

CARTHAGE
COLLEGE



2023–2024
Catalog

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.

Carthage College
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Kenosha, WI 53140
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CARTHAGE
 COLLEGE
 800-351-4058
 carthage.edu/visit



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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).



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College Overview

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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 cocurricular 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 a 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 permission of each. It is the purpose of the Campus Pastor to be available for spiritual support when a rabbi, priest, pastor, or an imam is not locally available. The mission of the CFS is to connect faith and life issues for 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. Einstein Bros. Bagels, 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

system for registration and degree planning, as well as access to the internet. Using the learning management system, students can access course materials, submit assignments electronically, view their progress, and interact with instructors and fellow students.

All students, staff, and faculty have access to email, calendar, and collaborative tools provided by G Suite for Education. Free and discounted versions of other software are available through LIS. Computer labs are located in academic buildings, providing more than 250 public access computers, and all of Carthage's classrooms are technology enhanced with multimedia capabilities. Rooms in the residence halls have both wireless and direct Ethernet network access connections, as well as digital cable television. Students bringing their own computers and other digital devices should consult the LIS web page for more information: www.carthage.edu/academics/library/computer-technology-services/.

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 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.cneaccreditation.org>).

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

The Teacher Education Programs for positions in elementary/middle, 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.

Carthage also maintains membership in the American Council on Education, Association of American Colleges and Universities, American Association of Colleges for Teacher Education, Wisconsin Association of Independent Colleges and Universities, American Association of College and University Summer Sessions, American Association of College Registrars and Admissions Officers, Association of College Admission Counselors, National Association of Student Financial Aid Administrators, Wisconsin Association of Colleges of Teacher Education, and Wisconsin Independent Colleges of Teacher Education. Carthage is approved by the American Association of University Women.

* 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, psychology, 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. Additionally, departments offering a Bachelor of Arts degree in a given major may offer a corresponding Bachelor of Science degree in that major. Carthage also offers three Bachelor of Music degrees. Students can only earn one degree in a specific major. Students can major in:

- Accounting (BA or BS)
- Allied Health Science
- Art Education
- Asian Studies
- Biology (BA or BS)
- Chemistry (BA or BS)
- 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 (BA or BS)
- Environmental Science
- Exercise and Sport Science
- Finance

French
Game Development (BA or BS)
Geographic Information Science
Geoscience
German
Graphic Design
History
International Political Economy
Japanese
Management
Marketing
Mathematics
Music
Music Education (BM)
Music Theatre (BM)
Music, Piano Performance and Collaborative Piano (BM)
Neuroscience
Nursing (BSN)
Photography
Physics (BA or BS)
Playwriting
Political Science
Psychology
Public Relations
Religion
Social Work
Sociology
Spanish
Studio Art
Theatre
Theatre Performance
Theatre Technical Direction
Theatrical Costume Design
Theatrical Stage Management

* To review the Carthage report submitted in compliance with Section 207 of Title II of the Higher Education Act, visit www.carthage.edu/education and scroll to the bottom of the page.

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 (MSc) in Business Design and Innovation, the Master of Science in Product Management, Certificate in Product Management, the Master of Music (M.M.) in Music Theatre Vocal Pedagogy, the Master of Music (M.M.) in Music Music 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 Licensure (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. The dual degree program with Case Western Reserve University is not available for students who major in Engineering at Carthage College.

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. The dual degree program with Washington University in St. Louis is not available for students who major in Engineering at Carthage College.

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+3 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 Pharmaceuticals 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.

Accelerated Master’s Programs with Michigan Technological University

Students seeking to earn a Master of Science in Physics, Master of Science in Applied Physics, or a Master of Geographic Information Science from Michigan Technological University, through agreement between Michigan Technological University and Carthage College, may double-count up to six (6) credits towards an afore listed master’s degree following receipt of their bachelor’s degree at Carthage College. Successful completion of the Accelerated Master’s Program will lead to a master’s degree awarded by Michigan Technological University.

Students are required to apply through the standard Graduate School admission process, identify that they wish to participate in this negotiated agreement within the application, and must be accepted by the academic program to which they apply. Students must apply and be accepted prior to receiving their bachelor’s degree at their home institution. Students receiving their bachelor’s degree in the Spring must register for the following Summer or Fall semester; students receiving their bachelor’s degree in the Fall, must register for the following Spring semester.

Students seeking to earn a Master of Science in Physics or Applied Physics may double-count up to six (6) credits from the following courses:

PHY 3170 Computational Physics
PHY 4100 Astrophysics
PHY 4110 Observational Astrophysics
PHY 4210 Experimental Physics

PHY 4200 Quantum Mechanics
PHY 4300 Electricity and Magnetism

Students seeking to earn a Master of Geographic Information Science may double-count up to six (6) credits from the following courses:

GEO 3200 Hydrology
GEO 3400 Forest Ecology
GEO 3700 Climatology
GEO 3800 Soil Science
GEO 3900 Methods in Field Research
MTH 3050 Statistics
GEO 3610 Applied Projects in Geographic Information Science
GEO 4500 Independent Study in Geospatial Science
GEO 4900 Geospatial Science Research

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.

Academic Information

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Degree Requirements

To earn a bachelor's degree from Carthage, a student must satisfy the following requirements: Successfully complete 130 credits for the Bachelor of Arts degree, Bachelor of Science, Bachelor of Science in Nursing degree, or Bachelor of Music degree. The requirements that students must complete to reach 130 credits are listed below.

The general education requirements seek to provide a broad base of knowledge in the liberal arts and sciences that enable students to construct a coherent framework for ongoing intellectual, ethical, and aesthetic growth. These requirements are designed to develop lifelong competencies, such as critical and creative thinking, written and oral communication, quantitative reasoning, problem-solving, and the capability to work independently and collaboratively. The general education curriculum includes three elements:

A first year course sequence called **Intellectual Foundations**

A set of curriculum components divided into four categories:

- Explorations**
- Abilities**
- Perspectives**
- Wellness**

A **Reflection Framework** that connects these courses to broader educational outcomes

INTELLECTUAL FOUNDATIONS

Intellectual Foundations (COR 1200) is typically taken in either Fall or Spring term of a student's first year.

4 credits in which students sample great works of literature, sacred writing, philosophy, and more. The variety of material and 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 with 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.

Curriculum Components

EXPLORATIONS

Encourages students to develop a sense of intellectual curiosity by exploring courses from across the college and studying the process by which knowledge is acquired in a range of different disciplines. Students will take one explorations course in each of these four areas:

Artistic Inquiries: (4 credits) in which students participate directly in the processes of the literary, performing, and visual arts. Options include acting, dance, voice or instrument lessons, music ensembles, music theater workshops, opera production, studio art, graphic design, scenic painting, creative writing, costume design, and others as appropriate.

Cultural Legacies: (4 credits) in which students examine and ask questions about the legacies of human cultures. Students identify and respond to texts using discipline-specific research tools, based on the interpretation and analysis of cultural practices and products.

Social Interactions: (4 credits) in which students understand social, economic, and/or political structures and the ways in which they affect and are affected by individuals and/or societies, focused on human behavior and/or interactions,

Scientific Exploration: in which students focus on exploring the structure and processes of the natural world and the modes of inquiry we use to study it, and develop the scientific understanding

necessary to respond to a topic/question/problem/challenge of general interest.

ABILITIES

Encourages students to develop some of the skills needed for success in college and beyond. Students will take two Global Language courses, four Written Communication courses, and one course each in Oral Communication and Quantitative Reasoning.

Global Language* (8 credits) in which students build linguistic and cultural competency as well as basic communication skills in a foreign language.

Written Communication (16 credits) in which students will practice and improve the articulation of ideas and arguments in clear, precise, and expressive writing.

NOTE: CORE 1200 Intellectual Foundations automatically fulfills 4 of these credits. One of the courses fulfilling this requirement must be within the student's major.

Oral Communication (4 credits): in which students will practice and improve the articulation of ideas and arguments in clear, precise, and expressive speech by identifying and applying techniques for effective verbal expression.

Quantitative Reasoning (4 credits) in which students will work with numerical data, read graphs or maps, draw inferences from data, and recognize sources of error in order to deepen their understanding of the world around us and enhance their ability to make reasoned decisions.

*Global Language:

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 global 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 offered at UW-Parkside.

You may be exempted from the Global Language requirement:

- (A) If a minimum of 6 credits in a modern language, with grades of C- or better, appears on your official postsecondary 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.

PERSPECTIVES

Encourages students to consider the world around them from a range of different angles, and to recognize the value of a broad approach to the acquisition of knowledge. Students will take one course in each of these four areas: Religious Perspectives, Diverse Perspectives, International Perspectives, and Interdisciplinary Perspectives.

Religious Perspectives (4 credits) in which students identify the underlying structural components of religious worldviews, and articulate how these are expressed in various world religions, in order to evaluate critically the interaction between religious values and daily life, and how such interaction can potentially both promote and resolve conflict.

Diverse Perspectives (4 credits) in which students will explore the diverse backgrounds represented in United States society, including race, ethnicity, religion, social class, sexual orientation, and gender identity, and describe how these diverse contexts lead to differing perspectives on various topics, allowing them to recognize our own context and gain broader perspectives that can be useful in helping overcome the limitations inherent in any single context.

International Perspectives (4 credits) in which students examine international communication, culture, politics, migration, and trade, identifying patterns of assumptions, values, and/or practices in one or more countries, regions, or cultural areas outside of the United States.

Interdisciplinary Perspectives (4 credits) in which students study topics from multiple distinct disciplinary perspectives, considering individual questions or topics from multiple perspectives, and recognizing the ways in which an interdisciplinary approach can strengthen our understanding of the world around us.

WELLNESS

Wellness is a holistic approach to optimize one's life through a dynamic process of growth and change. Options include courses focused on wellness as applied to dimensions such as mental/emotional, physical, environmental, social, spiritual, intellectual, occupational, and financial well-being.

Wellness (2 credits) in which students gain the knowledge and skills necessary to live healthier lives, thereby enhancing their general well-being at Carthage and beyond. Students will be able to articulate the relationship between wellness and one's ability to meet personal, academic, and life goals.

REFLECTION FRAMEWORK

This framework helps students learn to process their experiences, be intentional about their choices, and develop an appropriate educational plan. The framework is integrated into the entire learning experience. It is not a separate course, but rather a process to grow and learn over the course of study.

Notes:

Some General Education courses may have two or more general education designations. For example, a Cultural Legacies course may also have a Written Communication designation, thus allowing students to fulfill both general education requirements at the same time.

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 74 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 Science (48-72 cr.): Students can also earn a Bachelor of Science degree within the following programs: Accounting, Biology, Chemistry, Engineering, Game Development, and Physics. Carthage Bachelor of Science majors range between a minimum of 48 credits and a maximum of 72 credits (up to 68

non-thesis credits plus up to 4 thesis credits), or more if required by accreditation and/or licensure. Up to 56 credits may be required in any one department (up to 52 non-thesis credits plus up to 4 Senior Thesis credits). All students must have 74 credits outside of their major department for graduation. Students must complete a minimum of 12 credits in the major at Carthage. Specific requirements for these Bachelor of Science degrees can be found under the corresponding department heading in the *Undergraduate Academic Departments and Programs of Study* section of the college catalog.

Bachelor of Music in Piano Performance and Collaborative Piano (84-98 cr.): Students earning a Bachelor of Music in Piano Performance and Collaborative Piano degree must complete 84-98 credits in the Music Department and from supporting departments. 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 90 credits in the Music Department and 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.

Bachelor of Music in Music Theatre (90-98 cr.): Students earning a Bachelor of Music in Music Theatre degree must complete 90-98 credits in the Music Department and 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.

MINORS

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. If a minor is declared, it is considered to be a part of the degree requirements. Students can receive financial aid towards minor courses if declared with the intent to complete.

Electives

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

J-Term

All students must enroll in J-Term during their freshman year and in at least one additional year. Transfer students who transfer in more than 32 credits will only need to complete 1 J-Term.

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 Written Communication (WC). 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 WC course in the curriculum. If students are completing more than one major, they only need one WC 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 WC courses before graduation, as spelled out in Degree Requirements. Written Communication 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.

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 - 27 credits
Sophomore	28 - 63 credits
Junior	64 - 97 credits
Senior	98 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.

A	4.00
A-	3.67
B+	3.33
B	3.00
B-	2.67
C+	2.33
C	2.00
C-	1.67
D+	1.33
D	1.00
D-	.67
F	No points

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/Withdrawal Policy

Carthage uses an open add/drop period and a restricted add/drop period during each fall and spring semester. A “drop” removes a student from the faculty roster and the course no longer appears on your course schedule or transcript. Both the open and restricted periods are in effect during the first 5 weeks of each semester (see below).

Week 1: Open Add and Open Drop (students can add or drop a course directly in Workday)

Week 2: Open Drop and Restricted Add (restricted add period requires instructor permission via to add a course).

Weeks 3-5: Restricted Drop (restricted drop period requires approval from an advisor to drop a course. The Registrar’s Office will have a form that students will need to complete to make this request).

Weeks 6-9: Students may withdraw from a course during this period and will receive a “W” on their transcript. A “W” grade will not impact a student’s GPA.

After Week 9, students may withdraw from a single course once over the course of their undergraduate studies at Carthage. The one-time only late withdrawal form can be used up to and including the last day of instruction (see the academic calendar). This form can be obtained in the Registrar’s Office and requires advisor approval.

Full Semester Withdrawal:

Withdrawal during the final three weeks of instruction (or proportionate for winter and summer terms) is not permitted unless there are serious and extenuating circumstances beyond the student’s control that prevents them from continuing in their classes and grades of “Incomplete” are not possible. Students who wish to completely withdraw from the College must secure a withdrawal form from the Center for Student Success.

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

In some cases, depending on the course, an enrolled student may challenge the course 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.

Quality Credits	Probation	Suspension
12- 16	1.0-1.99	.999 or below
17- 36	1.2-1.99	1.199 or below
37- 56	1.4-1.99	1.399 or below
57- 72	1.6-1.99	1.599 or below
73- 86	1.8-1.99	1.799 or below
87+		1.999 or below

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 Office of Admissions 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 Office of Admissions 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 uses a holistic advising model that focuses on four core areas to best support the learning and personal growth of each student during their college journey. Each member in this support network serves a unique purpose in a student's education, working with one another and collaborating with faculty and staff members from other functional areas as needed.

New Student Registration

New Student Registration Specialists assist first-year students with academic and course scheduling in the fall semester. Each student is then matched with a Faculty Advisor in the major department(s) they have declared by their second semester at Carthage.

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. Students may receive additional support from other faculty members for teaching licensure, pre-professional programs, study abroad, and other specialty programs.

Student Success Advising

Every student is assigned a Student Success Advisor who connects them to campus partners and resources to maximize their college experience. Advisors help problem-solve with students to remove barriers to staying in college by addressing personal, academic, and financial concerns.

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 a My Aspire 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 2 J-Term classes (on-campus or off-campus) total is included for students attending full-time for a full academic year. If students want to complete more than 2 J-Term courses, they will be subject to per credit course fees. 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 assists students in developing 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 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.

Topic 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.

Field Placements

The following policies shall govern field placement during the regular term:

1. Students may register for up to twelve hours of field placement or internship per term. Students 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.
3. For field placements, attendance at a regularly held on-campus seminar conducted by the instructor is expected.
4. A minimum of 30 hours of on-the-job activity over the course of a semester is required to earn 1 credit. For example, students who wish to earn 4 credits, need to complete a total of 120 hours worth of on-the-job activity.
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 field placement may be counted toward the major, whether or not it is required for the major, and how many hours are necessary. Students should check with their faculty advisor during advising sessions to be sure where credits will count toward graduation. Departments may establish guidelines in addition to the following:

3500 Field Placement 2-8 credits
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.

Internships

The following policies shall govern internships during the regular term:

1. Students may register for up to twelve hours of field placement or internship per term. Students 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.
2. Internships are open to all students with the approval of the supervising faculty member and The Aspire Center.
3. A minimum of 30 hours of on-the-job activity over the course of a semester is required to earn 1 credit. For example, students who wish to earn 4 credits, need to complete a total of 120 hours worth of on-the-job activity.
4. 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.
5. Internship credit must be earned during the same semester as when the internship takes place.
6. Internship proposals follow the same add/drop deadlines of all course credit. Internship proposals submitted after the add/drop deadline must be submitted with a SARR committee petition.
7. Internship credit will count in the field of the faculty supervisor. For example, if an Accounting faculty member supervises a student who is a marketing major, the internship credit will appear as ACC 3550.
8. Students should check with their faculty advisor during advising sessions to be sure where credits will count toward graduation.
9. Faculty signatures for the internship proposal may be electronic.

Departments will have discretion in the determination of prerequisites, whether or not field placement may be counted toward the major, whether or not it is required for the major, and how many hours are necessary. Students should check with their faculty advisor during advising sessions to be sure where credits will count toward graduation. Departments may establish guidelines in addition to the following:

3550 Internship 1-12 credits

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 as 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.

Continuing Studies

Continuing Studies serves as Carthage College's hub for access and innovation, providing lifelong learning opportunities to a diverse population of traditional and nontraditional students. Continuing Studies 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.

Continuing Studies 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, Continuing Studies 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 Continuing Studies includes Summer Studies, Graduate Studies, and Professional Development Programs.

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 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 and want 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:

- Online application 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 Cocurriculum

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 12 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.
4. The Registrar for matters relating to student records. Complete details for the Student

Records Policy are outlined in the *Community Code*. Telephone: 262-551-6100.

5. The Provost of the College for matters relating to the curriculum and academic grievance procedure. Telephone: 262-551-5850.

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.

Carthage complies with the Family Education Rights and Privacy Act of 1974.

Academic Divisions

Division of Arts and Humanities

Division of Natural and Social Sciences

Division of Professional Studies

School of Business and Economics

Academic Divisions

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

Division of Arts and Humanities

Art
Asian Studies
Communication, Graphic Design, and Public Relations
English
History
Modern Languages
Music
Religion
Theatre
Women's and Gender Studies

Division of Natural and Social Sciences

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

Division of Professional Studies

Athletic Training
Broad Field Social Science Education
Exercise and Sport Science
Health Education
Nursing
Social Work

School of Business and Economics

Accounting and Finance
Economics
Management and Marketing

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 includes eight departments and four interdisciplinary programs. The division also offers general education courses for nonmajors, which provides an introduction to creative and critical inquiry survey courses, creative application courses, and short-term study abroad.

Departments in the Division include:

Art

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

Communication and Digital Media

B.A. in Graphic Design
B.A. in Communication
B.A. in Photography
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 Piano Pedagogy
B.M. in Piano Performance and Collaborative Piano
B.M. in Music Education
B.M. in Musical Theatre
Minors in Music and Music Theatre
M.M. in Music Theatre Vocal Pedagogy
M.M. in Music Pedagogy

Religion

B.A. in Religion
Minors 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 Playwriting
B.M. in Musical Theatre
Minors in Theatre, Dance, and Music Theatre

Interdisciplinary Programs

B.A. in Asian Studies
Minor in Asian Studies
Minor in African Studies
Minor in Women's and Gender Studies

Contributions to the General Education Curriculum

Students seeking to satisfy distribution requirements will find regular offerings of courses 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 general education requirement typically 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 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 co-curricular 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.

The division offers 15 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
- B.S. in Biology
- Minor in Biology

Chemistry

- B.A. in Chemistry
- B.A. in Chemistry (ACS certified)
- B.S. in Chemistry
- Minor in Chemistry

Computer Science

- B.A. in Computer Science
- B.A. in Game Development
- B.S. in Game Development
- Minor in Computer Science
- Minor in Game Development

Engineering

- B.A. in Engineering
- B.S. in Engineering

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 Climate Science

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

B.S. in Physics

Minor in Physics

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

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

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 several areas. 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

Clinical and field placements:

- Aurora Health Care Shadowing Program
- Fieldwork in Psychology
- Medical Mission to Nicaragua

Faculty research programs:

- Paleontology field research in Montana
- Microgravity and Space Sciences Program

National programs and placements:

- Amgen Scholars
- NSF REU Program

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:

Allied Health Science & Athletic Training

- B.A. in Allied Health Science
- M. A. in Athletic Training

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)

- Minor in School Health Education
- Athletic Coaching Certification
- Adaptive Physical Education Certification

Nursing

- B.S. in Nursing

Social Work

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

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)
- Association of Carthage Education Students (ACES)

- Alpha Epsilon Delta
- Pi Alpha Honors Fraternity
- Pi Lambda Theta
- Pi Sigma Epsilon
- Pals and Partners
- Racine/Kenosha Reading Council

School of Business and Economics

The School of Business and Economics at Carthage offers innovative programs that combine with The Aspire Program for career development and nationally ranked J-Term study tours to give students life-changing experiential learning opportunities. The curriculum at the School of Business and Economics will be continually informed by input from prominent alumni and business leaders from the region's largest employers.

Departments in the School of Business and Economics include:

Accounting and Finance

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

Economics

- B.A. in Economics
- Minor in Economics

Management and Marketing

- B.A. in Management
- B.A. in Marketing
- Minor in Business Administration
- Minor in Sport Business
- MSc in Business Design and Innovation

Degree Programs

- B.A. in International Political Economy

Centers and Institutes

- A.W. Clausen Center for World Business

Undergraduate Academic Departments and Programs of Study

Accounting and Finance

The Accounting and Finance Department offers majors in both accounting and finance, with many students opting to double major.

Accounting majors can choose to earn a Bachelor of Arts or a Bachelor of Science in Accounting. Both degrees will prepare students for a career in accounting.

Accounting graduates have obtained employment in auditing, financial analysis, tax accounting, and corporate accounting in private, public, nonprofit, and government entities. Students can begin their college career in either degree tract and should commit to their tract by the end of the sophomore year.

The Bachelor of Science degree is targeted at students who plan to earn 150 credits in order to take the CPA exam. This degree will qualify students to sit for the CPA exam and will meet the educational requirements for certification. With careful planning, students can complete the Bachelor of Science in 4 years by taking a course in every J-term and earning 16-18 credits each semester. Students should work closely with academic advisors to formulate a course plan.

The Bachelor of Arts degree should be considered by students who are not planning to take the CPA exam. This degree tract more readily allows students to double major in another discipline. This degree will prepare students for the profession, but does not meet the content or credit hour requirements of the CPA credential.

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.

Honors in the Accounting and Finance Majors:

Honors are awarded at the discretion of the Accounting and Finance Department Faculty.

Bachelor of Arts in Accounting

Required courses (48-50 cr.)

ACC 2010	Financial Accounting	(4 cr.)
ACC 2020	Managerial Accounting	(4 cr.)
ACC 3010	Intermediate Accounting I	(4 cr.)
ACC 3020	Intermediate Accounting II	(4 cr.)
ACC 3060	Individual Taxation	(4 cr.)
ACC 4010	Advanced Accounting	(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.)
BUS 4900	Business Policies Senior Seminar	(4 cr.)

Choose 8 cr. of the following

ACC 3090	Business Taxation	(4 cr.)
ACC 3250	Accounting Information Systems	(4 cr.)
ACC 200*/400*	Topics in Accounting	(4 cr.)
ACC 3610	Law for Accountants	(2 cr.)
ACC 4040	Advanced Cost and Managerial Accounting	(2 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.)

Bachelor of Science in Accounting

Required courses (76 cr.); Additional courses beyond the Bachelor of Arts requirements are bolded.

ACC 2010	Financial Accounting	(4 cr.)
ACC 2020	Managerial Accounting	(4 cr.)
ACC 3010	Intermediate Accounting I	(4 cr.)
ACC 3020	Intermediate Accounting II	(4 cr.)
ACC 3060	Individual Taxation	(4 cr.)
ACC 3090	Business Taxation	(4 cr.)
ACC 3250	Accounting Information Systems	(4 cr.)
ACC 3350	Data Analytics for Acct. Decisions	(4 cr.)
ACC 400*	Topics: Governmental & Non-Profit Acctg	(2 cr.)
ACC 4010	Advanced Accounting	(4 cr.)
ACC 4020	Auditing	(4 cr.)
ACC 4040	Advanced Cost and Managerial Accounting	(2 cr.)
MGT 3120	Principles of Management	(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.)
BUS 2110	Business Ethics	(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.)

Accounting

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 and Derivatives	(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 2020	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.)

BUS 1110	Introduction to Business	(4 cr.)
Any ECN course		(4 cr.)
Any ACC or FIN course		(4 cr.)
Any MGT or MKT course		(4 cr.)

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

Accounting

ACC 2000

Accounting Fundamentals for Decision Making

4cr

This course combines relevant portions of ACC 2010 Financial Accounting and ACC 2020 Managerial Accounting, to provide a comprehensive introduction to accounting concepts, financial statements, and the usage of accounting information for decision-making. The emphasis is on the application of financial data in the business world for planning, performance evaluation, and tactical decision-making. Topics include financial ratio analysis, evaluation of capital investments, cost-volume-profit analysis, inventory valuation, and make vs. buy analysis. This course is only for students not majoring in Accounting or Finance. Fall/Spring

ACC 2010

Financial Accounting (QR)

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 (QR)

4cr

This course is focused on the objective of providing managers and other internal users in an organization with information that improves decision-making and creates organizational value. Foundational concepts

include the development of costs of products/services for inventory valuation and profit computation as well as understanding cost behavior. Those functional concepts are then applied using critical thinking and analytical skills to three major activities of managers: planning, performance evaluation, and tactical decision-making. Methods and approaches that students will learn in those three areas of activity include (but are not limited to): budgeting; cost-volume-profit analysis; variance analysis, including identification of corrective action to improve performance; various differential analysis techniques, including make vs. buy and net present value method for evaluation capital investments.

Prerequisite: ACC 2010

Fall/Spring

ACC 3010

Intermediate Accounting I(QR)

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

ACC 3020

Intermediate Accounting II(QR)

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

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

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

ACC 3250

Accounting Information Systems (OC)

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

ACC 3350

Data Analytics for Accounting Decisions

4cr

This course is concerned with developing students' analytical mindsets and skills. It focuses on the data analysis process, which transforms raw data into useful information for decision-making through interpretation and communication of the results to stakeholders. It covers theory and concepts as well as practical applications using software tools.

Prerequisites: ACC 2020, ACC 3010, and BUS/ECN 2340

ACC 3350

Data Analytics for Accounting Decisions

4cr

This course is concerned with developing students' analytical mindsets and skills. It focuses on the data analysis process, which transforms raw data into useful information for decision-making through interpretation and communication of the results to stakeholders. It covers theory and concepts as well as practical applications using software tools.

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, trusts, 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

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 (QR) (SI)

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

ACC 4040

Advanced Cost and Managerial Accounting

2cr

This course covers managerial accounting and cost management practices that can be strategically applied across the various functions of a business organization to improve organizational performance. The course emphasizes the methods available to measure and evaluate costs for decision-making and performance evaluation purposes. A variety of case studies in different industries and decision contexts are used to examine the application of these concepts. Specific topics include activity-based cost management; lean manufacturing and lean accounting; product life cycle costing; inventory management; productivity measurement and the balanced scorecard.

Prerequisite: ACC 2020

Finance

FIN 2100

Microsoft Excel for Basic Business Applications (QR)

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 and 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(QR)

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, entegrated financial statements, portfolio optimization, and Monte Carlo simulation. Prerequisites: FIN 2100 or ACC 3250
Spring

FIN 3200

Money and Banking (SOC)(SI)

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
Fall/Spring

FIN 3210

Corporate Finance (SI)(QR)

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

FIN 3290

International Finance (SI) (ITL) (QR)

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
Fall/Spring

FIN 3500

Fixed Income and Derivatives

4cr
This course focuses on the fixed income and the derivative markets. Students will learn the features of various types of fixed income security, and their issuance, trading, risks, and valuation. The course covers the asset-backed securities based on various loan products. The derivative portion of the course introduces assets such as forwards, futures, options, and swaps. Students will learn the characteristics of them and the valuation through pricing models. Students will also learn to manage a portfolio of fixed income securities and derivatives.
Prerequisite: FIN 3210
Spring

FIN 3620

Real Estate Analysis

4cr
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.

FIN 3800

Trading the Financial Markets: Beyond the Theories and Myths (SI)

4cr
This course will introduce 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.

FIN 4050

Security Analysis and Portfolio Management (QR)

4cr
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
Fall

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.)

POL/SOC/

WMG 3040 African Transitions (4 cr.)

Category 2 Choose 1 course from each list

(12 cr.)

Arts/Culture

ARH 3720	Arts of Africa	(4 cr.)
MUS 3020	Survey of Music Sub-Saharan Africa	(4 cr.)

Gender

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

REL 3370	Religion in Africa	(4 cr.)
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*J-Term study tours that clearly fit any of the above categories, as determined by the Program Director, may count for Category 2 courses.

Category 3 Choose 2 courses from options below (8 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 major provides an exceptional and innovative learning experience for students planning to enter the healthcare field.

The curriculum 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.

PROGRAM OUTCOMES

1. Provide students with a multidisciplinary foundation in health sciences to prepare them for careers in the healthcare industry.
2. Prepare highly competent professionals who improve health outcomes by excelling in interprofessional communication, teamwork, and the delivery of safe, ethical, patient-centered care.
3. Develop individuals who can formulate appropriate questions, organize and test hypotheses and apply research results to improve health care outcomes.

The curriculum, taught by practicing healthcare providers, serves as the pre-professional phase for graduate programs or careers in non-patient contact fields. Carthage affiliate graduate programs the Allied Health Science Major serves includes:

3 + 2 Master of Arts in Athletic Training (Carthage College)

3 + 2 Master of Occupational Therapy (Washington University St Louis)

3 + 3 Doctorate of Pharmacy (Medical College of Wisconsin)

3+ 4 Doctorate of Pharmacy (Rosalind Franklin University)

4 + 1 Master of Public Health (Medical College of Wisconsin)

4 + 3 Doctorate of Chiropractic (Logan University)

2 + 2 Gateway Technical College completion Degree

See specific program for course requirements.

Required courses (44 cr.)

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	(4 cr.)
AHS 4900	Senior Seminar	(4 cr.)
BIO 2010	Human Anatomy & Physiology for the Health Professional I	(4 cr.)
BIO 2020	Human 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:

Recommended courses

BUS 1130	Introduction to the Business of Healthcare	(4 cr.)
PYC 1500	Introduction to Psychological Science	(4 cr.)
CDM 2100	Health 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 health care pathways available at Carthage will be looked 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 1300

Introduction to Music Therapy

2cr

This course will provide an overview of the health care profession of Music Therapy with a focus on the principles, frameworks, and applications of therapeutic music across a variety of clinical populations. Basic brain and neurological responses to music as well as the social and psychological influences of music will be explored.

Spring

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

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. Software fee \$50.
 Prerequisite: AHS 4469 with a grade of C- or better
 Spring

AHS 4469

Evidence Based Practice in Health care (IDP)

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 with a grade of C- or better
 Fall

AHS 4900

Senior Seminar (OC)

4cr
 The student is to apply scholarly research methods mastered in Evidenced Base Practice in Healthcare. The student may write a Literature Review on a faculty approved topic or observe a healthcare professional in the setting of their choice under the joint supervision of a licensed healthcare provider and college faculty. Both options will culminate in a poster presentation.
 Prerequisite: Senior standing and AHS 4469 with a C- or better
 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 Photography. 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, and Photography.

