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 become 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, North Central Association of Colleges and Schools, 30 North LaSalle Street, Suite 2400, Chicago 60602-2504, 800-621-7440.
Directions
Take I-94 to Kenosha, exit 339 (Highway E) east to the lake. Turn right onto Highway 32 (Sheridan Road). Drive south to campus (approx. 1 mile).

Campus Parking:
A, C, D, E, H, I, J, N, V
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College Overview

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About Carthage
Carthage is a four-year, liberal arts college affiliated with the Evangelical Lutheran Church in America. Located in Kenosha, Wis., a thriving city of 95,000, strategically situated midway between Chicago and Milwaukee, the College offers the bachelor of arts and master of education degrees. Carthage classes meet on the four-one-four academic calendar.

Founded in 1847 in Hillsboro, Ill., the College later moved to the state capital, Springfield, and moved again in 1870, this time to the rural, west-central city of Carthage, where the College acquired its present name. In 1962, Carthage relocated to Kenosha, and launched an era of exciting growth. In the decades since that move, the College has progressed from a small school with fewer than 500 students and financial assets of less than $3 million, to an institution with an enrollment of 2,500 full-time students and total assets exceeding $168 million. Similar achievements in curriculum development and faculty recruitment continue to advance the academic stature of the College.

Since moving to its new campus, Carthage blended the old with the new—distinguished academic heritage with modern educational facilities. Carthage offers the traditional aspects of a college experience and adds the benefits of a beautiful lakeside setting within an hour's travel time of two great metropolitan centers. The Kenosha location not only makes Carthage easily accessible, but also enables students to take advantage of the many cultural and social opportunities available in the “hub of the Midwest.”

The Carthage Mission
Seeking truth, building strength, inspiring service—together.

STATEMENTS OF PRINCIPLE
SEEKING TRUTH

Carthage is a college of the Evangelical Lutheran Church in America, espousing and expressing the Judeo-Christian tradition.

Carthage honors God's love for all people and celebrates the rich diversity of creation.

Carthage embraces scholarship and teaching that are grounded in respect for truth, the possibilities and limitations of individual perspectives, and personal accountability.

Carthage recognizes that the quest for truth is a life-long journey, and that knowledge, experience, and understanding, gained through a love of learning, are the surest guides.

Carthage promotes personal, professional, and social relationships characterized by truth, honesty, and integrity.

BUILDING STRENGTH

Carthage challenges all members of the community to seek excellence in every endeavor.

Carthage provides the resources, tools, and facilities necessary to attract and develop committed students, faculty, staff, and trustees.

Carthage strives for robustness throughout its educational experience, providing students with opportunities to grow in all facets of life.

Carthage seeks breadth and depth of cultural experience from faculty and students, building a foundation for informed, courageous, and effective action in the larger world.

Carthage collaborates with advisors and partners who help increase the relevance, vibrancy, and resilience of the educational experience.

Carthage is a responsible steward, investing in and preserving resources in service to current and successive generations of students.

INSPIRING SERVICE

Carthage affirms that the privilege of education is accompanied by the responsibilities of social awareness.

Carthage challenges students to become builders of a just and compassionate world by immersing them in an educational experience that offers exposure to the full breadth of existence on Earth.

Carthage prepares students for lives of service, and progression to leadership, by providing opportunities to give of themselves and help others locally, nationally, and internationally.

Carthage models and promotes the art of stewardship, enjoining respect for life in all of its various forms and cultures.

TOGETHER

Carthage is a college community that spans generations and bridges ideologies, nurturing lives of service, work, appreciation, and understanding.

Carthage affirms that Truth, Strength, and Service intertwine beneficially throughout life, and encourages members of the community to follow paths that incorporate all three.

Carthage embraces traditions that lift up the community and increase its relevance and prestige.

Carthage encourages community members to challenge and support one another, to accept responsibility and require accountability, and to collaborate in serving the best interest of students.

Religious Life

The College provides opportunities for students and faculty to explore and share faith perspectives. While the Christian faith is essential to the identity and heritage of Carthage, our Lutheran tradition also grants the freedom to examine other spiritual values and practices and to understand the wide diversity of religious choices available to students today.

