviewed for continued scholarship eligibility. Students wishing to use J-Term grades toward their cumulative GPA must submit a written request to the Office of Student Financial Planning prior to the first day of J-Term classes. Warning letters are sent to those who currently are not meeting their scholarship terms, and the Spring term is considered probationary. At the end of each Spring term, the cumulative GPA is reviewed to determine renewal of scholarship(s).

If the student’s cumulative GPA leads to the termination of the scholarship, the student may submit a written appeal to the director of Student Financial Planning and/or enroll in summer classes at Carthage. Reinstatement of the financial aid depends upon the outcome of the appeal.

The College offers continuing students an opportunity to compete for merit awards, such as Heritage Scholarships, departmental honors, and selected endowed scholarships. These require faculty recommendation and may have additional stipulations as developed by the department or donor. The Office of Student Financial Planning can provide more details.

**Verification**

Each year the federal government randomly selects students to complete a process called verification. This process requires the College to verify information submitted on your Free Application for Federal Student Aid (FAFSA). If you have been selected, you will receive notification from the Carthage Office of Student Financial Planning asking you to complete the verification process and submit federal income tax transcripts as soon as possible.

Financial aid awards calculated prior to completing the verification process are considered estimates until we have verified your information. If necessary, we will make corrections with the federal FAFSA processor and then confirm the level of financial assistance that you are eligible to receive. We strongly encourage you to complete this process in a timely manner to lock in your eligibility for state, federal, and institutional assistance.

Eligibility for many awards is based on financial need, as determined through the Free Application for Federal Student Aid (FAFSA).

**Institutional Grant Programs**

In addition to a broad range of federal and state programs, Carthage supplements these awards with a generous commitment of institutional need-based grants. The financial grant is just one form of institutional aid in which the amount varies based on need and completion of the FAFSA.

**Applying Aid to Student Accounts**

Federal regulations and Carthage policy require that all grants and scholarships whether from the College or from federal, state, or private sources be applied directly to the student’s account. (Work-Study is a payroll program, and no transfer of funds is made. Please see the section on Work-Study for more information.) For many programs, the aid will be credited to students’ accounts electronically, without the need for students to intervene. Any time Carthage receives a check requiring a student’s endorsement, the student will be asked to visit Finance and Administrative Services to sign the check(s).

Early each term, the Office of Student Financial Planning will initiate a process to assure that all funds for which students are eligible be applied to their student account with the Business Office. The bills that students receive from Finance and Administrative Services will detail the charges and the aid credited to the account. After all charges have been paid, any credit balance remaining will be refunded from loan proceeds.

**Refunds**

If a student withdraws or is dismissed from Carthage, the student may be eligible for a refund of a portion of the tuition and board paid to Carthage for that term. (See tuition and residency refunds.) If the student received financial assistance from outside of the family, a portion of the refund will be returned to the grant, scholarship, or loan source from which the assistance was received.

If a student will be withdrawing, the student should obtain a notification of withdrawal...
form from the Office of the Registrar. The student officially has begun the withdrawal process when this form is completed and returned to the Office of the Registrar. This procedure will enable Carthage to refund the maximum possible institutional charges.

The federal “Return of Title IV Aid” formula derived from the Reauthorization of the Higher Education Act (10/7/98) establishes the percentage of federal aid to be repaid. The federal formula is applicable to any student receiving TIP funding or federal Title IV aid other than Federal Work-Study, if that student withdraws on or before the completion of 60 percent of the term. Other financial assistance will be returned using the same percentage that is used for Title IV aid, whether or not the student received Title IV aid. If a student withdraws without notifying Carthage, the refund is 50 percent, unless Carthage documents that the student was in attendance beyond the completion of 50 percent of the term.

The federal formula provides a return of Title IV aid if the student received federal financial assistance in the form of a Pell Grant, Supplemental Educational Opportunity Grant, TIP Grant, Perkins Loan, Stafford Loan, or PLUS loan, and withdrew on or before the completion of 60 percent of the term. The percentage of the refund is equal to the number of calendar days remaining in the term, divided by the number of calendar days in the term. Scheduled vacation periods of more than four days are excluded.

For purposes of repayment, if federal Title IV aid exceeds institutional charges, the student will be required to repay some of the federal grants or loans released to the student if the student withdraws on or before the completion of 60 percent of the term.

Worksheets used to determine the amount of refund, return of Title IV aid, or repayment are available upon request from the financial aid office.

The following example illustrates how the policy would apply:

Suppose a student withdraws on the 20th day of a 100-calendar-day term. Also, suppose that the charge for tuition was $8,875 and the residency charge was $2,555. The student received a $2,500 federal loan, a $1,500 federal Pell Grant, a $1,150 Wisconsin Tuition Grant, and a $4,000 Carthage grant. The family also paid the balance due in full in the amount of $2,280. Eighty percent of the total Title IV aid and 80 percent of each nonfederal aid source would be returned since the student withdrew at the completion of 20 percent of the term. The tuition would be reduced by 80 percent and the board charges would be reduced by $715.20 ($8.94 per day, multiplied by 80 days). The family would then receive a refund check in the amount of $492.50.

This policy went into effect Sept. 1, 1999.

### Applying for Need-Based Financial Aid

The financial aid application process is an annual responsibility. The Free Application for Student Financial Aid should be completed electronically at www.fafsa.ed.gov. The federal processor will send renewal information each year thereafter. If your renewal information is not received by Jan. 1, stop by the Office of Student Financial Planning for directions on how to proceed. Failure to file the FAFSA each year may jeopardize your smooth progression through registration and check-in.

For additional financial aid information, contact the Office of Student Financial Planning at 262-551-6001.

### Satisfactory Academic Progress Policy

Federal regulations require that a student receiving financial aid maintain satisfactory academic progress according to the policies established by the institution. Academic progress will be evaluated on the basis of cumulative credit hours and cumulative grade point average.

Course incompletes, withdrawals, course repeats, and noncredit remedial courses do not count as credit in maintaining satisfactory academic progress. The maximum time frame in which students must complete their degree program is as follows:

1. **Full-time Students**
   - Full academic years attempted
   - Minimum number of cumulative credit hours completed at the end of that year
   - 1
   - 24
   - 2
   - 50
   - 3
   - 78
   - 4
   - 108
   - 5
   - 138

2. **Part-time Students**
   - Allowed an 8-year period.

### Financial Aid Adjustments

Occasionally, adjustments are made to financial aid awards reflecting either an increase or decrease in state, federal, private, or institutional funding. Understand that your eligibility for specific funds may be altered due to federal guidelines if you later find you qualify for outside assistance (e.g., veterans’ benefits, private scholarships, grants, etc.). In the event this should occur, you will receive a revised award letter and your next billing statements will reflect the changes.

### Less Than Full-Time Enrollment

Students enrolled with fewer than 12 credits during any one term are considered part-time students. Financial aid to part-time students is limited to eligibility for

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3. Graduate students shall have a four-year period as defined by the Master’s program, completing a total of 8 credits per academic year.

4. **GPA and Completion Standards**
   - Students must maintain at least a 2.0 cumulative GPA. Students who do not maintain the required GPA will have their academic standing evaluated on the basis of the chart under Academic Standards. In addition to the GPA requirement, a student must also complete a minimum of 67 percent of coursework attempted.

5. **Financial Aid Probation Criteria**
   - Students who do not meet the satisfactory academic progress requirement may appeal for one term of probation in which they can receive financial aid. Since progress is evaluated at the end of each Spring term, the probationary term will usually be the upcoming Fall term. If the student has not shown progress at the end of the probationary term, additional financial assistance may be withheld until the cumulative hour requirement and/or GPA requirement is met.

6. **Financial Aid Appeal Process**
   - Students whose financial aid has been withheld because they have not met the Satisfactory Academic Progress Policy may appeal to the Financial Aid Committee.

7. **Financial Aid Adjustments**
   - Occasionally, adjustments are made to financial aid awards reflecting either an increase or decrease in state, federal, private, or institutional funding.

8. **Less Than Full-Time Enrollment**
   - Students enrolled with fewer than 12 credits during any one term are considered part-time students. Financial aid to part-time students is limited to eligibility for

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*Carthage 2021-2022 Catalog*
Federal Pell Grants, Federal Grad PLUS, TEACH, Federal Stafford Loan, or Federal Unsubsidized Stafford Loan. Individuals enrolled on a part-time basis must be degree-seeking students in order to receive Title IV funding, or enrolled in an eligible certification program.

Students who are awarded a full-time aid package and drop below full-time status prior to the end of the refund period will be considered part-time students and have the aid award adjusted. Should a student be enrolled full-time at the end of the refund period, and subsequently drop to less than 12 credits, the aid package is unaffected, but the student may have difficulty maintaining satisfactory academic progress, and future aid eligibility may be jeopardized. Students should visit the Office of Student Financial Planning before changing enrollment from full-time to part-time status.

9. Housing Status
Students who change their living status from resident to commuter, or vice versa, may see changes in their financial aid awards. To make sure these changes will fit within your financial budget, discuss any residence changes with a financial aid representative before committing to a new residence.