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 decorator, 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.

The photography major 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, contemporary and professional context for their work. This focused study in photography allows students to develop an artist voice as well as professional techniques and skills for creating meaningful images.

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 + Spaces	(4 cr.)
ART 1072 FOUNDATIONS, TIME: Movement + Digital	(4 cr.)

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

ARH 2100	Art Survey I: History of Photography: Daguerre to Digital	(4 cr.)
ARH 2710	Art Survey II: 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.)
ARH 20T*	Topics in Art History	(4 cr.)
ARH 400T	Advanced Topics 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	Special Topics in Studio Art	(4 cr.)
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 3000	Advanced Drawing	(4 cr.)
ART 3200	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 semester and pass the edTPA licensure process.

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.)	ART 200T Photography: Variable Topic (4 cr.)	ART 200T Photography: Variable Topic (4 cr.)
EDU 3520 Developmental and Content Area Reading (4 cr.)	ART 2130 Color Photography (4 cr.)	CDM 1900 Adobe Creative Cloud: Level Up (4 cr.)
ART 4210 Art Curriculum and Methods (K-5) (4 cr.)	CDM 2500 Basic Digital Photography (4 cr.)	CDM 1950 Advanced Adobe Creative Cloud (4 cr.)
ART 4220 Art Curriculum and Methods (6-12) (4 cr.)	CDM 2650 Photographing Nature: Investigating Biodiversity and Conservation (4 cr.)	ART 2130 Color Photography (4 cr.)
EDU 4900 Student Teaching Seminar (12 cr.)	ART 3100 Studio Photography (4 cr.)	CDM 2500 Basic Digital Photography (4 cr.)
Photography Major (40 credits)	ART 3110 Advanced Darkroom Photography (4 cr.)	ART 2600 Sophomore Seminar in Art (4 cr.)
Students must take 10 courses (40 cr.) from the list below.	ART 3130 Advanced Color Photography (4 cr.)	CDM 2600 New Media Theory and Aesthetics (4 cr.)
Required classes:	CDM 3500 Advanced Digital Photography (4 cr.)	CDM 2650 Photographing Nature: Investigating Biodiversity and Conservation (4 cr.)
ART 1070 FOUNDATIONS, SURFACE: Images + Design (4 cr.)	ART 3550 Art Internship as approved by instructor-must be photography based (4 cr.)	ART 2701 Art Survey II: 1400-21st Century (4 cr.)
ARH 2100 History of Photography (4 cr.)	CDM 3550 Communication Internship as approved by instructor-must be photography based (4 cr.)	ART 2750 4D: Variable Topics (must be lens based) (4 cr.)
ART 4000 Senior Seminar in Art (4 cr.)		ART 3100 Studio Photography (4 cr.)
Choose one Darkroom course from the following list (4 cr.):	Choose 2 Elective courses (8 credits) from the following list that is not being used for the above:	ART 3110 Advanced Darkroom Photography (4 cr.)
ART 2110 Darkroom Photography (4 cr.)		ART 3130 Advanced Color Photography (4 cr.)
ART 200T Photography: Alternative Process (4 cr.)		CDM 3500 Advanced Digital Photography (4 cr.)
Choose one Digital course from the following list (4 cr.):		Choose one Theory course from the following list (4 cr.):
ART 2130 Color Photography (4 cr.)		ART 2600 Sophomore Seminar in Studio Art (4 cr.)
CDM 2500 Basic Digital Photography (4 cr.)		CDM 2600 New Media Theory and Aesthetics (4 cr.)
Choose one Advanced course from the following list (4 cr.):		ENG 3030 Major Texts in Critical Theory (4 cr.)
ART 3110 Advanced Darkroom Photography (4 cr.)		Choose 1 Elective Photography courses (4 credits) from the following list that is not being used for the above:
ART 3130 Advanced Color Photography (4 cr.)		ART 2600 Sophomore Seminar in Studio Art (4 cr.)
CDM 3500 Advanced Digital Photography (4 cr.)		CDM 2600 New Media Theory and Aesthetics (4 cr.)
Choose one Theory course from the following list (4 cr.):		ART 3550 Art Internship as approved by instructor-must be photography based (4 cr.)
ART 2600 Sophomore Seminar in Studio Art (4 cr.)		CDM 3550 Communication Internship as approved by instructor-must be photography based (4 cr.)
CDM 2600 New Media Theory and Aesthetics (4 cr.)		ART 3740 Modern Art (4 cr.)
ENG 3030 Major Texts in Critical Theory (4 cr.)		ART 200T: Animation (4 cr.)
Choose 1 Elective Photography courses (4 credits) from the following list that is not being used for the above:		ART/CDMT 200T & 400T ART and CDM

Topics courses (must be lens based)	(4 cr.)	ART 1050	Crafts	(4 cr.)	3400		(cr.)
		ART 1070	FOUNDATIONS, SURFACE: Images + Design	(4 cr.)	3500	Advanced Ceramics	(4 cr.)
Studio Art Minor		ART 1071	FOUNDATIONS, MATERIAL: Objects + Spaces	(4 cr.)	3700	Advanced 4D	(4 cr.)
<i>Total credits: 24</i>		ART 1072	FOUNDATIONS, TIME: Movement + Digital	(4 cr.)	400T	Advanced Topics in Studio Art	(4 cr.)
Choose one course (4 cr.) from the following		ART 2000	Drawing I	(4 cr.)	4500	Art	(4 cr.)
ART 1070 FOUNDATIONS, SURFACE: Images + Design	(4 cr.)	ART 200T	Topics in Studio Art	(4 cr.)	ARH 200T	Topics in Art History	(4 cr.)
ART 1071 FOUNDATIONS, MATERIALS: Objects + Spaces	(4 cr.)	ART 2110	Darkroom Photography	(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.)	ARH 2700	Art Survey I: Paleolithic to 1400	(4 cr.)
ART 2000 Drawing I	(4 cr.)	ART 2210	Oil Painting	(4 cr.)	ARH 2701	Art Survey II: 1400 to 21st Century	(4 cr.)
Choose one course (4 cr.) from the following		ART 2220	Acrylic Painting	(4 cr.)	ARH 2710	Arts of the Americas	(4 cr.)
ARH 1700 Introduction to Art History	(4 cr.)	ART 2230	Watercolor Painting	(4 cr.)	ARH 3710	20th Century American Art	(4 cr.)
ARH 2700 Art Survey I: Paleolithic to 1400	(4 cr.)	ART 2300	Printmaking: Silkscreen	(4 cr.)	ARH 3720	Arts of Africa	(4 cr.)
ARH 2701 Art Survey II: 1400 to 21st Century	(4 cr.)	ART 2310	Printmaking: Lithography	(4 cr.)	ARH 3730	Masterpieces of Asian Art and Architecture	(4 cr.)
ARH 2710 Arts of the Americas	(4 cr.)	ART 2320	Printmaking: Intaglio	(4 cr.)	ARH 3740	Modern Art	(4 cr.)
ARH 3720 Arts of Africa	(4 cr.)	ART 2330	Printmaking: Relief	(4 cr.)	ARH 3750	Ancient Art	(4 cr.)
ARH 3730 Masterpieces of Asian Art and Architecture	(4 cr.)	ART 2400	Introduction to Sculpture	(4 cr.)	ARH 3760	Women in the Arts	(4 cr.)
ARH 3760 Women in the Arts	(4 cr.)	ART 2410	Wood Sculpture	(4 cr.)	ARH 400T	Advanced Topics in Art History	(4 cr.)
Choose four courses (16 cr.) from the following. At least one must be at 3000+ level. Only one may be Art History (ARH)		ART 2500	Ceramic Hand-Building	(4 cr.)	ARH 4500	Independent Studies in Art History	(4 cr.)
		ART 2510	Ceramic Wheel-Throwing	(4 cr.)	Art History Minor		
		ART 2520	Ceramic Tile	(4 cr.)	<i>Total Credits: 20</i>		
		ART 2600	Sophomore Seminar in Art	(4 cr.)	Required course (4 cr.)		
		ART 2750	4D	(4 cr.)	ARH 2701	Art Survey II: 1400-21st Century	(4 cr.)
		ART 3000	Advanced Drawing	(4 cr.)	Choose one course (4 cr.) from the following		
		ART 3010	Illustration	(4 cr.)	ARH 2710	Arts of the Americas	(4 cr.)
		ART 3100	Studio Photography	(4 cr.)	ARH 3720	Arts of Africa	(4 cr.)
		ART 3110	Advanced Darkroom Photography	(4 cr.)	ARH 3730	Masterpieces of Asian Art and Architecture	(4 cr.)
		ART 3130	Advanced Color Photography	(4 cr.)	ARH 3760	Women in the Arts	(4 cr.)
		ART 3200	Advanced Painting	(4 cr.)	Choose two courses (8 cr.) from the following		
		ART 3300	Advanced Printmaking	(4 cr.)			
		ART	Advanced Sculpture	(4 cr.)			

ARH 2100	History of Photography	(4 cr.)
ARH 2700	Art Survey I: Paleolithic to 1400	(4 cr.)
ARH 2710	Arts of the Americas	(4 cr.)
ARH 200T	Topics in Art History	(4 cr.)
ARH 3550	Internship	(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.)
ARH 400T	Advanced Topics in Art History	(4 cr.)

Choose one course (4 cr.) from the following

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.)

Photography Minor (24 credits)

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

ARH 2100	History of Photography	(4 cr.)
ART 2110	Darkroom Photography	(4 cr.)
ART 2130	Color Photography	(4 cr.)
CDM 2500	Basic Digital Photography	(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.)

Students must take 1 course (4 cr.) from the list below that is not being used from the previous listing of courses

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 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.)
ART 200*	Photography: Alternative Processes (topics class)	(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. For students majoring in studio art, art education, communication, graphic design, or public relations, overlap between majors and minors must be at or below 50 percent.

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 3700	Advanced 4D	(4 cr.)
ART 200*	Animation (topics class)	(4 cr.)
CDM 2500	Basic Digital Photography	(4 cr.)
CDM 2620	Film Analysis	(4 cr.)
CDM 2630	Studies in Media	(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	Intro to Computing	(4 cr.)
CSC 1810	Principles of Computer Science	(4 cr.)
ART/CDM	Topics classes with related content	(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. For students majoring in studio art, art education, communication, graphic design, or public relations, overlap between majors and minors must be at or below 50 percent.

ARH 1700

Introduction to Art History (FAR) (CL)(ITL)

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 2100

History of Photography: Daguerre to Digital (FAR)(CL)

4cr

This course introduces the history of photography from its experimental beginnings in the early 19th century to the digital practices of the present. The course focuses on the various social, cultural, scientific, and artistic uses of photography as a visual medium, as well as the broader themes and questions that have accompanied photography throughout its history.

ARH 2700

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

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)(CL)

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) (CL) (DIV)

4cr

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

ARH 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

ARH 3710

20th Century American Art (FAR)

4cr

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

ARH 3720**Arts of Africa (FAR)**

4cr

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

ARH 3730**Masterpieces of Asian Art and Architecture (FAR) (AI) (CL)**

4cr

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

Fall

ARH 3740**Modern Art (FAR)(CL)**

4cr

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

ARH 3750**Ancient Art (FAR)**

4cr

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

ARH 3760**Women in the Arts (FAR) (CL) (IDP)**

4cr

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

ARH 3760W**Women in the Arts (FAR) (CL) (IDP) (WI) (WC)**

4cr

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

ARH 4700**Senior Seminar in Art History**

4cr

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

ART 1030**Exploring Studio Art (FAR) (AI)**

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)(AI)**

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)(AI)**

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)(AI)**

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)(AI)

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)(AI)

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)(AI)

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) (AI)

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)(AI)

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 lectures, demonstrations, discussions, and theory.

ART 2220

Acrylic Painting (FAR)(AI)

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 lectures, demonstrations, discussions, and theory.

Prerequisite: None

ART 2230

Watercolor Painting (FAR)(AI)

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 lectures, demonstrations, discussions, and theory.

Prerequisite: None

ART 2300

Printmaking: Silkscreen (FAR) (AI)

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) (AI)

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)(AI)

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 (AI) (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) (AI)**

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

Fall/Spring

ART 2410**Wood Sculpture (FAR)(AI)**

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)(AI)**

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)(AI)**

4cr

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

Fall/Spring

ART 2520**Ceramic Tile (FAR)(AI)**

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)(AI)**

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)(AI)**

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

ART 3130

Advanced Color Photography

4cr

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

ART 3200

Advanced Painting

4cr

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

ART 3300

Advanced Printmaking

4cr

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

ART 3310

Graphic Production Techniques

4cr

Camera-ready layout will be reproduced through serigraphic printing techniques. A studio art course containing theory and practice.

Prerequisite: Consent of instructor

Fall

ART 3400

Advanced Sculpture

4cr

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

ART 3500

Advanced Ceramics

4cr

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

ART 3700

Advanced 4D

4cr

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.

Prerequisite: ART 2750

ART 4000

Senior Seminar in Studio Art

4cr

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, résumé, and website.

Prerequisites: Completion of four studio courses, junior review, and consent of instructor

Fall

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 elementary 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 Interdisciplinary 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 Interdisciplinary 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 (when the course has substantial Asian content) (4 cr.)

POL 200* Topics in Political Science (when the course has substantial Asian content) (4 cr.)

POL 3390 Politics of Rapid Growth in East Asia (4 cr.)

POL 3400 Chinese Politics (4 cr.)

POL 3580 American Foreign Policy (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:
An Interreligious Exploration (4 cr.)

ASN 1000

Interdisciplinary Introduction to Asian Studies

4cr

Taught by an Asian Studies faculty member, this course is to be an introductory course for all students who choose to either major or minor in Asian Studies. The course is designed to introduce the study of Asia to students with little or no background in the area. Reflecting the geographical and theoretical diversity of the Asian Studies field itself, the course is not limited to a particular part of Asia nor to a particular disciplinary approach. Rather, the course introduces students to selected exemplary Asian Studies primary materials and scholarly perspectives on them in order to open up discussion of the larger ideas and issues which concern scholars working in the Asian Studies field today.

Prerequisite: None

ASN 4000

Senior Seminar in Asian Studies (CL)(ITL)

4cr

The Senior Seminar is taught and directed by one member of the Asian Studies faculty, 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.

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 Interdisciplinary 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 Interdisciplinary 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 (when the course has substantial Asian content) (4 cr.)

POL 200* Topics in Political Science (when the course has substantial Asian content) (4 cr.)

POL 3390 Politics of Rapid Growth in East Asia (4 cr.)

POL 3400 Chinese Politics (4 cr.)

POL 3580 American Foreign Policy (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: An Interreligious Exploration (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. The department offers a Bachelor of Arts and a Bachelor of Science in Biology as well as a minor in Biology.

Bachelor of Arts in Biology

Core Courses (18 cr.):

BIO 1110 Molecules, Cells, and Organisms (4 cr.)

BIO 1120 Organisms, Populations, and Systems (4 cr.)

BIO 2100 Reflections in Biology (2 cr.)

BIO 2400 Genetics (4 cr.)

BIO 4120 Senior Seminar in Biology (4 cr.)

Students completing the Bachelor of Arts in Biology will also be required to take 5 upper-level (3000 or 4000) level courses (20 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 and fifth 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.)

Bachelor of Science in Biology (66 credits)

Core Courses (18 cr.):

BIO 1110	Molecules, Cells, and Organisms	(4 cr.)
BIO 1120	Organisms, Populations, and Systems	(4 cr.)
BIO 2100	Reflections in Biology	(2 cr.)
BIO 2400	Genetics	(4 cr.)
BIO 4120	Senior Seminar in Biology	(4 cr.)

Required Supportive Courses (24 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.)
PHY 2100 or 2200	Physics I or General Physics	(4 cr.)
Choose One:		
PHY 2110	Physics II	(4 cr.)
PHY 2210	General Physics II	(4 cr.)
MTH 2020	Differential Equations	(4 cr.)
MTH 2040	Linear Algebra	(4 cr.)
MTH 1120	Calculus I	(4 cr.)
CSC 1030	Data Science I	(4 cr.)
CSC 1100	Intro to Computing	(4 cr.)
CHM 3020	Advanced Biochemistry	(4 cr.)

Biology Electives (24 cr.):

Cellular and Molecular Biology- Choose One

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- Choose One

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- Choose One

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

In addition to the electives listed above, students pursuing the Bachelor of Science in Biology must also complete 12 additional elective credits. Those credits can be selected from any of the Biology elective categories listed above.

Biology Minor

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

3010. Biology topics courses also count towards the biology minor. 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 (NLAB)(SE)

4cr

A study of life phenomena with focus on macromolecules, cells, inheritance, and the structure and function of bacteria and plants. This course does not count toward the biology major.

Prerequisite: None
Fall/Spring

BIO 1011

Exploring Climate Change (LAB SCI) (SE) (OC)

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) (SE)

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)(SE)

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 (SE) (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 1110

Molecules, Cells, and Organisms (LAB SCI)(SE)

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)(SE)

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)(SE)

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 is designed for students in Nursing, Athletic Training, and Pre-Health. This course includes a laboratory.
Prerequisite: None

BIO 2020

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

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 better

BIO 2100

Reflections in Biology

2cr

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)(SE)

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

Summer

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 better

Fall/Spring

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 better

Spring

BIO 3100

General Ecology (LAB SCI)

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 better

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 better, or ENV 1000 with a C- or better
Fall

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 better, or ENV 1000 with a C- or better

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 better

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 better

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 better, or ENV 1000 with a C- or better
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 better
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 better
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 better

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 better

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 of 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 better in both

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 better, or ENV 1000 with a C- or better

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 better

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 better

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 better

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, law school, engineering, teaching and a variety of health care graduate programs.

The Chemistry department offers 2 degrees in Chemistry, a Bachelors of Arts degree and a Bachelor of Science degree. The Bachelor of Arts degree gives students the necessary experience and education to succeed in a large variety of post-graduate opportunities after Carthage, including graduate school. This degree provides more flexibility to take courses outside of Chemistry and is therefore ideal for pre-health students, students pursuing careers in education and business, and students pursuing multiple majors and/or minors. The Bachelor of Science degree is approved by the American Chemical Society, the largest and most internationally recognized professional organization for chemists. This degree is ideal for students seeking a Ph.D. in Chemistry after graduating from Carthage. This degree will also give students additional in-depth and hands-on experiences, which may be helpful for students seeking industry jobs immediately after graduation.

Bachelor of Arts in Chemistry (60 credits)

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 1020	General Chemistry II	(4 cr.)
CHM 3020	Advanced Biochemistry	(4 cr.)	CHM 2070	Organic Chemistry I	(4 cr.)
CHM 3100*	Advanced Synthesis Laboratory	(4 cr.)	CHM 2080	Organic Chemistry II	(4 cr.)
CHM 3240	Analytical Chemistry II	(4 cr.)	CHM 2120	Inorganic Chemistry	(4 cr.)
CHM 400T	Topics in Chemistry	(4 cr.)	CHM 3010	Biochemistry	(4 cr.)
CHM 4070	Advanced Organic Chemistry	(4 cr.)	CHM 3100	Advanced Synthesis Laboratory	(4 cr.)
CHM 4120	Advanced Inorganic Chemistry	(4 cr.)	CHM 3110	Advanced Integrated Laboratory	(4 cr.)
	Chemistry	(4 cr.)	CHM 3130	Physical Chemistry I	(4 cr.)
CHM 4900*	Research in Chemistry	(2 or 4 cr.)	CHM 3140	Physical Chemistry II	(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.

Bachelor of Science in Chemistry (72 credits)

Must complete the following core courses:

Students must also complete 4 credits from the following list of electives:

MTH 2020	Differential Equations	(4 cr.)
MTH 2040	Linear Algebra	(4 cr.)
MTH 2120	Multivariate Calculus	(4 cr.)
CSC 1030	Data Science	(4 cr.)
CSC 1810	Principles of Computer Science I	(4 cr.)

*Students must have a research experience. This can be satisfied by an approved summer research experience, internship, or 4 credits of CHM4900 or other approved research experience.

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)(SE)

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) (SE)

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) (SE)**

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

CHM 2070**Organic Chemistry I (LAB SCI)**

4cr

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

CHM 2080**Organic Chemistry II (LAB SCI)**

4cr

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

CHM 2120**Inorganic Chemistry**

4cr

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

CHM 3010**Biochemistry (LAB SCI)**

4cr

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

CHM 3020**Advanced Biochemistry**

4cr

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

CHM 3100**Advanced Synthesis Laboratory**

4cr

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

CHM 3110**Advanced Integrated Laboratory**

4cr

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

CHM 3130**Physical Chemistry I (QR)**

4cr

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

CHM 3140**Physical Chemistry II**

4cr

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

CHM 3230**Analytical Chemistry I (LAB SCI)**

4cr

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

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
Spring

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

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.

Programs: The department offers majors in Communication, Graphic Design, and Public Relations, and minors in Communication, Graphic Design, Public Relations, Photography, and Film and New Media.

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*/400*	Topics in Communication (relevant topics)	(4 cr.)
CDM 3900	Leadership and Small Group Communication	(4 cr.)

Communication and Digital Media

Media Studies:

CDM 1925 Basic Adobe Creative Cloud	(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*/400* Topics in Communication (relevant topics)	(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 1925 Basic Adobe Creative Cloud	(4 cr.)
CDM 1950 Advanced Adobe Creative Cloud	(4 cr.)
CDM 2500 Basic Digital Photography	(4 cr.)
CDM 2600 New Media Theory and Aesthetics	(4 cr.)
CDM 2650 Photographing Nature	(4 cr.)
ART 3010 Illustration	(4 cr.)
CDM 3200 Words and Images in Motion	(4 cr.)
CDM 3400 Social Media	(4 cr.)
CDM 3540 Web Design II	(4 cr.)
CDM 3560 Graphic Design Internship	(4-8 cr.)
CDM 200T/400T Topics in Communication (relevant topic)	(4 cr.)

Requirements for the Public Relations Major (44 credits)

Fundamentals (12 cr.):

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

Major Core (24 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 3810 Public Relations Campaigns	(4 cr.)
CDM 3820 Crisis Communication	(4 cr.)
CDM 4030 Public Relations Senior Seminar	(4 cr.)

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

CDM 1925 Basic Adobe Creative Cloud	(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 double majoring within the department:

In order to double major in the CDM department, you must satisfy the following requirements:

1. Both Senior Seminar courses must be fulfilled; similar thesis topics may be used.
2. Department fundamentals cannot count in both majors, only one. Twelve (12) additional credits from the major must be taken to fulfill credit number requirements for the second CDM major, chosen in consultation with a CDM Department advisor.
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:

CDM 2100	Health Communication	(4 cr.)
CDM 2300	Interpersonal Communication	(4 cr.)
CDM 2400/		
WMG 200R	Gender Communication	(4 cr.)
CDM 2450	Nonverbal Communication	(4 cr.)
CDM 3000	Rhetoric and Persuasion	(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*/400*	CDM Topics	(4 cr.)
CDM 3900	Leadership and Small Group Communication	(4 cr.)

For Media Studies, choose from the following:

CDM 1925	Basic Adobe Creative Cloud	(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 3450	Mass Communication	(4 cr.)
CDM 3500	Advanced Digital Photography	(4 cr.)
CDM 3550	Communication Internship	(4-8 cr.)
CDM 3950	Advanced Film and New Media Production	(4 cr.)
CDM		
200*/400*	CDM Topics	(4 cr.)

Requirements for the Public Relations Minor (20 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.

CDM 3420	Communications Management	(4 cr.)
CDM 3570	Public Relations Internship	(4-8 cr.)
CDM 3810	Public Relations Campaigns	(4 cr.)
CDM 3820	Crisis Communication	(4 cr.)

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.)
CDM 1300	Visual Communication	(4 cr.)
CDM 2000	Graphic Design I	(4 cr.)
CDM 2850	Typography	(4 cr.)
CDM 3530	Web Design I	(4 cr.)
CDM 3750	Graphic Design II	(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.

ARH 2100	History of Photography	(4 cr.)
ART 2110	Darkroom Photography	(4 cr.)
ART 2130	Color Photography	(4 cr.)
CDM 2500	Basic Digital Photography	(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.)

Students must take 1 course (4 cr.) from the list below that is not being used from the previous listing of courses

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 1925	Basic Adobe Creative Cloud	(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.)
ART 200*	Photography: Alternative Processes	(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. For students majoring in studio art, art education, communication, graphic design, or public relations, overlap between majors must be at or below 50 percent.

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 (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.)
- ART/CDM Topics classes with related content (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. For students majoring in studio art, art education, communication, graphic design, or public relations, overlap between majors must be at or below 50 percent.

CDM 1150

Human Communication (SI)

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 in human interaction. These concepts will be further applied to the study of relationships, small groups, organizations, rhetoric, and media.

Prerequisite: None

CDM 1200

Public Speaking (OC)

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.

Prerequisite: None

CDM 1300

Visual Communication (AI)

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.

Prerequisite: None

CDM 1950

Advanced Adobe Creative Cloud

4cr

This course focuses on enhancing students' previous knowledge of Adobe and progressing their skill set to the level of advanced work with Adobe Illustrator, Photoshop, and InDesign. It is intended for students planning to work in the realm of the creative, communication, and marketing industry. Students will create and edit multiple projects with the Adobe tools as a base; other supplemental programs may be introduced as well. The steps of the creative process will also be used for project advancement, from brainstorming to final solution. Students will be required to have access to a computer with Adobe CC, which can be found in several labs on campus. For students to do best in this course they should have existing knowledge of the following: Adobe Illustrator: creating basic vector graphics through image trace or drawing tools such as the pencil or blob brush tool, color swatches, affecting line, pathfinder, and basic

pen tool Adobe Photoshop: editing image size and resolution, basics of selections and using layers, healing tools, adjusting images using levels and color correction, layer adjustment and styles. Adobe InDesign: creating multiple page layouts, with placed image and type, laying out guides and grids, using typography tools such as creating columns, master pages, and swatches.

Prerequisite: CDM 1925 or instructor approval.

CDM 2000

Graphic Design I(AI)

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 (SI)(IDP)

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.

Prerequisite: None

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.

Prerequisite: None

CDM 2300

Interpersonal Communication (SI)

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 or consent of instructor

CDM 2400

Gender Communication (CL) (SI) (DIV)

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.

Prerequisite: None

CDM 2450

Nonverbal Communication (SI)

4cr

Comprehensive study of nonverbal codes and systems, including kinesics, proxemics, haptics, vocalics, olfactics, chronemics, oculesics, 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: None

CDM 2500

Basic Digital Photography (FAR) (AI)

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.

Prerequisite: None

CDM 2600

New Media Theory and Aesthetics (FAR)(CL)(IDP)

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.

Prerequisite: None

CDM 2620

Film Analysis (FAR)(CL)

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.

Prerequisite: None

CDM 2650

Photographing Nature: Investigating Biodiversity and Conservation (FAR) (AI)

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)(AI)(IDP)

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.

Prerequisite: None

CDM 2750

History of Film: From the Nickelodeon to Netflix (CL) (ITL)

4 cr

This course surveys film movements, industries, and periods of national cinemas that have sought to redefine the dominant ideologies, modes of production, and aesthetics of the cinematic artform from 1895 to the present.

CDM 2800

Exploring the Documentary Form (FAR)(CL)(ITL)

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.

Prerequisite: None

CDM 2850

Typography (AI)

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.

Prerequisites: CDM 1300 and ART 1070

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.

Prerequisite: None

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

CDM 3200

Words and Images in Motion (AI)

4cr

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

CDM 3250

Graphic Design Practicum (AI)

4cr

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

CDM 3310

Journalistic Writing

4cr
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.
Prerequisite: None

CDM 3320

Screenwriting

4cr
Screenwriting introduces students to writing for film, television, the web, and other mass media outlets. Throughout the course, students will develop, pitch, workshop, and complete the first act of a feature-length film or the pilot episode of a television/web series. While completing their scripts, students will also explore the intricacies of the film and television industry from a writer's perspective.
Prerequisite: None

CDM 3350

Public Relations Writing

4cr
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

CDM 3400

Social Media (SI)

4cr
This course examines digital technology as a medium of communication. Issues covered include the social, economic, civic, and global implications of the information age. The course will explore trends, ethics and best practices for social media practitioners in both business and non-profit settings. Students will gain practical experience planning, creating, and implementing campaigns across a variety of social media.
Prerequisite: CDM 1150 or consent of instructor

CDM 3420

Communications Management (SI) (ITL)

4cr
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 or instructor permission

CDM 3450

Mass Communication (CL)

4cr
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

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 concentrate 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 (AI)

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 (AI)

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 (CL) (ITL)

4cr

Exploration of the various theories, opportunities, and problems related to communication by individuals within and across different cultural groups.

Prerequisite: CDM 1150 or consent of instructor

CDM 3700

Organizational Communication (SI)

4cr

This course will help students understand organizational communication theories, models, and processes. Students will examine the impacts of diversity, globalization, leadership, and technology on effective strategies for communication with internal and external stakeholders of for-profit and not-for-profit organizations.

Prerequisite: None

CDM 3750

Graphic Design II (AI)

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.

Prerequisite: CDM 2000 and CDM 2850

CDM 3810

Public Relations Campaigns (SI)

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 (SI)

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

CDM 3950

Advanced Film and New Media Production (AI)

4cr

This course draws on principles and skills developed in CDM 2700. Students will design, produce, and edit several types of advanced video, audio, virtual reality, and/or new media projects, culminating in a single major work.

Prerequisite: CDM 2700 or consent of instructor

CDM 4010

Communication Senior Seminar

4cr

This capstone experience provides communication seniors the opportunity to integrate and utilize the knowledge and skills they have acquired during their course of study. The course culminates in the completion and public presentation of a senior project or thesis.

Prerequisite: CDM 3545

CDM 4020

Graphic Design Senior Seminar (AI)

4cr

This capstone experience for graphic design seniors prepares students for entry into professional practice after graduation. Main areas of interest will include ethical, professional, and creative expectations for the practicing graphic designer. Additional topics may include self-promotion, portfolio development, business, and administrative concerns. Students will consider and reflect upon texts as well as the advice and insight shared by experienced practitioners addressing issues of primary concern for the student-designer striving to transition into the professional world. Coursework will include written responses to assigned readings, practical exercises, design projects aimed toward portfolio development, and preparation for an exhibition of design work.
Prerequisites: CDM 3750 and CDM 3555

CDM 4030

Public Relations Senior Seminar

4cr

This capstone experience provides public relations seniors the opportunity to integrate and utilize the knowledge and skills they have acquired during their course of study. The course culminates in the completion and public presentation of a senior project or thesis.

Prerequisites: CDM 3350 and CDM 3565

Computer Science

By taking computer science courses, students develop problem-solving skills that can be applied across many disciplines. These courses provide students with a firm foundation of knowledge and practical experience in software development, computer architecture, and software engineering best practices. This knowledge will prepare students for successful, rewarding careers in technology industries or for graduate studies in computer science. Majors and minors are encouraged to begin their CS

education in the fall term of their first year. The Computer Science department offers a Bachelor of Arts in Computer Science, a Bachelor of Arts in Game Development and a Bachelor of Science in Game Development.