Worship services are led by the Dean of Siebert Chapel and take place on Wednesday mornings and Sunday evenings. These services often include guest speakers and student music ensembles. Catholic Mass is led by area priests on Sunday evenings as coordinated by the Catholic campus minister. Other weekly chapel programs are scheduled on Monday and Friday mornings, and special events are presented at various times during the school year.

The CMC (Christian Ministry Council) helps coordinate the various religious life groups on campus which include: Carthage Undergrads Making Big Youth Activities (CUMBYA), the Gospel Messengers Choir, Catholic Fellowship, Habitat For Humanity, and Intervarsity Christian Fellowship. While each group has its own specific emphasis and mission, they often work together in
sponsoring campus-wide events and special projects that reach out to our community. The Dean of Siebert Chapel and the Catholic campus minister are here to serve the spiritual needs of the Carthage community, and they are available to all students and faculty regardless of denominational backgrounds or faith perspectives.

**Chapel**

The Carthage community sets aside 25 minutes on Mondays, Wednesdays, and Fridays, beginning at 10:30 a.m., for worship, dialogue, and meditation in the A. F. Siebert Chapel. This Chapel Series has three distinct themes. On Mondays, the students, faculty and staff are invited to lead discussions called *Bridges To Peace*. These conversations explore various concepts and visions of peace from the perspectives of faith, culture, academic discipline, and personal experience. On Wednesdays, the Dean of Siebert Chapel leads *Morning Prayer*, a celebration of Christ through preaching, liturgy, prayer, and song. On Fridays, the chapel offers an *Invitation to Meditation* and provides a safe space for introspection and prayer. This is a time of quiet reflection, and for many students it is an important resource for spiritual renewal.

On Sunday mornings, Lutheran Services of Holy Communion are scheduled regularly. On Sunday evenings, Roman Catholic students gather with local priests for Mass in Siebert Chapel.

The Dean of Siebert Chapel coordinates the Chapel Series by incorporating suggestions and participation from Carthage students, faculty, and staff in a variety of ways. While attendance is voluntary, many within the college community make chapel time part of their regular routine. Chapel offers an opportunity to meet friends and form new friendships. The Chapel Series reflects the mission of Carthage to connect faith and life issues for the benefit of all.

**Library and Information Services**

Library and Information Services (LIS) combines the staff expertise and resources of the library, computing, and media services to provide a unified, holistic approach to the academic information needs of students and faculty. The purpose of LIS is to assist the College in producing more information-literate and technology-facile graduates. Workshops, tutors, in-class instruction, trained assistants, and help desk staff are available for those who need assistance.

**Hedberg Library**

Named for Donald Hedberg, a 1950 Carthage graduate, Hedberg Library is an "electronic teaching library" with the mission to support the educational program of the College and to provide students and faculty with the materials and services that they need to pursue their course assignments and research.

Contained therein is a carefully selected collection of books, periodicals, video recordings, microforms, electronic databases, CDs, and various other materials. The growing book collection contains more than 125,000 print and over 40,000 electronic volumes, and is accessed through the on-line catalog.

Full text access is provided to over 10,000 magazines and journals in either print or electronic format. Wireless laptops, camcorders and other audio and video equipment are available, along with ample group and individual study space.

The library is a member of WILS (Wisconsin Interlibrary Services), thus giving Carthage students and faculty access to the combined resources of virtually all the libraries in the state of Wisconsin. A staff of professional librarians and paraprofessional personnel provide reference, interlibrary loan, collection development, cataloging, circulation, and library instruction to the Carthage community.

My Carthage Resource Center (MCRC) information desk combines the library reference desk with the technology help desk and is available virtually and during library hours for those who need assistance with hardware, software, media, and library-related questions. 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 important materials not currently owned.

**Academic Computing Services**

Carthage provides an extensive campus-wide network. All students, staff and faculty are issued a network user ID, allowing them to communicate by e-mail with each other both on- and off-campus. The campus network allows users to search the library catalog and databases, and to access the world wide web. Computer labs are located in academic buildings, providing more than 230 public access computers.

Many instructors utilize the Blackboard course management system to provide class resources electronically. The majority of courses are offered in media- and technology-enhanced electronic classrooms. Rooms in the residence halls have both wireless and direct Ethernet network access. Students interested in bringing their own computers should consult the Computer Services web page for options and requirements.