Endowed Scholarships
The College gratefully acknowledges the following endowed scholarship funds that provide permanent scholarship opportunities in support of deserving full-time undergraduate students:

- Wilbur M. and Mabel M. Allen and Philip and Karin Pratt Scholarship
- Anton B. and Adele R. Altera Scholarship
- Alumni Association Scholarship
- Alan and Irma Anderson Scholarship
- Clarence Anderson Scholarship
- Arneson Family Scholarship
- Kayla and Thomas Baran Scholarship
- Thomas R. Beau Memorial Scholarship
- Ella Sue Beck and Mildred Beck Scholarship
- Edgar W. Belter Scholarship
- Donald O. Benson, Sr. and Anne C. Benson Scholarship
- Samuel H. and Helen E. Bess Scholarship
- The Reverend James P. Bishop Scholarship
- Dexter and Nancy Black Scholarship
- Frank J. Borsh Scholarship
- Hazel Bothe Memorial Scholarship
- Merle and Eunice Boyer Scholarship
- Patricia and Harold Brainard Scholarship
- Melissa Brannon Memorial Scholarship
- Muriel N. and Jerald C. Brauer Scholarship
- Walter H. and Irene B. Brinkman Scholarship
- Betsy and Howard Brown Scholarship
- David and Lyn Brunn Scholarship
- Brunswick Corporation / Niemann Scholarship
- Edith J. and William H. Bullamore Scholarship
- Dwight W. Byram Scholarship
- Wilbur D. and Martha S. Capps Scholarship
- Harry F. and Elizabeth Lesher Carlson Scholarship
- The Carthage Women’s Club Scholarship
- Blake R. and Marie E. Children Scholarship
- Class of 1925 Scholarship
- Class of 1927 Scholarship
- Class of 1928 Scholarship
- Class of 1930 Scholarship
- Class of 1935 Scholarship
- Class of 1940 Scholarship
- Class of 1942 Scholarship
- Class of 1951 Scholarship
- Class of 1957 Scholarship
- Bowersox Memorial Scholarship
- Class of 1964 Scholarship
- Class of 1965 Scholarship
- A.W. and Joycelyn Clausen Scholarship
- George and Valborg Crossland Scholarship
- The Reverend J. E. and Mary A. Dale Scholarship
- W. Howard Dawe Scholarship
- Delta Upsilon Alumni Association of Carthage College Endowment
- Jacob and Sarah Diehl Scholarship
- William A. and June M. Diehl Scholarship
- Diskerud-Eller Scholarship
- Robert and Lois Dittus Scholarship
- Rolf and Eleanor Dokmo Endowed Scholarship
- Ronald J. and Wilma G. Dopp Scholarship
- David J. Dorak Memorial Scholarship
- Downing / Miche Scholarship
- Stephen B. Dozier Scholarship
- Karl and Lydia Easterday Scholarship
- David and Doris Ehler Scholarship
- Donald and Virginia Eken Scholarship
- William and Amanda Eller Scholarship

James C. Ellis and Mary Tice Ellis Scholarship
- The Dr. Ruth A. Fangmeier Scholarship
- Leone and Harold Ferron Scholarship
- Rev. Dr. Ellsworth and Kay Freyer Scholarship
- John and Judy Fritsch Scholarship
- Emmert and Leola Gassman Memorial Scholarship
- Dr. Pearl E. Goeller and Family Scholarship
- Dr. Paul G. Goerner Scholarship
- Herbert H. Goodman Scholarship
- Kenneth F. and Edna L. Gross Scholarship
- Gutkind-Kraemer Scholarship
- Fred O. Haas Scholarship
- Richard and Diane Halom Scholarship
- Kenneth and Janice Hamm Scholarship
- Nancy Ross Hanisch Memorial Scholarship
- Elmer and Eudora Hanke Scholarship
- Burdette Harris Scholarship
- Kathy Harris Scholarship
- Mae and Jack Harris Scholarship
- Verna Hey and William J. Harshman Scholarship
- Christen P. and Anna J. Heide Scholarship
- Janet L. and Steen W. Heimke Scholarship
- Walter O. and Adela E. Helwig Scholarship
- Donald Hensey Scholarship
- T. Shandy Holland Scholarship
- Carol Holm Scholarship
- Anna, Stefan, and Suzanne Hrajnoha Scholarship
- Charles Melvin Hurd and Harriet Howe Hurd Scholarship
- Bernice Ihenfeld Scholarship
- Edna M. Johnson Scholarship
- John and Elizabeth Johnson Scholarship
- The Kaelber Scholarship
- The Reverend Oscar C. and Victoria Kaitschuk Scholarship
- Kappa Chi Omega Scholarship
- Kappa Phi Eta Scholarship
- Arthur T. Keller Scholarship
- Mary Katherine Kent-Rohan Scholarship
- Harriet and Joseph Kern Scholarship
- Clayton and Pearl Kesselring Scholarship
- Ewald Kessler Scholarship
- Dr. Alice Kibbe and Alice (Schleuning) Geison Scholarship
Jack and Annette Kilver Scholarships
Merton Elihu Knisely Scholarship
David B. Knowles Memorial Scholarship
Inez G. Koch Scholarship
Irène Kraemer Starting Over Scholarship
William C. Krauss Scholarship
Krueger Family Scholarship
Conrad Kuhl Scholarship
Henry and Vera Kuhn Scholarship
Herbert C. Kurth Scholarship
The Flora Testa Lalli Scholarship
Anna K. Larsen Memorial Scholarship
Lester O. Leenerts Scholarship
Eleanor and Harold Lentz Scholarship
Thomas W. Lentz Scholarship
Odelle Monte Leonard Scholarship
Ralph S. Leonard Scholarship
Lukas Family Scholarship
Lutheran Brotherhood Scholarship
Norman E. and Grace B. Lutz Memorial Scholarship
Gladys D. Lynch Scholarship
Joseph F. and Shirley M. Madrigrano Scholarship
Thomasina and Aldo Madrigrano Family Scholarship
Elizabeth Mancuso Memorial Scholarship
Frederick and Jewel Marks Scholarship
Mr. and Mrs. William McFetridge and Barbara McFetridge Scholarship
Lieutenant Colonel Jack M. Meiss, Barbara J. (Meiss) Welling, and Dr. Guy T. Meiss Scholarship
John H. and Mary L. (Hall) Meiss and Olive C. (Meiss) Padre Scholarship
R. William Miller Scholarship
Rev. Dr. Melvin and Linda Miritz Scholarship
Don L. Moldenhauer Scholarship
The Thomas and Sarah Montemurro Scholarship
Ernest and Edna Newhouse Scholarship
Jack and Bernice Newkirk Scholarship
Theodore and Mildred Nicholson Scholarship
William L. Niemann Scholarship
Harry and Lois Niese Family Scholarship
Rev. Jack and Marian Nitz Scholarship
Dr. Herman Ogren Scholarship
Duane M. Olson Scholarship
Eric H. Olson and Anna Olson-Thom Scholarship
George and Hazel Osborn Scholarship
Miriam E. Owsley Scholarship
Wilfred A. and Helen M. Pagel Scholarship
Dr. Clifton E. Peterson Scholarship
Frank and Corinne Petretti Family Scholarship
Susan (Worley) Pietrowski Memorial Scholarship
Pi Theta Scholarship
Mary Etta and Dr. Richard A. Powell Scholarship
Dolores R. Prrellberg Scholarship
Albert and Marion Pufahl Scholarship
Raymond J. Pugesek, Jr. Scholarship
Henry Queckenstedt Family Scholarship
Warren and Carol Reckmeyer Family Scholarship
Rhine and Unglaube Scholarship
Pastor Dudley Riggle Scholarship
Evelyn A. Rogers Scholarship
Nelson Peter Ross Memorial Scholarship
Alice (Mack) and Neil O. Rowe Scholarship
Russell and Marion Rutter Scholarship
Ruud Academic Excellence Scholarship
Alan J. Ruud and Susan B. Stover Scholarship
The Alden Salstrom and Carolyn Fecht Salstrom Music Scholarship
Glenn A. and Eleanor S. Sather Scholarship
Judith Schaumberg Scholarship
Grace C. Scheel Scholarship
Lois A. Schmidt Scholarship
Gwendolyn Braun Schmiedeskamp Scholarship
Ceola Erlsten Yeager Schoenig Scholarship
Schumacher / Broderdorf Scholarship
Loren H. and Vickie Semler Bridge Scholarship
Martha Shippert Scholarship
The Dr. Richard D. Sjöerdsma Scholarship
Marie and John Sladek Scholarship in Fine Arts / Natural Sciences
Edward and Alice (Lawler) Smeds Scholarship
Louis W. Smith, Jr. Scholarship
Karl L. Solum Scholarship
Rev. Donald Sondrol Scholarship
Wilfred J. and Marie Sonntag Scholarship
Lili Sorokin Scholarship
Fred W. and Marguerite Spangler Scholarship
John R. and Margaret O. Spangler Scholarship
Special Opportunities Scholarship
W. Carl and Esther C. Spelman Scholarship
Grace C. Staber Scholarship
Ronald and Barbara Stamer Scholarship
Donna Wolf Steigerwaldt / Jockey International, Inc. Scholarship
The Jane Sliezak Sturgeon and Lester Sturgeon Scholarship
John and Evelyn Susina / Barbara Susina Stewart Scholarship
Christine Swannell Scholarship
Thorberg Swenson Scholarship
J. Bannen Swope Scholarship
Tarble Family California Scholarship
Tau Delta Psi Scholarship
Alois H. Tennessen Scholarship
Ralph J. and Margaret Tenuta Scholarship
Dorothy Myhre Tolleson Memorial Scholarship
James and LaRue Unglaube Scholarship
Joy Valentine Scholarship
Veterans Scholarship
Frank and Ruth E. (Wuerzberger) Vorpahl Scholarship
Wagner Brothers Scholarship
Walker Manufacturing Scholarship
Georgene L. Wall Scholarship
Ralph J. and Margaret Tenuta Scholarship
Dorothy Myhre Tolleson Memorial Scholarship
James and LaRue Unglaube Scholarship
Joy Valentine Scholarship
Veterans Scholarship
Frank and Ruth E. (Wuerzberger) Vorpahl Scholarship
Wagner Brothers Scholarship
Walker Manufacturing Scholarship
Georgene L. Wall Scholarship
Mildred and Delferd Walser Scholarship
Albert and Mary Kimbrough Webb Memorial Scholarship
Weightman Memorial Scholarship
David and Heather Wiers Scholarship
Dr. Robert D. Wolff Scholarship
Student Affairs