Computer Science Major

This major requires 48 credits, which must include the following six courses:

CSC 1810	Principles of Computer Science I	(4 cr.)
CSC 1820	Principles of Computer Science II	(4 cr.)
CSC 2560	Data Structures and Algorithms	(4 cr.)
CSC 3510	Computer Organization	(4 cr.)
CSC 4350	Software Design and Development	(4 cr.)

Students also must take five computer science courses (16 credits) numbered above 2000.

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

In addition, these courses must also be taken:

MTH 1240	Discrete Structures	(4 cr.)
CSC 4000	Senior Seminar	(4 cr.)
CSC 4990	Senior Thesis Completion	(0 cr.)

Computer Science Minor

A minor consists of Computer Science 1810,

Computer Science

1820, three additional Computer Science courses numbered above 2000, and MTH 1240.	ART 1070	FOUNDATIONS, SURFACE: Images + Design	(4 cr.)	CSC 1710	Game Design	(4 cr.)
Game Development in Computer Science	ART 1071	FOUNDATIONS, MATERIAL: Objects + Spaces	(4 cr.)	CSC 1810	Principles of Computer Science I	(4 cr.)
The future of gaming extends far beyond games and entertainment into the mainstream of future human culture. The Game Development in Computer Science major at Carthage College recognizes that future training systems, modes of work, and modes of storytelling will increasingly leverage simulation and synthetic environments such as those traditionally associated with computer gaming. The major provides students a solid basis to pursue employment in simulation, game development, visual storytelling and related fields. Our major also provides a rigorous foundation in the mainstream computer sciences which graduates can apply in numerous disciplines unrelated to gaming and simulation.	ART 1072	FOUNDATIONS, TIME: Movement + Digital	(4 cr.)	CSC 1820 2560	Principles of Computer Science II Data Structures	(4 cr.) (4 cr.)
	ART 2000	Drawing I	(4 cr.)	CSC 2810	Database Design and Management	(4 cr.)
	ART 2130	Color Photography	(4 cr.)	CSC 4350	Software Design and Development	(4 cr.)
	ART 200T	2D Animation	(4 cr.)	CSC 4000	Senior Seminar	(4 cr.)
	ART 200T	3D Animation	(4 cr.)	CSC 4990	Senior Thesis Completion	(0 cr.)
	ART 2750	4D	(4 cr.)	MTH 1120	Calculus I	(4 cr.)
Bachelor of Arts in Game Development in Computer Science:	ART 3010	Illustration	(4 cr.)	MTH 2040	Linear Algebra	(4 cr.)
Required Courses:	CDM 2630	Studies in Media	(4 cr.)	Game Development Electives- Choose three:		
CSC 1710 Game Design (4 cr.)	CDM 2730	Studies in Media Production	(4 cr.)	CSC 3710	Game Engine Programming	(4 cr.)
CSC 1810 Principles of Computer Science I (4 cr.)	ENG 2050	Creative Writing	(4 cr.)	CSC 3530	Artificial Intelligence and Cognitive Modeling	(4 cr.)
CSC 1820 Principles of Computer Science II (4 cr.)	MUS 1900	Electronic Music	(4 cr.)	CSC 3770	Computer Graphics	(4 cr.)
CSC 2560 Data Structures (4 cr.)	PYC 1900	Cognitive Science of Magic	(4 cr.)	CSC 400T	Topics in Game Development	(4 cr.)
CSC 2710 Game Development I (4 cr.)	Bachelor of Science in Game Development in Computer Science:			Interdisciplinary Electives- Choose two:		
CSC 2720 Game Development II (4 cr.)	Required Courses:					
CSC 2810 Database Design and Management (4 cr.)						
CSC 4350 Software Design and Development (4 cr.)						
CSC 4000 Senior Seminar (4 cr.)						
CSC 4990 Senior Thesis Completion (0 cr.)						
Game Development Electives- Choose two:						
CSC 3710 Game Engine Programming (4 cr.)						
CSC 3530 Artificial Intelligence and Cognitive Modeling (4 cr.)						
CSC 3770 Computer Graphics (4 cr.)						
CSC 400T Topics in Game Development (4 cr.)						
Interdisciplinary Electives- Choose three:						

ART 1070	FOUNDATIONS, SURFACE: Images + Design	(4 cr.)	CSC 1810	Principles of Computer Science I	(4 cr.)
ART 1071	FOUNDATIONS, MATERIAL: Objects + Spaces	(4 cr.)	CSC 1820	Principles of Computer Science II	(4 cr.)
ART 1072	FOUNDATIONS, TIME: Movement + Digital	(4 cr.)	CSC 2710	Game Development I	(4 cr.)
ART 2000	Drawing I	(4 cr.)	CSC 2720	Game Development II	(4 cr.)
ART 2130	Color Photography	(4 cr.)	CSC 2730	Game Development III	(4 cr.)
ART 200T	2D Animation	(4 cr.)	and one elective chosen from the following (4 cr.):		
ART 200T	3D Animation	(4 cr.)	CDM 2630	Studies in Media	(4 cr.)
ART 2750	4D	(4 cr.)	CDM 2730	Studies in Media Production	(4 cr.)
ART 3010	Illustration	(4 cr.)	ART 1070	FOUNDATIONS, SURFACE: Images + Design	(4 cr.)
CDM 2630	Studies in Media	(4 cr.)	ART 1071	FOUNDATIONS, MATERIAL: Objects + Spaces	(4 cr.)
CDM 2730	Studies in Media Production	(4 cr.)	ART 1072	FOUNDATIONS, TIME: Movement + Digital	(4 cr.)
ENG 2050	Creative Writing	(4 cr.)	ART 2000	Drawing I	(4 cr.)
MUS 1900	Electronic Music	(4 cr.)	ART 2130	Color Photography	(4 cr.)
PYC 1900	Cognitive Science of Magic	(4 cr.)	ART 2750	4D	(4 cr.)
	Additional Electives:		ART 3010	Illustration	(4 cr.)

In addition to the elective courses listed in the categories above, students pursuing the Bachelor of Science degree must also complete 2 upper level (2000+) department electives or 1 upper level (2000+) elective and PHY 2100 Physics I.

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.):

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.

Honors in the Department:

Departmental Honors will be granted to those graduates with a Computer Science majors GPA of 3.5 or higher.

CSC 1030

Data Science I (QR)

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 (QR)

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 1710

Game Design

4cr

This course provides a practical foundation in game design with a focus on concept development, prototyping, and design decomposition. Students learn how to translate game ideas, themes, and metaphors into gameplay, game concept pitches, and design documents using game design principles, physical prototyping, and iterative development suggestive of Agile methods.
Prerequisites: None

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 course 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 run-time 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 4730 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 Spring

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 3710

Game Engine Programming

4cr

In this course students will create their own 2D game engine using approaches such as the Entities, Components, and Systems architecture. Students will develop their own animation, physics, collision, and pathfinding systems. Students will also be required to create a level editor for their engine. This is a projects-based course.

Prerequisites: 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 (AI)**

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. During this course, students are expected to substantially complete their senior capstone or thesis.

Prerequisites: Senior standing, completion of six CSC courses, and instructor permission
Fall

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.

Should be taken in the Spring term of junior year.

Prerequisite: CSC 2560 with a C- or higher.
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. This course is project intensive.

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.):

CRJ 1000	Criminal Justice System	(4 cr.)
CRJ 2260	Criminology	(4 cr.)
CRJ/SOC/ WMG 2530	Race and Racisms	(4 cr.)
POL 3910	Constitutional Law: Civil Liberties and Civil Rights	(4 cr.)
CRJ/SOC 4990 or POL 4000	Senior Seminar	(4 cr.)

Students may choose to pursue either a Criminal Justice or prelaw track within this major. **Students who wish to complete the Criminal Justice major without a declared track must take the following three courses (12 cr.):**

Criminal Justice

CRJ/SOC 3025 Social Problems in the City	(4 cr.)
CRJ/SOC 3035 Wrongful Convictions	(4 cr.)
CRJ/SOC 3045 Social Impacts of Mass Incarceration	(4 cr.)

Those students who choose to pursue the prelaw track must take the following three courses (12 cr.):

POL 1910 Law and Society	(4 cr.)
POL 1500 American Government: National, State, and Local	(4 cr.)
POL 3920 Constitutional Law and the Separation of Powers	(4 cr.)

In addition to the common core (20 cr.) and track (12 cr.) requirements, students must take 4 credits of electives.

Students in the prelaw track may fulfill their elective requirement by taking any course in the criminal justice track.

Students in the criminal justice track may fulfill their elective requirement by taking any course in the prelaw track.

Finally, regardless of track pursued by the student, the elective requirement may be met by completing any **one** of the following courses for four credit hours:

CRJ 2100 Probation, Parole, and Community Supervision	(4 cr.)
CRJ/SOC 2270 Juvenile Delinquency	(4 cr.)
CRJ 2700 Criminal Law	(4 cr.)
CRJ 3010 Police and Society	(4 cr.)
CRJ 3020 American Courts	(4 cr.)
CRJ/SOC 3120 Crimes of the Powerful	(4 cr.)
CRJ 3200 Restorative Justice	(4 cr.)
CRJ 3300 Mock Trial	(4 cr.)
CRJ 3500 Field Placement	(varies)
CRJ 3550 Internship	(varies)
CRJ 200*/400* Topics Courses	(4 cr.)
EDU 4340 Urban and Cultural Leadership	(4 cr.)
POL 3350 Human Rights	(4 cr.)
POL 3900 Comparative Law	(4 cr.)
POL 3930 Environmental Law	(4 cr.)
POL 200*/400* Topics Courses	(4 cr.)
SOC 3110 Deviance	(4 cr.)
SWK 1300 Introduction to Social Justice and Social Welfare	(4 cr.)
SWK/WMG 2210 Family Violence	(4 cr.)
SWK 2400 Human Behavior in the Social Environment	(4 cr.)
SWK 2600 Ethics and Leadership in a Multicultural Society	(4 cr.)
WMG 1100 Introduction to Women's and Gender Studies	(4 cr.)

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.

CRJ 2100 Probation, Parole, and Community Supervision	(4 cr.)
CRJ 2260 Criminology	(4 cr.)
CRJ/SOC 2270 Juvenile Delinquency	(4 cr.)
CRJ 2700 Criminal Law	(4 cr.)
CRJ 3010 Police and Society	(4 cr.)
CRJ 3020 American Courts	(4 cr.)
CRJ/SOC 3025 Social Problems in the City	(4 cr.)
CRJ/SOC 3120 Crimes of the Powerful	(4 cr.)
CRJ 3200 Restorative Justice	(4 cr.)
CRJ 3300 Mock Trial	(4 cr.)
CRJ 3500 Field Placement	(4 cr.)
CRJ 3550 Internship	(varies)
CRJ 200*/400* Topics Course	(4 cr.)
EDU 4340 Urban and Cultural Leadership	(4 cr.)
POL 1500 American Government: National, State, Local	(4 cr.)
POL 3920 Constitutional Law: Separation of Powers	(4 cr.)
POL 3910 Constitutional Law: Civil Liberties and Civil Rights	(4 cr.)
POL 3350 Human Rights	(4 cr.)
POL 3900 Comparative Law	(4 cr.)
POL 3930 Environmental Law	(4 cr.)
POL 200*/400* Topics Courses	(4 cr.)
SOC 3110 Deviance	(4 cr.)
SWK 1300 Introduction to Social Justice and Social Welfare	(4 cr.)
SWK/WMG 2210 Family Violence	(4 cr.)
SWK 2400 Human Behavior in the Social Environment	(4 cr.)
SWK 2600 Ethics and Leadership in a Multicultural Society	(4 cr.)
WMG 1100 Introduction to Women's and Gender Studies	(4 cr.)

CRJ 1000

Criminal Justice System (SOC) (SI)

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 sociohistorical 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

CRJ 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 CRJ 1000

Fall/Spring

CRJ 2700

Criminal Law (SOC)

4cr

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

CRJ 3010

Police and Society

4cr

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

CRJ 3020

American Courts

4cr

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

CRJ 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

CRJ 3030

Social Impacts of Mass Incarceration

4cr

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

CRJ 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 lawmaking to conviction).

Prerequisite: CRJ 1000 or instructor permission

CRJ 3110

Power, Deviance and Social Control

4cr

This course examines power, deviance, and social control as interconnected sociological concepts. Students will understand how these concepts have been defined across various social contexts. This course will also examine social reactions to power and deviance. Students will be able to describe power's role in labeling people deviant and how those labeled deviant have resisted forms of social control. Finally, students will develop the ability to recognize the various forms of power, deviance, and social control surrounding them daily.

Prerequisite: SOC 1000 or CRJ 1000

CRJ 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

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 plaintiff 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)

Introductory Courses:

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

Core Courses:

ECN 2510	Intermediate Microeconomics	(4 cr.)
ECN 2520	Intermediate Macroeconomics	(4 cr.)
BUS/ECN 2340	Applied Statistics for Management and Economics	(4 cr.)
ECN 3310	History of Economic Thought	(4 cr.)
ECN 3340	Introduction to Econometrics	(4 cr.)
ECN 4410	Senior Seminar in Economics	(4 cr.)
ECN 4990	Senior Thesis Completion	(0 cr.)

Choose one of the following:

Statistics Course:

BUS/ECN 2340	Applied Statistics for Management and Economics	(4 cr.)
MTH 1050	Elementary Statistics	(4 cr.)
MTH 1055	Statistics for Social Justice	(4 cr.)
MTH 3050	Statistics	(4 cr.)

Elective courses:

Three (12 credits) or four (16 credits) electives in economics from courses 2500 or above. Note: Students who have taken ECN 1010 and ECN 1020 may meet this requirement by taking only three elective courses (12 credits); students who have taken only ECN 1030 are required to take four elective courses (16 credits).

Economics Minor (24 credits)

Introductory Courses:

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

Choose one of the following:

Intermediate Theory Course:

ECN	Intermediate	(4
2510	Microeconomics	cr.)
ECN	Intermediate	(4
2520	Macroeconomics	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.

Choose one of the following:

Statistics Course:

BUS/	Applied Statistics for	(4
ECN	Management and Economics	cr.)
2340		
MTH	Elementary Statistics	(4
1050		cr.)
MTH	Statistics for Social Justice	(4
1055		cr.)
MTH	Statistics	(4
3050		cr.)

Honors in the Major

Students who earn honors in the economics major commonly pursue a more in-depth senior thesis project that is completed over two semesters. Please see Department Chair for details. Additional basic requirements are listed under “Honors in the Major” 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:

ECN	Issues in Economics	(4
1030		cr.)
ECN/	Applied Statistics for	(4
BUS	Management and Economics	cr.)
2340		
ECN	International Trade	(4
3270		cr.)
ECN	International Political	(4
4030	Economy	cr.)
ECN/	Seminar in International	(4
POL	Political Economy	cr.)
4050		
POL	Introduction to International	(4
1050	Relations	cr.)
POL	Philosophical Foundations of	(4
2050	Political Economy	cr.)
MGT	International Management	(4
3710		cr.)

Choice of one:

ECN	Intermediate	(4
2510	Microeconomics	cr.)
ECN	Intermediate	(4
2520	Macroeconomics	cr.)

Choice of three:

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

ECN 1010

Principles of Microeconomics (SOC) (SI)

4cr

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) (SI)

4cr

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.
Fall/Spring

ECN 1030

Issues in Economics (SOC)(SI)

4cr

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) (QR)

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

ECN 2510

Intermediate Microeconomics (SOC) (SI)

4cr
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

ECN 2520

Intermediate Macroeconomics (SOC) (SI)

4cr
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.
Prerequisite: ECN 1020 or 1030
Spring

ECN 3050

Environmental Economics (SI)

4cr
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. By applying some basic tools of economic and institutional analysis, students may obtain a better understanding of environmental issues, both national and global, and are able to identify and evaluate alternative solutions.
Prerequisite: ECN 1010, or ECN 1030, or consent of the instructor

ECN 3100

Political Economy of East Asia (SOC)(SI)(ITL)

4cr
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.

ECN 3200

Money and Banking (SOC) (SI)

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
Fall

ECN 3220

Regional Economic Development (SOC) (SI)

4cr
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.
Prerequisite: ECN 1010 or ECN 1030

ECN 3240

Public Sector Economics (SOC) (SI)

4cr
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.

ECN 3250

Economics of Poverty and Income Inequality (SOC)(SI)

4cr
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.

ECN 3260

Labor Economics (SOC) (SI)

4cr
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.
Prerequisite: ECN 1010 or ECN 1030

ECN 3270

International Trade (SOC) (SI)

4cr
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.
Prerequisites: ECN 1010 and 1020, or 1030
Fall

ECN 3290

International Finance (SI) (ITL)

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) (SI) (OC)

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: ECN 1010, ECN 1020, or ECN 1030

ECN 3310

History of Economic Thought (SOC) (SI)

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 (SI)

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) (SI) (QR)

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, MTH 1050, or MTH 1055

Spring

ECN 3550

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 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 K-12, biology, broad field social science, chemistry, economics, English, French, German, geography, history, mathematics, music, physical education, physics, political science, psychology, sociology, Spanish, and theatre. 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, 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 *Stepshandbook* 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 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 successfully complete pre-student teaching field experiences, pass the appropriate Praxis II content test, or use an approved alternative of earning a 3.0 or higher in the appropriate courses as listed in the *Steps* handbook. Elementary and Middle School Education majors and Cross-categorical Special Education majors must pass the FORT Exam (or an approved alternative for cross-categorical special education majors only) 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 semester 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.

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.

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.

Elementary and Middle School Education majors fulfill the environmental education requirements in methods course EDU 3260. Students in the Middle and High School minor with history, science, and social science majors can fulfill the environmental science requirement by taking one of the following courses: BIO 1110, BIO 1020, or BIO 1030 or ENV 1000. They will also fulfill the assessment portion of this requirement within their EDU 3520 course.

General Education Requirements for Education Majors:

Education Students: Elementary and Middle School Education Majors, Middle and High School Education minors, and K-12 licensees must complete the requirements of Carthage College General Education program, with some special requirements in the following areas: Cultural Legacies General Education requirement must be a Legacies of Race and Racism course. Social Interactions General Education Requirement must be an American Government course, POL 1500 or POL 1910. Scientific Exploration General Education Requirement must come from must come from one of the following departments: BIO, CHM, ENV, PHY, EGR *** Science, History, or Social Science majors must take Bio 1011, 1020, 1030 or an ENV course.

Wellness:

Elementary and Middle School Education majors must take EXS 2450 Physical Education and Health Methods.

Students who double major in Elementary And Middle School Education and Cross-Categorical Special Education or minor in Urban Education are exempt from the 74 credits that are required to be taken outside of

the department. All other general education requirements must be fulfilled.

Majors:

Elementary and Middle School Education (Grades K through 9)

The Education Department offers a major in Elementary and Middle School Education (Grades K-9), 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 200*	Urban Education Immersion Experience	(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.)

3. The Elementary and Middle School Education major also may earn a minor or second major. Candidates may choose either a licensable or non-licensable minor.

4. The senior capstone experience for Elementary and Middle School Education 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

(52-56 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 Middle and High School Education (Grades 4-12).

This major consists of two components plus a minor:

- 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).

- Completion of the Middle and High School minor.

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 4-12: history, political science, sociology, economics, or psychology. They must earn

20-24 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 Elementary and Middle School Education or a content major and a Middle and High School Education minor. Upon completion of the Cross-Categorical Special Education major, students are eligible for both licenses: Ages 5-12 and Ages 13-21. They must apply for both licenses to ensure that their certification will span grades K-12 (ages 5-21). 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 Elementary and Middle School (grades K-9) certification or Middle and High School (grades 4-12) certification:

Requirements for the minor:

The candidates will:

- Major in Elementary and Middle School Education or minor in Middle and High School Education.
- Complete the five of the following courses (20 credits):
 - EDU 2340 Foundations in Urban Education
 - EDU 200* Urban Education Immersion Experience
 - SWK 2500 Engaging Multicultural Students

Education

and Families

EDU 3240 English Language Learner:
Methods and Studies in Education

EDU 4282 Culturally Responsive Instruction

EDU 4340 Urban and Cultural Leadership

Natural Science/STEM Minor

For teacher candidates seeking Elementary and Middle School licensure (grades K-9):

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 1011 Exploring Climate Change (4 cr.)

BIO 1020 Plants and People (4 cr.)

BIO 1030 Conservation for Educators (4 cr.)

Requirement 2 (Choose one of the following):

CHM 1000 Better Living Through Chemistry (4 cr.)

CHM 1010 General Chemistry I (4 cr.)

Requirement 3 (Choose one of the following):

EGR 1010 Intro to Engineering Design (4 cr.)

PHY 1030 Astronomy (4 cr.)

Requirement 4 (Choose one of the following):

GEO 1600 Earth Revealed* (4 cr.)

ENV 1000 Introduction to Environmental Science (4 cr.)

*Or other appropriate Earth Science course selected in consultation with the Geospatial Science department

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 Middle and High School Education licensure (grades 4-12): The Broad Field Science minor, as a supplement to a science major and Middle and High School Education certification, will prepare students to teach science in middle 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 1011 Exploring Climate Change

BIO 1020 Plants and People

or BIO 1030 Conservation for Educators

or BIO 3100 General Ecology

Physics

PHY 2100 Physics I

PHY 2110 Physics II

or

PHY 2200 General Physics I

PHY 2210 General Physics II

Earth and Space Science

PHY 1030 Astronomy

ENV 1000 Introduction to Environmental Science

Middle and High School Education Minor

For teacher candidates seeking grades 4-12 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:

Courses for the minor:

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.)

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.)

EDU 4900 Student Teaching Seminar (12 cr.)

Choose one of the following (4 cr.):

EDU 200* Urban Education

Immersion Experience (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.)

Note: *English majors must also take EDU 2130 Multicultural Children's and Early Adolescents' Literature (4 cr.)*

History, science, and social science majors must satisfy the environmental education requirement by completing:

BIO 1011 Exploring Climate Change (4 cr.)

OR

BIO 1020 Plants and People (4 cr.)

OR

BIO 1030 Conservation for Educators (4 cr.)

OR

ENV 1000 Introduction to Environmental Science (4 cr.)

Middle and High School Education students will complete the Senior Thesis in their major fields.

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.

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 200* Urban Education Immersion Experience	(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.)
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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 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 2020

Urban Education Immersion Experience

4cr

This course offers all education and sociology majors and minors an opportunity to explore urban communities with mentors in elementary schools. Students will read about current issues in urban education as well as three specific models of urban teaching, learn about schools as social institutions in urban settings, the basics of lesson planning and assessment, and work directly with a mentor teacher to plan and execute a needs-based urban learning experience within local schools.

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 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 2340

Foundations in Urban Education (DIV)

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 2570

Fostering Engagement and Positive Behavior in the Classroom (Grades 5-12)

4cr

This course will prepare middle/secondary education majors to implement effective policies and strategies for creating a productive and safe classroom environment. Materials will cover basic teaching strategies for wide discipline programs. Students will complete fieldwork, in which they evaluate effects of popular management strategies. Conflict resolution will be addressed.

Prerequisite: EDU 2010

EDU 2720

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 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(WC)

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(WC)

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, the methods of teaching, and the curricula as taught at 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. Field experience required.

Prerequisite: Admission to the Teacher Education Program Corequisite: EDU 3220 and EDU 2150

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. 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 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

EDU 3340

Teachers and Teaching in Urban Education

4cr

This undergraduate course of study 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)

EDU 3500

Fieldwork in Education

4cr

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

EDU 3520

Developmental and Content Area Reading(WC)

4cr

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

EDU 3900

Junior Thesis Seminar

2cr

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

EDU 4090

Methods for Teaching Elementary Level Exceptional Learners

4cr

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
Fall

EDU 4100

Methods for Teaching Secondary Level Exceptional Learners

4cr

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
Spring

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 (DIV)

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 reinforces 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

EDU 5249

Research Paradigms in Educational Settings

3cr

This course explores and utilizes the quantitative and qualitative research processes to teach educational practitioners how to plan and complete an action research study related to students, teachers or schools. Furthermore, the course examines the social, cultural and ethical issues of conducting research with students for the purpose of action research. In addition, the course will also explore mixed methodologies.

Engineering

Students learn engineering through real projects partnered with real stakeholders to address real needs for our community. The Engineering Department offers two programs: Bachelor of Science in Engineering and Bachelor of Arts in Engineering. Each program incorporates early design and project experiences to provide real-world context and authentic practice throughout the program.

Engineering at Carthage is rooted in the liberal arts, designed to emphasize student self-discovery and exploration and provide opportunities to grow in all facets of life. Whether seeking to earn the Bachelor of Science or the Bachelor of Arts, students' engineering pathway builds on a solid science and mathematics base. Students learn engineering processes through the practice of engineering under the guidance of faculty mentors and industry partners.

Mission: Our mission mirrors that of Carthage College: *Seeking Truth, Building Strength, Inspiring Service – Together*, defining each challenge as a challenge within the context of Engineering for all our graduates:

Seeking Truth: We act responsibly and ethically, adhering to codes, standards, and established knowledge while holding paramount the safety, health, and welfare of the public.

Building Strength: We act as innovators, understanding and building from tradition while having the courage to seek new solutions for tomorrow's challenges.

Inspiring Service: We act to better our surroundings and society while protecting resources and the needs of future generations.

Together: We act as honorable collaborators, respecting others and forgiving easily to bring out the best in our communities.

Values: As a community of learners, Carthage College Department of Engineering values:

Community: We support each other.

Curiosity: We are driven to discover.

Ingenuity: We blaze new trails.

Integrity: We live honestly and ethically.

Sustainability: We respect future generations.

Tenacity: We pursue knowledge, truth, and understanding.

Program Educational Objectives: Within 3-5 years of graduation, graduates of Carthage College Department of Engineering will establish themselves as professionals who:

Identify opportunities, evaluate risks, and balance ambiguous and mismatched objectives to develop solutions that add new value.

Are well-versed in solving a large range of technical problems across different engineering disciplines.

Work constructively and ethically as a member of diverse teams among professional and community organizations.

Hear, respect, and communicate ideas, technical information, and proposals effectively across a variety of audiences.

Are positioned for future success in a chosen career path through demonstrated ownership of personal growth and

development.

The Bachelor of Science in Engineering: is a non-disciplinary engineering program focused on learning how to design, analyze, and test devices and processes that solve human problems. Standards pursue a breadth of engineering topics necessary to pass the Fundamentals of Engineering exam and enter a wide variety of engineering disciplines unconstrained by typical engineering disciplinary structures.

The Bachelor of Science degree has been designed to meet the ABET Accreditation standards.

Students seeking to earn a Bachelor of Science in Engineering may optionally select to complete a one-year, paid cooperative (co-op) learning experience to replace four credits of required engineering electives. Students who complete a co-op learning experience will be on a five-year program of study with one academic year away from campus working full time in a paid engineering position on-site with an external project partner (e.g., industry, non-profit, community organization). Students leave for co-op during their junior year following completion of Engineering Practice I and II, and are on co-op for two consecutive semesters typically beginning at the start of J-term and lasting for one calendar year. During each co-op semester, students enroll in the 2-credit Engineering Cooperative Experience and maintain full-time student status. Completion of the credited co-op learning experience counts as one engineering elective. Placement into an engineering co-op partner is not guaranteed by Carthage College.

Upon graduation, Bachelor of Science in Engineering students will have acquired the knowledge, skills, and behaviors required:

1. To identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. To apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. To communicate effectively with a range of audiences.
4. To recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must

consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

5. To function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. To develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. To acquire and apply new knowledge as needed, using appropriate learning strategies.

Bachelor of Science in Engineering Degree Requirements (88 credits):

Science and Mathematics Requirements (34 credits):

EGR 1020	Computational Reasoning with MATLAB	(4 cr.)
MTH 1120	Calculus I	(4 cr.)
MTH 1220	Calculus II	(4 cr.)
MTH 2020	Differential Equations	(4 cr.)
MTH 2120	Multivariate Calculus	(4 cr.)
MTH 3050	Statistics	(4 cr.)
PHY 2200	General Physics I	(4 cr.)
PHY 2210	General Physics II	(4 cr.)
CHM 1010	General Chemistry I	(4 cr.)
<i>Engineering Core (42 cr.)</i>		
EGR 1100	Introduction to Engineering Design	(4 cr.)
EGR 1200	Visualization and Modeling	(2 cr.)
EGR 1300	Managing Engineering Ventures	(2 cr.)
EGR 2100	Engineering Statics and Solid Mechanics	(4 cr.)
EGR 2700	Engineering Practice I	(4 cr.)
EGR 2710	Engineering Practice II	(4 cr.)
EGR 3100	Engineering Materials	(4 cr.)
EGR 3120	Electronics	(4 cr.)
EGR 3400	Thermal Fluids	(4 cr.)
EGR 3600	Dynamics	(4 cr.)
EGR 4300	Engineering Management and Economics	(2 cr.)
EGR 4500	Analysis and Measurement of Engineering Systems	(4 cr.)

Engineering Electives (8 credits):

Students must complete at least 8 credits of Engineering Electives (EGR 41## courses).

Senior Capstone Experience (4 credits):

EGR 4910	Engineering Capstone I	(2 cr.)
EGR 4920	Engineering Capstone II	(2 cr.)

*Students must achieve a final grade of C- or better in 1000, 2000, and 3000-level Engineering Core classes.

Bachelor of Science in Engineering with Co-op Degree Requirements (88 credits):

Science and Mathematics Requirements (34 credits):

EGR 1020	Computational Reasoning with MATLAB	(4 cr.)
MTH 1120	Calculus I	(4 cr.)
MTH 1220	Calculus II	(4 cr.)
MTH 2020	Differential Equations	(4 cr.)
MTH 2120	Multivariate Calculus	(4 cr.)
MTH 3050	Statistics	(4 cr.)
PHY 2200	General Physics I	(4 cr.)
PHY 2210	General Physics II	(4 cr.)
CHM 1010	General Chemistry I	(4 cr.)
<i>Engineering Core (42 cr.)</i>		
EGR 1100	Introduction to Engineering Design	(4 cr.)
EGR 1200	Visualization and Modeling	(2 cr.)
EGR 1300	Managing Engineering Ventures	(2 cr.)
EGR 2100	Engineering Statics and Solid Mechanics	(4 cr.)
EGR 2700	Engineering Practice I	(4 cr.)
EGR 2710	Engineering Practice II	(4 cr.)
EGR 3100	Engineering Materials	(4 cr.)
EGR 3120	Electronics	(4 cr.)
EGR 3400	Thermal Fluids	(4 cr.)
EGR 3600	Dynamics	(4 cr.)
EGR 4300	Engineering Management and Economics	(2 cr.)
EGR 4500	Analysis and Measurement of Engineering Systems	(4 cr.)
EGR 4550	Engineering Cooperative Experience (taken twice)	(2 cr.)

Engineering Electives (4 credits):

Students must complete at least 4 credits of Engineering Electives (EGR 41## courses).

Senior Capstone Experience (4 credits):

EGR 4910	Engineering Capstone I	(2 cr.)
EGR 4920	Engineering Capstone II	(2 cr.)

*Students must achieve a final grade of C- or better in 1000, 2000, and 3000-level Engineering Core classes.

The Bachelor of Arts in Engineering is an applied science degree with an engineering emphasis that allows students to pursue an area of specialization in areas such as business, arts, and humanities through a tailored course of study following the second year of coursework.