My Carthage Resource Center (MCRC) information desk combines the technology help desk with the library reference desk, and is available for those who need assistance with hardware, software, and library-related questions.

**Media Services**

Situated in the Hedberg Library, Media Services attends to the academic multimedia needs of the Carthage community. Production and presentation resources, such as VCRs, DVD players, camcorders, data projectors, and digital cameras, are available to students and faculty for classroom use. Media Services also provides electronic classrooms, CD recording, video dubbing and editing, and two-way and multi-point videoconferencing services.

**Accreditation**

Carthage has been accredited by the North Central Association of Colleges and Schools since 1916, when the association became the primary accrediting agency for schools in the Midwest. (Higher Learning Commission, North Central Association of Colleges and Schools, 30 North LaSalle St., Suite 2400, Chicago 60602-2504. 1-800-621-7440.)

Additional accreditation or approval has been granted by such agencies as the Wisconsin Department of Public Instruction, the National Association of Schools of Music, the American Chemical Society, and other state departments of public instruction. Accreditation is also granted by the Commission on Accreditation of Athletic Training Education (CAATE).

The undergraduate major in social work prepares students for beginning professional social work practice and is fully accredited by the Council on Social Work Education. The teacher education programs for positions in elementary/middle, secondary, and physical education are fully certified by the state of Wisconsin. In addition to accreditation, Carthage maintains membership in the American Council on Education, American Council on Education, Association of American Colleges, 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, the American
Association of University Professors, and the National Association of Student Financial Aid Administrators. Carthage is approved by the American Association of University Women.

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, 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 from business administration to chemistry, economics, foreign language, geography, history, mathematics, political science, public management, physics, social science, and sociology.

Pre-law and pre-seminary students may concentrate their studies in a discipline of their choosing. While most pre-law 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, psychology 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 with majors in:

- Accounting
- Asian Studies
- Biology
- Chemistry
- Classics
- Communication
- Computer Science
- Criminal Justice
- Economics
- Education
  - Cross Categorical Special Education (K-12)
  - Elementary/Middle (Middle Childhood through Early Adolescence )
  - (1-9) Education*
- English
- Environmental Science
- Exercise & Sport Science
  - Athletic Training
  - Physical Education, Sport and Fitness Instruction
- Finance
- Geography
- Graphic Design
- Great Ideas
- History
- Information Systems
- International Political Economy
- Management
- Marketing
- Mathematics
- Modern Languages
  - Chinese
  - French
  - German
  - Japanese
  - Spanish
- Music
- Neuroscience
- Philosophy
- Physics
- Political Science
- Psychology
- Public Relations
- Religion
- Social Science
- Social Work
- Sociology
- Studio Art
- Theatre
- Theatre Performance
- Theatre Technical Production and Design

* To review the Carthage report submitted in compliance with Section 207 of Title II of The Higher Education Act, visit www.carthage.edu/education/certification.

The Graduate Degree
Carthage also offers the master of education degree with concentrations in administration, language arts, social science, religion, reading, creative arts, natural science, classroom guidance and counseling, gifted and talented children, modern language, and teacher leadership.

Intercollegiate Athletics
The Department of Athletics offers an opportunity for students to participate in a wide variety of sports activities that are designed to improve each student in mind, body and spirit. Three 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 with each program governed by the College Conference of Illinois and Wisconsin (CCIW) and the National Collegiate Athletic Association (NCAA) Division III. Currently, men participate in 11 sports. Fall: cross country, football, and soccer. Winter: basketball, indoor track & field, and swimming. Spring: baseball, golf, outdoor track & field, tennis, volleyball and lacrosse. Women participate in 11 sports. Fall: cross country, golf, tennis, volleyball, and soccer. Winter: basketball, indoor track & field, and swimming. Spring: outdoor track & field, softball, water polo and lacrosse.

The second level of competition is club sports. These programs are recreational but 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. Activities currently offered are ice hockey and bowling.

The third level of competition is intramural sports. Intramural sports involve competition between Carthage students and are designed to provide exercise, fun and social interaction. All students are encouraged to participate in these activities which are offered throughout the academic year, including a wide range of individual and team sports. Examples of intramural activities include: basketball, flag football, racquetball, soccer, tennis, softball, volleyball (indoor/sand) and weightlifting.
The Director of Athletics is responsible for all of these departmental programs, and reports to the President of the College and the Vice President for Administration and Business.