Student Affairs
The Division of Student Affairs provides support services and facilitates developmental opportunities for students outside of the classroom. This is implemented by the functional area units within the division, which include Dean of Students, Student Conduct, Residential Life, Student Involvement (Student Activities; Fraternity and Sorority Life; Community Service; Diversity, Equity, and Inclusion Programs; and Leadership Development), Health and Counseling, the Center for Faith and Spirituality, and the Center for Student Success. Below are more detailed descriptions of some of the programs and services provided by each area:

Dean of Students Office
The Dean of Students Office serves as the central office for the division and facilitates numerous operational activities for students while they are enrolled at Carthage. The office provides student and voter identification cards, records verification, and official notices of family emergency or loss. The Dean of Students team facilitates the New Student Orientation program that occurs each fall for incoming students, advises Student Government, approves student organization marketing materials, and maintains the Community Code. In addition, the office provides Title IX education and support, and general assistance for students experiencing a struggle during their collegiate career. The office is located on the first floor of the Todd Wehr Center (TWC) in Suite 100.

Student Conduct
The Community Code comprises the College’s policies, guidelines, and standards for community living and campus life for all students. The Community Code is maintained on the College website (www.carthage.edu/community-code). All students are expected to know and live up to the Community Code. Alleged violations of community standards are handled by the Associate Dean of Students with the assistance of hearing officers (Residential Life professional staff members) and hearing panels made up of faculty and staff. The student conduct team also provides prevention education about alcohol and other drugs and Title IX issues.

Residential Life
The best collegiate experience is one where the curriculum and the cocurriculum are seamlessly integrated. With this value in mind, full-time undergraduate students will be required to live in the residence halls and be enrolled in a meal plan until they attain senior standing, in accordance with the College’s residency requirement policy.

Residential Life facilitates the student housing process and residential education program. The Director of Residential Life leads five professional staff who supervise paraprofessional student staff (Senior Resident Assistants and Resident Assistants). Residential Life programming includes one-on-one connection opportunities with students and staff, faculty-in-half programs, and other educational and social engagement opportunities. In addition, all Residential Life staff serve as a resource to residents, uphold community standards, and are first responders in a crisis. The staff offices are located on the first floor of the Tower and in the lower level of Madrigano Family Residence Hall.

Student Involvement
It is important for students to engage with their peers and connect to the College, and the Office of Student Involvement provides an array of ways to do both. Located on the first floor of the Todd Wehr Center (TWC), it is the place to go to find out what’s happening on campus. Read further to learn more about the specific areas of engagement that Student Involvement staff support:

Student Activities
There are more than 130 student clubs and organizations on campus. These groups receive financial support from Student Government and training and development support from the Office of Student Involvement. The Carthage Activities Board (CAB) is the primary social programming body on campus, holding more than 45 events each semester. CAB and the Office of Student Involvement provide significant programming for major campus events, such as New Student Orientation, Kickoff Days, Homecoming, and Family Weekend. To see a full list of active clubs and organizations, visit www.carthage.edu/clubs.

Fraternity and Sorority Life
Carthage has both national and local fraternity and sorority chapters that engage in academic, leadership, and personal development for their members. The fraternity and sorority community is very active in community service and philanthropy, both on campus and in Kenosha and Racine. At Carthage, students may join a fraternity or sorority after completing a minimum of one semester and achieving a minimum grade-point average.

Community Service
Community service is rooted in the Lutheran tradition of Carthage, and service is an important part of campus life. Many of Carthage’s clubs and organizations have specific missions focused on service; others engage in community service regularly.

Student Affairs Office of Equity and Inclusion
The Student Affairs Office of Equity and Inclusion provides a wide variety of on-campus and off-campus diversity programs and initiatives. All programs are designed to educate our community members on how to create an environment of inclusion for all students. The office supports and partners with cultural student organizations to deliver educational cultural programming. Additionally, the office supports underrepresented students through regular assessment of campus climate and programs that create equity and inclusion for all students.

Leadership Development
Leadership development is facilitated through experiential learning programs on and off campus. These programs help students learn more about their talents and skills for working with others to achieve common goals for positive change. The Student Involvement staff coordinates and facilitates club and organization training, experiential learning programs, and recognition programs for student leaders.

Health and Counseling Center
Located in the N. E. Tarble Athletic and Recreation Center (TARC), the Health and Counseling Center (HCC) provides services to full-time undergraduate students. The HCC is staffed by licensed professionals. The Campus Nurse treats minor illness and injury and assists with referrals to medical providers. Limited testing and over-the-counter medications are available at no cost. Licensed counselors provide short-term personal counseling, coordinate referrals for off-campus providers, and consult with faculty and staff. Educational programming to the Carthage community is provided for mental and physical health, as well as sexual violence awareness and prevention.

Center for Faith and Spirituality
Led by the Campus Pastor, the Center for Faith and Spirituality provides support for students as they explore their individual faith journey, and offers regular programming and support for the spiritual lives of all students regardless of their individual faith tradition. The Campus Pastor is available for spiritual support when a rabbi, priest, pastor, or imam is not locally available.

The Center for Faith and Spirituality is located in the A. F. Siebert Chapel, which is the symbol and hub of spiritual life on campus, but a significant amount of the center’s programs and services are provided across campus or in one of the three small
chapels on campus. A team of paraprofessional student staff members and clubs assist with programs.

A service based in the Lutheran tradition with communion is held on Wednesday evenings. A Roman Catholic lay minister serves as a resource to students and arranges for Sunday evening celebrations of Mass.

**Center for Student Success**
The Center for Student Success provides professional support services to facilitate the academic success and persistence of Carthage students during their time at the college. Staff in the Center for Student Success work closely with other college personnel to holistically address the academic, developmental, and social needs of students, with particular focus on supporting underrepresented/underserved student populations and those on academic probation. Center for Student Success staff members oversee a suite of programs and services for part-time and full-time undergraduate students:

- Curriculum development and course instruction for GNR 0000 College Success Seminar for new first-time freshmen and transfer/exchange students
- Case management and outreach for Carthage Academic Achievement Program (CAAP) students, as well as other students facing academic and financial obstacles
- Recruitment and leadership development of Peer Coaches who assist in welcoming and supporting new students during their first semester
- Pre-orientation programming for international and first-generation students
- Oversight of the College’s student alert system to identify unique challenges that students may be facing and facilitate interventions and/or referrals as needed

Students are welcome to visit the Center for Student Success on the first floor of the Todd Wehr Center or to reach out for assistance by emailing studentsuccess@carthage.edu.
Faculty

Malek Alkarsawi
Visiting Associate Professor of Chemistry, 2021

Cynthia Allen
Assistant Professor of Exercise and Sport Science, 2004

Gregory Baer
Director, Student Fellowships; Chair, Modern Languages Department; Professor of Modern Languages, 1996

Anthony Barnhart
Chair, Psychological Science Department; Associate Professor of Psychological Science, 2015

Greg Barron
Director, Master of Business Design and Innovation Program; Assistant Professor of Management and Marketing, 2015

Gregory Berg
Associate Professor of Music, 1995

Richard Bjella
Director, Carthage Choir; Visiting Professor of Music, 2021

Rick Bingen
Assistant Professor of Computer Science, 2019

Sandra Bisciglia ’94
Assistant Professor of Religion, and Women’s and Gender Studies, 2001

Christine Blaine
Professor of Chemistry, 1995

Matthew Borden
Associate Professor of Modern Languages, 2003

Shannon Brennan
Director, Writing Development; Assistant Professor of English, 2016

David Brownholland
Chair, Chemistry Department; Associate Professor of Chemistry, 2014

Lynn Brownson
Chair, Communication and Digital Media Department; Associate Professor of Communication and Digital Media, 2008

Jonathan Bruning
Associate Professor of Communication and Digital Media, 1999

Temple Burling
Associate Professor of Physics and Astronomy, and Biology, 2002

Deanna Byrnes
Dean, Division of Natural and Social Sciences; Professor of Biology, 2007

Leslie Cameron
Professor of Psychological Science, 2002

Brant Carlson
Associate Professor of Physics and Astronomy, 2012

Nora Carroll
Artist in Residence, Theatre Department, 2021

Thomas D. Carr
Director, Carthage Institute of Paleontology; Senior Scientific Advisor, Dinosaur Discovery Museum; Associate Professor of Biology, 2004

Ronald Cronovich
Professor of Economics, 2008

Kevin Crosby
Director, Wisconsin Space Grant Consortium; Professor of Physics and Astronomy, and Computer Science, 1998

Julius Crump
Assistant Professor of Religion, 2018

Sarah Cyganiak
Assistant Professor of Modern Languages, 2007

Arthur Cyr
Director, International Political Economy Program; Professor of Political Science, 1998

Julie Dahlstrom
Chair, Physics and Astronomy Department; Associate Professor of Physics and Astronomy, 2008