The Bachelor of Arts in Engineering provides students with the flexibility to pair their engineering studies with complementary disciplines, such as Management, Physics, Mathematics, Theater Arts, Environmental Science, and others. These emphasis areas are courses taken beyond the course requirements of a Bachelor of Arts in Engineering degree, providing students with an opportunity to gain focused interdisciplinary studies in one or more programs or majors. In consultation with advisors, students should consider their professional goals when exploring and identifying emphasis areas. Selection and development of an emphasis area typically occurs following the completion of the Engineering Practice I and II course sequence.

Upon graduation, Bachelor of Arts in Engineering students will have acquired the knowledge, skills, and behaviors required:

1. To identify, formulate, and solve broadly-defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to areas relevant to the discipline.
2. To formulate or design a system, process, procedure, or program to meet desired needs.
3. To develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions.
4. To communicate effectively with a range of audiences.
5. To understand ethical and professional responsibilities and the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts.
6. To function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.

Bachelor of Arts in Engineering Degree

Requirements (60 credits):

Science and Mathematics Requirements (30 credits):

EGR 1020	Computational Reasoning with MATLAB	(4 cr.)
MTH 1120	Calculus I	(4 cr.)
MTH 1220	Calculus II	(4 cr.)
MTH 2020	Differential Equations	(4 cr.)
OR		
MTH 3050	Statistics	(4 cr.)
MTH 2120	Multivariate Calculus	(4 cr.)
PHY 2200	General Physics I	(4 cr.)
PHY 2210	General Physics II	(4 cr.)
CHM 1010	General Chemistry I	(4 cr.)
OR		
BIO 1110	Molecules, Cells, and Organisms	(4 cr.)

Engineering Core (18 cr.)

EGR 1100	Introduction to Engineering Design	(4 cr.)
EGR 1200	Visualization and Modeling	(2 cr.)
OR		
EGR 1300	Managing Engineering Ventures	(2 cr.)
EGR 2100	Engineering Statics and Solid Mechanics	(4 cr.)
EGR 2700	Engineering Practice I	(4 cr.)
EGR 2710	Engineering Practice II	(4 cr.)

Engineering Electives (8 credits):

Students must complete at least 3 credits of Engineering Electives (EGR 3000 courses or above).

Senior Capstone Experience (4 credits):

EGR 4900	Senior Capstone Project	(4 cr.)
EGR 4990	Senior Capstone Completion	(0 cr.)

*Students must achieve a final grade of C- or better in 1000, 2000, and 3000-level Engineering Core classes.

EGR 1020**Computational Reasoning with MATLAB**

2cr

Computational Reasoning with MATLAB is an introductory course focused on learning the processes of exploring systems and data analytically as a means to draw data-informed

conclusions and recommendations. This course will draw from topics of algebra, geometry, and trigonometry to inform modeling of simple systems. Students will work in small groups as they learn to break down complex systems into simpler constituents which can be approximated as analytical models in the MATLAB scripting environment. Within this course, students will focus on problems related to mathematical, scientific, and engineering problems while learning to use MATLAB to script, analyze data, and present and communicate results. Lecture and laboratory.

EGR 1100**Introduction to Engineering Design**

4cr

This course introduces students to engineering as a professional discipline rooted in problem identification and solving. The course focuses in one or more areas drawn from the domains of energy, transportation, environment, consumer technology, health, and exploration. Through this course, students are introduced to the principles of identifying engineering opportunities, benchmarking existing solutions, and reverse engineering. Through their analysis of reverse engineered products, students explore engineering and manufacturing decisions, sustainability principles, and engineering ethics. Students present their work throughout the course informing each other of their findings as they explore existing engineered products. The course incorporates key aspects of professional engineering in which critical thinking, teamwork, and creativity are essential attributes of the successful practitioner.

EGR 1200**Visualization and Modeling**

2cr

This is a course about communicating design ideas through modeling, visualization, and prototyping. Students learn to create value through the representation and communication of engineering design ideas with computer aided drafting and rapid prototyping. Students will begin with foundational elements of dimensions, sketching, and projecting. Students will learn to transition design ideas into computer aided drafting software, and recognizing that designs change and new information is learned, students will learn to model their design ideas using parametric modeling techniques to account for design

intent. Modeling in computer-aided drafting software will be used as an entry point into the fundamentals of rapid manufacturing. The course will culminate in a project where students apply both modeling and rapid manufacturing to communicate design ideas. Lecture and laboratory.

EGR 1300**Managing an Engineering Venture**

2cr

This is a course on entrepreneurial thinking, the development of engineered solutions, and the effective management of the organizations and processes supporting such work. In this practice-based course, students learn to create value through practice of managing an engineering project with an engineering team. Students will explore, apply, and compare processes of agile management, including Strategic Doing and SCRUM as well as traditional project management approaches by identifying project requirements, developing a work breakdown structure and network diagram, and formulating a project schedule. These skills and processes reflect those currently used in active engineering firms, both established and startups.

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**Statics & Solid Mechanics**

4cr

Statics and Solid Mechanics 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. The mechanics of deformable bodies, and the effects of externally applied loads on materials, are also studied. The laboratory component of the course emphasizes measurement of the mechanical properties of engineering materials with modern hardware and software tools. Lecture and laboratory.

Prerequisite: PHY 2200 and MTH 1220 or permission of instructor.

EGR 2700

Engineering Practice I: Understand and Conceptualize

4cr

This course is the first in a sequence about exploring and evaluating opportunities to solve a real problem with real stakeholders. Through this course, students will learn about the engineering design process with a focus on early-stage engineering design: understanding and detailing customer requirements, describing engineering problems functionally, exploring the engineering solutions space, ideating potential design solutions, and analyzing potential design options. Students will work with a real client through this course with a goal of delivering a final design solution. This course includes significant team and project-based components and provides an introduction to interpersonal communication skills that lead to effective problem solving, idea generation, and decision making.

Prerequisites: EGR 1100 and EGR 1020

EGR 2710

Engineering Practice II: Model and Realize

4cr

This course is the second in a sequence about exploring and evaluating opportunities to solve a real problem with real stakeholders. Through this course, students will learn about the engineering design process with a focus on late-stage engineering design: embodiment, modeling and prototyping, and testing and refinement of design solutions. Students will work with a real client through this course with a goal of delivering a final design solution. This course includes

significant team and project-based components and provides an introduction to interpersonal communication skills that lead to effective problem solving, idea generation, and decision making.

Prerequisites: EGR 2700 and EGR 1200 or EGR 1300 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 3400

Thermal Fluids

4cr

This course is an integrated development of the fundamental principles of thermodynamics, fluid mechanics, and heat transfer. The first and second laws of thermodynamics are covered including mass and momentum conservation for open and closed systems. Heat transfer and the relationship between heat and work will be explored. This course will also cover hydrostatic properties of fluids and fluid dynamics, including Bernoulli equation, pipe flow, and fluid transport. Applications of principles to thermal-fluid systems across engineering disciplines will be emphasized. Prerequisites: MTH 2020 Differential Equations and PHY 2210 General Physics II

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 3600

Dynamics

4cr

This course focuses on vector dynamics introducing the rigid-body kinematics necessary for analyzing simple systems and machines. Use of vectors and free body diagrams will be stressed, and Newton's laws will be employed to solve problems. Students will use energy and momentum methods of analysis to predict paths of motion of particles and rigid bodies and understand how to modify those paths. Computational methods will be used to create dynamics simulations and animations. Undamped, damped, and driven vibrations will also be discussed.

Prerequisites: MTH 2120 Multivariate Calculus and PHY 2200 General Physics I

EGR 4100

Nanomaterials

4cr

This course provides a dive into the nanoscale world. Students learn how mechanical, electrical, optical, and thermal properties will change when working with materials at the nanoscale. The importance of dimensional confinement will be discussed, including nanoparticles, nanowires, and two-dimensional materials. This course will further provide an overview of synthesis methods, current applications, and challenges. The role of miniaturization and incorporation of nanoscale devices into aspects of modern life will be discussed, with examples pulled from cutting-edge research.

Prerequisites: EGR 3100 or permission of instructor

EGR 4110**Internet of Things**

4cr

In this course, students will explore the Internet of Things using a combination of lecture and laboratory practice. Topics include, but are not limited to, IoT Architectures, Sensors and Microcontrollers, Synthetic Sensors, Digital and Analog Electronics, Python and C programming for IoT, Sampling Strategies, Connectivity and Networks, Data Analysis and Data Management. In the laboratory component, students will design and build IoT solutions according to design requirements provided by the instructor. This is a technical elective course within the Engineering major. Additionally, this course serves as an advanced elective in the Computer Science major and minor.

Prerequisites: EGR 3120 or PHY 3120 or CSC 3600 or permission of instructor

EGR 4120**Manufacturing Processes and Design**

4cr

Through this course students will explore the practices and processes of engineering manufacturing, from raw materials acquisition to design for manufacturing to processing to prototyping to production. There will be discussion of the influences of material choice and product performance on manufacturing methods while balancing practical limitations such as scalability and cost. Sustainability and ethical concerns involved in the manufacturing process will also be investigated. Processes and optimization will be considered as a practical part of the engineering world. Students will go on field trips to local manufacturing facilities and see the application of these ideas in active engineering settings.

Prerequisites: EGR 3100 or permission of instructor

EGR 4130**Mechanics of Human Movement**

4cr

This course focuses on the influence of external forces upon the body, while both moving and still. Concepts of physics and engineering will be applied to examples taken from everyday motion, dance, and athletics. Both ideal and unideal execution of movements will be studied, with a lens of

easing unnecessary stresses and improving ability. The performance modifications due to athletic gear and other specialized equipment will be discussed. Students will collect data based on in-class movement, culminating in an analysis of a movement of their choice. No specialized movement experience or expertise is needed.

Prerequisites: PHY 2100, PHY 2200, EGR 3600, or permission of instructor

EGR 4300**Engineering Management and Economics**

2cr

This course focuses on the skills to make engineering decisions based on project schedule, scope, and economics. Students will learn about the importance of balancing risks, creating a realistic project timeline, managing costs, and allocating resources. Students will explore the principles of engineering economics to assess the costs and benefits of engineering investments including product and technology development programs and capital purchases. The underlying ethics, standards, and quality control as integrated into any project will also be investigated. Students will apply principles of engineering management and economics to explore design options based on varied alternatives.

Prerequisites: EGR 1300 Managing Engineering Ventures and EGR 2710 Engineering Practice II or permission of instructor

EGR 4500**Analysis & Measurement of Engineered Systems**

4cr

This course focuses on the concepts and the practice of analysis and measurement for complex engineered systems. Students will develop basic knowledge and tools to identify a system, decompose it into parts, define interactions, perform analysis and apply control measures if necessary. Working with engineered systems, students will apply industry-standard measurement methods and strategies to collect data toward interpretation and analysis of system behavior. Application of computational tools and mathematical modeling will be emphasized through analysis and measurement laboratory activities.

Prerequisites: EGR 3600 Dynamics and EGR 3210/PHY 3120 Electronics or permission of instructor.

EGR 4550**Engineering Cooperative Learning Experience**

2cr

The engineering cooperative (co-op) experience is designed to provide an opportunity to applied engineering knowledge and skills. Through co-op students develop and enhance hands on, technical, and professional skills within an industry related to one's engineering program of study. Students will be working full time in a paid engineering position on-site with external project partner (e.g., industry, non-profit, community organization). This course pairs with the co-op experience to guide students through reflective learning and discussion based on their work experience. During co-op, students engage with a co-op faculty instructor virtually three times per semester, submit reflective writings based on co-op learning goals, participate in a performance evaluation led by the employer, and facilitate one on-site visit with the co-op faculty instructor. A memorandum of understanding agreed to by Carthage and the external employer must be in place before work can begin.

Prerequisites: EGR 2710: Engineering Practice II and one 3000-level EGR course (EGR 3100: Engineering Materials or EGR 3210: Electronics or EGR 3400: Thermal-Fluids or EGR 3600: Dynamics)

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.

EGR 4910**Engineering Capstone I**

2cr

This is the first semester of the two-semester long capstone experience in engineering. This

course provides students in the BS in Engineering program with a culminating engineering design experience that 1) incorporates appropriate engineering standards and multiple constraints and 2) is based on the knowledge and skills acquired in earlier course work. This course contains a lecture component with an emphasis on codes and standards, course balance associated with design requirements, integrative design, and analysis. During the lecture, students will work under the guidance of faculty instructors to put into practice their engineering skills and knowledge on an engineering project with external project partners (e.g., industry, non-profits, community organizations).
Co-requisites: EGR 4500 Analysis & Measurement of Engineered Systems and EGR 4300 Engineering Management and Economics

EGR 4920

Engineering Capstone II

2cr

This is the second semester of the two-semester long capstone experience in engineering. This course provides students in the BS in Engineering program with a culminating engineering design experience that 1) incorporates appropriate engineering standards and multiple constraints and 2) is based on the knowledge and skills acquired in earlier course work. This course contains a lecture component with an emphasis on codes and standards, modeling, prototyping and testing, validation, and production. During the lecture, students will work under the guidance of faculty instructors to put into practice their engineering skills and knowledge on an engineering project with external project partners (e.g., industry, non-profits, community organizations).

Prerequisites: EGR 4910: Engineering Capstone I

EGR 4990

Senior Thesis Completion

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

ENG 2010 Studies in American Literature	(4 cr.)
ENG 2020 Studies in British Literature	(4 cr.)
ENG 3010 Literature in Its Time I: Prior to 1800	(4 cr.)
ENG 3150 Special Studies in a Major Author Prior to 1800	(4 cr.)
ENG 3020 Literature in Its Time II: After 1800	(4 cr.)
ENG 3160 Special Studies in a Major Author after 1800	(4 cr.)

Category II: Literary Forms and Theories

ENG 3030 Major Texts in Critical Theory	(4 cr.)
ENG 3070 Film and Literature	(4 cr.)
ENG 3090 Literature of Diversity	(4 cr.)
ENG 3100 Literature and Gender	(4 cr.)
ENG 3110 Shakespeare	(4 cr.)
ENG 3140 Literary Genres	(4 cr.)

English Major (40 credits)

The English major consists of the following:

ENG 1160 Introduction to Literary Studies	(4 cr.)
ENG 2050 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 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, including the following:

ENG 1160	Introduction to Literary Studies	(4 cr.)
ENG 2050	Creative Writing	(4 cr.)

English minors must also take one course from Category I: Literature and Its Contexts and one from Category II: Literary Forms and Theories.

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 40 credits may be completed by choosing among the department course offerings. Students majoring in elementary education may count EDU 2130 Multicultural Children’s and Early Adolescent Literature as an elective toward the English minor.

The Emphasis in Creative Writing for English Majors

Students majoring in English may also select an emphasis in creative writing. The emphasis is designed for students who wish to combine their literary study with study in the practice of creative writing. Students majoring in English who elect the emphasis in creative writing take 44 credits in the department, including the following required courses:

Core courses:

ENG 1160	Introduction to Literary Studies	(4 cr.)
ENG 2050	Creative Writing	(4 cr.)
ENG 3040	Advanced Writing	(4 cr.)
ENG 4000	Junior Seminar: Critical Theory and Methods in Literary Studies	(4 cr.)
ENG 4100	Senior Seminar	(4 cr.)
ENG 4300	Seminar in Creative Writing	(4 cr.)

English majors with a creative writing emphasis 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; all English majors with an emphasis in creative writing must include ENG 3140 Literary Genres among the 44 credits taken within the department.

Creative Writing Minor for Non-English Majors

The minor in creative writing for non-English majors consists of the following 24-credit course of study:

ENG 2050	Creative Writing	(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 chair for details. Forms for departmental honors are available from the English Department chairperson. Basic requirements are listed under All-College Programs in the catalog.

ENG 1160

Introduction to Literary Studies (HUM)(CL)

4cr

This gateway course, open to both majors and nonmajors, 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

ENG 2010

Studies in American Literature (HUM) (DIV) (CL)

4cr

This variable content course introduces students to some of the major critical questions of American literary and cultural studies. What is American 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, disabled) 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 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)(CL)(DIV)

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 (AI)

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)(CL)

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) (DIV)(CL)

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) (CL) (DIV)

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 (AI)

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)(CL)

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) (CL) (DIV)

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)(CL) (DIV)

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)(CL)

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 Shakespeares 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
Fall/Spring

ENG 3140

Literary Genres (HUM)(CL)

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)(CL)

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)(CL) (ITL)

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 3160W

Special Studies in a Major Author After 1800 (HUM) (CL) (WI) (WC)

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 (CL)

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 (AI) (WC)

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 conjunction 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, MTH 1055 Statistics for Social Justice or other approved course.

Track Perspectives:

One internationally focused course chosen from: POL 3040 African Transitions, POL 3360 Latin American Politics, POL 3370 Russian/East European Politics, POL 3380 West European Politics, POL 3400 Chinese Politics, ECN 3100 Political Economy of East Asia, 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.

One science course chosen from: BIO 3100 General Ecology, BIO 3200 Aquatic Ecology, BIO/ENV 3400 Conservation Science, BIO 4150 Field Botany and Mycology, GEO 1800 Great Lakes Basin, GEO 1900 Geology of National Parks, GEO 3200 Hydrology, GEO 3400 Forest Ecology, GEO 3700 Climatology, ENV 2010 Environmental Chemistry, ENV 2550 Environmental Pollutants, ENV 2750 Sustainable Agriculture, 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 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) (SE)**

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 (QR)**

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 with a grade of C- or better

ENV 2550**Environmental Pollutants (NLAB) (SE)**

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)(OC)**

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 better

Spring

ENV 2650**Photographing Nature: Investigating Biodiversity and Conservation (NLAB)(SE)**

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) (SE)**

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.

Prerequisite: ENV 2100 and junior standing, or permission of instructor

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: ENV 3000

ENV 4900

Research in Environmental Science

1-4cr

An opportunity to conduct research in environmental science, culminating in a research paper and a formal presentation. Given the interdisciplinary nature of environmental science, students in related disciplines may participate in this course with the permission of the instructor and their departmental advisor. Students may enroll for credit more than once, but no more than 4 credits may be applied to the major.

Prerequisite: Permission of the instructor

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

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
- Major in Exercise and Sport Science 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:

- | | |
|--|---------|
| 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 2700 Elementary Physical Education: Principles of Movement | (4 cr.) |
| EXS 3510 Adapted Physical Education and Sport | (4 cr.) |
| EXS 3520 Field Placement in Specially Designed Physical Education | (4 cr.) |
| EXS 4060 Fitness Education | (4 cr.) |
| EXS 4080 Assessment in Physical Education | (4 cr.) |
| EDU 4900 Student Teaching (counts as Senior Thesis) | (12 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 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 (52 cr.)

EDU Education and Society	(4
1010	cr.)
EDU Educational Psychology and	(4
2010 Assessment	cr.)
EXS Elementary Physical Education:	(4
2700 Principles of Movement	cr.)
EDU Teaching and Supporting Learners	(4
2050 with Diverse Characteristics and	cr.)
Needs	
EDU Developmental and Content Area	(4
3520 Reading	cr.)
EXS Methods and Materials of Teaching	(4
4200 Physical Education	cr.)
EDU Student Teaching Seminar	(12
4900	cr.)
BIO Human Anatomy and Physiology	(4
1040	cr.)
HIS Issues in American History	(4
1000	cr.)
Any appropriate physical science course*	(4
	cr.)
Any appropriate social science course*	(4
	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.)

PYC 2850	Child and Adolescent	(4 cr.)
	Development	
EXS 3520	Field Placement in	(4 cr.)
	Specially Designed	
	Physical Education	

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 Introduction to Health and	(3
1080 Wellness Education	cr.)
EXS Nutrition for Health and	(3
2200 Performance	cr.)
EXS Consumer Health Issues	(2
2270	cr.)
EXS Comprehensive School Health	(2
2500 Programming	cr.)
EXS Alcohol, Tobacco, and Other	(2
2810 Drugs (ATOD) Education	cr.)
EXS Sexuality Education	(2
3090	cr.)
EXS Personal and Community Health	(4
3110	cr.)
EXS Issues in Emotional and Mental	(2
3120 Health	cr.)
EXS Methods and Materials of	(4
4210 Teaching Health Education	cr.)

Athletic Coaching Certification Program

This program is very desirable for students who intend to coach athletic teams in a public/private school setting. It will assist students from three distinct academic areas:

1. Exercise and Sport Science major pursuing Physical Education, K-12 Licensure. Most of the coursework is part of the major. If the student receives his/her teaching licensure, he/she also will receive a coaching certification recognition on his/her student transcript.
2. Education majors who will be licensed in a subject area. If the student receives his/her teaching licensure, he/she also will receive a coaching certification recognition on his/her student transcript.
3. A noneducation major or an Exercise and Sport Science major who does not seek a teaching licensure. These students cannot receive a coaching certification from the Wisconsin Department of Public Instruction. However, upon request, the EXS department chair will have the following statement placed on their transcripts: "This student has completed the coursework for coaching certification required by the Wisconsin Department of Public Instruction."

The following coursework is required:

BIO	Human Anatomy and	(4
1040	Physiology	cr.)
EXS	Applied Principles of Strength	(3
2300	Training	cr.)
EXS	Sport and Recreation	(4
3030	Management	cr.)
EXS	Applied Exercise Anatomy and	(4
3070	Biomechanics	cr.)
EXS	Physiology of Exercise	(4
3080		cr.)
EXS	Prevention and Care of Athletic	(2
2180	Injuries	cr.)
EXS	Theory and Practice of Coaching	(4
4020		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 (WEL)

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 1010

Foundations of Exercise and Sport Science

2cr

This course examines the history, philosophy, principles, and development of exercise and sport programs.

Fall/Spring

EXS 1020

Instructional Methods for Individual and Group Activities

4cr

Through a blend of lecture, discussion, and hands-on experiences, this course is designed to build proficiency in the skills necessary to provide instruction in a variety of health, fitness, and educational settings.

Corequisite or prerequisite: EXS 1010
Fall/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

EXS 1080

Introduction to Health and Wellness Education (WEL)

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 1110

Lifetime Wellness and Fitness (PE) (WEL)

2cr This course will engage students in examining the holistic and interrelated nature of wellness. Students will demonstrate the knowledge and skills necessary to engage in lifetime physical activities to promote overall wellness and fitness over their lifespan.

EXS 1120

Introduction to Brazilian Jujitsu (WEL)

4cr

This course will introduce students to history, theory, and practice of the martial art of Brazilian Jujitsu (BJJ), both as a method of self-defense and a competitive sport. This course is designed to give students the skills and confidence necessary to confront and manage a wide variety of stressful interpersonal challenges. Students will be able to perform and describe the principles of efficiency, patience, and self-control as they pertain to BJJ. Students will also practice making connections between these important lessons on the mats to life off the mats (e.g., the value of patience in everyday life, the

importance of self-control in resolving forms of interpersonal conflict, and the use of skill, strategy, and technique to solve problems).

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 and practices of Sport Psychology and team dynamics will also be covered.

Prerequisite: EXS 1010

EXS 2180

Prevention and Care of Athletic Injuries

2cr

A course designed for students with an emphasis in physical education (K-12 licensure), sport, and fitness instruction. It provides an overview of the major injuries and athletically related health conditions.

Prerequisite: EXS 1010

Fall

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 (WEL)

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/J-Term

EXS 2330**Applied Statistics for Health and Human Services (MTH) (QR)**

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: Sophomore standing and accepted Nursing majors or declared Exercise and Sport Science or Allied Health majors.

EXS 2450**Physical Education and Health Methods (PE) (WEL)**

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 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.

Prerequisites: EXS 1020

Spring

EXS 2810**Alcohol, Tobacco, and Other Drugs (ATOD) Education (WEL)**

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

EXS 3030**Sport and Recreation Management**

4cr

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.

Prerequisite: EXS 1010

Fall/Spring

EXS 3070**Applied Exercise Anatomy and Biomechanics (SE)**

4cr

A review of musculoskeletal anatomy and an in-depth study of biomechanics and its

application to sport.

Prerequisite: BIO 1040 or BIO 2010

Spring

EXS 3080**Physiology of Exercise (NLAB) (SE)**

4cr

This course is designed to provide 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

Fall/Spring

EXS 3090**Sexuality Education**

2cr

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.

Fall

EXS 3110**Community and Public Health (WEL) (DIV)**

4cr

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.

Spring

EXS 3120**Issues in Emotional and Mental Health (WEL)**

2cr

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.

Fall/Spring

EXS 3210

Advanced Techniques in Training and Conditioning

4cr

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

J-Term

EXS 3510

Adapted Physical Education and Sport (DIV)

4cr

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 2700

Fall/Spring

EXS 3520

Field Placement in Specially Designed Physical Education

4cr

An off-campus practical experience for students to work with special populations in a physical education setting. (Pass/Fail)

Prerequisites: EXS 3510; EDU 1010, 2010, 2050 and 3520; EXS 4200; and PYC 2850

EXS 3530

Strength and Conditioning Practicum

2cr

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

EXS 3720

General Medical Conditions for the Athletic Trainer

3cr

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

Spring

EXS 4020

Theory and Practice of Coaching

4cr

This course is designed to broaden students' perspective in the areas of teaching, coaching, and structuring athletic teams. Emphasis will be placed on coaching theory and development of coaching philosophy.

Prerequisites: EXS 1010 and junior standing

J-Term

EXS 4040

Exercise Prescription

4cr

A practical approach to prescribing appropriate exercise modalities to multiple populations including athletic, healthy, and special populations. Students will build on concepts learned to core courses and review current literature in order to create training programs that meet client goals. Through a variety of case studies, students will develop training programs/treatments that will help individuals maximize performance and prevent/reduce disease. Students will create programs for increasing muscular strength as well as increasing cardiovascular endurance.

Prerequisite: EXS 3080

Spring

EXS 4060

Fitness Education

4cr

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 2700

EXS 4080

Curriculum and Assessment for Physical Education

4cr

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 2700

Spring

EXS 4200

Methods and Materials of Teaching Physical Education

4cr

A course required of students pursuing the emphasis in physical education K-12 licensure. Emphasizes teaching methods and instructional materials in physical education.

Prerequisites: EXS 2700

Spring

EXS 4210

Methods and Materials of Teaching Health Education

4cr

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

Fall

EXS 4900

Field Placement in Exercise and Sport Science

4cr

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 2330

Fall

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 Climate Science. 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	
or		(4 cr.)
GEO 1610	Introduction to Geographic Information Science: 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 1900	Geology of National Parks	(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.)

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 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.)

Minor in Geoscience (24 credits)

Required core courses (8 cr.):

GEO 1210	Internet Mapping and Web GIS	(4 cr.)
or		
GEO 1610	Introduction to Geographic Information Science: Mapping Your World	
GEO 1600	Earth Revealed	(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 1900	Geology of National Parks	(4 cr.)
GEO 2450	Biogeography	(4 cr.)
GEO 2550	Meteorology	(4 cr.)
GEO 2950	Geomorphology	(4 cr.)

All students must select one 3000-level Geoscience course (4 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.)

In addition, all students must select one course (4 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.)

Major in Geographic Information Science (GIS) (48 credits)

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 Science: 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.)
CSC 1030	Data Science I	(4 cr.)
MTH 1050	Elementary Statistics	(4 cr.)
or		
BUS/		
ECN 2340	Applied Statistics for Management and Economics (or other approved statistics course)	

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 CSC 2810 Database Design and Management (4 cr.) plus 1 course (4 cr.) in the Geospatial Science Department.

Geographic Information Science Minor (24 credits)

Required core courses (20 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 2700	Satellite Image and Air Photo Analysis	(4 cr.)
GEO 3610	Applied Projects in Geographic Information Science	(4 cr.)
CSC 1100	Introduction to Computing	(4 cr.)

All students must select one course (4 cr.) from the following:

GEO 1210	Internet Mapping and Web GIS	(4 cr.)
GEO 1770	Unmanned Aerial Systems (Drones) in Geosciences	(4 cr.)
CSC 1030	Data Science I	(4 cr.)
CSC 2810	Database Design and Management	(4 cr.)

Minor in Climate Science (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 (16 cr.):

GEO 2550	Meteorology	(4 cr.)
GEO 3700	Climatology	(4 cr.)
GEO/PHY 4150	Science of Global Climate Change	(4 cr.)

All students completing the Climate Science minor 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 Climate Science 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) (SE)

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 as well as 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 1500

Human Geography: An Introduction (SOC)(SI)

4cr

An examination of the evolution of concepts concerning the nature, scope, and methods of Human Geography (population, economic, urban, landscape, etc.) with emphasis on current geographic thought, theory, research themes, and the relationship between people and the environment.

GEO 1600**Earth Revealed (NLAB)(SE)**

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)(SE)(QR)**

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 1700**Natural Disasters (NLAB)(SE)**

4cr

A geographic examination of the causes and human consequences of natural disasters, such as floods, volcanic eruptions, tornadoes, and drought. Emphasis is placed on understanding the role that human perception plays in determining the steps that society takes to reduce natural hazard risks and disaster losses.

GEO 1770**Unmanned Aerial Systems (Drones) in Geosciences (NLAB)(SE)**

4cr

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)(SE)**

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 (SE) (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 (QR)**

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)(SE)**

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)(SE)**

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)(QR)**

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)(QR)**

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 2800

Geography of East Asia (SOC) (ITL)

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.

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)(SE)

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.

GEO 3200

Hydrology (LAB SCI)(QR)

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 3400

Forest Ecology (QR)

4cr
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

GEO 3610

Applied Projects in Geographic Information Science (QR)

4cr
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 "client." 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

GEO 3700

Climatology (LAB SCI)(QR)

4cr
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

GEO 3800

Soil Science (LAB SCI)(QR)

4cr
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

GEO 3900

Methods of Field Research

4cr
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

GEO 4000

Senior Seminar in Geospatial Science

4cr
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

GEO 4150

Science of Global Climate Change (NLAB)(IDP)

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. Prerequisite: GEO 3700, PHY 2200, or consent of the instructor

GEO 4500

Independent Study in Geospatial Science

1-4cr

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

GEO 4900

Geospatial Science Research

1-4cr

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

GEO 4990

Senior Thesis Completion

0cr

Students should register for GEO 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 your 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.)
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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:

History

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.

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 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.

HIS 1000

Issues in American History (HUM) (DIV)

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)(CL) (SI)(ITL)

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 (CL) (HUM)(SI)(ITL)

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)(CL)(SI)(ITL)

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) (CL)(ITL)

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) (CL)(SI)(ITL)

4cr

A survey of the political and social history of South America from colonization through the 1980s.

Spring

HIS 2050

Shamanism (HUM) (CL)

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 (CL)(HUM)(SI)(ITL)

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)(CL)(SI)(ITL)

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)(CL)(SI)(WC)(ITL)

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)(CL)(SI)(ITL)

4cr

The study of recent European history with emphasis on political, social, economic, and cultural developments.

HIS 2310

The Greeks (HUM)(CL)(SI)(ITL)

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)(CL)(SI)(ITL)

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)(CL)(SI)(ITL)

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 2600

Beauty Will Save the World (HUM)(CL)(IDP)

4cr

This course is an exploration of the historical, scientific, aesthetic, moral, and spiritual aspects of beauty. Students will read extensively from a variety of disciplines to assess Dostoyevsky's assertion that beauty will save the world. (4cr)

HIS 2620

America in the 1960s (HUM)(CL)(SI)

4cr

A survey of the major themes, events, and individuals in America in the 1960s.