**Athletic 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.

**Athletic Department Goals**
Provide for all students a variety of individual and team sports with appropriate leadership and coaching/teaching.

Provide the opportunity for students to participate in amateur sports in an environment that enhances the very best in competition, sportsmanship and ethical conduct.

Assist students in the development of their leadership skills and teach them to serve as role models for children and others in the community.

Promote academic achievement by recognizing NCAA Academic All-Americans, CCWI All-Academic and Athletic Director's Honor Roll recipients, while strictly adhering to the NCAA and CCWI academic standards for participation.

Provide safe, effective equipment and facilities to support each athlete and team.

Make available, to men and women, fair and equitable distribution of overall athletic opportunities, benefits, and resources. The participants in both the men's and the women's sports programs should accept the overall program of the other gender as fair and equitable.

Provide a disciplined yet humanistic environment to enhance physical, psychological, social, and emotional development and well-being.

Recruit the best students in our region who exemplify excellence in academics, athletics, and citizenship.

Win more than 50 percent of our intercollegiate contests. Finish in the top three of the CCWI standings with the ultimate goal of winning the CCWI championship.

**CHAMPS/Life Skills Program**
Carthage has been involved in the NCAA-sponsored CHAMPS/Life Skills Program (Challenging Athletes' Minds for Personal Success) since 1998. The first stage in the program is designed to assist our student-athletes to bridge the gap between high school and college life. In conjunction with Carthage's College Success Program, our College Success Program for Athletes focuses directly on issues that challenge our incoming student-athletes. Through personal and academic topics, the program is designed to encourage students to realize their potential for excellence in the classroom, in the residence halls, in the community, and on the playing fields.

Beyond the student-athletes' first year, the program encourages continued participation through activities sponsored by the Carthage Student Athlete Advisory Committee (SAAC). Comprised of two members from each Carthage athletic team, the SAAC meets monthly to discuss issues that impact Carthage student-athletes at the local, conference, and national levels.

From the Carthage Student Athlete Advisory Committee, two females and two males are nominated to participate in the NCAA Leadership Conference. The NCAA chooses one student to participate each year. In addition, Carthage chooses one female and one male to receive the College Conference of Illinois and Wisconsin (CCWI) Merle Chapman Leadership Award. This award recognizes students who demonstrate outstanding leadership at the campus and conference levels.

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

**Engineering**
Engineering students attend Carthage for three years and, upon successful completion of the required courses with GPA conditions listed below, are assured admission to a partnering engineering school for completion of the final two years of the 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 engineering school. Participating engineering schools include:

- University of Wisconsin at Madison: College of Engineering
- University of Minnesota: Institute of Technology

While at Carthage, engineering students must major in one of the physical sciences, mathematics, or computer science.

Required courses for admission to partner engineering schools are:
- Chemistry 1010, 1020
- Computer Science 1110
- Mathematics 1120, 1220, 2020
- Physics 2200, 2210, 2470 or Mathematics 2120

Acceptance into the College of Engineering at U.W.-Madison is contingent on both a three-year Carthage GPA of at least 3.0 and a 3.0 GPA in the above required courses.

Acceptance into the Institute of Technology at Minnesota is contingent on a minimum GPA in the above required courses that, while varying with each engineering sub-field, is at least a 2.8. A second program enables Carthage students to receive a Master of Engineering degree from the University of Minnesota, in addition to the B.A. degree from Carthage College, following four years at Carthage and typically two years at the Institute of Technology. Admission is not assured.

Scholarship students in the dual-degree program are encouraged to apply to the engineering schools for continuing scholarship support. Contact the Coordinator of the Carthage Dual Degree Program in Engineering for more information.

**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.

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 choose the major they prefer, but during their three years at Carthage, they must complete prerequisite courses for admission to the occupational therapy program at Washington University, including 1) upper level, 200 or higher, biology course 2) human physiology, 3) one other course in the physical sciences, 4) developmental psychology, from child to adolescence through adulthood, 5) one additional class in the social sciences, and 6) statistics. 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.

**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 and military science courses offered by the Army ROTC Program.

The Carthage transcript lists all courses and grades earned by the students in these courses. However, credit is not granted toward a Carthage degree, nor are grades computed in the cumulative grade point.