Angela Dassow
Chair, Biology Department; Associate Professor of Biology, 2015

Julie Dawson
Assistant Professor of Accounting and Finance, 1993

Peter Dennee ’86
Chair, African Studies Program; Professor of Music, 2005

Annette Duncan
Associate Professor of English, 1994

Jacqueline Easley
Co-Director, Teaching Commons; Professor of Education, 2006

Wael Farouk
Director, Keyboard Studies; Assistant Professor of Music, 2016

Patricia Flannery
Clinical Assistant Professor of Nursing, 2017

David Garcia
Professor of English, 2014

Dana Garrigan
Associate Professor of Biology, 2007

Tracy Gartner
Professor of Environmental Science and Biology, 2005

Danielle Geary ’00

Professor of Psychological Science, 2002

Brant Carlson
Associate Professor of Physics and Astronomy, 2012

Nora Carroll
Artist in Residence, Theatre Department, 2021

Thomas D. Carr
Director, Carthage Institute of Paleontology; Senior Scientific Advisor, Dinosaur Discovery Museum; Associate Professor of Biology, 2004

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Professor of Economics, 2008

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Director, Wisconsin Space Grant Consortium; Professor of Physics and Astronomy, and Computer Science, 1998

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Assistant Professor of Religion, 2018

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Assistant Professor of Modern Languages, 2007

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Director, International Political Economy Program; Professor of Political Science, 1998

Julie Dahlstrom
Chair, Physics and Astronomy Department; Associate Professor of Physics and Astronomy, 2008

Angela Dassow
Chair, Biology Department; Associate Professor of Biology, 2015

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Assistant Professor of Accounting and Finance, 1993

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Chair, African Studies Program; Professor of Music, 2005

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Associate Professor of English, 1994

Jacqueline Easley
Co-Director, Teaching Commons; Professor of Education, 2006

Wael Farouk
Director, Keyboard Studies; Assistant Professor of Music, 2016

Patricia Flannery
Clinical Assistant Professor of Nursing, 2017

David Garcia
Professor of English, 2014

Dana Garrigan
Associate Professor of Biology, 2007

Tracy Gartner
Professor of Environmental Science and Biology, 2005

Danielle Geary ’00

Associate Professor of Social Work, 2005

Kimberly Greene
Chair, Art Department; Associate Professor of Art, 2007

Ashley Greenwood
Assistant Professor of Exercise and Sport Science, 2018

Amy Haines
Associate Professor of Music, 1987

Michele Hancock
Professor of Practice in Education, 2014

Fatih Harpci
Chair, Religion Department; Associate Professor of Religion, 2014

Ellen Hauser
Director, Women’s and Gender Studies Program; Associate Professor of Political Science, and Women’s and Gender Studies, 1999

Andrea Henle
Associate Professor of Biology, 2015

Steven Henle
Assistant Professor of Neuroscience, 2016

Katherine Hilson
Assistant Professor of Sociology, 2018

Matthew Houglund
Assistant Professor of Music, 2021

Rebecca Hornung
Chair, Social Work Department; Associate Professor of Social Work, 2015

Laura Huaracha
Associate Professor of Communication and Digital Media, 2007

Kimberly Instenes
Associate Professor of Theatre; Costume Designer, 2008

Laurie Jensen
Director, Athletic Training Program; Assistant Professor of Exercise and Sport Science, 1999

Sara Jensen ’08
Associate Professor of Mathematics, 2014

Barbara Jewell
Assistant Professor of Accounting and Finance, 2017

Erik Johnson
Assistant Professor of Economics, 2017

Rebekah Johnson
Chair, Exercise and Sport Science; Assistant Professor of Exercise and Sport Science, 2016

Etsushi Kawakami
Director, Orchestral Activities; Co-Chair, Music Department; Associate Professor of Music, 2014

Terry Kamps
Visiting Assistant Professor of Biology, 2021

Alyson Kiesel
Co-Chair, English Department; Ruth Maxwell
Distinguished Professor of English; Associate
Professor of English, 2011

John Kirk
Co-Director, Teaching Commons; Associate
Professor of Chemistry, 2016

Paul Kirkland
Associate Professor of Political Science, 2007

Perry Kivolowitz
Chair, Computer Science Department;
Professor of Practice in Computer Science, 2015

Kristin Klimisch
Assistant Professor of Nursing, 2018

Sheryl Konrad
Manager, Biology Department and
Neuroscience; Senior Lecturer, Biology, 2005

Herschel Kruger
Chair, Theatre Department; Professor of
Theatre, 2004

Erik Kulke
Director, Education Abroad; Assistant
Professor of Modern Languages, 1999

John Leazer
Chair, History Department;
Associate Professor of History, 2008

Diane Levesque
Associate Professor of Art, 2004

Janet Levey
Associate Professor of Nursing, 2018

Linfeng Li
Visiting Assistant Professor of Modern
Languages, 2021

James Lochtefeld
Professor of Religion and Asian Studies, 1992

Julie Maher
Clinical Assistant Professor of Nursing, 2017

Mark Mahoney
Professor of Computer Science, 2002

Yuri Maltsev
Professor of Economics, 1991

Paul Martino
Dean, Division of Professional Studies;
Associate Professor of Biology, 2009

Debbie Masloski
Assistant Professor of Music, 2006

Jerald Mast
Chair, Political Science Department;
Professor of Political Science, 2002

Joy Nystrom Mast
Chair, Geospatial Science Department;
Professor of Geospatial Science, 2002

Rick Matthews
Director, Criminal Justice Program; Chair,
Sociology Department; Professor of Sociology and
Criminal Justice, 2002

Martin McClendon
Professor of Theatre, 2006

Brent McClintock
Chair, Economics Department; Associate
Professor of Economics, 1991

Richard Meier
Co-Chair, English Department; Writer-in-
Residence; Associate Professor of English, 2008

Tim Melewin
Assistant Professor of Accounting and
Finance, 2018

Daniel Miller
Director, Neuroscience Program; Professor
of Neuroscience, 1994

Justin Miller
Assistant Professor of Biology, 2012

Ryan Miller
Director, H. F. Johnson Gallery of Art;
Assistant Professor of Art, 2011

Debra Minsky-Kelly
Director, Field Education; Clinical Assistant
Professor of Social Work, 2018

Stephanie Mitchell
Valor Distinguished Professor of History;
Professor of History, 2002

Jose Montoto
Assistant Professor of Communication and
Digital Media, 2000

Maribel Morales Martinez
Associate Provost for Assessment and
Accreditation; Assistant Professor of Modern
Languages, 2006

Kevin Morris
Klingenmeyer Distinguished Professor of
Chemistry, 1996

Mark Mrowiec
Assistant Professor of Management and
Marketing, 2021

Dennis Munk
Professor of Psychological Science and
Education, 2006

Corinne Ness
Dean, Division of Arts and Humanities;
Director, Master of Music in Music Theatre
Vocal Pedagogy; Professor of Music, 2000

William Newcomb
Carthage Theatre Technical Director;
Assistant Professor of Theatre, 2009

Andrea Ng’weshemi
Jerald C. Brauer Chair for Lutheran Studies;
Associate Professor of Religion, 2015

Nora Nickels
Assistant Professor of Psychological Science, 2019

Melanie Nyhof
Assistant Professor of Psychological Science, 2020

Colleen O’Brien
Associate Professor of Management and
Marketing, 2009

Colleen Palmer
Assistant Professor of Communication and
Digital Media, 2014

Mark Petering
Professor of Music, 2005

Cheryl Petersen
Assistant Director, RN to BSN Program;
Assistant Professor of Nursing, 2016

Michael Phlegy
Director, Mock Trial Program; Associate
Professor of Management and Marketing, 2003

Thomas Powers
Associate Professor of Political Science, 2008

Eric Pullin
Associate Professor of History and Asian
Studies, 2007

Andrew Pustina
Assistant Professor of Exercise and Sport
Science, 2016

Jean Quashnock
Professor of Physics and Astronomy, 1999

Nancy Reese
Director, Nursing Department; Associate
Professor of Nursing, 2021

Patricia Rieman
Chair, Master in Education Program;
Associate Professor of Education, 2008

James Ripley
Director, Instrumental Music Activities;
Professor of Music, 2001

Isabel Rivero-Vilá
Associate Professor of Modern Languages,
2004

Jeffrey Roberg
Chair, Political Science Department;
Professor of Political Science, 1997

Carter Rockhill
Director, Sports Management Program;
Assistant Professor of Management and
Marketing, 2021

Pascal Rollet
Professor of Modern Languages, 1993

Sarah Rubinfeld
Director, Environmental Science Department;
Associate Professor of Environmental
Science, 2010

Daniel Ruffner
Assistant Professor of Exercise and Sport
Science, 1998

Neil Scharnick ’99
Director, Honors Program;
Associate Professor of Theatre, 2003