HIS 2850

Comparative History: Chicago and Milwaukee (HUM)(CL)(SI)

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)(CL)(SI)(DIV)

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)(CL)(SI)(DIV)

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)(CL) (SI)

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)(CL) (SI)(ITL)

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)(CL)(SI)(ITL)

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)(CL)(SI)(ITL)

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 (CL)(SI)(HUM)(ITL)

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 3300

History of Mexico Since Independence (HUM)

4cr

This is an interdisciplinary approach to the history of Mexico from the mid-19th century to the early 21st century.

HIS 3400

Modern China (HUM)(CL)(ITL)

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)(CL)(ITL)

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.
Fall

HIS 3990

Historiography (HUM) (CL) (SI) (ITL)

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. Prerequisite: Three courses in history or consent of the instructor
Spring

HIS 4000

Senior Seminar (CL)(SI)(ITL)

4cr
The capstone of the history major. Each seminar member produces a research paper on a topic of his or her own choosing, in consultation with the seminar leader and based in part on primary material. Prerequisites: Four courses in history and consent of the instructor
Fall

Management and Marketing

The Management and Marketing Department offers two majors. In addition to the Management and Marketing majors, the department offers minors in Business Administration and Sport Business. 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:

ACC 2020	Managerial Accounting	(4 cr.)
ACC 2040	Cost and Managerial Accounting	(4 cr.)

Choose one of the following:

BUS/ECN 2340	Applied Statistics for Management and Economics	(4 cr.)
MGT 3100	Introduction to Business Analytics	(4 cr.)

Electives in the Major:

Choose from BUS or MGT course offerings (12 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.)
MGT 3120	Principles of Management	(4 cr.)
BUS 4900	Business Policies Senior Seminar	(4 cr.)
MGT 3600	Legal Environment of Business or MGT 3650	(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.)
MGT 3100	Introduction to Business Analytics	(4 cr.)

Choose three of the following (course cannot be repeated from the list above):

MGT 3100	Introduction to Business Analytics	(4 cr.)
MGT 3710	International Management	(4 cr.)
MKT 3140	Consumer Behavior	(4 cr.)
MKT 4100	Integrated Marketing Communications	(4 cr.)
MKT 4200	Direct Marketing Analytics	(4 cr.)
MKT 4210	Marketing Research	(4 cr.)
ACC 2020	Managerial Accounting	(4 cr.)

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

Required courses (24 cr.)

BUS 1110	Introduction to Business	(4 cr.)
Any ECN course		(4 cr.)
Any ACC or FIN course		(4 cr.)
Any MGT or MKT course		(4 cr.)

8 additional credits from courses with the

Business Administration

following prefixes: ACC, BUS, FIN, MGT, and MKT not already counted above.

Sport Business Minor

Required courses (24 cr.)

MGT 1050 Principles of Sport Business	(4 cr.)
MGT 2500 Sport Business Development & Operations	(4 cr.)
CDM 2900 Sport Media	(4 cr.)
MGT 3400 Sport Law	(4 cr.)
MGT 3800 Sport Organization History and Social Impact	(4 cr.)
MGT 4200 Advanced Topics and Case Development in Sport	(4 cr.)

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 (CL)

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 (QR)

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) (QR)

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 1050

Introduction to Sport Business

4cr

This course will serve as the introductory course for students in the Sport Business Minor/Concentration. The Sport Industry is rapidly evolving, establishing itself as one of the more prominent industries and business enterprises globally. Therefore, it is critical that future Sport Business practitioners understand the fundamental structures, governance, careers, and business processes within the industry. This course will introduce students to such structures, careers, and processes. Curriculum will teach students the organizational structures and business processes in all levels of sport, namely focusing on professional sport, intercollegiate athletics, esports, high school sport, youth sport, and amateur sport. Furthermore, students will be exposed to different career opportunities in sport. This course will also incorporate frequent discussion of current events in sport business.

MGT 2500

Sports Business Development and Operations

4cr

Sport is a tremendous business enterprise whose organizations provide immense opportunity for entertainment and economic growth. This course will explore the functions of a sport organization creating revenue, economic development, and selling a product to many consumers and stakeholders. In exploring the business functions of a sports organization, students will learn about business development, such as managing capital and investing in product development specific to the context of sport via regular competition (i.e. regular season competitions)

or singular events (i.e. hosting concerts or singular athletic events). Students will integrate this understanding of business development with theory and topics related to Event and Facilities Management. Expanding upon sport business development, such topics discussed will include sport specific theories and contexts related to Marketing, Sponsorship, Sales, and Finance. This course will evaluate the current landscape of sport, while also investigating the future of the Sport Industry, and new business development opportunities such as esports.

MGT 3100

Introduction to Business Analytics (QR)

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, 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 (QR)

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 (SI)

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 3500

Sport Law

4cr

With a wide array of professions in the sport industry, and its ever-changing landscape, it is necessary for sport practitioners to proactively apply and understand various laws, statutes, and regulations. In addition to providing students with the skills and resources to interpret the law, this class will provide a comprehensive overview of specific legal topics, which pertain to sport and the sport industry. This will include, but not be limited to, discussions of contract law, negligence, intentional torts, Title IX, Title VII of the Civil Rights Act of 1964, constitutional law and sport, federal anti-trust law, collective bargaining agreements, legalities centered on facilities management, and sport governance. Students will explore significant case law, statutes, and U.S. Constitutional amendments, which explain and direct best practices for sport practitioners.

MGT 3600

Legal Environment of Business (SI)

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 3650

Business Law for Accountants

4cr

This course will provide students majoring in accounting with an overview of the legal concepts necessary to successfully complete the CPA exam. This course will focus on the Uniform Commercial Code, contracts, negotiable instruments, sales and secured transactions, agency relationships, business organization and formation, bankruptcy, professional liability, and accounting ethics. Students will be expected to analyze legal cases involving business law matters through both oral and written communication. At the end of the course, students will be able to demonstrate an understanding of the American legal system, an ability to recognize and address ethical issues attendant to making important business decisions, and an ability to analyze complex legal concepts associated with the accounting process. This course is not open for credit to students who have taken MGT 3600.

Prerequisite: ACC 2020 or ACC 2040
Spring

MGT 3710

International Management (SI) (ITL)

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 3730

International Legal Environment of Business (SI)(ITL)

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 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 3900

Sport Organization History & Social Impact

4cr

With the growing prominence of the sport industry, it is necessary to understand the important role sport (and its organizations) plays in society, as sport has a significant economic and social impact. This embraces notions of how society is represented through sport, and vice versa, as well as the historical significance of sport in society. This course will provide students with a circumstantial understanding of theories related to sport sociology and sport history, and how these theories dovetail in explaining the social and economic impact of sport on communities. Topics discussed will include the historical formation and growth of major professional sport leagues (i.e., NFL, NBA, WNBA, MLB, NHL, MLS, and NWSL), and intercollegiate sport (i.e. NCAA) both nationally and internationally. The historical topics will provide a foundation for understanding the relationship between sport and society, and the role of athletes and sport organizations in serving Corporate Social Responsibility. Furthermore, this class will explore how sport organizations may serve as drivers of positive social change within their communities and society, and what impact this has on a local economy and business.

MGT 4200

Advanced Topics & CASE Development in Sport

4cr

Considering the constantly changing nature of the sport industry, it is necessary for professionals to be researching and exploring new business opportunities within the industry. Therefore, it is necessary for future sport practitioners to be able to conduct their own research and to be able to disseminate their findings and recommendations through a carefully and professionally articulated analysis. Thus, this course will provide students with this opportunity to develop case study research, which is relevant to creating new perspectives and practices in the sport industry. Through this course, students may collaborate with a sports organization, a practitioner in sport, or other business faculty to write a case study that will be published independently, with high quality CASE work being published in a new, forthcoming Sport Business CASE study journal. Case research incorporates an in-depth, and integrated (through practice) approach to understanding complex issues. This journal will be published by the institution. Students will work in groups to develop and research these CASE studies, thus allowing them to acquire skills and practice with working in a high-performing team. Students are expected to deliver an individual CASE study, teaching note, and instructor guide. This course will develop student-writing skills through its writing intensive nature. Topics of research will focus on innovation and development in sport business. This course will feature an on-site experiential learning component.

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

MGT 5500

Data Analytics & Excel Fundamentals

2cr

This course provides an introduction to data analytics and teaches students how to use Microsoft Excel to analyze data and create visualizations. Students will learn basic and advanced data analysis tools, including pivot tables, functions, and macros, to manipulate and analyze data more efficiently. They will also learn how to apply data analytics skills to real-world scenarios through case studies and class projects.

Students will also sit for the Microsoft Excel Certificate exam via CertiPort.

Prerequisites: Acceptance to the master's degree in Product Management for Manufactured Goods Program.

MGT 5501

Principles of Product Management for Manufactured Goods

3cr

This course provides an overview of product management for manufactured goods, including the basic skills and tools needed to develop, launch, and manage successful products. Students will learn about the product manager's role and the product development lifecycle, starting from market research and analysis to the creation of a product strategy and roadmap, and finally, the launch of the product. Through case studies and group projects, students will gain hands-on experience in product management and develop the basic skills required for an entry level product management position.

MGT 5502

Project Management Fundamentals

3cr

This course provides an introduction to project management concepts, tools, and techniques for those who are new to the field or have limited experience in managing projects. Students will learn how to define project scope, develop a project plan, allocate resources, monitor project progress, and close out projects as related to product management. The course emphasizes practical application and case studies to demonstrate how project management methodologies can be applied product management. Student will

also sit for the PMI Project Management Ready Certificate exam via CertiPort.
Prerequisites: Data Analytics & Excel Fundamentals (MGT-5500)

MGT 5503

Product Marketing for Manufactured Goods

3cr

This course will explore the essential elements of product marketing and equip students with the skills and knowledge required to create effective marketing strategies. The course will cover topics such as market research, customer segmentation, product positioning, pricing, and promotion. Throughout the course, students will engage in case studies and real-world examples to help them understand how these strategies are applied in practice.

Prerequisites: Data Analytics & Excel Fundamentals (MGT-5500)

MGT 5504

Engineering & Manufacturing Foundations

3cr

This course is designed for students to develop their foundational knowledge of engineering and manufacturing processes as it relates to product management of manufactured goods. The course covers topics such as engineering design principles, manufacturing processes, material selection, quality control, supply chain management, cost estimation, prototyping, and production planning. Students will engage in interactive discussions and team-based activities to develop practical skills in working with engineering and manufacturing teams, and guest speakers from industry will share their experiences and insights.

Prerequisites: Data Analytics & Excel Fundamentals (MGT-5500)

MGT 5505

Advanced Product Management for Manufactured Goods

3cr

The Advanced Product Management course is a comprehensive program that expands upon the Principles of Product Management course. Its purpose is to provide students with a more extensive understanding of product management, enabling them to excel in product management positions. The course

encompasses a broad spectrum of subjects, such as product innovation, portfolio management, best practices from concept to launch, and the gate model.

Prerequisites: MGT 5501- Principles of Product Management

MGT 5506

Product Management Experience

3cr

Product Management Experience is a hands-on course that exposes students to the realities of product management through company visits, plant tours, panel discussions, and a final reflection paper. Students gain insight into product management challenges and successes, engage in conversations with experienced product managers, and synthesize their experiences in a final paper. This course provides students with a deeper understanding of product management and a network of contacts in the field.

Prerequisites: MGT 5500- Data Analytics & Excel Fundamentals

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. Executional 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 Statistics (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 1050 Elementary Statistics (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 on secondary teaching should include:

- MTH 2080 Modern Geometry (4 cr.)

- MTH 3030 Probability (4 cr.)

- MTH 3050 Statistics (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 five core courses (20 cr.), one course each in statistics, computing, data software, and ethics (12 cr.), and two portfolio seminars (2 cr.). Required courses include:

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.)
MTH 4990	Senior Thesis Completion	(0 cr.)

Choose one of the following:

Statistics Course:

BUS/ECN 2340	Applied Statistics for Management and Economics	(4 cr.)
MTH 1050	Elementary Statistics	(4 cr.)
MTH 1055	Statistics for Social Justice	(4 cr.)
MTH 3050	Statistics	(4 cr.)
EXS/NSG 2330	Applied Statistics for Health and Human Services	(4 cr.)

Choose one of the following:

Computing Course:

CSC 1100	Introduction to Computing	(4 cr.)
CSC 1810	Principles of Computer Science	(4 cr.)

Choose one of the following:

Data Software Course:

BUS 2150	Business Geographics and Data Visualization	(4 cr.)
CSC 2810	Database Design and Management	(4 cr.)

Choose one of the following:

Ethics Course:

BUS 2110	Business Ethics	(4cr.)
MTH 2190	Ethics in Data Science	(4 cr.)

Students also design and complete a three-course (12-credit) applied concentration, in consultation with a faculty mentor. Applied concentrations must be approved by the chair of the Mathematics Department.

Data Science Minor

The Data Science Minor is composed of 6 courses (24 cr.).

Required courses include:

CSC 1030	Data Science I	(4 cr.)
CSC 1040	Data Science II	(4 cr.)

Choose one of the following:

Statistics Course:

BUS/ECN 2340	Applied Statistics for Management and Economics	(4 cr.)
MTH 1050	Elementary Statistics	(4 cr.)
MTH 1055	Statistics for Social Justice	(4 cr.)
MTH 3050	Statistics	(4 cr.)
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.)
ECN 400T	Big Data in Economics and Public Policy	(4 cr.)
FIN 3110	Intermediate Financial Modeling with MS Excel	(4 cr.)
GEO 1210	Internet Mapping and Web GIS	(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 3610	Applied Projects in Geographic Information Science	(4 cr.)
MGT 3100	Introduction to Business Analytics	(4 cr.)
MTH 3090	Mathematics of Data Science	(4 cr.)
NEU 3600	Computational Analysis in the Life Sciences	(4 cr.)
MTH 2190	Ethics in Data Science	(4 cr.)
MTH 200T	Text Mining and Natural Language Processing	(4 cr.)

Honors in the Major

Students wishing to earn honors in mathematics or data science must fulfill the following requirements:

1. The student must have a 3.5 GPA in their major coursework at graduation.
2. The student must present a mathematics/data science talk at an off-campus venue. The talk and venue must be approved by the Mathematics Department chair.
3. The student must pass an oral examination before a jury composed of three members of the Mathematics Department. Data

science majors may substitute one Carthage faculty member associated with their Applied Concentration. 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)(QR)

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 this course after receiving credit for any MTH course numbered 1120 or above without approval of the Mathematics Department chair. Fall/J-Term/Spring

MTH 1035

Quantitative Social Justice (DIV)(MTH)(QR)

4cr This course provides foundational quantitative reasoning skills through study of issues related to diversity, equity, and inclusion. We identify, measure, and analyze evidence of inequality and disparities of opportunities and outcomes, as well as phenomena and trends relevant to social justice.

MTH 1040

Principles of Modern Mathematics (MTH)(QR)

4cr

An introduction to set theory, problem-solving, geometry, algebra, probability, and statistics, with selected applications for each. The course satisfies teacher certification requirements. A student may not receive

credit for this course after receiving credit for any MTH course numbered 1120 or above without approval of the Mathematics department chair. Fall/J-Term/Spring

MTH 1050

Elementary Statistics (MTH)(QR)

4cr

Methods of determining averages, variability, hypothesis testing and correlation, and of testing the significance of the statistics, prediction, and distribution-free statistics. A student may not receive credit for this course after receiving credit for any other statistics course without approval of the Mathematics Department chair. 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)(QR)

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 with a grade of C- or better, or high school preparation Fall/Spring

MTH 1220

Calculus II (MTH)

4cr

A study of transcendental functions, infinite series, mean-value theorem, polar coordinates, integration, and application of integration. Students completing this course with a grade of C or better will be awarded credit for MTH 1120. Prerequisite: MTH 1120 with C- or better 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 with a grade of C- or better Fall

MTH 2040

Linear Algebra (MTH)

4cr

An examination of linear equations, matrices, vector spaces, transformations, and eigensystems. Prerequisite: MTH 1120 Fall/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

Spring

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 with a grade of C- or better.

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

MTH 2190**Ethics in Data Science**

4cr

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.

Prerequisite: CSC 1030

J-Term

MTH 2190W**Ethics in Data Science (WI) (WC)**

4cr

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.

J-Term

MTH 3030**Probability (MTH)**

4cr

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

MTH 3040**Abstract Algebra I (MTH)**

4cr

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

MTH 3050**Statistics (MTH)**

4cr

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

MTH 3090**Mathematics of Data Science (QR)**

4cr

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 1100 or CSC 1810

Spring

MTH 3120**Real Analysis (MTH)**

4cr

Fundamental concepts of analysis, limits, continuity, differentiation, and integration. Major topics include the real number system, sequences, series, the Riemann integral, and the gauge integral.

Prerequisites: MTH 1240 and MTH 2040

Spring

MTH 3140**Abstract Algebra II (MTH)**

4cr

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

MTH 3180**Introduction to Topology (MTH)**

4cr

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

MTH 3220

Complex Variables (MTH)

4cr

This course is an introduction to complex analysis, including the Cauchy-Riemann equations, Cauchy's theorem, residue theory, and conformal mapping.

Prerequisite: MTH 1220

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

A study of differential equations, partial differential equations, multiple integration, Laplace transforms, Fourier transforms, and vector analysis. Most spring semesters.

Prerequisite: MTH 2020 with a grade of C- or better

Spring of odd number years

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 (OC)

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

Fall

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 global 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 Global Language requirement, please note the following:

You may be exempted from the Global 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:

2010-2020 Language Acquisition	(8 cr.)
2200 Cultural Awareness Orientation	(1 cr.)
3010 *Language Acquisition	(4 cr.)
3010 L Language Competency Exam	(0 cr.)
<i>*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.</i>	
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.)
3110 Interpreting Written Texts in French/German/Spanish	(4 cr.)
4010 Senior Seminar	(4 cr.)
4240 Theatre	(4 cr.)
OR	
400T Special Topics in the Language	(4 cr.)
<i>Also required*:</i>	
GNR Immersion Abroad 3510	(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 Modern Language Department chair 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 3010 L. Passing scores on these evaluations are required before a student can enroll in courses numbered 3080 or higher.*

3110 Interpreting Written Texts in French/German/Spanish	(4 cr.)
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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 2010 Elementary Chinese/ Japanese I	(4 cr.)
CHN/JPN 2011 Elementary Oral Chinese/ Japanese I	(1 cr.)
CHN/JPN 2020 Elementary Chinese/ Japanese II	(4 cr.)
CHN/JPN 2021 Elementary Oral Chinese/ Japanese II	(1 cr.)
MLA 2200 Cultural Awareness	(1 cr.)
CHN/JPN 3010 Intermediate Chinese/ Japanese I	(4 cr.)
CHN/JPN 3011 Intermediate Oral Chinese/Japanese I	(1 cr.)
CHN/JPN 3020 Intermediate Chinese/ Japanese II	(4 cr.)
CHN/JPN 3021 Intermediate Oral Chinese/Japanese II	(1 cr.)
GNR 3510 Immersion Abroad	(12-16 cr.)
CHN/JPN 4070 Advanced Chinese/ Japanese	(4 cr.)
CHN/JPN 4010 Senior Seminar	(2-4cr.)

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 Modern Language department chair 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 2010 Elementary Chinese/ Japanese I	(4 cr.)
CHN/JPN 2011 Elementary Oral Chinese/ Japanese I	(1 cr.)
CHN/JPN 2020 Elementary Chinese/ Japanese II	(4 cr.)
CHN/JPN 2021 Elementary Oral Chinese/ Japanese II	(1 cr.)
CHN/JPN 3010 Intermediate Chinese/ Japanese I	(4 cr.)
CHN/JPN 3011 Intermediate Oral Chinese/ Japanese I	(1 cr.)
CHN/JPN 3020 Intermediate Chinese/ Japanese II	(4 cr.)
CHN/JPN 3021 Intermediate Oral Chinese/ Japanese II	(1 cr.)

Choice of one 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.)
CHN/JPN 4070 Advanced Chinese/Japanese	(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)(GL)

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) (GL)**

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 2011 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 2011 or equivalent
Corequisite: CHN 2020
Spring

CHN 2070**Calligraphy and Chinese/Japanese Language (CL)(ITL)**

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

While proceeding 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

CHN 3011**Intermediate Oral Chinese I**

1cr

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

CHN 3020**Intermediate Chinese II**

4cr

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

CHN 3021

Intermediate Oral Chinese II

1cr

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

CHN 3070

Chinese/Japanese Culture and Language (CL)(WC)(ITL)

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

CHN 3080

Chinese and Japanese Literature and Culture (HUM)(CL)(WC)(ITL)

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

CHN 4070

Advanced Chinese

4cr

This 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

Japanese

JPN 1010

Introductory Japanese I (MLA) (GL)

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) (GL)

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 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 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 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 (CL)(ITL)

4cr
This course integrates language and cultural studies through calligraphy, the writing of Chinese Hanzhi 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

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

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

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

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

JPN 3080

Chinese and Japanese Literature and Culture (HUM)(CL)(ITL)

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 (CL) (ITL)

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) (CL) (ITL)

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

Asian Culture Through Films (HUM)(CL)(ITL)

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 film-making; 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 have instructor's consent

MLA 4200

Methods and Materials in Teaching Modern Languages

4cr

A study of the philosophies, methods, and materials used by the classroom teacher in elementary, middle, and secondary modern language classrooms. Emphasis will be placed on the practical teaching application of the communicative approach. Fieldwork required. The methods course can be taken before or after the language immersion experience (16 credits of study abroad for majors, four weeks immersion experience for minors). Students should check with the Modern Language department the first semester of their sophomore year to plan for this course. Prerequisite: 3010 or equivalent in the target language
Fall only

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

French**FRN 1010****Elementary French I (MLA)(GL)**

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.

Fall/Spring

FRN 1020**Elementary French II (MLA)(GL)**

4cr

This course teaches listening, speaking, reading, and some writing skills in French 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 French, using basic language structures. They also will be able to employ constructively a broad range of vocabulary related to the themes studied and to survival communication and cultural needs.

Prerequisite: FRN 1010 or equivalent
Fall/Spring

FRN 2010**Intermediate French 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 French and exposing students to native French speakers and cultural events.

Prerequisite: FRN 1020 or equivalent
Spring only

FRN 2020**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
Fall only

FRN 3010**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
Fall/Spring

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)(CL)(OC)(ITL)**

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)(CL) (ITL)**

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)(CL)(ITL)**

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 (CL) (ITL)**

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)(CL) (ITL)

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)(GL)

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)(GL)

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

GRM 2010

Intermediate German 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 German and exposing students to native German speakers and cultural events.

Prerequisite: GRM 1020 or equivalent
Spring

GRM 2020

Intermediate German II

4cr

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.

Prerequisite: GRM 2010 or equivalent
Fall

GRM 3010

Advanced German

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: GRM 2020 or equivalent
Spring

GRM 3030

German 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: GRM 3010 or consent of department chair
Fall/Spring

GRM 3080

German-Speaking World: Social, Political, and Economic Issues (HUM)(CL)(OC)(ITL)

4cr

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.

Prerequisites: GRM 3010 and GRML 3010 or consent of instructor
Alternate Fall semesters

GRM 3090

German-Speaking World: Cultural and Intellectual Life (HUM)(CL) (ITL)

4cr

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.

Prerequisites: GRM 3010 and GRML 3010 or consent of instructor
Alternate Fall semesters

GRM 3110**Interpreting Written Texts (HUM) (CL)(ITL)**

4cr

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.

Prerequisites: GRM 3010 and GRML 3010
Spring

GRM 4010**Senior Seminar in German (CL) (ITL)**

4cr

A capstone experience in which 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.

Prerequisites: Senior standing or consent of instructor and GNR 3510
Spring

GRM 4240**German Theatre (HUM)**

4cr

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. The course may fulfill a topics course requirement of the major.

Prerequisites: GRM 3080 or 3090 and 3110 and GNR 3510 or consent of instructor

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.

Spanish**SPN 1010****Elementary Spanish I (MLA)(GL)**

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 1020**Elementary Spanish II (MLA)(GL)**

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

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 2020 or equivalent

Fall/Spring

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

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.

Fall/Spring

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)(CL)(OC)(ITL)

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)(CL) (ITL)

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)(CL)(ITL)

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 (CL)(ITL)

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)(CL)(ITL)

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

SPNL3010

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:

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 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 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 3050 Music History I	(4 cr.)
MUS 3060 Music History II	(4 cr.)
MUS 400T Music History Depth Elective	(4 cr.)
MUS 4990 Senior Thesis Completion	(0 cr.)
MUS 0700 *Recital Attendance (8 terms)	(0 cr.)
*Applied lessons in a single performance area (1 cr., 8 terms)	(8 cr.)
*Ensemble participation (8 terms)	(0 cr.)

*All student teachers are granted waivers for lessons, ensemble, and recital attendance in the semester they plan to student teach.

Music majors are placed in an approved ensemble in their principal performing area.

Additional Emphases

In addition to the emphases in music education, Carthage offers additional emphases in music performance and piano pedagogy for students who seek further depth and skills development.

Emphasis in Vocal Performance (16 cr.)

In addition to the core music major, the

following courses are required of students pursuing an emphasis in Vocal Performance:

MUS 2180 Conducting Fundamentals	(2 cr.)
MUS 2490 Vocal Diction and Literature	(4 cr.)
MUS 2210 Opera	(4 cr.)
MUS 3490 Vocal Pedagogy	(2 cr.)
Additional applied lessons in the principal performance area	(4 cr.)
MUS 4980 Half Recital Completion	(0 cr.)
Satisfactory full recital	(0 cr.)

Additional notes:

Students in the Vocal Performance track are strongly encouraged to participate in the opera lab class and J-Term opera productions.

Electives in acting and dance are strongly encouraged.

Emphasis in Instrumental Performance (16 cr.)

In addition to the core music major, the following courses are required of students pursuing an emphasis in Instrumental Performance:

MUS 2180 Conducting Fundamentals	(2 cr.)
MUS 3010 Seminar in Form and Analysis	(2 cr.)
MUS 2000 A Survey of Symphonic Literature	(4 cr.)
<i>*Piano performance students take MUS 4101 (2 cr.) and MUS 4102 (2 cr.), not MUS 2000</i>	
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 I	(2 cr.)
MUS 2520 Piano Pedagogy II	(2 cr.)
MUS 3510 Piano Pedagogy Practicum (1 cr. course, 2 terms)	(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 0550 Composition Lessons (1 cr. course, 6 terms)	(6 cr.)
MUS 1800 Introduction to Music Technology	(2 cr.)
MUS 1900 Electronic Music	(4 cr.)
MUS 3010 Seminar in Form and Analysis	(2 cr.)
MUS 3120 Orchestration	(2 cr.)

Bachelor of Music in Musical Theatre (90-98 cr.)

Musicianship and Musical Performance:

MUS 00*	Ensemble Participation	(0-4 cr.)	4110	Musical Theatre: Showcase	(4 cr.)
	(4 terms required)			Senior Thesis Completion	(0 cr.)
MUS 0160	Keyboard Skills I	(2 cr.)	MUS 4990	MUS 0010, 0020, or 0240 Ensemble participation	(0-8 cr.)
	(1 cr. course, 2 terms)			(4 terms)	
MUS 0170	Keyboard Skills II	(2 cr.)	MUS 4990	Senior Thesis Completion	(0 cr.)
	(1 cr. course, 2 terms)			<i>Theatre/Dance Studies:</i>	
MUS 0250	Private Voice	(8 cr.)	DNC	Dance Electives	(6 cr.)
	(1 cr. course, 8 terms)			(1 cr. courses, 6 terms)	
MUS 0400	Movement for Singers	(4 cr.)	THR 2110	Acting I	(4 cr.)
	(2 cr. course, 2 terms)		THR 2900	Play Reading and Analysis	(4 cr.)
MUS 0700	Recital Attendance	(0 cr.)	THR 2910	Play Production I	(4 cr.)
	(0 cr. course, 4 terms)		OR		
MUS 1010	Music Theory I	(3 cr.)	THR 2920	Play Production II	(4 cr.)
MUS 1020	Aural Skills I	(1 cr.)	THR 3110	Acting II	(4 cr.)
MUS 1030	Music Theory II	(3 cr.)	THR 3100	Voice for the Stage	(4 cr.)
MUS 1040	Aural Skills II	(1 cr.)	THR 4110	Acting III	(4 cr.)
MUS 1620	Music Theatre		THR 0100	Theatre Service and Practice	(0 cr.)
				(2 terms required)	
	Techniques I: Song Analysis	(4 cr.)	Minor in Music (20 cr.)		
	Music Theatre		Requirements:		
MUS 1630			MUS 1010	Music Theory I	(3 cr.)
	Techniques II: Song Analysis	(4 cr.)	MUS 1020	Aural Skills I	(1 cr.)
	Popular Music in America	(4 cr.)	MUS 1030	Music Theory II	(3 cr.)
MUS 2200			MUS 1040	Aural Skills II	(1 cr.)
MUS 2620	Music Theatre Workshop	(0-4 cr.)	MUS 0700	Recital Attendance	(0 cr.)
	(2 terms required)			(4 terms)	
MUS 2640	Music Theatre		MUS 2110	Introduction to Western Music History	(4 cr.)
	Techniques III: Scene into Song	(4 cr.)		<i>Choose One:</i>	
MUS 2650	Music Theatre		MUS 3050	Music History I	(4 cr.)
	Techniques IV: Duets	(4 cr.)	or		
MUS 3400	Music Theatre History	(4 cr.)	MUS 3060	Music History II	(4 cr.)
MUS 3660	Musical Theatre			Applied music lessons in the principal performance area (4 cr., 1 cr. each term)	
	Techniques V: Pop/Rock 1930s-1970s	(4 cr.)		Ensemble participation (0 cr., 4 terms)	
MUS 3670	Musical Theatre VI:			Music minors are placed in an approved ensemble in their principal performing area.	
	Pop/Rock 1980s-Present	(4 cr.)		Minor in Music Theatre (22-24 cr.)	
MUS 4100	Audition/Business Skills	(2 cr.)		Requirements:	
MUS	Senior Seminar in				

MUS 0160	Keyboard Skills I	(1 cr.)	MUS 0150 Private Piano	(12 cr.)	MUS 3510 Piano Pedagogy Practicum	(0 cr.)
MUS 0170	Keyboard Skills II	(1 cr.)	(1 cr. course, 12 courses)		(0 cr. course, 2 terms)	
MUS 0250	Private Voice		MUS 0450 Private Organ	(2 cr.)	MUS 3520 Performance Practice I	(2 cr.)
	(1 cr. per semester, 4 cr. total)	(4 cr.)	(1 cr. course, 2 courses)		MUS 3530 Performance Practice II	(2 cr.)
MUS 1620	Music Theatre Techniques I	(2 cr.)	MUS 0700 Recital Attendance	(0 cr.)	MUS 400* Music History Depth Elective	(8 cr.)
MUS 1630	Music Theatre Techniques II	(2 cr.)	(0 cr. course, 8 terms)		(2 courses, 4 cr. each)	
MUS 2620	Music Theatre Workshop		MUS 1010 Music Theory I	(3 cr.)	MUS 4101 Piano Literature I	(2 cr.)
	(0-1 cr. per semester, 2 semesters required)	(0-2 cr.)	MUS 1020 Aural Skills I	(1 cr.)	MUS 4102 Piano Literature II	(2 cr.)
MUS 3400	Music Theatre History	(4 cr.)	MUS 1030 Music Theory II	(3 cr.)	MUS 4800 Senior Seminar for Pianists	(2 cr.)
THR 2110	Acting I: Fundamentals of Acting (for Majors and Minors)	(4 cr.)	MUS 1040 Aural Skills II	(1 cr.)	MUS 4980 Half Recital Completion	(0 cr.)
Choose 1			MUS 1800 Introduction to Music Technology	(2 cr.)	MUS 4985 Collaborative Half Recital Completion	(0 cr.)
MUS 400*	TP: Movement for Singers	(1-4 cr.)	MUS 2010 Music Theory III	(3 cr.)	MUS 4990 Senior Thesis Completion	(0 cr.)
or			MUS 2020 Aural Skills III	(1 cr.)	Ensemble participation (2-6 terms) and either 4 additional terms of Ensemble participation	(0-10 cr.)
any applied Dance (DNC) course		(1-4 cr.)	MUS 2030 Music Theory IV	(3 cr.)	<i>or</i>	
			MUS 2040 Aural Skills IV	(1 cr.)	MUS 2540 Collaborative Practicum	(0-4 cr.)
			MUS 2075 Instrumental Chamber Music Workshop	(0-4 cr.)	(*students should consult their faculty advisor for appropriate placement)	
			(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.)		

*An audition is required for admission to the Music Theatre minor

Bachelor of Music in Piano Performance and Collaborative Piano (84-98 cr.)

Core curriculum (72-86 cr.)

Students must take the following:

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 (BMME) with Certifications in Instrumental Music Education and Vocal Music Education. The BMME 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 BMME 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 BMME 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 BMME

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). BMME 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. BMME 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.)
	Primary Applied Lesson	(7 cr.)
	(1 cr. course, 7 terms)*	
	Primary Large Ensemble	(0-7 cr.)
	(0-1 cr. course, 7 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	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 2180	Conducting	
	Fundamentals	(2 cr.)
MUS 3050	Music History I	(4 cr.)
MUS 3060	Music History II	(4 cr.)
MUS 400*	Music History	
	Depth Elective	(4 cr.)
MUS 4980	Half Recital Completion	(0 cr.)

*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.):

MUS 1180	Introduction to Music Education	(2 cr.)
MUS 1190	Exploring PreK-12 Music Curriculum	(4 cr.)
MUS 2710	Culturally Responsive Music Pedagogy	(4 cr.)
MUS 3200	Field Experience**	(0 cr.)
MUS 4210	General Music Methods	(4 cr.)

**To be taken concurrently with MUS 1180, 1190, 2710, 4200, 4210, and 4220.

Instrumental Music Education Concentration (14 cr.):

MUS 2050	Woodwind Techniques	(1 cr.)
MUS 2060	Brass Techniques	(1 cr.)
MUS 2070	Percussion Techniques	(1 cr.)
MUS 2080	String Techniques	(1 cr.)
MUS 2740	Choral Pedagogy for Instrumentalists	(2 cr.)
MUS 2900	Instrumental Conducting and Techniques	(2 cr.)
MUS 3120	Orchestration	(2 cr.)
MUS 4200	Instrumental Music Methods	(4 cr.)

Vocal Music Education Concentration (14 cr.):

MUS 2750	Band and Orchestra Pedagogy for Vocalists	(2 cr.)
MUS 2910	Choral Conducting and Techniques	(2 cr.)
MUS 3130	Choral Literature	(2 cr.)
MUS 3150	Choral Rehearsal Techniques	(2 cr.)
MUS 3490	Vocal Pedagogy	(2 cr.)
MUS 4220	Vocal Music Methods	(4 cr.)

Professional Education (20 cr.):

EDU 2010	Educational Psychology and Assessment	(4 cr.)
EDU 2050	Teaching Learners with Diverse Characteristics	(4 cr.)
EDU 4900	Student Teaching/Seminar	(12 cr.)

MUS 0010

Carthage Choir (AI)(WEL)

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 (AI)(WEL)

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 (AI)(WEL)

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 (AI)(WEL)

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 0051

Concert Band (AI)(WEL)

0-2cr
The Carthage Concert Band focuses on developing ensemble performance skills while performing standard band repertoire and music written for pedagogical practice. Serves as the lab ensemble for music education students, and presents concerts for campus and community events. Membership is by individual audition.

MUS 0070

Carthage Philharmonic (AI)(ITL)(WEL)

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 (AI)(WEL)

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 (AI) (WEL)

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.

MUS 0150

Private Piano (AI)

1cr

Applied piano study focused on the development of proper technique, appropriate literature, and performance skills.

MUS 0160

Keyboard Skills I

1cr

Introduction to the basic fundamentals of keyboard study including elementary solo repertoire.

Prerequisite: Music major status or consent of department

MUS 0170

Keyboard Skills II

1cr

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

MUS 0180

Keyboard Skills III

1cr

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

MUS 0190

Keyboard Skills IV

1cr

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

MUS 0200

Class Voice

1cr

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.

MUS 0210

Class Guitar (AI)

1cr

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.

MUS 0240

Carthage Treble Choir (AI)(WEL)

0-1cr

The Carthage Treble Choir regularly sings both sacred and secular music on and off campus. Membership by individual audition.

MUS 0250

Private Voice (AI)

1cr

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.

MUS 0300

Keyboard Seminar

0cr

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

MUS 0450

Private Organ (AI)

1cr

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.

MUS 0550

Private Instrument (AI)

1cr

Study will focus on development of technique, literature, and performance skills. Principles 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.

MUS 0650

Private Conducting (AI)

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 (AI)

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 (AI)(QR)

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 (AI)(QR)

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)(AI)

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.

MUS 1151

Musicking for Health and Wellness (WEL)

2cr
This course is an introduction to recent research and practices pertaining to the health and wellness benefits of musicking (ways of musicking include: singing, playing, kinesthetically responding, listening, creating, and reading), particularly as these benefits relate to physical, psychological, and social well-being. Learners will be actively engaged in musicking. No prior music experience is required to be successful in this course.
Prerequisites: None

MUS 1151

Musicking for Health and Wellness (WEL)

2cr
This course is an introduction to recent research and practices pertaining to the health and wellness benefits of musicking (ways of musicking include: singing, playing, kinesthetically responding, listening, creating, and reading), particularly as these benefits relate to physical, psychological, and social well-being. Learners will be actively engaged in musicking. No prior music experience is required to be successful in this course.

Prerequisites: None

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 (SI)(WEL)

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.
Concurrent requisite: MUS 3200

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
Concurrent requisite: MUS 3200

MUS 1300

Introduction to Music Therapy

2cr
This course will provide an overview of the health care profession of Music Therapy with a focus on the principles, frameworks, and applications of therapeutic music across a variety of clinical populations. Basic brain and neurological responses to music as well as the social and psychological influences of music will be explored.

MUS 1400**Thinking Musically (AI) (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: Song Analysis**

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 1630**Music Theatre Techniques II: Song Analysis**

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.

Prerequisites: MUS/THR 1620 or instructor permission

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 (FAR) (AI)**

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)(CL)(ITL)**

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 (CL)(QR)**

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 (AI)**

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 (AI)(QR)**

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 (AI)**

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 (AI)**

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 (AI)**

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 (AI)**

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 (AI)**

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 (AI)

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 (SI)

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 (CL)

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 (AI)

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)(CL)

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 (AI)

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 2491

Lyric Diction and Literature: English

1cr

This course focuses on enunciation and transcription of the English language as applied to lyric diction. Students will be equipped with an understanding of the International Phonetic Alphabet, in addition to the rules associated with the authentic

execution of the English language. In addition, students will be introduced to a thorough and functional knowledge of the rich body of English art song, and assigned individual pieces to study and perform in class.

MUS 2492

Lyric Diction and Literature: Italian

1cr

This course focuses on enunciation and transcription of the Italian language as applied to lyric diction. Students will be equipped with an understanding of the International Phonetic Alphabet, in addition to the rules associated with the authentic execution of the Italian language. In addition, students will be introduced to a thorough and functional knowledge of the rich body of Italian art song, and assigned individual pieces to study and perform in class.

MUS 2493

Lyric Diction and Literature: German

1cr

This course focuses on enunciation and transcription of the German language as applied to lyric diction. Students will be equipped with an understanding of the International Phonetic Alphabet, in addition to the rules associated with the authentic execution of the German language. In addition, students will be introduced to a thorough and functional knowledge of the rich body of German art song, and assigned individual pieces to study and perform in class.

MUS 2494

Lyric Diction and Literature: French

1cr

This course focuses on enunciation and transcription of the French language as applied to lyric diction. Students will be equipped with an understanding of the International Phonetic Alphabet, in addition to the rules associated with the authentic execution of the French language. In addition, students will be introduced to a thorough and functional knowledge of the rich body of French art song, and assigned individual pieces to study and perform in class.

MUS 2510**Piano Pedagogy I (SE)**

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 (SE)**

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.

MUS 2620**Music Theatre Workshop (AI)**

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 2640**Musical Theatre Techniques III: Scene into Song**

4cr

This course takes the foundations worked on in MT Techniques I and II and combines them with the scene work that happens before the songs are sung. Performers work with scene partners and the course instructor to develop character choices and learn the art of combining scenic work and song analysis.

Students will use selections from the Musical Theatre canon to put scenes and songs on their feet for feedback and performative assessment. Prerequisite MUS 1630

MUS 2650**Musical Theatre Techniques IV: Duets and Trios**

4cr

This course continues to build off of MT Techniques I, II, and III, allowing students to work collaboratively in duets, trios, and small groups, on the art of acting and singing with others. Performers work with multiple scene partners, crafting their story, character, and ability to fully integrate the elements of storytelling and well-crafted performances. Students will use selections from the Musical Theatre canon to put scenes and songs on their feet for feedback and performative assessment.

MUS 2710**Culturally Responsive Music Pedagogy (DIV)**

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 Concurrent requisite: MUS 3200

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 Concurrent requisite: MUS 3200

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 Concurrent requisite: MUS 3200

MUS 2900**Instrumental Conducting and Techniques(AI)**

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 2910**Choral Conducting and Techniques (AI)**

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 3000**Opera Production (CL)**

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 (AI)

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 of 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 music. In addition to assigned readings and written work, the course will include opportunities to play instruments, sing, and dance.

MUS 3050

Music History I (CL)

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. Prerequisite: Music major or minor status, or consent of the department.

MUS 3060

Music History II (CL)

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.

Prerequisite: Music major or minor status, or consent of the department.

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 3120

Orchestration (AI)

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 (AI)

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.

Concurrent prerequisite: MUS 3200

MUS 3155

Women in the 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 (AI)

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 (CL)

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 (AI)**

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.

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 3520

MUS 3660**1970s**

4cr

This course explores the various eras of Pop/Rock music by separating each decade (1930, 1940, 1950, 1960, and 1970) and requiring students to explore the differences and

similarities in each era of the genre of pop/rock music. Students will walk away with an in-depth understanding of pop music from the 1930s-1970s and how that translates into the genre of Musical Theatre and where the industry is headed, and what it requires of its performers. Using selections from the popular music canon, students will perform selections for feedback and performative assessment.

MUS 3670**Present**

4cr

This course explores the various eras of Pop/Rock music by separating each decade (1980, 1990, 2000, 2010, and current) and requiring students to explore the differences and similarities in each era of the genre of pop/rock music. Students will walk away with an in-depth understanding of pop music from the 1980s to the present day and how that translates into the genre of Musical Theatre, where the industry is headed, and what it requires of its performers. Using selections from the popular music canon, students will perform selections for feedback and performative assessment.

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 (AI)**

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 4109**Audition/Business Skills**

4cr

This course prepares students with audition and business skills in the musical theatre industry, allowing them to exit the course with a complete audition book, resume, website, headshots, and other materials needed to complete their senior year and go out into the industry. This course will explore professional organizations, personal branding, networking, and mock auditions.

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 and 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.

MUS 4200**Instrumental Music Methods (AI)**

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 microteaching off campus. Students seeking licensure are required to have a grade of C- or better.

Prerequisite: Must be accepted into the TEP
 Concurrent requisite: MUS 3200

MUS 4210

General Music Methods (AI)

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
 Concurrent requisite: MUS 3200
 Fall

MUS 4220

Vocal Music Methods (AI)

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
 Concurrent requisite: MUS 3200

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 (AI)

0cr

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.

MUS 5560

Ensemble

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.):

CHM 1010	General Chemistry I	(4 cr.)
CHM 1020	General Chemistry II	(4 cr.)
NEU 2100	Introduction to Behavioral Neuroscience	(4 cr.)
BIO 1110	Molecules, Cells, and Organisms	(4 cr.)
BIO 1120	Organisms, Populations, and Systems	(4 cr.)
NEU 2500	Neuroscience Research Methods and Statistical Analysis	(4 cr.)
NEU 3950	Neuroscience II: Cellular and Molecular Neuroscience	(4 cr.)
NEU 4000	Senior Thesis in Neuroscience	(4 cr.)
NEU 4100	Neuroscience III: Neuroanatomy and Physiology	(4 cr.)

And **three** (4 cr.) electives from any of the following courses:

BIO 2400	Genetics	(4 cr.)
BIO 3300	Advanced Human Anatomical Systems	(4 cr.)
BIO 3310	Advanced Human Physiological Systems	(4 cr.)
BIO 3500	Advanced Cell Biology	(4 cr.)
BIO 4310	Developmental Biology	(4 cr.)
CHM 2070	Organic Chemistry I	(4 cr.)
CHM 2080	Organic Chemistry II	(4 cr.)
CHM 3010	Biochemistry	(4 cr.)
CHM 3230	Analytical Chemistry I	(4 cr.)
CHM 3240	Analytical Chemistry II	(4 cr.)
CHM 4070	Advanced Organic Chemistry	(4 cr.)
PHY 3120	Electronics	(4 cr.)
PHY 4300	Electricity and Magnetism	(4 cr.)
PYC 2150	Sensation and Perception	(4 cr.)
PYC 2300	Cognitive Psychology	(4 cr.)
PYC 2850	Child and Adolescent Development	(4 cr.)
NEU 4900	Research in Neuroscience	(1-4 cr.)

NEU 2100

Introduction to Behavioral Neuroscience (NLAB)(SE)

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 development 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 3600

Computational Analysis in the Life Sciences

4cr

As scientists are able to collect bigger and more datasets, analyzing and making sense of this data has become the main challenge. This class will look at different datasets in imaging, bioinformatics, and behavior and give students insight into the tools used to process and understand them.

Prerequisite: NEU 2500 or BIO 2400 or CSC 1030

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.

Prerequisite: NEU 2100 or BIO 1120, or instructor approval
Fall

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: NEU 3950 with a grade of C- or better

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 view the teaching-learning process as an interactive and collaborative relationship with students and 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. Apply informatics and other technologies to plan, improve, and evaluate nursing and health care outcomes.
6. Integrate ethical and professional standards to guide professional nursing practice.
7. Analyze the influence of socio-political-economic factors that influence the provision of nursing and health care.

Requirements

Students in the Bachelor of Science in Nursing program must complete 56 credits within the major, along with 24 credits of required courses that support the major, and 50+ credits fulfilling Carthage's degree requirements. Minimum total credits for the degree are 130, 74 of which must be outside the major. The following courses are requirements for the Bachelor of Science in Nursing (BSN) degree.

Courses Required for the Nursing Major (56 cr.):

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 (includes practicum)
9. NSG 3022 Nursing Practice IV: Improving Maternal and Newborn Health Outcomes (includes practicum)
10. NSG 3024 Clinical Scholarship: Applying Evidence to Improve Health Outcomes (WI)
11. NSG 4020 Nursing Practice V: Improving Health Outcomes of Populations (includes practicum)
12. NSG 4022 Nursing Practice VI: Improving Health Outcomes in Complex Situations (includes practicum)
13. NSG 4024 Leading Systems of Care to Improve Health Outcomes
14. NSG 4026 Advanced Clinical Synthesis and Capstone (includes 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, SOC 2020 Cultural Anthropology, or SWK 1300 Introduction to Social Justice and Social Welfare, any CRJ course.)

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.

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. 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 (Understandings of Religion or equivalent)
 4. PYC 1850 (Lifespan Developmental Psychology for the Health Professional or equivalent)
 5. COR 1100 and 1110, or COR 1200 (or equivalent)
 6. Able to meet modern language requirement No course may be repeated more than once.
7. The most recent grade will be used in the calculation of the GPA.

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 (Understandings 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.

Students interested in transferring into the nursing program at Carthage should be aware that, because of Carthage's requirements, it is likely that most students' programs of studies will be delayed by a year if some of the science courses are not completed prior to admission. Hence, we highly recommend that students have completed the following courses, as a minimum, PRIOR to applying for transfer into the program:

1. Biology 2010 and 2020 or an equivalent sequence.
2. Chemistry 1010 and 1020 or an equivalent two-course introductory sequence.

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	95% or above
A-	93 - 94
B+	90 - 92
B	87 - 89
B-	84 - 86
C+	81 - 83
C	78 - 80
C-	74 - 77
D+	71 - 73
D	68 - 70
D-	65 - 67
F	<65

To continue in the nursing program, students must meet the following progression requirements:

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 necessarily mean dismissal from Carthage College. Students should confer with their advisor to

ascertain their eligibility to continue at Carthage.

2. **Course Grades:** 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. All nursing (NSG) and correlative courses (BIO, CHM, EXS, PYC, or SOC) must be passed with a grade of “C” or better.
 2. 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.
 3. 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.
 4. 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.
 5. 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.
 6. 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.
 7. 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.

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: CHM 1010, CHM 1020, BIO 2010, and BIO 2020

NSG 2015

Fundamental Core Concepts for Nursing Practice

3cr: Didactic, 1cr: Clinical/Lab

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, 1cr: Clinical/Lab

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) (QR)

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.

Prerequisites: Sophomore standing and accepted Nursing majors or declared Exercise and Sport Science or Allied Health majors.

NSG 3004

Clinical Science Integration Seminar (RN to BSN)

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 pharmacotherapeutics, 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 pharmacotherapeutics. 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 health care 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: EXS 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 health outcomes in mental health. 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 (SE)

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: EXS 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: 1.5:2.5

Equates to 105 hours of clinical with a nurse preceptor. Hours depend on the 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

Physics and Astronomy

Physics is the study of the fundamental principles that govern the entire cosmos, from the behaviors of subatomic particles to the structure of the universe as a whole. A physics major is a rigorous course of study that prepares students for careers in many different fields by promoting competency in computing, by sharpening quantitative and analytical skills, by building tenacity in problem-solving, and by developing the ability to model complex systems.

Recent Carthage physics majors who have chosen to pursue post baccalaureate studies have earned advanced degrees in physics, astrophysics, medical physics, and applied physics, as well as science journalism, aerospace engineering, and education. Those who have chosen employment after graduation have found success in a variety of careers, including finance, IT, technical project management, engineering, data science, energy consultancy, science teaching, and others.

The Physics and Astronomy Department offers two versions of the physics major, an

optional astrophysics concentration, and a minor. Students should consult faculty advisors in the Physics and Astronomy department to determine which of these options is the best fit for their interests, their degree completion timeline, and their career aims.

Bachelor of Arts in Physics (56 credits)

The Bachelor of Arts in Physics is a flexible degree option that combines traditional physics major rigor with freedom for students to explore their other academic or co-curricular passions. Students who intend to double-major, who like to keep their options open, or who seek cross-disciplinary careers such as patent law, entrepreneurship, or teaching are good candidates for the Bachelor of Arts in Physics.

Required courses:

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, the B.A. in physics requires 16 credits of additional Physics coursework at the 3000 level or higher. Students are encouraged to develop individual plans in consultation with a faculty advisor.

With approval of the department chair, up to 8 credits of electives may be selected from an approved list of science courses outside the Physics and Astronomy Department.

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.)

Bachelor of Science in Physics (72 credits)

The Bachelor of Science in Physics is structured to provide a strong foundation for students wishing to pursue graduate studies in physics, astrophysics, or applied physics. This degree option is also recommended for students seeking careers in physics research either in a university setting or within industry. Due to its program size, the Bachelor of Science in Physics cannot typically be completed in fewer than four years nor combined with any other major.

Required courses:

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 3200 Mechanics	(4 cr.)
PHY 3300 Thermodynamics	(4 cr.)
PHY 3960 Portfolio Seminar B	(1 cr.)
PHY 3970 Portfolio Seminar C	(1 cr.)
PHY 4120 Experimental Physics	(4 cr.)
PHY 4200 Quantum Mechanics	(4 cr.)
PHY 4300 Electricity and Magnetism	(4 cr.)
PHY 4900 Independent Research	(4 cr.)
PHY 4960 Portfolio Seminar D	(1 cr.)
PHY 4970 Portfolio Approval	(0 cr.)

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.)

Choose one Computational elective:

CSC 1820 Principles of Computer Science I	(4 cr.)
PHY 3170 Introduction to Computational Physics	(4 cr.)
PHY 3450 Data Analysis for Scientists and Engineers	(4 cr.)
MTH 2090 Mathematical Computing	(4 cr.)

Choose two Applied Physics electives:

PHY 3100 Optics and Waves	(4 cr.)
PHY 3120 Electronics	(4 cr.)
PHY 3470 Mathematics for Scientists and Engineers	(4 cr.)
PHY 4100 Astrophysics	(4 cr.)
PHY 4110 Observational Astrophysics	(4 cr.)
PHY 4150 Science of Global Climate	(4 cr.)
EGR 2100 Statics and Solid Mechanics	(4 cr.)
EGR 3100 Engineering Materials	(4 cr.)
EGR 3400 Thermal Fluids	(4 cr.)
EGR 3600 Dynamics	(4 cr.)

Astrophysics Concentration

Students with an interest in astrophysics or the space sciences may choose to pursue the astrophysics concentration within either version of the physics major.

PHY 3100 Optics and Waves	(4 cr.)
PHY 4100 Astrophysics	(4 cr.)
PHY 4110 Observational Astrophysics	(4 cr.)
PHY 3200 Mechanics	(4 cr.)
PHY 3300 Thermodynamics	(4 cr.)
PHY 4200 Quantum Mechanics	(4 cr.)
PHY 4300 Electricity and Magnetism	(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.

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 a traditional written senior 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.

PHY 1000

Physics for Future Presidents (NLAB)(SE)(QR)

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)(SE)(QR)

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)(SE)

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) (SE)

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

PHY 2100

Physics I (LAB SCI)(SE)

4cr

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; students with academic credit for MTH 1120 or who concurrently enroll in MTH 1120 or MTH 1220 require approval of the physics department.
Fall

PHY 2110

Physics II (LAB SCI)

4cr

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; students with academic credit for MTH 1120 or who

concurrently enroll in MTH 1120 or MTH 1220 require approval of the physics department.

Spring

PHY 2200

General Physics I (LAB SCI)(SE)

4cr

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

PHY 2210

General Physics II (LAB SCI)

4cr

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 grade of C- or better
Fall/Spring

PHY 2300

Modern Physics (LAB SCI)

4cr

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

PHY 2970

Physics Portfolio Seminar A

1cr

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. Concurrent enrollment in PHY 2210 required.
Spring

PHY 3100

Optics and Waves (NLAB)

4cr

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

PHY 3120

Electronics (LAB SCI)

4cr

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

PHY 3170

Introduction to Computational Physics

4cr

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 programming and introduces software development best practices.

Prerequisites: PHY 2210 and MTH 2020 OR PHY 2210 and concurrent enrollment in MTH 2020

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 grade of 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 2020 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: Permission of the instructor

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 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 data are used to reveal the physical properties of astronomical objects.

Prerequisite: PHY 2210 or departmental approval
J-Term

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

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

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

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

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

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

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 r sum s and curriculum vitae.

Prerequisite: PHY 3970 or departmental approval
Fall

PHY 4970

Physics Portfolio Approval

0cr

Department approval of portfolios for graduation occurs after the completion of PHY 4970 after students have completed their portfolios.

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:

Two courses from the area of American Government and Politics

Two courses from the area of Public Law and Judicial Politics

Two courses from the area of Comparative Government

Two courses from the area of International Relations

POL 1070 (Intro to Political Theory) and one additional Political Thought and Theory course

Political Science 4000

Political Science majors are not required to, but may, obtain a *concentration* in any of the five areas of the discipline by taking one additional class (for a total of three) in that area. Concentrations will be noted by the registrar and will be included in student transcripts.

For students seeking a concentration in Political Thought and Theory, POL 1070 and POL 3250 are both required courses, in addition to a third Political Thought and Theory course.

The CRJ 3300 Mock Trial Course cannot be used to meet the breadth requirement (two courses from the area of Public Law and Judicial Politics) on its own. However, it can count as the third required course for students seeking a concentration in Public Law and Judicial Politics.

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.

Other General Suggestions:

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

POL 1040	Introduction to Public Policy	(4 cr.)
POL 1500	American Government: National, State, and Local	(4 cr.)
POL 3510	Campaigns and Elections	(4 cr.)
POL 3520	America at War	(4 cr.)
POL 3530	Congress and the Presidency	(4 cr.)
POL 3580	American Foreign Policy	(4 cr.)
POL 3620	Environmental Politics	(4 cr.)

Comparative Politics

POL 1030	Introduction to Comparative Politics	(4 cr.)
POL 3030	Women of Africa	(4 cr.)
POL 3040	African Transitions	(4 cr.)
POL 3200	Women and Politics	(4 cr.)
POL 3330	Middle East Politics	(4 cr.)
POL 3360	Latin American Politics	(4 cr.)
POL 3370	Russian/East European Politics	(4 cr.)
POL 3380	West European Politics	(4 cr.)
POL 3400	Chinese Politics	(4 cr.)
POL 3450	Global Poverty	(4 cr.)

General Courses

POL 200T	Topics in Political Science	(1-4 cr.)
POL 2100	Politics and Film	(4 cr.)
POL 4000	Senior Seminar	(4 cr.)
POL 4050	Seminar in International Political Economy	(4 cr.)

International Relations

POL 1050	Introduction to International Relations	(4 cr.)
POL 1600	Model United Nations and Global Politics	(4 cr.)
POL 3350	Human Rights	(4 cr.)
POL 3330	Middle East Politics	(4 cr.)
POL 3600	International Security	(4 cr.)
POL 3610	Nuclear Proliferation	(4 cr.)
POL 3620	Environmental Politics	(4 cr.)

Political Thought and Theory

POL 1070	Introduction to Political Theory	(4 cr.)
POL 2050	Philosophical Foundations of Political Economy	(4 cr.)
POL 3110	Women’s and Gender Studies Theory	(4 cr.)
POL 3240	Contemporary Political Theory	(4 cr.)
POL 3250	Classics of Political Thought	(4 cr.)
POL 3260	Studies in Political Theory	(4 cr.)
POL 3270	Religion and Politics in the United States	(4 cr.)

Public Law and Judicial Politics

POL 1900	Constitutional Rights: Freedom of Expression	(4 cr.)
POL 1910	Law and Society	(4 cr.)
POL 3910	Constitutional Law: Civil Liberties and Civil Rights	(4 cr.)
POL 3920	Constitutional Law and the Separation of Powers	(4 cr.)
POL 3900	Comparative Law	(4 cr.)
POL 3930	Environmental Law	(4 cr.)

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)(SI)

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

POL 1040

Introduction to Public Policy

(SOC)(SI)

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.

POL 1050

Introduction to International Relations (SOC)(SI)

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.

Fall

POL 1070

Introduction to Political Theory (SOC)(CL)

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.

POL 1500

American Government: National, State, and Local (SOC)(SI)

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.

Fall/Spring

POL 1600

Model United Nations and Global Politics

4cr

This course provides students with an understanding of the role, impact, and significance of the United Nations as well as providing an understanding of the modalities of international diplomacy. This course will include current events, pressing international issues, the basics of international law and an exploration of global power relationships.

POL 1600

Model United Nations and Global Politics

4cr

This course provides students with an understanding of the role, impact, and significance of the United Nations as well as providing an understanding of the modalities of international diplomacy. This course will include current events, pressing international issues, the basics of international law and an exploration of global power relationships.

POL 1900

Constitutional Rights: Freedom of Expression (SOC) (SI)

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.

POL 1910

Law and Society (SI)

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.

POL 2050

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).

Fall

POL 2100

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.

POL 3030

Women of Africa (ITL) (SI)

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.

Prerequisite: Sophomore standing or instructor consent

POL 3040

African Transitions (SI) (ITL)

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.

Prerequisite: Sophomore standing or instructor consent

POL 3110

Women's and Gender Studies Theory (DIV)(SI)

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.

Prerequisite: Sophomore standing or instructor consent

POL 3200

Women and Politics (SOC)(SI) (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.

Prerequisite: Sophomore standing or instructor consent

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.

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 or instructor consent

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.

POL 3270

Religion and Politics in the United States (SOC)(SI)

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.

POL 3330

Middle East Politics (SOC)

4cr

This is an introductory course on the regional politics of the Middle East. The course will include both a comparative politics perspective (contrasting the domestic politics within different countries), as well as an international relations perspective (explaining varying relationships between countries). The content will be organized thematically (political economy, religion, poverty, human rights, conflict, etc.), but we will also use specific country case studies to illustrate different themes such as the Arab Spring, Israeli-Palestinian conflict, and the Syrian or other conflicts.

Prerequisite: None

POL 3350

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 3360

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 3370

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 (ITL) (SI)

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.

Prerequisite: Sophomore standing or instructor consent

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 1500 or instructor's consent
Fall

POL 3520

America at War (SI)

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 (SI) (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 3580

American Foreign Policy (SOC) (SI)

4cr

A study of the formulation and execution of foreign policy in the United States, together with an examination of the substantive issues of American foreign policy since World War II. A primary objective of the course is to provide the student with a basis for an intelligent analysis of current foreign policy issues.

POL 3600

International Security (SOC)(SI)

4cr

With the fall of the Berlin Wall in 1989 and the end of the Cold War in 1991, the world seemed to become a less threatening place and there was hope that a "New World Order" would bring peace and prosperity to all the world's inhabitants. Only a few years later the events in Bosnia, Somalia, Rwanda, and Kosovo, among others, have made some ask how the New World Order differs from the

old Cold War Order. Are we really more secure? This course will explore what it really means to be "secure" by examining some of the sources of conflict and instability that exist in the world today.

POL 3610

Nuclear Proliferation (SOC)(SI)

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 about Islamic and other legal systems.

POL 3910

Constitutional Law: Civil Liberties and Civil Rights (SOC) (SI)

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 3920

Constitutional Law and the Separation of Powers (SOC) (SI)

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 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
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 Cultural Psychology	(4 cr.)
PYC 400T Advanced Topics 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)(SE)

4cr

A team-taught introduction to the methods and principles of psychological science.

NOTE: Majors must pass this course with a grade of C- or better to move on in the major courses.