Karin Sconzert
Faculty

Director, Broad Field Social Science Program; Chair, Education Department; Associate Professor of Education, 2007
Jeffrey Seymour
Assistant Professor of Sociology and Criminal Justice, 2014
Dimitri Shapovalov
Co-Chair, Music Department; Associate Professor of Music, 2005
Joseph Shields
Chair, Management and Marketing Department; Assistant Professor of Management and Marketing, 2009
Amareshwar Singh
Associate Professor of Biology, 2005
Walter Smith
Assistant Professor of Chemistry, 2009
Mark Snavel
Chair, Mathematics Department; Professor of Mathematics, 1990
Richard Sperber
Associate Professor of Modern Languages, 2000
David Steege
Senior Associate Provost; Professor of English, 1991
Daniel Steiner
Assistant Professor of Physics and Astronomy, 2014
Susan Stevenson
Assistant Professor of Chemistry, 2018
Wenjie Sun
Professor of Geospatial Science, Computer Science, and Asian Studies, 2006
John R. Swallow
President and Chief Executive Officer; Professor of Mathematics, 2017
Kateryna Sylaska
Assistant Professor of Psychological Science, 2018
Joseph Tenuta
Assistant Professor of Management and Marketing, 2021
Jeffrey Thomas
Assistant Professor of Management and Marketing, 2019
Diana Thomson
Assistant Professor of Mathematics, 2018
J. Alex Thompson
Assistant Professor of Nursing, 2021
David Timmerman
Provost and Chief Operating Officer; Professor of Rhetoric, 2018
Deborah Tobisao
Assistant Chair, Biology Department; Professor of Biology, 2007
Aaron Trautwein
Professor of Mathematics, 1995
Stephen Udry
Director, Asian Studies Program; Professor of History and Asian Studies, 2000
Paul Ulrich
Director, Intellectual Foundations Program; Associate Professor of Political Science, 2004
Jojin Van Winkle
Director, Photography, Film, and New Media Program; Assistant Professor of Art, 2017
Jun Wang
Assistant Professor of Education, 2016
Yan Wang
Associate Professor of Modern Languages and Asian Studies, 2008
Marilyn Ward
Director, Center for Children’s Literature; Professor of Education, 1990
Erin Weber
Assistant Professor of Chemistry, 2020
Nina Weisling
Assistant Professor of Education, 2019
Margaret Wentzell
Assistant Professor of Biology, 2016
Erlan Wheeler
Professor of Mathematics and Computer Science, 1992
Siovahn Williams
Director, Accelerated Certification in Teaching; Assistant Professor of Education, 2021
Haley Yaple
Associate Professor of Mathematics, 2013
Chao Zheng
Chair, Accounting and Finance Department; Assistant Professor of Accounting and Finance, 2017
Bradley Zopf '05
Assistant Professor of Sociology, 2017
Matthew Zorn
Professor of Geospatial Science, 1997

Target Language Experts 2021-22
Alejandra Arcos
Franco Basili
Yanis Fenelon
Risa Kageyama
Charlotte Klein
Misuzu Komatsu
Leonardo Alba Lopez
Miguel Angel Bartolome Lopez
Rachel Roy
Chih-Hsuan “Lily” Tsao

Faculty Emeriti
Seemee Ali
Professor Emerita of English and Great Ideas, 2008-2020
Douglas Arion
Professor Emeritus of Physics, 1994-2020
John W. Bailey
Professor Emeritus of History, 1967-2001
Barbara Boe
David Brunn
Professor Emeritus of Business Administration, 1993-2013
Maria Carrig
Professor Emerita of English, Great Ideas, and Theatre, 2002-2020
Anne Cassidy
Professor Emerita of Art, 2005-2020
Samuel Chell
Professor Emeritus of English, 1968-2007
Dan Choffnes
Professor Emeritus of Biology, 2006-2020
D. Ben DeSmidt
Associate Professor Emeritus of Classics and Great Ideas, 2005-2020
Clayton Diskerud ’59
Professor Emeritus of Social Science/Criminal Justice, 1962-1998
Mabel DuPriest
Professor Emerita of English, 1981-2010
Ernestine Eger
Professor Emerita of Modern Languages, 1965-2009
Donald Gottschalk
Professor Emeritus of Business Administration, 1989-1997
William C. Gunderson
Professor Emeritus of Political Science, 1973-2002
Vincent P. Hart
Professor Emeritus of Physics, 1971-1998
Scott Hegrenes
Professor Emeritus of Biology, 2001-2020
Richard Heitman
Professor Emeritus of Philosophy, 2009-2018
Woodrow Hodges
Professor Emeritus of Music, 1977-2013
William Jankovich
Professor Emeritus of Business Administration, 1977-2009
Donald Johnson
Palmer Professor Emeritus of Business Administration, 1970-2001
Daniel Jurkovic
Professor Emeritus of Political Science and Criminal Justice, 1967-2004
Mary Katherine Kent-Rohan
Professor Emerita of Foreign Language,
1969-1989
Arthur A. Landry
Professor Emeritus of Education, 1973-2005
Lynn Loewen
Professor Emeritus of Modern Languages, 1988-2014
Christopher Lynch
Professor Emeritus of Political Science and Great Ideas, 2000-2020
Romwald Maczka
Professor Emeritus of Religion, 1989-2018
Daniel Magurshak
Professor Emeritus of Philosophy and Great Ideas, 1984-2019
Robert Maleske
John McGrew
Professor Emeritus of Computer Science, 1998-2002
Michael McShane
Professor Emeritus of Philosophy and Great Ideas, 2008-2020
Edward Montanaro
Professor Emeritus of Economics and Modern Languages, 2006-2020
John Neuenschwander
Professor Emeritus of History, 1969-2008
Linda Noer
Professor Emeritus of Social Work, 1982-2015
Thomas Noer
Professor Emeritus of History, 1973-2020
Kurt Piepenburg
Dean of the College, 1995-2009; Professor Emeritus of Geospatial Science, 1984-2020
Elaine Radwanski
Professor Emeritus of Biology, 1997-2015
Christine Renaud
Professor Emeritus of Classics, Religion, and Women’s and Gender Studies, 1995-2020
Dudley V. Riggle
Professor Emeritus of Religion and Associate in Ministry, 1961-1998
Julio Rivera
Provost, 2010-2014; Professor Emeritus of Management and Marketing, 1997-2019
Marian Rothstein
Professor Emeritus of Modern Languages, 1991-2010
Leonard Scharmach
Professor Emeritus of Sociology, 1972-2001
Judith B. Schaumberg
Acting Dean of the College and Provost, 2008-2010; Professor Emerita of Education, 1990-2010
Robert Schlack
Professor Emeritus of Economics, 1975-2014
August R. Schmidt III ’62
Professor Emeritus of Physical Education and Health, 1961-1989
Daniel Schowalter
Professor Emeritus of Classics and Religion, 1989-2020
Leonard Schulze
Professor Emeritus of Communication and Digital Media, and English, 2004-2014
Penny Seymoure
Professor Emerita of Psychological Science, 2000-2015
Richard Sjoerdsma
Professor Emeritus of Music, 1968-2007
Pamela Smiley
Professor Emerita of English, and Women’s and Gender Studies, 1991-2020
Lili G. Sorokin
Professor Emerita of Foreign Language, 1969-1992
Wayne Thompson
Professor Emeritus of Sociology, 1998-2020
Ralph M. Tiefel
Professor Emeritus of Biology, 1957-1995
Ingrid Tiegel
Professor Emerita of Psychological Science, 1980-2019
Dennis Unterholzner
Professor Emeritus of Library Services, 1975-2009
Thomas E. Van Dahm
Christian von Dehsen
Professor Emeritus of Religion, 1988-2016
John Windh
Professor Emeritus of Music, 1966-1999
Kenneth W. Winkle
Professor Emeritus of Music, 1973-2001
Mimi Yang
Professor Emerita of Modern Languages, 1996-2020

President’s Executive Staff
John R. Swallow
President and Chief Executive Officer
Vince Ceja
Associate Vice President for Finance; Chief Financial Officer
Kimberlie Goldsberry
Vice President for Student Affairs; Dean of Students
Abigail Hanna
Vice President for Administrative Planning and Innovation; Chief Organizational Development Officer
Lisa Hinkley
Associate Vice President and Executive Director for Career and Professional Development
Thomas Kline
Vice President for Institutional Advancement
Nick Mulvey ’02
Vice President for Enrollment
Nate Stewart
Director of Athletics
David Timmerman
Provost; Chief Operating Officer
Elizabeth Young
Associate Vice President for Marketing and Communications

Officers Emeriti
F. Gregory Campbell
President Emeritus, 1987-2012
Eugene A. Engeldinger
Vice President Emeritus for Academic Information Services, 1990-2008
Judith Schaumberg
Provost Emerita, 2008-2010; Professor Emerita of Education, 1990-2008
James M. Unglaube ’63
Vice President Emeritus for College Relations, 1998-2008
Board of Trustees

Chair
Jeff Hamar ’80
Executive Chairman
Galleher, Inc.
Santa Fe Springs, California

First Vice Chair
Gina Madrigrano Friebus ’76
Vice President — Administration (retired)
W.O.W. Distributing Co., Inc.
Sussex, Wisconsin

Second Vice Chair
Hoyt H. Harper II ’77
Principal
HHHarper & Associates
Stamford, Connecticut

Secretary
Dennis L. Monroe ’74
Chairman and Senior Partner
Monroe Moxness Berg PA
Minneapolis, Minnesota

President and Chief Executive Officer
John R. Swallow
Carthage College

Trustees
Patrick N. Anderson ’85
Law Offices of Patrick N. Anderson &
Associates
Alexandria, Virginia

Mary Bishop
President and Chief Marketing Officer
(retired)
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Chicago

Lucy Brown
President
Lupe Development Partners

Richard M. Christman
Chairman
Caresoft Global, Inc.
Westmont, Illinois

The Rev. Dr. Paul D. Erickson
Bishop
Greater Milwaukee Synod
Evangelical Lutheran Church in America
Milwaukee

Christine A. Hobbs ’71
Civic Leader
Naples, Florida

Steven J. Hopp
Practice Leader
Private Equity
Akron, Ohio

Thomas J. Kelley III ’99
Vice President and Chief Financial Officer
Froedtert South
Kenosha, Wisconsin