Fall/Spring

PYC 1850

Lifespan Developmental Psychology for the Health Professional (SI)

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)(IDP)

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)(QR)

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 (SI)

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

PYC 2200**Social Psychology (SOC)**

4cr

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

PYC 2300**Cognitive Psychology (SOC)**

4cr

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

PYC 2850**Child and Adolescent Development (SOC)(SI)**

4cr

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

PYC 3010**Research Methods and Statistics II (SOC)(WC)**

4cr

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, and PYC 2300 or NEU 2100

Spring

PYC 3200**Psychological Science of Teaching and Learning**

4cr

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

PYC 3400**Hormones and Behaviors (SOC)**

4cr

This course aims to explore the role hormones play in the study of behavior and development 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

PYC 3500**Abnormal Psychology (SOC)**

4cr

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

PYC 3600**Organizational Psychology**

4cr

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

PYC 3650**Childhood Psychopathology (SOC)**

4cr

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

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) (SI)

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.)
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 2220 Jesus Beyond Christianity (4 cr.)
REL 3510 Christians and Muslims: Conflict vs Dialogue (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.

PHL 1000

Introduction to Philosophy (HUM) (CL)

4cr

This course treats some essential works in Philosophy, from Plato to Nietzsche, and in that sense it gives students a broad introduction to the subject. But it is also an introduction to Philosophy in that it shows a variety of ways in which Philosophy has been understood and defined by the greatest thinkers, in particular as Philosophy relates to religion and to communities in which humans thrive as humans. Overall, the course considers the questions: What is Philosophy? And what is its value for human beings?
Fall/Spring

PHL 2400

Philosophy of Religion (CL) (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 4000

Senior Seminar in Philosophy (CL) (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.

REL 1000

Understandings of Religion (RP) (REL)

4cr

A study of the religious dimension in the lives of individuals, communities, and cultures. Students will explore understandings of religion and roles of religion, along with commonalities and differences in expression of religion. This will be accomplished by examining topics such as God, scripture, ritual, values, ethical issues, and cosmology, as expressed within several specific religious traditions, including Judaism and Christianity.
Fall/Spring

REL 2000

History of Christian Thought (CL) (REL)

4cr

Students will concentrate on major Christian issues, such as dogma, canon, creed, Christology, justification, salvation, word and sacraments, and church unity, from a historical and ecumenical point of view. Special attention will be given to the ways

history and cultures have influenced and shaped Christian thought.

REL 2010

Jewish Bible-Old Testament (REL) (CL)

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)(CL)

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)(CL)

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)(CL)

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) (CL)

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)(SI)

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) (DIV)(CL)

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 2210

Christianities in the Global South (REL)(CL)(ITL)

4cr

An overview of the expansion of Christianity especially in the global South where the majority of the world's Christians now live. The course examines the processes through which the Christian faith is communicated, received, and lived. Special attention is paid to theologies developed in Latin America, Asia, and Africa, and the factors that inform the theological process. Prerequisite: REL 1000

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) (SI)(IDP)(WEL)

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)(CL)

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) (CL)

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)(CL)(IDP)

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)(CL)**

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) (CL)**

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)(CL)**

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 (CL) (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)(CL)**

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) (DIV)**

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) (DIV)(CL)(WEL)**

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)(CL)**

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) (CL)(IDP)

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) (DIV)(SI)

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) (CL)(IDP)

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)(CL)(IDP)

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 religions 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)(SI)

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 3360

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.

REL 3370

Religion in Africa (REL) (CL) (ITL)

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) (CL)

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

REL 3510

Christians and Muslims: Conflict vs. Dialogue (REL)(SI)(ITL)

4cr

Christians and Muslims have been living together, and actively engaged with each other, for over 1,400 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 the 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 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 1500 American Government: National, State, and Local	(4 cr.)
SOC 1000 Introduction to Sociology	(4 cr.)

Choice of one additional supporting course with a focus on poverty (students may petition the Department Chair for other courses to meet this requirement):

- 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 (4 cr.)
- SWK 2400 Human Behavior in the Social Environment (4 cr.)
- SWK 2600 Ethics and Leadership in a Multicultural Society (4 cr.)
- SWK 3100 Social Welfare Policy Analysis (4 cr.)

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 Communication (4 cr.)
- EDU 2340 Foundations in Urban Education (4 cr.)
- EDU 4340 Urban and Cultural Leadership (4 cr.)
- ENG 3030 Major Texts in Critical Theory (4 cr.)
- GNR 200P Challenging White Supremacy and Practicing Anti-Racism (4 cr.)
- GNR 200R Legacies of Race and Racism in the U.S. (4 cr.)
- POL 3110 Women’s and Gender Studies Theory (4 cr.)
- POL 3450 Global Poverty (4 cr.)
- POL 3620 Environmental Politics (4 cr.)
- PYC 3460 Psychology of Women and Gender (4 cr.)
- SOC 2530 Race and Racisms (4 cr.)
- SOC/WMG 2770 Sex, Gender, and Sexuality in a Diverse World (4 cr.)
- SOC/SWK/WMG 2800 Decoding Disney (4 cr.)
- SWK 2200 Child Welfare Policy and Practice (4 cr.)
- SWK/WMG 2210 Family Violence (4 cr.)
- SWK 2500 Engaging Multicultural Students and Family (4 cr.)
- SWK 2650 Wounded Hearts: Interdisciplinary Exploration of Trauma and Recovery (4 cr.)
- SWK 2700 Trauma Across Social Contexts (4 cr.)
- SWK 400* Special Topics in Social Work (4 cr.)
- WMG 3010 Feminist Theory (4 cr.)
- WMG 4200 The Gendering of Leadership (4 cr.)

SWK 1200

Introduction to Music Therapy

2cr

This course will provide an overview of the health care profession of Music Therapy with a focus on the principles, frameworks, and applications of therapeutic music across a variety of clinical populations. Basic brain and neurological responses to music as well as the social and psychological influences of music will be explored.

SWK 1300

Introduction to Social Justice and Social Welfare (SI)

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 (SI)

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 (IDP)

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)(SI)**

4cr

This course will focus on human development and behavior across the lifespan 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 (SI)(OC)**

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 (SI)**

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.

Prerequisite for Social Work major and Social Justice minors: SWK 2400 or department approval

Prerequisite for others: Sophomore standing. Fall

SWK 2650**Wounded Hearts: Interdisciplinary Exploration of Trauma and Recovery (SI)(IDP)**

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 focuses 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)(SI)(WEL)**

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 (SI)(OC)**

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, families, and communities.

Prerequisite: SWK 2600

Spring

SWK 4200**Advanced Social Work Practice (SI)**

4cr

Advanced study of generalist social work intervention with agencies and community systems with emphasis on the acquisition of values, knowledge, and practice skills. Must be taken with SWK 3000 and SWK 4610.

Prerequisite: SWK 3300

Fall

SWK 4300

Integrative Seminar

4cr

Weekly seminar to integrate and synthesize social work theory and practice using critical reflection. Students will complete their Senior Applied Research in this course. Must be taken with SWK 4620.

Prerequisites: SWK 3000, SWK 4200, and SWK 4610

Spring

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

SWK 1200

Introduction to Music Therapy

2cr

This course will provide an overview of the health care profession of Music Therapy with a focus on the principles, frameworks, and applications of therapeutic music across a variety of clinical populations. Basic brain and neurological responses to music as well as the social and psychological influences of music will be explored.

SWK 1300

Introduction to Social Justice and Social Welfare (SI)

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 (SI)

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 (IDP)

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)(SI)

4cr

This course will focus on human development and behavior across the lifespan 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 (SI)(OC)

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 (SI)

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.

Prerequisite for Social Work major and Social Justice minors: SWK 2400 or department approval

Prerequisite for others: Sophomore standing
Fall

SWK 2650

Wounded Hearts: Interdisciplinary Exploration of Trauma and Recovery (SI)(IDP)

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 focuses 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)(SI)(WEL)

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 (SI)(OC)

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, families, and communities.

Prerequisite: SWK 2600

Spring

SWK 4200

Advanced Social Work Practice (SI)

4cr

Advanced study of generalist social work intervention with agencies and community systems with emphasis on the acquisition of values, knowledge, and practice skills. Must be taken with SWK 3000 and SWK 4610.

Prerequisite: SWK 3300

Fall

SWK 4300

Integrative Seminar

4cr

Weekly seminar to integrate and synthesize social work theory and practice using critical reflection. Students will complete their Senior Applied Research in this course. Must be taken with SWK 4620.

Prerequisites: SWK 3000, SWK 4200, and SWK 4610

Spring

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 2530 Race and Racisms (4 cr.)
- 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 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
- SOC 3550 Internship

Finally, students **may count one of the following courses outside sociology as an elective for the major:**

- EDU 2340 Foundations in Urban Education (4 cr.)
- EDU 4340 Urban and Cultural Leadership (4 cr.)
- ECN 3250 Economics of Poverty and Income Inequality (4 cr.)
- GEO 1610 Introduction to GIS: Mapping Your World (4 cr.)
- POL 1500 American Government: National, State, and Local (4 cr.)
- POL/WMG 3350 Human Rights (4 cr.)
- PYC 2200 Social Psychology (4 cr.)
- PYC 3450 Contemporary Issues in Sex and Gender (4 cr.)
- SWK 2400 Human Behavior in the Social Environment (4 cr.)
- WMG 3090 Literature of Diversity (4 cr.)
- WMG 3110 Women’s and Gender Studies Theory (4 cr.)
- WMG 4200 The Gender of Leadership (4 cr.)

Sociology Minor (20 credits)

The sociology minor consists of three core courses: SOC 1000, SOC 3020, and SOC 3250.

In addition to the required core, students **must complete 2 courses (8 cr.)** in sociology with a 2000 level or higher designation (see list above for frequently offered courses).

Honors in the Major

Please see department chair for details. Basic requirements are listed under All-College Programs in the catalog.

SOC 1000

Introduction to Sociology (SOC) (SI)

4cr
Explores how social structures and social forces shape beliefs, values, and behavior. Applies theoretical frameworks to historical and contemporary social institutions. The course stresses the impact of social class, race, and gender inequalities.
Fall/Spring

SOC 2010

Social Problems (SOC)

4cr
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 2020

Cultural Anthropology (SOC) (SI)

4cr
This course provides an introductory exploration of anthropological approaches to society, culture, language, and history. Students are given the opportunity to consider the intellectual and ethical challenges that confront anthropologists in making sense of human difference, experience, and complexity.
Fall/Spring

SOC 2040

Sociology of Religion (SOC)

4cr
This course explores sociological perspectives and research on religion. The course is focused on the study of religion as a social institution. The course considers religion and religious movements as forces that may both resist and encourage social change. Beyond institutional dimensions and group dynamics, this course also seeks to broaden student understanding of religion as a basis for personal adjustment in modern societies characterized by diverse meaning systems.
Spring

SOC 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.
Spring

SOC 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

SOC 2520**Marriage and the Family**

4cr

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)**

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 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 (SI)(ITL)**

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.

Prerequisites: Sophomore standing or

instructor consent

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 lawmaking to conviction).

Prerequisite: CRJ 1000 or instructor permission

SOC 3040**African Transitions (SI)(ITL)**

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.

Prerequisite: Sophomore standing or instructor consent

SOC 3045**Social Impacts of Mass Incarceration**

4cr

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

SOC 3110

Power, Deviance, and Social Control

4cr

This course examines power, deviance, and social control as interconnected sociological concepts. Students will understand how these concepts have been defined across various social contexts. This course will also examine social reactions to power and deviance.

Students will be able to describe power's role in labeling people deviant and how those labeled deviant have resisted forms of social control. Finally, students will develop the ability to recognize the various forms of power, deviance, and social control surrounding them daily.

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 and original theoretical texts, and examine social issues/problems using a critical sociological lens.

Prerequisite: SOC 1000 or instructor permission

SOC 3450

Global Poverty (ITL) (SI)

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.

Prerequisite: Sophomore standing or instructor consent

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, a major in playwriting, 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 cocurricular 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 (24 cr.):

THR 2110	Acting I: Fundamentals of Acting	(4 cr.)
THR 2900	Play Reading and Analysis	(4 cr.)
THR 2910	Play Production: Stagecraft	(4 cr.)
THR 2920	Play Production: Costumes and Makeup	(4 cr.)
THR 3010	Stage Management	(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:

THR 2390	Theatrical Lighting and Sound	(4 cr.)
THR 2940	Play Production: Scenic Painting	(2 cr.)
THR 2950	Play Production: Advanced Makeup Techniques	(2 cr.)
THR 2960	Play Production: Draping and Patternmaking	(2 cr.)
THR 200T	Approved Theatre Topics Course	(2-4 cr.)

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.)

Plus an additional 2, 4, 6, or 8 THR credits at or above the 2000 level that does not require students to surpass the 44 credit limit of courses from a single academic unit.

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: Stagecraft	(4 cr.)
THR 2920	Play Production: 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: Stagecraft	(4 cr.)
THR 2920	Play Production: 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.)

30 additional credits:

THR 0300	Applied Acting and Directing (two classes, 1 cr. each)	(2 cr.)
THR 2630	Movement Techniques for Performers	(2 cr.)
THR 3280	Modern Theatre Survey	(4 cr.)
THR 3100	Voice for the Stage	(4 cr.)
THR 3110	Acting II: Character and Scene Study	(4 cr.)
THR 4110	Acting III: Periods and Styles	(4 cr.)
THR 4550	Directing	(4 cr.)
ENG 3110	Shakespeare	(4 cr.)
DNC	Applied Dance (choose two 1-credit dance techniques)	

Two credits from the following:

THR 2620	Music Theatre Workshop	(0-2 cr.)
MUS 0200	Class Voice (repeatable)	(1 cr.)

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: Stagecraft	(4 cr.)
THR 2920	Play Production: 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.)

Theatre

28 additional credits

THR 0200	Applied Technical Production (two 1-credit sections)	(2 cr.)
THR 1200	Advanced Theatre Lab (two 1-credit sections)	(2 cr.)
THR 2390	Theatrical Lighting and Sound	(4 cr.)
THR 2600	Theatrical Drafting Methods	(4 cr.)
THR 2940	Play Production: Scenic Painting	(2 cr.)
THR 3910	Advanced Play Production	(2 cr.)
THR 4600	Scenic Design	(4 cr.)
ART 1071	FOUNDATIONS, MATERIAL: Objects + Spaces	(4 cr.)
ART 2000	Drawing I	(4 cr.)

Choose one of the following four-credit courses:

THR 3260	Premodern Theatre Survey	(4 cr.)
THR 3280	Modern Theatre Survey	(4 cr.)
THR 3600	History of Scenic and Lighting Design	(4 cr.)
THR 400T	Topics in Theatre (approved topic)	(4 cr.)

Choose one of the following four-credit courses:

ENG 3110	Shakespeare	(4 cr.)
THR/ENG 400T	Topics Course (approved Topic)	(4 cr.)

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: Stagecraft	(4 cr.)
THR 2920	Play Production: 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

THR 0200	Applied Technical Production (two 1-credit sections)	(2 cr.)
THR 1200	Advanced Theatre Lab (two 1-credit sections)	(2 cr.)
THR 2950	Play Production: Advanced Makeup Techniques	(2 cr.)
THR 2960	Play Production : Draping and Patternmaking	(2 cr.)
THR 3610	History of Clothing: Ancient Egypt to Modern	(4 cr.)
THR 4610	Costume Design	(4 cr.)
ART 1070	FOUNDATIONS, SURFACE: Images + Design	(4 cr.)
ART 1071	FOUNDATIONS, MATERIAL: Objects + Spaces	(4 cr.)
ART 2000	Drawing I	(4 cr.)

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: Stagecraft	(4 cr.)
THR 2920	Play Production: 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 (1 cr. course, taken twice)	(2 cr.)
THR 1200	Advanced Theatre Lab (1 cr. course, taken twice)	(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: Scenic Painting	(2 cr.)
THR 2950	Play Production: Advanced Makeup Techniques	(2 cr.)
THR 2960	Play Production: Draping and Patternmaking	(2 cr.)

Choose eight credits:

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.)

Playwriting Major (60 cr.)

Required Courses (48 cr.):

THR 2110	Acting I: Fundamentals of Acting	(4 cr.)
THR 2120	Acting and Directing One-Acts	(4 cr.)
THR 2900	Play Reading and Analysis	(4 cr.)
THR 2910 or 2920	Stagecraft or Costume Technology	(4 cr.)
THR 3000	Playwriting	(4 cr.)
THR 3020	Verbatim Theatre Techniques	(4 cr.)
THR 3210	Ensemble and Experimental Theatre/Dev.	(4 cr.)
THR 4010	Senior Seminar in Theatre	(4 cr.)
THR 4990	Senior Thesis Completion	(0 cr.)
ENG 1160	Introduction to Literary Studies	(4 cr.)
ENG 2050	Creative Writing	(4 cr.)
ENG 3110	Shakespeare	(4 cr.)
ENG 4300	Seminar in Creative Writing	(4 cr.)
THR 0100	Service Hours Completion	(0 cr.)

Theatre Survey: Choose 1 course

THR 3280	Modern Theatre Survey	(4 cr.)
THR 3290	Contemporary Theatre Survey	(4 cr.)
THR 200T	Survey of African American Theatre	(4 cr.)

English Electives: Choose 2 courses

ENG 3030	Major Texts in Critical Theory	(4 cr.)
ENG 3090	Literature of Diversity	(4 cr.)
ENG 3100	Literature and Gender	(4 cr.)
ENG 3140	Literature Genres	(4 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.)

Or any THR courses at the 2000 level or above.

Costume Design Minor (24 cr.)*Core (8 cr.)*

THR 2110	Acting I: Fundamentals of Acting	(4 cr.)
THR 2900	Play Reading and Analysis	(4 cr.)
THR 2920	Play Production II: Costumes and Makeup	(4 cr.)

Emphasis (10 cr.)

THR 0200	Applied Technical Production	(1 cr.)
THR 1200	Advanced Theatre Lab	(1 cr.)
THR 3610	History of Clothing: Ancient Egypt to Modern	(4 cr.)
THR 4610	Costume Design	(4 cr.)

Elective (2 cr.)

THR 2950	Play Production V: Advanced Makeup Techniques	(2 cr.)
or		
THR 2960	Play Production IV: Draping and Patternmaking	(2 cr.)

Honors in the Major

Please see department chair for details.

DNC 1041**Applied Dance: Ballet I (PE)(AI) (WEL)**

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)(AI) (WEL)**

1cr
A beginning level course that honors and explores the history and traditions of Tap, an American Vernacular art form. Exercises and

progressions will culminate into longer phrases of choreography that will guide students to create their own rhythmic compositions and improvisations. In this course, students will gain the tools needed to confidently connect rhythms of the feet and body to the timing of music. Fulfills general education requirement for Exercise and Sport Science experience and is a graded course.
Fall/Spring

DNC 1044**Applied Dance: Jazz I (PE)(AI) (WEL)**

1cr
Beginning level course that honors and explores the history and expressions of Jazz dance. Exercises and progressions will culminate into longer phrases of choreography, and students will have opportunities to develop their own voice using jazz dance as a creative movement language. Fulfills general education requirement for Exercise and Sport Science experience and is a graded course.
Fall

DNC 1047**Applied Dance: Modern I (PE)(AI) (WEL)**

1cr
A beginning level course that integrates connections between fundamental movement principles and the historic, cultural, and physical language of Modernist Dance. Classes will incorporate both floor and standing exercises that culminate into longer phrases of choreography. In this course, students will have opportunities to apply improvisational and compositional elements to their study of Modern Dance as they develop their own movement expressions.
Fall

DNC 1120**Dance Theory and Practices (AI)**

2cr
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

DNC 2041

Applied Dance: Ballet II (PE) (AI)(WEL)

1cr
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

DNC 2043

Applied Dance: Tap II (PE)(AI) (WEL)

1cr
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

DNC 2044

Applied Dance: Jazz II (PE)(AI) (WEL)

1cr
This course is a continuation of Jazz dance exploring related concepts with more depth and acceleration. Exercises and progressions will culminate into longer phrases of choreography, and students will have opportunities to develop their own voice using jazz dance as a creative movement language. Fulfills general education requirement for Exercise and Sport Science experience and is a graded course

Prerequisite: DNC 1044 or consent of instructor

DNC 2047

Applied Dance: Modern II (PE)

(AI)(WEL)

1cr

This course offers continued instruction movement inquiries that nurture connections between fundamental movement principles and the historic, cultural, and physical language of Modernist Dance. Classes will incorporate both floor and standing exercises that culminate into longer phrases of choreography. In this course, students will have opportunities to apply improvisational and compositional elements to their study of Modern Dance as they develop their own movement expressions.

Prerequisite: DNC 1047

DNC 2051

Applied Dance Styles (PE)

1cr

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

DNC 2060

Dance Theory and Composition (AI)

2cr

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

DNC 2070

Dance Choreography and Repertory (AI)(WEL)

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

DNC 3041

Advanced Ballet (PE)(AI)(WEL)

1cr

A continuation and extension of the techniques learned in Ballet I and II, including application of more difficult elements of the ballet style. Each class will include barre, port de bras, center barre, adagio, petit allegro, grand allegro, and entournant. Discussions will include theory and history of ballet as it applies to the styles being studied. 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.

Prerequisites: DNC 2041 and consent of instructor
Fall

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

DNC 3050

Dance History (CL)

4cr

This course is designed to deepen knowledge of contemporary concert dance. The course will thematically examine contemporary choreographic explorations and consider diverse perspectives. Students will develop an understanding of the contextual threads that form contemporary concert dance through multiple research modalities.

Prerequisite: DNC 1120 or consent of instructor
Spring

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.

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

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

THR 1110**Introduction to Acting (FAR)(AI)**

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 understanding 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) (AI)**

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 2180**Theatre for Children (FAR)**

4cr

The course includes a study of drama and community settings for persons of all ages, as well as study and experiences designed to develop the skills needed to provide environments conducive to the development of creativity in the individual, and an examination of the child's potential for creative achievement at different age and grade levels.

Fall

THR 2390**Theatrical Lighting and Sound**

4cr

This course introduces students to the basic technology of theatrical stage lighting and sound. Students will learn the fundamentals of lighting design, instrument use, and operation of the theatre lighting system. Students will

learn the fundamentals of sound design, sound equipment use, and operation of the theatrical sound systems. Prerequisite: THR 2910 or instructor permission

THR 2600

Theatrical Drafting Methods (AI)

4cr

This course will examine the principles and practice in the techniques of drafting traditional and nontraditional types of stage scenery and other technical theatre projects. Based upon industry standards, the preparation and presentation of construction drawings and detail drawings for use in scene, prop, and lighting design will be taught. Utilizing skills acquired through written texts, lecture, and class discussion, students will be able to create mechanical drawings, as well as lighting plots, ground plans, sections, and elevations. Computer drafting software and its foundations will also be implemented. Prerequisite: THR 2920

THR 2620

Music Theatre Workshop (AI)

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

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

Costume Technology

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

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

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

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 (FAR) (AI)

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 (OC)

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 (AI)

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 3210

Ensemble and Experimental Theatre (AI)

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

Premodern Theatre Survey (CL) (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 3270

Classical Theatre Survey (CL) (FAR)

4cr

A comprehensive study of dramatic literary forms and the theatrical expressions of civilizations and cultures from the inception of theatre to the Renaissance. Coursework will include both practical applications and written evaluations of theatre productions.
Prerequisite: Junior or senior standing

THR 3280

Modern Theatre Survey (FAR)(CL)

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 3290

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 (CL)

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 (CL)

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 (CL) (SI)

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 (AI)

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 (AI)

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 Topics in Women's and Gender 200* Studies	(4 cr.)
WMG Family Violence 2210	(4 cr.)
WMG Race, Gender, and Sex in Ancient 2450 Greece and Rome	(4 cr.)
WMG Blacks in Antiquity: Race in the 2500 Ancient Mediterranean World	(4 cr.)
WMG Race and Racisms 2530	(4 cr.)
WMG Psychology of Women and 2060 Gender	(4 cr.)
WMG Sex, Gender, and Sexuality in a 2770 Diverse World	(4 cr.)
WMG Decoding Disney 2800	(4 cr.)
WMG Constitutional Law: Civil 3910 Liberties and Civil Rights	(4 cr.)
WMG Women and the Bible 3020	(4 cr.)
WMG Women of Africa 3030	(4 cr.)
WMG African Transitions 3040	(4 cr.)
WMG Literature of Diversity 3090	(4 cr.)
WMG Literature and Gender 3100	(4 cr.)
WMG Women and Politics 3200	(4 cr.)
WMG Advanced Feminist Theory 3250	(4 cr.)
WMG The Economics of Love and Sex 3330	(4 cr.)
WMG Human Rights 3350	(4 cr.)
WMG Global Poverty 3500	(4 cr.)
WMG Women in the Arts 3760	(4 cr.)
WMG Cinema of African American 675L 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 (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

WMG 3020

Women and the Bible (HUM) (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.

WMG 3030

Women of Africa (SI) (ITL)

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.

Prerequisite: Sophomore standing or instructor consent

WMG 3040

African Transitions (SI) (ITL)

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.

Prerequisite: Sophomore standing or instructor consent

WMG 3090

Literature of Diversity (HUM) (DIV)

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.

WMG 3100

Literature and Gender (HUM) (DIV)

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.

WMG 3110

Women's and Gender Studies Theory (DIV) (SI)

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: Sophomore standing or

instructor consent

WMG 3200

Women and Politics (SOC) (DIV) (SI)

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.

Prerequisite: Sophomore standing or instructor consent

WMG 3250

Advanced Feminist Theory

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

WMG 3350

Human Rights

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.

WMG 3500**Global Poverty (ITL) (SI)**

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.

Prerequisite: Sophomore standing or instructor consent

WMG 3760**Women in the Arts (CL) (IDP)**

4cr

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.

WMG 3760W**Women in the Arts (CL) (IDP) (WI) (WC)**

4cr

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

WMG 3910**Constitutional Law: Civil Liberties and Civil Rights (SOC) (SI)**

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.

WMG 4200**The Gendering of Leadership (DIV)**

4cr

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

Graduate Academic Program of Study**Master of Education****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.

Those seeking admission to the Master of Education must meet the following qualifications:

- Successful completion of a bachelor's degree

- Possession of 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.)

- A minimum grade point average of 2.75

Carthage College does not discriminate against employees, students, or applicants on the basis of race, sex, disability, veteran status, national origin, religion, or personal affiliation.

Admission Procedures

Before candidates may be considered for admission, they must:

- Submit an application

- Send official transcripts of all college work. A minimum 2.75 GPA is required.

Provide proof of a valid teaching certificate (for licensed teachers).

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 Academic Progress Report in Workday before meeting with the primary advisor. The program consists of 30-33 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 30-33 credits of coursework must include these four courses with EDU 5060 Foundations of Education being a prerequisite for the other three courses. Individuals are required to enroll in courses at the 5000 level or above. No continuing education credits will be counted toward a master's degree. Full-time status will be considered six credits. A maximum of 9 credits is permitted for any given semester unless the graduate chair grants permission to take up to two additional credits, not to exceed 11 total credits. The additional cost for excess credits above 11 will be determined by Student Financial Services and may not be covered by financial aid.

Upon completion of M.Ed. core classes and coursework necessary for a concentration, 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.

Master of Education

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 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 (9 cr.):

EDU 5060 Foundations of Education	(3 cr.)
EDU 5249 Research Paradigms in Educational Research	(3 cr.)
EDU 5282 Culturally Responsive Instruction	(3 cr.)
EDU 5990 Master’s Degree Capstone Completion	(0 cr.)

All students must choose one of the following (3 cr.):

EDU 5550 Master’s Degree Capstone Experience	(3 cr.)
EDU 5950 Master’s Comprehensive Exam	(3 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: Education Administration (K-12) with #51 License
- Option Six: English as a Second Language with #1395 License

Option Seven: Bilingual with #1023 License

Option Eight: ACT with M.Ed.

Option Nine: Sports Leadership in Education

Option One: Curriculum and Instruction (30 cr.)

M.Ed. core classes listed above (12 cr.) and

EDU 5110 Curricular Issues	(3 cr.)
EDU 5140 Development of Curricula	(3 cr.)

Then students must choose four (12 cr.):

EDU 5230 Reading and Research in Multicultural Children’s and Young Adult Literature	(3 cr.)
EDU 5410 Curriculum and Instruction in Reading (K-12)	(3 cr.)
EDU 5120 Urban Issues in Education	(3 cr.)
EDU 5420 Diagnostic and Remediation Techniques for Reading Disabilities (K-12)	(3 cr.)
EDU 5430 Practicum A and B in Reading Disabilities (K-12)	(3 cr.)

Option Two: Curriculum and Instruction with Reading License #316/1316 (30 credits)

M.Ed. core classes listed above (12 credits) and

EDU 5110 Curricular Issues	(3 cr.)
EDU 5140 Development of Curricula	(3 cr.)

Then students must take the following DPI-approved courses (12 credits):

EDU 5281 English Language Learner: Methods and Study in Education	(3 cr.)
EDU 5410 Curriculum and Instruction in Reading (K-12)	(3 cr.)
EDU 5420 Diagnostic and Remediation Techniques for Reading Disabilities (K-12)	(3 cr.)
EDU 5430 Practicum A and B in Reading Disabilities (K-12)	(3 cr.)

Option Three: Teacher Leadership (30

credits)

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 (12 credits) and

Choose one (3 cr.):

EDU 5110 Curricular Issues	(3 cr.)
EDU 5050 Leadership in Sport	(3 cr.)

Then choose five of the following (15 cr.):

EDU 5030 Evidence-Based Decision-Making	(3 cr.)
EDU 5140 Development of Curricula	(3 cr.)
EDU 5150 Student Achievement and Learning	(3 cr.)
EDU 5160 Professionalism and Leadership in Today’s Schools	(3 cr.)
EDU 5281 English Language Learner: Methods and Study in Education	(3 cr.)
EDU 5282 Culturally Responsive Instruction	(3 cr.)
EDU 5285 Fundamentals of Linguistics for Teachers of Diverse Learners	(3 cr.)

Option Four: Teacher Leadership with Reading Specialist License #17/5017 (42 credits)

M.Ed. core classes listed above (12 credits) and

Choose one (3 cr.):

EDU 5110 Curricular Issues	(3 cr.)
EDU 5050 Leadership in Sport	(3 cr.)

Then complete the following 27 credits:

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	(3 cr.)	collaboration, school law, school finance, and leadership and organizational development. Eligible candidates must hold a valid education license or be licensed as a school counselor, school psychologist, or 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 Portfolio, which is required instead of the 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. *EDU 5040 is the capstone practicum experience and can only be taken in conjunction with one final course.	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.
EDU 5340	Psycholinguistics and Developing Effective Readers in Content Area (K-12)	(3 cr.)	<p>M.Ed. core classes listed above (12 credits)</p> <p>Then students must complete the following required courses (21 credits):</p> <p>EDU 5000 School Law (3 cr.)</p> <p>EDU 5010 Organizational Management in Educational Settings (3 cr.)</p> <p>EDU 5020 School Finance (3 cr.)</p> <p>EDU 5030 Evidence-Based Decision-Making (3 cr.)</p> <p>EDU 5040 School Principalship (3 cr.) *(Capstone practicum)</p> <p>EDU 5110 Curricular Issues (3 cr.)</p> <p>EDU 5160 Professionalism and Leadership in Today’s Schools (3 cr.)</p>	<p>Option Seven: Bilingual with #1023 License (33 credits)</p> <p>M.Ed. core classes listed above (12 credits)</p> <p>Beyond or as part of initial licensure, candidates must have completed the following prerequisite requirements:</p> <ul style="list-style-type: none"> • 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) <p>and then the following courses (21 cr.):</p> <p>EDU 5230 Reading and Research in Multicultural Children’s and Young Adult Literature (3 cr.)</p> <p>EDU 5280 ELL Literacy and Accommodations (3 cr.)</p> <p>EDU 5281 English Language Learner: Methods and Study in Education (3 cr.)</p> <p>EDU 5282 Culturally Responsive Instruction (3 cr.)</p> <p>EDU 5279 Bilingual Methods (3 cr.)</p> <p>EDU 5285 Fundamentals of Linguistics for Teachers of Diverse Learners (3 cr.)</p> <p>EDU 5286 Practicum in Bilingual Classrooms (3 cr.)</p>
EDU 5350	Seminar in Reading Research	(3 cr.)		
EDU 5360	Supervision, Administration, Guiding, and Directing Reading Programs (K-12)	(3 cr.)	<p>Option Six: English as a Second Language and License #1395 (30 credits)</p> <p>M.Ed. core classes listed above (12 credits)</p> <p>and then complete the following courses (18 credits):</p> <p>EDU 5230 Reading and Research in Multicultural Children’s and Young Adult Literature (3 cr.)</p> <p>EDU 5280 ELL Literacy and Accommodations (3 cr.)</p> <p>EDU 5281 English Language Learner: Methods and Study in Education (3 cr.)</p> <p>EDU 5282 Culturally Responsive Instruction (3 cr.)</p> <p>EDU 5284 Practicum in ESL Classrooms (3 cr.)</p> <p>EDU 5285 Fundamentals of Linguistics for Teachers of Diverse Learners (3 cr.)</p>	<p>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.</p> <p>Option Eight: Accelerated Certification Teacher Program with M.Ed. (CCSE or Secondary Education)</p> <p>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</p>
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)	(3 cr.)	<p>Option Five: School Principalship (K-12) with License #51 (33 credits)</p> <p>Developed in collaboration with administrators from local school districts and the Carthage Education Department, the School Principalship concentration prepares educators for leadership roles as building principals in the K-12 setting. The coursework focuses on shared decision-making and</p>	<p>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.</p>
EDU 5420	Diagnostic and Remediation Techniques for Reading Disabilities (K-12)	(3 cr.)		
EDU 5430	Practicum A and B in Reading Disabilities (K-12)	(3 cr.)	<p>Option Five: School Principalship (K-12) with License #51 (33 credits)</p> <p>Developed in collaboration with administrators from local school districts and the Carthage Education Department, the School Principalship concentration prepares educators for leadership roles as building principals in the K-12 setting. The coursework focuses on shared decision-making and</p>	<p>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.</p>
EDU 5160	Professionalism and Leadership in Today’s Schools	(3 cr.)		

EDU 5450	Characteristics and Assessment of Learners with Exceptionalities	(3 cr.)
EDU 5451	Academic and Behavioral Interventions for Learners with Exceptionalities (Elementary)	(3 cr.)
EDU 5452	Academic and Behavioral Interventions for Learners with Exceptionalities (Secondary)	(3 cr.)
EDU 5453	Instructional and Assistive Technology for Learners with Exceptionalities	(2 cr.)
EDU 5454	Collaboration with Parents and Professionals	(3 cr.)
EDU 5090	Conflict Resolution	(3 cr.)
EDU 5901	Student Teaching (Add-On License)	(3 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	(3 cr.)
EDU 5280	ELL Literacy and Accommodations	(3 cr.)
EDU 5281	English Language Learner: Methods and Study in Education	(3 cr.)
EDU 5282	Culturally Responsive Instruction	(3 cr.)
EDU 5284	Practicum in ESL Classrooms	(3 cr.)
EDU 5285	Fundamentals of Linguistics for Teachers of Diverse Learners	(3 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.

Bilingual Add-On License #1023 (Candidates must hold a valid Wisconsin teaching license.):

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

- Eight credits of study in a modern language (must meet ACTFL requirements as noted following coursework for bilingual licensure)

EDU 5230	Reading and Research in Multicultural Children’s and Young Adult Literature	(3 cr.)
EDU 5280	ELL Literacy and Accommodations	(3 cr.)
EDU 5281	English Language Learner: Methods and Study in Education	(3 cr.)
EDU 5282	Culturally Responsive Instruction	(3 cr.)
EDU 5279	Bilingual Methods	(3 cr.)
EDU 5285	Fundamentals of Linguistics for Teachers of Diverse Learners	(3 cr.)
EDU 5286	Practicum in Bilingual Classrooms	(3 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 (OPI-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 the 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:

- Obtain an application from the Graduate Admissions Director.
- Be currently employed (or will be employed) by a public or private middle

or high school.

Receive admission to the Carthage Education Program by providing evidence of:

1. 2.75 GPA in all courses taken.
2. 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.)
3. Passing the Praxis I Pre-Professional Skills Tests
4. 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 attendance 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.

73 credits with M.Ed.

First Summer Session (8 weeks):

EDU 5820	Introduction to Child and Adolescent 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:

Master of Education

EDU Field Placement (no class time) 5560	(4 cr.)
EDU Academic and Behavioral 5451 Interventions for Learners with Exceptionalities (Elementary)	(4 cr.)
EDU Seminar/Portfolio Development 5001	(4 cr.)
EDU Culturally Responsive Instruction 5282	(3 cr.)
EDU Instructional and Assistive 5453 Technology for Learners with Exceptionalities	(2 cr.)

Fall Session 2:

EDU 5452 Academic and Behavior Interventions for Learners with Exceptionalities (Secondary)	(4 cr.)
EDU 5120 Urban Issues in Education	(3 cr.)

Spring Session 1:

EDU 5560 Field Placement (clinical experience at an elementary, middle or HS)	(4 cr.)
EDU 5060 Foundations of Education	(3 cr.)
EDU 5001 Seminar/Portfolio Development	(4 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	(3 cr.)
EDU 5249 Research Paradigms in Education Research	(3 cr.)

Fall Session (2nd year):

EDU 5550 Master's Degree Capstone Experience	(3 cr.)
OR	
EDU 5950 Master's Comprehensive Exam	(3 cr.)

Additional sessions as needed:

EDU 5990 Master's Degree Capstone Completion	(0 cr.)
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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 5001 Seminar/Portfolio Development	(4 cr.)
EDU 5282 Culturally Responsive Instruction	(3 cr.)
EDU 5451 Academic and Behavioral Interventions for Learners with Exceptionalities (Elementary)	(4 cr.)

Fall Session 2:

EDU 5452 Academic and Behavioral Interventions for Learners with Exceptionalities	(4 cr.)
EDU 5120 Urban Issues in Education	(3 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	(3 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	(3 cr.)
EDU 5454 Collaboration with Parents and Professionals	(2 cr.)

For students pursuing a M.Ed.:

Summer Session 1 (2nd year):

EDU 5110 Curricular Issues	(3 cr.)
EDU 5249 Research Paradigms in Education Research	(3 cr.)

Fall Session (2nd year):

EDU 5550 Master's Degree Capstone Experience	(3 cr.)
OR	
EDU 5950 Master's Comprehensive Exam	(3 cr.)

Additional sessions as needed:

EDU 5990 Master's Degree Capstone Completion	(0 cr.)
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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 5249 Research Paradigms in Education Research	(3 cr.)
EDU 5550 Master's Degree Capstone Experience	(3 cr.)
OR	
EDU 5950 Master's Comprehensive Exam	(3 cr.)

Additional sessions as needed:

EDU 5990 Master's Degree Capstone Completion	(0 cr.)
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Courses

EDU 5000

School Law

3cr

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 5010**Organizational Management in Educational Settings**

3cr

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**

3cr

Financing and reporting from a budgeting and managerial decision-making perspective.

EDU 5030**Evidence-Based Decision-Making**

3cr

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**

3cr

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**

3cr

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**

3cr

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 (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**

3cr

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**

3cr

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**

3cr

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**

3cr

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**

3cr

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

3cr

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

3cr

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

3cr

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

3cr

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.

EDU 5230

Reading and Research in Multicultural Children's and Young Adult Literature

3cr

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.

EDU 5240

Qualitative Methods in Educational Research

4cr

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

EDU 5250

Quantitative Methods in Educational Research

4cr

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

EDU 5270

Instructional Strategies

3cr

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.

EDU 5279

Bilingual Methods

3cr

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 5280

ELL Literacy and Accommodations

3cr

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.

EDU 5281**English Language Learner: Methods and Study in Education**

3cr

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.

EDU 5282**Culturally Responsive Instruction**

3cr

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.

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**

3cr

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**

3cr

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**

3cr

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)**

3cr

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 5350**Seminar in Reading Research**

3cr

A critical analysis of recent research and professional literature relevant to the field of reading in K-12 is examined. Emphasis is on the tools of educational research related to the theories of reading, including metacognition and models of comprehension, schema theory, psycholinguistics, and the interactive model.

EDU 5360**Supervision, Administration, Guiding, and Directing Reading Programs (K-12)**

3cr

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)**

3cr

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 the sequence of reading skills in EDU 5360.

EDU 5410**Curriculum and Instruction in Reading (K-12)**

3cr

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)

3cr

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 5430

Practicum A and B in Reading Disabilities (K-12)

3cr

This course provides college-supervised clinical or laboratory practicum, including experience at the elementary level and the middle/secondary level. Students develop programs for use with individual cases in the assessment and teaching of needed reading skills. Attention is given to the child's reading needs and to classification of these problems through affective and cognitive correlates. Emphasis is on metacognition, models of comprehension, schema theory, psycholinguistics, and the interactive process.

EDU 5450

Characteristics and Assessment of Learners with Exceptionalities

4cr

Participants will gain foundational knowledge for working with middle/secondary students with disabilities in the inclusive educational environment. Participants will learn the role that assessment plays in formulating teaching practices. Contributions of educational psychology and assessment in the areas of classroom management, research foundations, reading and interpreting data, and current

instructional methodologies will be addressed.

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' IEP.

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

3cr

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

3cr

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

3cr

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)

3cr

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

3cr

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.

Master of Science in Business Design and Innovation

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

MGT 5020 Business Metrics	(3 cr.)
MGT 5140 Change Management	(3 cr.)
MGT 5150 Ethical Decision-Making	(3 cr.)
MGT 5130 Designing for Logistical Optimization	(3 cr.)
MGT 5060 Designing and Developing High-Impact Teams	(3 cr.)
MGT 5015 Complementary Workshop I	(0 cr.)
MGT 5025 Complementary Workshop II	(0 cr.)

J-Term

MGT 5100 Experiential Learning Entrepreneurial Studies	(0 cr.)
MGT 5010 Innovative Leadership	(3 cr.)

Spring

MGT 5035 Complementary Workshop III	(0 cr.)
MGT 5050 Financial Analysis for Decision Making	(3 cr.)
MGT 5120 Disruptive Innovation	(3 cr.)
MGT 5030 Strategic Market Analysis	(3 cr.)
MGT 5110 Design, Innovation, and Sustainability	(3 cr.)
MGT 5040 Nonprofit Administration, Design, and Development	(3 cr.)
MGT 5045 Complementary Workshop V	(0 cr.)
MGT 5160 BDI Capstone	(3 cr.)

Sports Management Track Requirements:

Fall

MGT 5020 Business Metrics	(3 cr.)
MGT 5240 Sports Media- Digital and Traditional	(3 cr.)
MGT 5150 Ethical Decision-Making	(3 cr.)
MGT 5230 Sport Marketing, Public Relations, and Promotions	(3 cr.)
MGT 5060 Designing and Developing High-Impact Teams	(3 cr.)
MGT 5015 Complementary Workshop I	(0 cr.)
MGT 5025 Complementary Workshop II	(0 cr.)

J-Term

MGT 5260 ESports	(3 cr.)
MGT 5010 Innovative Leadership	(3 cr.)

Spring

MGT 5100 Experiential Learning-Sport Governance	(3 cr.)
MGT 5035 Complementary Workshop III	(0 cr.)
MGT 5210 Sport Industry, Economics, and Financial Analysis	(3 cr.)
MGT 5120 Disruptive Innovation	(3 cr.)
MGT 5250 Sport Business and Player Analytics	(3 cr.)
MGT 5200 Sport Sales	(3 cr.)
MGT 5045 Complementary Workshop V	(0 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.

Candidates must also 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
- Résumé/CV
- Entrance interview
- GRE or GMAT test scores (recommended but not required)

In addition to the Business Design and Innovation program, the department also offers a Masters program in Product Management for Manufactured Goods and a Certificate program in Product Management for Manufactured Goods.

The Product Management for Manufactured Goods program provides students with the knowledge and skills necessary to effectively manage existing products and the development and launch of new manufactured products. The program focuses on topics such as product lifecycle, production processes, supply chain management, quality control, project management, and marketing strategies. Students will develop the practical skills needed to launch and manage successful manufactured products. Graduates will be prepared to lead product teams and make strategic decisions that impact product success.

Masters in Product Management for Manufactured Goods

Required Courses:

MGT 5500	Data Analytics and Excel Fundamentals	(3 cr.)
MGT 5501	Principles of Product Management for Manufactured Goods	(3 cr.)
MGT 5502	Project Management Fundamentals	(3 cr.)
MGT 5503	Product Marketing for Manufactured Goods	(3 cr.)
MGT 5504	Engineering and Manufacturing Foundations	(3 cr.)
MGT 5010	Innovative Leadership	(3 cr.)
MGT 5050	Financial Analysis for Decision Making	(3 cr.)
MGT 5120	Disruptive Innovation	(3 cr.)
MGT 5505	Advanced Product Management for Manufactured Goods	(3 cr.)
MGT 5110	Design, Innovation and Sustainability	(3 cr.)
MGT 5030	Strategic Market Analysis	(3 cr.)
MGT 5506	Product Management Experience	(3 cr.)

Certificate in Product Management for Manufactured Goods

Required Courses:

MGT 5500	Data Analytics and Excel Fundamentals	(3 cr.)
MGT 5501	Principles of Product Management for Manufactured Goods	(3 cr.)
MGT 5502	Project Management Fundamentals	(3 cr.)
MGT 5503	Product Marketing for Manufactured Goods	(3 cr.)
MGT 5504	Engineering and Manufacturing Foundations	(3 cr.)

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 5100

Experiential Learning

3cr

Placements in private, nonprofit, and government sectors. Continued experiential/action learning over spring semester.

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 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

Master of Music in Music Theatre Vocal Pedagogy

Music Pedagogy is the art of how we teach music. Programs in music pedagogy focus on practical performance strategies as well as the theories and research that inform how we perform. Whether your goal is to perform or to teach, a pedagogy degree at Carthage will provide the necessary tools for graduate students to engage musically, artistically, and intellectually.

Carthage offers two tracks in the Master of

Music program: a degree in Music Theatre Vocal Pedagogy (MTVP) and a degree in Music Pedagogy (MP). Both tracks provide opportunities for creative endeavor, inquiry, and investigation into the field of music pedagogy. 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. The M.M. is accredited by the National Association of Schools of Music (NASM). Graduates of the M.M. program at Carthage will be able to:

1. Analyze and interpret repertoire from a broad range of styles, and apply those understandings in performance.
2. Demonstrate an awareness of a broad range of pedagogical concepts, and apply these concepts appropriately in a variety of educational settings.
3. Conduct scholarly research projects.
4. Demonstrate and apply understandings of equity and inclusion within applied teaching and the broader field of music.
5. 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. in Music Theatre Vocal Pedagogy (MTVP) includes the following courses and credits:

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	(4 cr.) (2 cr. course, taken 2 times)
MUS 5500	Advanced Applied Music Study	(6 cr.) (1 cr. course, taken 6 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.)

The M.M. in Music Pedagogy (MP) includes the following courses and credits:

MUS 5150	Topics in Music Pedagogy Seminar	(8 cr.) (4 cr. course, 8 cr. required for graduation)
MUS 5160	Research Methods	(4 cr.)
MUS 5400	Supervised Teaching Practicum	(4 cr.) (2 cr. course, taken 2 times)
MUS 5500	Advanced Applied Music Study	(6 cr.) (1 cr. course, taken 6 times)
MUS 5560	Music Ensemble	(2 cr.) (1 cr. course, 2 cr. required for graduation)
MUS 6000	Seminar in Analysis and Interpretation of Music Theatre	(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 remedying 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 Feldenkraet visctvisis. 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

4cr

Students in this course will develop a thorough understanding of performance practices and stylistic characteristics of a wide variety of musical genres through this variable content course. 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 required for the Master of Music.

Prerequisite: None

MUS 6310

Master of Music Thesis Project

4cr

In this capstone course, 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.

Prerequisite: Completion of at least 28 graduate credits in Music

Master of Arts in Athletic Training

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, 40 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 pathophysiological 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

Students accepted into the program begin the professional phase enrolled in graduate-level courses (designated by “*”) to fulfill institutional credit requirements during their senior year. Students not accepted into the program will complete the Allied Health Science major.

See Allied Health Science for major requirements.

Prerequisite courses:

AHS 1020	Introduction to Health Care Professions	(2 cr.)
AHS 3080	Structural Kinesiology	(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 3080	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.)

2- Year Track

Students must have an earned Bachelor's degree in a related field (Kinesiology, Exercise and Sport Science, and Biology). Students must successfully complete the following courses with a minimum grade of C:

- Anatomy
- Kinesiology
- Physiology
- Chemistry
- Physics
- Psychology
- Statistics

An application is submitted through the ATCAS system. Application is rolling with an open date of June 1st. Acceptance into the program is based on the following criteria:

1. Bachelor degree in a related field with a GPA of 3.0/4.0
2. Prerequisite course completion with a minimum grade of C
3. Completed ATCAS application with required documentation (background checks, physical exams, 10 panel drug test).
4. Documented 20 hours of athletic training observation
5. Verification of the ability to meet Technical Standards
6. Program Admission Committee Interview

PROFESSIONAL PHASE: Master of Athletic Training 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.

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 Conditions	(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.)

Additional Program Fees*:

Attire	\$75-Students will be required to purchase program designated scrubs
Background Check	\$40-\$100
Annual EMR/ CPR Certification	\$60
Health Insurance	Varies
Immunization Physical Exam & Drug Screening	Varies
Textbook Library	\$400
Travel Expense	Responsible for transportation to clinical experiences

**All fees are subject to change*

Courses

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 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 5201

Practicum II

2cr
The course is a companion laboratory course for ATH 5210. The athletic training student will practice the skills taught in the classroom for evaluation and assessment of orthopedic injuries and conditions of the upper extremity. Laboratory/clinical rotation experience.
Spring

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 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 5666

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

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 an admissions and financial aid representative. 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.

Freshmen 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. Carthage will accept unofficial transcripts for admission purposes (official transcripts would need to be submitted at the time of enrollment).

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, and (3) a \$35 application fee.

Students seeking acceptance to the Nursing program may 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.

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 \$200 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.)

Government and Politics (U.S.): POL 2400 American Government: National, State, and Local (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 (4 cr.). Score of 4 or 5 required.

Physics 2, Algebra Based: PHY 1200 Fundamental Physics (4 cr.). 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 (4 cr.).

Physics C (Electricity/Magnetism): 8 credits in PHY 1200 Fundamental Physics and PHY 2200 General Physics I. Score of 4 or 5 required.

Physics C (Mechanics): PHY 1200 Fundamental Physics (4 cr.) Score of 4 or 5 required.

Psychology: General Elective credit (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.)

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.

Project Lead the Way

The Project Lead the Way end-of-course assessments are administered to students who complete Project Lead the Way Engineering, Computer Science, and Biomedical Science courses in high school. An Achievement Level Descriptor is assigned based on these nationally administered exams. Entering students who wish credit for Project Lead the

Way must submit official test results and transcripts to the Office of the Registrar.

Students who receive a "Distinguished" Achievement Level Descriptor in Introduction to Engineering Design or Principles of Engineering AND complete a final project in Engineering Design and Development may receive credit for EGR 1100 Introduction to Engineering Design (4 cr.). Such received credit is considered provisional until the student's subsequent Carthage course work confirms that they are sufficiently prepared for subsequent courses.

GED Applicants

Students having completed the Graduate 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.

Transfer students with an Associate of Arts or an Associate of Science degree will be credited as having met all the general education course requirements. Transfer students without Associate of Arts or an Associate of Science degree will be required to take a prorated portion of Carthage's general education curriculum. Transfer students who come to Carthage with 16 or

fewer college credits will undergo a course by course analysis by the Registrar's Office and as reviewed by the designated faculty member in the department in which they intend to major. If students have taken courses that fit one or more of the Carthage requirements they will be counted as such.

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

2022-23 Undergraduate Tuition and Fees

Late Payment Fees

2022-23 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 2022-23 academic year, the comprehensive fee is \$34,500 for commuting students and \$47,148 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.

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.

2023-24 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 2023-24 academic year:

	Annual Fee	Per Term (with J-Term)
Full-Time Tuition (12-18 credits per semester plus J-Term)	\$36,500	\$18,250
Residence Fee (Double Room)	\$12,950	\$6,475
Total Fee	\$49,450	\$24,725

2023-24 Graduate Tuition and Fees

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

Please visit <https://www.carthage.edu/about/offices-services/student-financial-services/tuition-fees/> for the most up to date program information and fees for optional services.

Refund Schedule

Refunds for the 2022-23 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 2022-23 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.

Student Financial Planning

Financial Aid Rights and Responsibility

Carthage Scholarship/Grant Program

Institutional Grant Programs

Applying Aid to Student Accounts

Refunds

Applying for Need-Based Financial Aid

Satisfactory Academic Progress Policy

Endowed Scholarships

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:

Scholarship/Grant	Minimum GPA	
Academic Honors Scholarship	2.75	President Lentz Scholarship 3.25
Alumni Grant	2.00	Presidential Scholarship 2.75
Anderson Scholarship	3.25	Public Relations Scholarship 2.00
Art Scholarship	2.00	Ruud Scholarship 3.25
Badger Boys/Girls State Scholarship	2.50	Sibling Grant 2.00
Bridges Scholarship	2.25	Spring Scholarship 3.00
Business Scholarship	3.00	Springfield Scholarship 2.75
Campbell Scholarship	3.25	Tarble Scholarship 2.50
Carthage Scholarship	2.00	Theatre Scholarship 2.00
Clausen Scholarship	3.25	Transfer Scholarship 3.00
Communication Scholarship	2.00	Tri-County Grant 2.00
Dahl Scholarship	3.25	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).
Dance Scholarship	2.00	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.
Dean's Scholarship	2.50	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.
Diversity, Equity, and Inclusion Leadership Fellows Scholarship	3.00	Verification
ELCA Grant	2.00	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 our verification worksheet and submit federal income tax transcripts as soon as possible.
Faculty Scholarship	2.50	Financial aid awards calculated prior to completing the verification process are considered estimates until we have verified your information. If necessary, we will make
Founders Scholarship	2.75	
Graphic Design Scholarship	2.00	
Hay Scholarship	3.25	
Highest Honors Scholarship	3.00	
Hillsboro Grant	2.00	
Kenosha Police and Fire Scholarship	2.00	
Kenosha Scholarship	2.75	
Laura Kaeppler Kenosha Scholarship	2.75	
Lentz Scholarship	3.25	
Lincoln Scholarship	3.25	
Mary Lou Mahone Kenosha Scholarship	2.75	
Math/Science Scholarship	3.00	
Ministerial Grant	2.00	
Modern Language Scholarship	3.00	
Multicultural Scholarship	2.00	
Music Scholarship	2.00	
Phi Theta Kappa Scholarship	2.75	
President Anderson Scholarship	3.25	
President Dahl Scholarship	3.25	

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.

Full academic years attempted	Minimum number of cumulative credit hours completed at the end of that year
1	12
2	24
3	48
4	64
5	84
6	100
7	120
8	138

- Graduate students shall have a four-year period as defined by the Master’s program, completing a total of 8 credits per academic year.
- 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.
- 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.
- 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.
- 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

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.

Student Affairs

The Office of Student Life provides support services and facilitates developmental opportunities for students outside of the classroom. The Office of Student Life includes the Center for Student Success, the Health and Counseling Center, Dean of Students, Residential Life, Student Conduct, and Student Involvement. The Office of Student Life provides student and voter identification cards, records verification, and official notices of family emergency or loss. The office 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.

Center for Student Success

The Center for Student Success, located within the Office of Student Life in the Todd Wehr Center, provides professional support services to facilitate the success and persistence of students during their time at Carthage. 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.

- Oversight of Carthage'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 or to reach out for assistance by emailing studentsuccess@carthage.edu.

Health and Counseling Center

Located in the N. E. Tarble Athletic and Recreation Center but moving to the Todd Wehr Center in Fall 2022, the Health and Counseling Center provides holistic care for students' mental and physical well-being. The HCC is staffed by licensed professionals. The campus nurse treats minor illness and injuries and assists with referrals to medical providers. In-person counselors provide short-term personal counseling, coordinate referrals for off-campus providers, and consult with faculty and staff. A partnership with telehealth provider UWill connects students to licensed therapists for help via video, chat, text, or phone. Educational programming to the Carthage community is provided for mental and physical health, as well as sexual violence awareness and prevention.

Dean of Students and 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 Dean of Students and 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 co-curriculum are seamlessly integrated. With this value in mind, full-time undergraduate students are required to live in the residence halls and be enrolled in a meal plan. Students who qualify for commuter status are exempt from living on campus if they so wish.

Residential Life facilitates the student housing process and residential education program. The Director of Residential Life leads 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-hall programs, and other education 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 Residence Hall and in the lower level of Madrigano Family

Residence Hall.

Student Involvement

It is important for students to engage with their peers and get involved in campus activities during their time at Carthage. Student Involvement staff support student clubs and organizations, fraternity and sorority life, community service, and leadership development.

Student Activities

There are more than 130 student clubs and organizations at Carthage. These groups receive financial support from Student Government, and training and development support from the Office of Student Life. 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 Life provide significant programming for major campus events, such as New Student Orientation, Carthage Kickoff Days, and Homecoming and Family Weekend. To learn more about 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.

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.

Office of Equity and Inclusion

The Carthage community is committed to fostering integrity, civility, and justice. Aiming to learn from each other, we reject all forms of prejudice and discrimination toward underrepresented groups. All academic and

administrative departments at Carthage are committed to advancing equity and inclusion initiatives. The Office of Equity & Inclusion leads many of these programs, and serves as a central hub for students, faculty, staff, and administrators looking to advance their own cultural competency and advocacy work.

The Engagement and Inclusion Center

One of many initiatives led by the Office of Equity and Inclusion, Carthage's Engagement & Inclusion Center serves as a campus hub for equity, anti-racism, and inclusion programming by forming strong coalitions and support networks for students, faculty, and staff. This space enables students to gather and facilitate a welcoming, inclusive campus for all. The EIC is committed to promoting the engagement, wellbeing, and all-inclusive growth of our underrepresented

and historically marginalized students. Centrally located on the first floor of the Todd Wehr Center, the EIC provides sociocultural programs and hosts events that educate, encourage, and advocate for students by fostering integrity, civility, and justice.

Center for Faith and Spirituality

Led by the Campus Pastor, the Center for Faith and Spirituality (CFS) 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 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. The Campus Pastor is available for spiritual support when a rabbi, priest, pastor, or imam is not locally available. A team of paraprofessional student staff members and clubs assist with programs.

The center holds a traditional Protestant worship experience every week in Tuesday Chapel with scripture reading, reflection, and communion. The center's Roman Catholic student staff work with local priests who come to campus for weekly mass. On Thursdays, the center hosts Interfaith Lunch and Spirit. Interfaith Lunch is an opportunity to hear someone else's faith/non-faith story. Spirit is a time to deconstruct and reconstruct your faith.

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Michele Hancock
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Interim Vice President for Admissions

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June Boatman Waller '63

Trustee
Franklin I. and Irene List Saemann
Foundation
Champaign, Illinois

2023-2024 Academic Calendar

14 Week Semester Calendar

FALL TERM 2023

August	30	Wed	Classes begin
September	4	Mon	No classes in session (Labor Day)
	7	Thur	Last day to add or drop a first 7-week course
	7	Thur	Last day of open add/drop period for 14-week course
	8	Fri	Restricted add period for a 14-week course begins
	14	Thur	Last day to turn in pass/fail/audit slips
	14	Thur	Last day to petition for an overload
	14	Thur	Last day of restricted add period for a 14-week course
	15	Fri	Restricted drop period for a 14-week course begins
	28	Thur	Last day of restricted drop period for a 14-week course
October	2	Mon	Advising for Spring and J-Term begins
	3	Tues	Last day to withdraw from first 7-week course
	13	Fri	Last day to file for May graduation
	13	Fri	First 7-week courses end
	13	Fri	Midterm grades due
	16-17	Mon-Tues	Fall Break
	18	Wed	Second 7-week courses begin
	20	Fri	Last day to withdraw from a 14-week course
	25	Wed	Last day for complete withdrawal
	25	Wed	No financial refunds after this date
	25	Wed	Last day to add or drop a second 7-week course
November	3	Fri	Advising for Spring and J-Term ends
	6-10	Mon-Fri	Online registration for Spring and J-Term begins
	17	Fri	Residence halls close at 5 p.m. (classes end at 4 p.m.)
	20-24	Mon-Fri	Thanksgiving recess
	27	Mon	Classes resume
	29	Wed	Last day to withdraw from second 7-week course
December	8	Fri	Last day of class
	10	Sun	Study day
	11-13	Mon-Wed	Final exams
	13	Wed	Residence halls close at 5 p.m.

J-TERM

January	3	Wed	Residence halls open at Noon
	4	Thur	Classes begin
	8	Mon	Last day to add or drop J-Term
	11	Thur	Last day to withdraw from J-Term
	26	Fri	J-Term ends

SPRING TERM

January	30	Tues	Residence halls open at Noon
	31	Wed	Classes begin
February	7	Wed	Last day to add or drop a first 7-week course
	7	Wed	Last day of open add/drop period for 14-week course
	8	Thur	Restricted add period for 14-week course begins
	14	Wed	Last day to turn in pass/fail/audit slips
	14	Wed	Last day to petition for an overload
	14	Wed	Last day of restricted add period for a 14-week course
	15	Thur	Restricted drop period for a 14-week course begins
	28	Wed	Last day of restricted drop period for a 14-week course
March	1	Fri	Residence halls close at 5 p.m.
	4-8	Mon-Fri	Spring recess
	10	Sun	Residence halls open at Noon
	11	Mon	Advising for Fall begins
	11	Mon	Classes resume
	22	Fri	Midterm grades due
	26	Tues	First 7-week courses end
	27	Wed	Second 7-week courses begin
	29-	Fri-Mon	Easter break
April	1		
	2	Tues	Classes resume
	3	Wed	Last day to withdraw from a 14-week course
	3	Wed	Last day to add/drop second 7-week course
	5	Fri	Last day for a complete withdrawal
	5	Fri	No financial refunds after this date
	5	Fri	Advising for Fall ends
	8-12	Mon-Fri	Online registration for Fall begins
	11	Thur	Assessment Day
	24	Wed	Last day to withdraw from second 7-week courses
May	10	Fri	Last day of classes
	12	Sun	Study day
	13-15	Mon-Wed	Final exams
	15	Wed	Residence halls close at 5 p.m.
	18-19	Sat-Sun	Commencement
	19	Sun	Residence halls close for graduates at 5 p.m.

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CARTHAGE
COLLEGE

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