Thomas E. Kieso ’73
Co-owner
William F. Meyer Company
Aurora, Illinois

Frederick John Krull ’83
Principal (retired)
Ernst & Young, LLP
Los Angeles, California

Rick LaBerge
Executive Vice President and Chief Operating
Officer
HARIBO of America
Rosemont, Illinois

Robert Lee, Jr.
President & CEO
Lee Plumbing, Heating, Cooling & Electric
Kenosha, Wisconsin

Thomas A. Martinez
Vice President of Sales and Business
Operations
Twilio
San Francisco, California

The Rev. Wayne N. Miller
Bishop (retired)
Metro Chicago Synod
Evangelical Lutheran Church in America
Chicago

Alan Mills ’79
Partner
Barnes & Thornburg LLP
Indianapolis, Indiana

Maria Nalywayko
Chief People Officer (retired)
CoreLogic
Newport Beach, California

Jeff Neubauer
Executive Director
Higher Expectations
Racine, Wisconsin

Andrew S. Palmen
President
Palmen Automotive Group
Kenosha, Wisconsin

LeAnn Pedersen Pope
Former Partner
Burke, Warren, MacKay & Serritella, P.C.
Winnetka, Illinois

Nicholas T. Pinchuk
Chairman, President, and CEO
Snap-on Incorporated
Kenosha, Wisconsin

Charles C. Sutton
President
MC Squared Energy Services, LLC
Chicago

David C. Wiers ’98
President
Satori Energy
Chicago

Gary D. Wilson
President (retired)
Wilson Printing, Inc.
Mundelein, Illinois

Trustees Emeriti
Edward W. Smeds ’57
Chair Emeritus
President, Operations (retired)
Kraft Foods
Glenview, Illinois

Robert A. Cornog
Chairman, President, and CEO (retired)
Snap-on Incorporated
Kenosha, Wisconsin

John W. Fritsch
President
Fritsch Charitable Foundation
Libertyville, Illinois

William D. George
President and CEO (retired)
SC Johnson
Racine, Wisconsin

John L. Gorton ’66
President
Gorton Farms, Inc.
Racine, Wisconsin

Donald D. Hedberg ’50
Civic Leader
Manalapan, Florida

Marilyn Hedberg
Civic Leader
Manalapan, Florida

The Rev. Robert H. Herder
Bishop Emeritus
East Central Synod of Wisconsin
Evangelical Lutheran Church in America
Appleton, Wisconsin

William H. Kelley
Vice Chairman
Jelly Belly Candy Company
North Chicago, Illinois

James R. Klauser
Senior Vice President (retired)
Wisconsin Energy Corporation
Milwaukee

Thomas W. Lentz ’63
Chairman
Global Display Solutions, Inc.
Rockford, Illinois

Dean A. Matthews ’84
General Manager
Matthews Distributing Co. of Iowa
Dubuque, Iowa

John H. Pender
Senior Vice President and Chief Investment
Officer (retired)
Aid Association for Lutherans
Appleton, Wisconsin
Gordon Postlewaite '59
Assistant Superintendent for Administration (retired)
Oswego Community Unit District #308
Oswego, Illinois

Loren H. Semler '65
Chairman and CEO
Semler Industries, Inc.

John R. Sladek, Jr. '65
President and CEO (retired)
California Lutheran University
Thousand Oaks, California

John P. Timmerwilke
Director, Information Services (retired)
Nutrilite Products

June Boatman Waller '63
Trustee
Franklin I. and Irene List Saemann Foundation
Champaign, Illinois
Campus Buildings

David A. Straz Jr. Center for the Natural and Social Sciences (DSC)
The David Straz Center houses Carthage’s Science Center, which opened in 2015. The building provides state-of-the-art facilities for study in the natural sciences, with classrooms and laboratories designed to maximize collaborative work by students and faculty on forefront research. The Science Center offers interdisciplinary laboratories for research in such pioneering areas as nanotechnology, molecular biology, and atomic microscopy; collaborative learning areas; a two-story, glass-enclosed atrium for exhibits, public gatherings, student poster presentations, and planetarium shows; TEAL (Technology Enhanced Active Learning) classrooms; a stepped seating area with advanced media capabilities; and an outdoor classroom overlooking Lake Michigan with natural stone seating.

A. W. Clausen Center for World Business (CC)
Recognizing that students are graduating into a global economy, the College opened the A. W. Clausen Center for World Business in 2004. Situated on the north wing of the Straz Center, the Clausen Center provides offices, classrooms, and other facilities for the Accounting and Finance, Economics, Management and Marketing, Political Science, and Computer Science departments, and is home to the new School of Business and Economics. Housing 10 classrooms, five seminar rooms, and an executive conference room/classroom laboratory, the Clausen Center hosts numerous special lectures and visits by international business leaders.

Lentz Hall (LH)
A four-story building perched on the campus bluff overlooking Lake Michigan, Lentz Hall is home to the Office of Admissions, Finance and Administrative Services, Office of Institutional Advancement, Office of the President, Office of the Provost, The Aspire Center, Office of the Registrar, and Office of Continuing Studies. Serving as one of the primary academic centers of the campus, Lentz Hall contains numerous classrooms, specialized teaching facilities, and offices for many of the humanities and professional studies faculty. The Nursing Learning Laboratories opened in Lentz Hall in 2017. This 3,000-square-foot space is divided into a skills lab and a simulation lab. The building is named for the Rev. Harold H. Lentz, 18th President of the College, who served from 1952 to 1976. He courageously led the College during its crucial transition from Carthage, Illinois, to Kenosha.

Walter Fritsch Meditation Chapel
Enjoying its position nestled within a grove of mature oak trees, this charming 40-seat chapel constructed of native Lannon stone with timber frames is enjoyed by Carthage community members for private meditation, eucharist, or prayer services. The chapel is adorned with a Greek cross fashioned by internationally renowned liturgical artist Eugene Potente Jr., a resident of Kenosha. Masonry that forms the altar was taken from the steps of the Old Main building at the College’s former Illinois campus.

Hedberg Library (HL)
Dedicated in 2002, Hedberg Library provides Carthage students and faculty with the resources, services, support, and inspirational space they need to pursue their course assignments and research. Hedberg Library is home to Library and Information Services, which supports traditional and electronic library services, information technology, media/audiovisual services, and equipment loans including laptops and iPads. The library’s growing collection of print and electronic resources contains unique books, periodicals, audio and visual recordings, microforms, and other materials. The 65,000-square-foot facility has several technology-enhanced classrooms, the 75-seat Niemann Media Theater, and 11 collaborative and individual study rooms. It includes the Bleeke Research Center, the Franklin I. and Irene List Saemann Curriculum Resource Center, the Staubitz Archives, the Fess Information Commons, the Brainard Writing Center, tutoring and academic support offices, the Fritsch Classroom, the Center for Children’s Literature, and the Teaching Commons. Donna’s Bytes, in the east section of the library, offers food, beverages, and a relaxing atmosphere for students to unwind and enjoy discussions, lake views, or sitting in front of the fireplace. The library is named for Donald D. Hedberg ’50, Carthage trustee emeritus and philanthropist.

A. F. Siebert Chapel (SC)
At the heart of the Carthage campus, A. F. Siebert Chapel provides a beautiful setting for the College’s religious life programs. It is the site of a thriving worship series during the week and weekend worship services. It is the gathering place for important events, such as the Carthage Christmas Festival, Interfaith Baccalaureate service, and concerts by renowned musical ensembles. The 1,500-seat chapel includes the magnificent four-manual Fritsch Memorial Pipe Organ, Ehler Fellowship Hall, and offices for the Campus Pastor and Director of Choral Activities.

H. F. Johnson Center for the Fine Arts (JAC)
The Johnson Arts Center includes classrooms, practice areas, teaching studios, and faculty offices for both the Music and Art departments. The center houses the recital hall, the art gallery, and the Visual and Performing Arts Lab. Music facilities include band and choir rooms, numerous practice rooms, and piano laboratory. Dedicated art facilities include ceramic, 3D, drawing, painting, and etching classrooms/labs.

N. E. Tarble Athletic and Recreation Center (TARC)
Opened in 2001, the 156,000-square-foot N. E. Tarble Athletic and Recreation Center houses the Koenitzer Aquatic Center, featuring the HARIBO pool, a 25-yard-by-40-meter, 16-lane competition pool; the 5,000-square-foot Semler Health and Fitness Center; the McNamara Baseball and Softball Practice Area; the Snap-on ACE Climbing Wall; a 200-meter indoor track; the Karstetter Racquetball Court; and the David E. Dale Golf Center; the Jon Swift Sports Medicine Center; an aerobics area; multipurpose courts for basketball, volleyball, and tennis; six locker rooms hosting more than 500 lockers; and offices for the athletic staff, which include the Cornog Swimming Coaches’ Office, the Lyons Volleyball Coach’s Office, and the Art Keller Football Coaches’ Office. The Field House is home to the spring Commencement exercises and large-scale concerts and events.

Tarble Arena
The Tarble Arena, reopened in 2009 after a $13.5 million renovation, provides indoor facilities for physical education and athletics. The arena serves as the competition venue for basketball and volleyball. The facility hosts four classrooms, seven office suites, an athletic training/exercise physiology laboratory, and an athletic team fitness center. The arena seats 2,500 for basketball or volleyball, and 4,200 for concerts and other events. Past concerts have featured national acts including Dave Matthews, John Mayer, Bob Dylan, The Script, Nate Ruess, and The Fray.

Todd Wehr Center (TWC)
The Todd Wehr Center is positioned proudly in the middle of the student residential area. This facility, supporting the cocurricular life of Carthage students, contains the campus cafeteria, student mailroom, student lounges, and a suite of multipurpose meeting and event rooms. The Caf, on the second floor, offers a variety of dining options provided by Sodexo.
Food Service, North America’s largest provider of food and facilities management. The Dean of Students Office and the Center for Student Success are housed in the building.

**Campbell Student Union**
The Campbell Student Union opened in 2011 and serves as the campus living room. Proving that the gathering is always in the kitchen, Carthage students frequent the union’s eateries, which include Sub Connection, WOW Café, and Baja Fresh Mexican Grill. Rounding out the retail main street, the union also contains the campus Barnes & Noble bookstore and the Red Zone, Carthage’s own convenience store. The 200-seat student activity auditorium proudly boasts a state-of-the-art digital projection system in a THX-certified showplace. The western face of the Campbell Student Union comprises the 1,700-seat home field seating for Art Keller Field and the 2,000-square-foot athletic press box.

**The Joan C. Potente Chapel**
The Joan C. Potente Chapel provides an oasis for nurturing the spirit. Reflection, meditation, prayer, and worship can restore balance and provide inspiration in the lives of those who come here. It is nestled among The Oaks Residential Village at the south end of campus. Although open to all students and the greater community, this chapel reflects a Roman Catholic atmosphere. A gift of Gene Potente, whose work also includes the Fritsch Meditation Chapel, the Joan C. Potente Chapel is named in honor of his wife.

**Student Residence Halls**
Comfortable on-campus housing accommodations are available to residential students in a number of residence halls. Each hall includes lounges, vending facilities, study areas, laundry rooms, and other services. 

*Henry Denhart Residence Hall* is a coed residence hall offering suite-style rooms, a courtyard, and housing for two Greek organizations: Chi Omega and Tau Kappa Epsilon. Denhart Hall hosts an annual fundraiser for the St. Baldrick’s Foundation. The building is named for Henry Denhart, an early Carthage trustee and significant benefactor.

*Joseph Johnson Residence Hall* is a coed hall that includes three Greek wings: Sigma Omega Sigma, Delta Upsilon, and Alpha Chi Omega. The terrace level was renovated in 2001 and now includes suite-style rooms. The Office of Public Safety is located on the terrace level. A large courtyard is situated behind the building. Johnson Hall is known for its annual “Johnson Haunted Halls” competition, which takes place each year around Halloween. The building is named for Joseph Johnson, a founder and former chairman of the board of Snap-on, Inc., who was an important benefactor of the College.

*Madrigrano Family Residence Hall* is a coed hall that includes three Greek wings: Tau Sigma Chi, Kappa Phi Eta, and Delta Omega Nu. The terrace level is home to *The Current*, the student-run newspaper, and *Centrique*, a student literature and arts magazine. Madrigano Hall also houses offices for live-in Residential Life staff members, the Carthage Activities Board, WAVE, Residence Life Council, and the Office of Marketing and Communications.

*Trinity House* (Home of the President)
Built as the family home of the President of the College in the early 1960s, the building was a gift from the people of Trinity Lutheran Church in Rockford, Illinois. The home was named “Trinity House” in honor of the College’s decades-long relationship with the congregation.

**Smeds Tennis Center**
Across the street from the main campus, the Smeds Tennis Center features 10 hard-surface tennis courts, six of which are lighted; two stadium courts; an observation deck; and a clubhouse, which houses locker rooms, restrooms, team meeting space, and a juice bar. The facility is named for Edward W. and Alice Smeds, alumni of the College. Mr. Smeds is a trustee emeritus of the College and served as the chairman of the Board of Trustees from 1997 to 2011.
# Academic Calendar

## 14-week Undergraduate Calendar

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Weekday</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL TERM</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>September 7</td>
<td>Tues</td>
<td>Last day to add or drop a first 7-week course</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Tues</td>
<td>Last day of open add/drop period for 14-week course</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Wed</td>
<td>First day of restricted add/drop period for 14-week course</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Tues</td>
<td>Last day of restricted add/drop period for 14-week course</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Tues</td>
<td>Last day to petition for an overload</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Tues</td>
<td>Last day to turn in pass/fail/audit slips</td>
<td></td>
</tr>
<tr>
<td>October 4</td>
<td>Mon</td>
<td>Advising for Spring and J-Term begins</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Fri</td>
<td>Midterm grades due</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Fri</td>
<td>First 7-week courses end</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Fri</td>
<td>Fall Break</td>
<td></td>
</tr>
<tr>
<td>25-26</td>
<td>Mon-Tues</td>
<td>Second 7-week courses begin</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Wed</td>
<td>Second 7-week courses begin</td>
<td></td>
</tr>
<tr>
<td>November 1</td>
<td>Mon</td>
<td>Last day to withdraw from a 14-week course</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Wed</td>
<td>Last day to add or drop a second 7-week course</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Wed</td>
<td>No financial refunds after this date</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Fri</td>
<td>Last day for complete withdrawal</td>
<td></td>
</tr>
<tr>
<td>8-12</td>
<td>Mon-Fri</td>
<td>Advising for Spring and J-Term ends</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Fri</td>
<td>Residence halls close at 5:00 p.m. (classes end at 4:00 p.m.)</td>
<td></td>
</tr>
<tr>
<td>24-26</td>
<td>Wed-Fri</td>
<td>Thanksgiving recess</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Mon</td>
<td>Classes resume</td>
<td></td>
</tr>
<tr>
<td>December 13</td>
<td>Mon</td>
<td>Last day of class</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Tues</td>
<td>Study day</td>
<td></td>
</tr>
<tr>
<td>15-17</td>
<td>Wed-Fri</td>
<td>Final exams</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Fri</td>
<td>Residence halls close at 5:00 p.m.</td>
<td></td>
</tr>
</tbody>
</table>

**J-TERM**

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Weekday</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 5</td>
<td>Wed</td>
<td>Residence halls open at 12:00 p.m.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Thur</td>
<td>Classes begin</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Mon</td>
<td>Last day to add or drop J-Term</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Thur</td>
<td>Last day to withdraw from J-Term</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Fri</td>
<td>J-Term ends</td>
<td></td>
</tr>
</tbody>
</table>

**SPRING TERM**

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Weekday</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 1</td>
<td>Tues</td>
<td>Residence halls open at 12:00 p.m.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Wed</td>
<td>Classes begin</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Wed</td>
<td>Last day to add or drop a First 7-week course</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Wed</td>
<td>Last day of open add/drop period for 14-week course</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Thur</td>
<td>First day of restricted add/drop period for 14-week course</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Wed</td>
<td>Last day of restricted add/drop period for 14-week course</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Wed</td>
<td>Last day to petition for an overload</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Wed</td>
<td>Last day to turn in pass/fail/audit slips</td>
<td></td>
</tr>
<tr>
<td>March 1</td>
<td>Tues</td>
<td>Last day to withdraw from a first 7-week course</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Fri</td>
<td>Residence halls open at 12:00 p.m.</td>
<td></td>
</tr>
<tr>
<td>14-18</td>
<td>Mon-Fri</td>
<td>Spring recess</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Sun</td>
<td>Residence halls open at 12:00 p.m.</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Mon</td>
<td>Classes resume</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Mon</td>
<td>Advising for Fall begins</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Fri</td>
<td>Midterm grades due</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Fri</td>
<td>First 7-week courses end</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Mon</td>
<td>Second 7-week courses begin</td>
<td></td>
</tr>
</tbody>
</table>
Adult Education Calendar

Fall I Term: September 7 - October 25
August 31 Last day to add a course
September 20 Last day to drop a course
October 4 Last day to withdraw from a course

Fall II Term: October 26 - December 16
October 19 Last day to add a course
November 8 Last day to drop a course
November 22 Last day to withdraw from a course

Winter Term (2 Days/Week): January 6 - 31
December 30 Last day to add a course
January 12 Last day to drop a course
January 19 Last day to withdraw from a course

Spring I Term: February 2 - March 29
January 26 Last day to add a course
February 15 Last day to drop a course
March 1 Last day to withdraw from a course

Spring II Term: March 30 - May 17
March 23 Last day to add a course
April 12 Last day to drop a course
April 26 Last day to withdraw from a course

Summer I Term: May 23 - July 7
May 16 Last day to add a course
June 3 Last day to drop a course
June 17 Last day to withdraw from a course

Summer II Term: July 11 - August 25
July 5 Last day to add a course
July 22 Last day to drop a course
August 5 Last day to withdraw from a course
# Index

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>About Carthage</td>
<td>2</td>
</tr>
<tr>
<td>Academic Calendar</td>
<td>218</td>
</tr>
<tr>
<td>Academic Departments and Programs of Study</td>
<td>21</td>
</tr>
<tr>
<td>Academic Divisions</td>
<td>18</td>
</tr>
<tr>
<td>Academic Honesty Policy</td>
<td>9</td>
</tr>
<tr>
<td>Academic Information</td>
<td>6</td>
</tr>
<tr>
<td>Academic Resources</td>
<td>10</td>
</tr>
<tr>
<td>Accelerated Certification Program for Teachers</td>
<td>13</td>
</tr>
<tr>
<td>Accounting</td>
<td>21</td>
</tr>
<tr>
<td>Accreditation</td>
<td>3</td>
</tr>
<tr>
<td>Add/Drop Policy</td>
<td>8</td>
</tr>
<tr>
<td>Admissions</td>
<td>198</td>
</tr>
<tr>
<td>Advanced Licensing as a Reading Teacher/Specialist</td>
<td>13</td>
</tr>
<tr>
<td>Advanced Placement</td>
<td>199</td>
</tr>
<tr>
<td>Advising</td>
<td>9</td>
</tr>
<tr>
<td>Art</td>
<td>25</td>
</tr>
<tr>
<td>Arts and Humanities, Division of</td>
<td>18</td>
</tr>
<tr>
<td>Asian Studies</td>
<td>36</td>
</tr>
<tr>
<td>ASPIRE Program</td>
<td>10</td>
</tr>
<tr>
<td>Astrophysics</td>
<td>140</td>
</tr>
<tr>
<td>Athletic Training</td>
<td>24</td>
</tr>
<tr>
<td>Biology</td>
<td>37</td>
</tr>
<tr>
<td>Board of Trustees</td>
<td>214</td>
</tr>
<tr>
<td>Business Administration</td>
<td>21</td>
</tr>
<tr>
<td>Calendar</td>
<td>218</td>
</tr>
<tr>
<td>Campus Buildings</td>
<td>216</td>
</tr>
<tr>
<td>Career Services</td>
<td>10</td>
</tr>
<tr>
<td>Chemistry</td>
<td>43</td>
</tr>
<tr>
<td>Chinese</td>
<td>109</td>
</tr>
<tr>
<td>Classics</td>
<td>45</td>
</tr>
<tr>
<td>Coaching</td>
<td>83</td>
</tr>
<tr>
<td>College Overview</td>
<td>2</td>
</tr>
<tr>
<td>Communication and Digital Media</td>
<td>48</td>
</tr>
<tr>
<td>Computer Science</td>
<td>57</td>
</tr>
<tr>
<td>Conservation and Ecology</td>
<td>81</td>
</tr>
<tr>
<td>Continuing Studies, Office of</td>
<td>12</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>60</td>
</tr>
<tr>
<td>Cross-Categorical Special Education (K-12)</td>
<td>67</td>
</tr>
<tr>
<td>Degree Requirements</td>
<td>6</td>
</tr>
<tr>
<td>Disciplinary Actions</td>
<td>9</td>
</tr>
<tr>
<td>Early Admission</td>
<td>198</td>
</tr>
<tr>
<td>Economics</td>
<td>63</td>
</tr>
<tr>
<td>Education</td>
<td>67</td>
</tr>
<tr>
<td>Elementary/Middle Education (1-8)</td>
<td>67</td>
</tr>
<tr>
<td>Endowed Scholarships</td>
<td>205</td>
</tr>
<tr>
<td>Engineering</td>
<td>4</td>
</tr>
<tr>
<td>English</td>
<td>76</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>80</td>
</tr>
<tr>
<td>Examination for Credit</td>
<td>8</td>
</tr>
<tr>
<td>Exercise and Sport Science</td>
<td>83</td>
</tr>
<tr>
<td>Faculty</td>
<td>210</td>
</tr>
<tr>
<td>Faith and Spirituality</td>
<td>2</td>
</tr>
<tr>
<td>Family Education Rights and Privacy Act</td>
<td>2</td>
</tr>
<tr>
<td>Fees for Optional Services</td>
<td>201</td>
</tr>
<tr>
<td>Field Placements/Internships</td>
<td>11</td>
</tr>
<tr>
<td>Finance</td>
<td>21</td>
</tr>
<tr>
<td>Financial Planning</td>
<td>203</td>
</tr>
<tr>
<td>French</td>
<td>115</td>
</tr>
<tr>
<td>Freshman Entrance Requirements</td>
<td>198</td>
</tr>
<tr>
<td>General Courses</td>
<td>88</td>
</tr>
<tr>
<td>Geospatial Science</td>
<td>89</td>
</tr>
<tr>
<td>German</td>
<td>116</td>
</tr>
<tr>
<td>Grade Point Average</td>
<td>9</td>
</tr>
<tr>
<td>Grading System</td>
<td>7</td>
</tr>
<tr>
<td>Great Ideas: Intellectual Foundations of the West</td>
<td>93</td>
</tr>
<tr>
<td>Greek (Ancient)</td>
<td>46</td>
</tr>
<tr>
<td>Health and Counseling Services</td>
<td>208</td>
</tr>
<tr>
<td>Health Education</td>
<td>85</td>
</tr>
<tr>
<td>Hedberg Library</td>
<td>2</td>
</tr>
<tr>
<td>Heritage Studies</td>
<td>6</td>
</tr>
<tr>
<td>History</td>
<td>95</td>
</tr>
<tr>
<td>Honors Program</td>
<td>15</td>
</tr>
<tr>
<td>Housing and Residential Life</td>
<td>217</td>
</tr>
<tr>
<td>Individual Study</td>
<td>11</td>
</tr>
<tr>
<td>Institutional Grant Programs</td>
<td>204</td>
</tr>
<tr>
<td>Intercollegiate Athletics</td>
<td>4</td>
</tr>
<tr>
<td>International Baccalaureate</td>
<td>199</td>
</tr>
<tr>
<td>International Political Economy</td>
<td>63</td>
</tr>
<tr>
<td>International Study Abroad</td>
<td>11</td>
</tr>
<tr>
<td>Internships</td>
<td>11</td>
</tr>
<tr>
<td>January Term</td>
<td>10</td>
</tr>
<tr>
<td>Japanese</td>
<td>112</td>
</tr>
<tr>
<td>Latin</td>
<td>48</td>
</tr>
<tr>
<td>Library and Information Services</td>
<td>2</td>
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<tr>
<td>Majors</td>
<td>3</td>
</tr>
<tr>
<td>Management</td>
<td>99</td>
</tr>
<tr>
<td>Marketing</td>
<td>99</td>
</tr>
<tr>
<td>Master of Business Design and Innovation</td>
<td>14, 190</td>
</tr>
<tr>
<td>Master of Education Program</td>
<td>13, 179</td>
</tr>
<tr>
<td>Mathematics</td>
<td>103</td>
</tr>
<tr>
<td>Middle/Secondary Education (6-12)</td>
<td>70</td>
</tr>
<tr>
<td>Mission Statement</td>
<td>2</td>
</tr>
<tr>
<td>Modern Languages</td>
<td>107</td>
</tr>
<tr>
<td>Music</td>
<td>119</td>
</tr>
<tr>
<td>Music Education</td>
<td>120</td>
</tr>
<tr>
<td>Natural and Social Sciences, Division of</td>
<td>19</td>
</tr>
<tr>
<td>Neuroscience</td>
<td>130</td>
</tr>
<tr>
<td>New Student Orientation</td>
<td>208</td>
</tr>
<tr>
<td>Nursing</td>
<td>131</td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td>5</td>
</tr>
<tr>
<td>Organizations and Activities</td>
<td>208</td>
</tr>
<tr>
<td>Pass-Fail Option</td>
<td>8</td>
</tr>
<tr>
<td>Philosophy</td>
<td>138</td>
</tr>
<tr>
<td>Physical Education, Sport, and Fitness Instruction</td>
<td>83</td>
</tr>
<tr>
<td>Physics</td>
<td>140</td>
</tr>
<tr>
<td>Piano Pedagogy</td>
<td>120</td>
</tr>
<tr>
<td>Political Science</td>
<td>145</td>
</tr>
<tr>
<td>Professional Studies, Division of</td>
<td>20</td>
</tr>
<tr>
<td>Program of Study</td>
<td>7</td>
</tr>
<tr>
<td>Psychological Science</td>
<td>151</td>
</tr>
<tr>
<td>Public Relations</td>
<td>49</td>
</tr>
<tr>
<td>Refund Schedule</td>
<td>202</td>
</tr>
<tr>
<td>Religion</td>
<td>154</td>
</tr>
<tr>
<td>ROTC Programs</td>
<td>5</td>
</tr>
<tr>
<td>Scholarships and Academic Planning</td>
<td>16</td>
</tr>
<tr>
<td>Secondary Education</td>
<td>70</td>
</tr>
<tr>
<td>Self-Designed Major/Minor</td>
<td>11</td>
</tr>
<tr>
<td>Seven-Week Format</td>
<td>12</td>
</tr>
<tr>
<td>Social Work</td>
<td>160</td>
</tr>
<tr>
<td>Sociology</td>
<td>163</td>
</tr>
<tr>
<td>Spanish</td>
<td>118</td>
</tr>
<tr>
<td>Special Education (K-12) (see Cross-Categorical Special Education)</td>
<td>67</td>
</tr>
<tr>
<td>Student Affairs</td>
<td>208</td>
</tr>
<tr>
<td>Study Abroad</td>
<td>11</td>
</tr>
<tr>
<td>Target Language Experts</td>
<td>212</td>
</tr>
<tr>
<td>Theatre</td>
<td>66</td>
</tr>
<tr>
<td>Theatre Performance</td>
<td>66</td>
</tr>
<tr>
<td>Theatre Technical Production and Design</td>
<td>67</td>
</tr>
<tr>
<td>Transfer Students</td>
<td>199</td>
</tr>
<tr>
<td>Tuition and Fees</td>
<td>201</td>
</tr>
<tr>
<td>Tutoring</td>
<td>10</td>
</tr>
<tr>
<td>Urban Education Minor</td>
<td>70</td>
</tr>
<tr>
<td>Veterans Administration Educational Program</td>
<td>202</td>
</tr>
<tr>
<td>Veterans Administration Standards of Progress</td>
<td>9</td>
</tr>
<tr>
<td>Women’s and Gender Studies</td>
<td>175</td>
</tr>
<tr>
<td>Writing Across the Curriculum</td>
<td>7</td>
</tr>
</tbody>
</table>

220 Carthage 2021-2022 Catalog