The following courses are available for those enrolled in the Air Force ROTC Program. The courses are taught at Marquette University by the AFROTC faculty. Students register for these courses at Marquette.

011 The Air Force Today (1 cr.)
012 The Air Force Today (1 cr.)
021 The Air Force Way (1 cr.)
022 The Air Force Way (1 cr.)
051 Leadership Laboratory (0 cr.)
131 AF Leadership/Management (3 cr.)
132 AF Leadership/Management II (3 cr.)
141 American Foreign Policy/Process (3 cr.)
142 Military Law and Officership (3 cr.)

The following courses are available for those enrolled in the Army ROTC Program. The courses are taught at Marquette University by the ARROTC faculty. Students register for these courses at Marquette.

001, 003, 005, 007 Physical Training Lab (1 cr. each)
002, 004, 006, 008 Physical Training Lab (1 cr. each)
010 Introduction to Military Science (1 cr.)
011 Introduction to Military Leadership (1 cr.)
024 Basic Military Skills (2 cr.)
025 Military Skills (2 cr.)
135 Applied Leadership I (2 cr.)
136 Applied Leadership II (2 cr.)
137 Applied Leadership Lab I (1 cr.)
138 Applied Leadership Lab II (1 cr.)
144 Organizational Leadership (2 cr.)
146 Military Law (2 cr.)
Professionalism/Ethics
147 Advanced Leadership Lab I (0 cr.)
148 Advanced Leadership Lab II (0 cr.)
118 American Military History (3 cr.)

For further information, contact the Carthage Admissions Office, or Marquette University at (414) 288-ROTC.
Academic Information

Degree Requirements
Program of Study
Grading System
Academic Standards
Academic Honesty Policy
Advising
Academic Resources
January Term
Career Services
Foreign Study Abroad
Individual Study
Self-Designed Major / Minor
Topics Courses
Field Placements / Internships
Adult Education
Family Educational Rights and Privacy Act

Degree Requirements
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.

To earn a bachelor of arts degree from Carthage, a student must satisfy the following requirements:

Successfully complete 138 credits, including:

1. Heritage Studies (freshman year)
   - COR 1100 Western Heritage I (WI) 4 cr.
   - COR 1110 Western Heritage II 4 cr.
   - Global Heritage (GH) 4 cr.
   (Course descriptions are found under Interdisciplinary Studies: Heritage Studies.)

2. Religion
   - Understandings of Religion 1000 4 cr.
   - One additional approved course 4 cr.
   - Neither required religion course can be used to satisfy any distribution requirement.

3. Modern Languages
   - Two modern languages courses in the same language unless the student fulfills the proficiency requirement established by the College. In addition to Chinese, French, German, Japanese, and Spanish which are taught at Carthage, students may fulfill their language requirement by taking courses in Italian given at UW-Parkside.

4. Mathematics
   - 0-4 cr.
   - Successful completion of a mathematics course unless the student fulfills the proficiency requirement established by the College.

5. Exercise and Sport Science
   - Concepts of Physical Fitness 1 cr.
   - One Lifetime/Fitness activity 1 cr.
   - A student who participates on an athletic team for an entire season can fulfill the one lifetime/fitness activity requirement (1 credit).

6. Carthage Symposium
   - All students will complete one Carthage Symposium, typically taken during the sophomore or junior year. One goal of the College is for our graduates to be able to make connections between disciplines. The Carthage Symposium requirement can be satisfied by either one course (4 credits) or a set of two linked courses (usually 8 credits) that provide an interdisciplinary learning experience. These offerings are team-taught by two instructors from different departments, most frequently from different academic divisions. All Symposia are completed within one academic term. The Carthage Symposium creates a community of learners among the students and two faculty.

7. Senior Thesis
   - As part of their major, all students will complete a Senior Thesis. This can be in form of a written thesis, laboratory research, music recital, art exhibit, or other significant and integrative experience appropriate to their major. Students graduating with more than one major must complete a Senior Thesis for each major or one integrative Senior Thesis approved by each major department or program.

8. Major
   - 36-56 cr.
   - A maximum of 56 credits may be required in the major, with no more than 40 of these credits within any one department. A student may count a maximum of 56 credits in any one department toward graduation; however, all students must have 82 credits outside their major department for graduation. Students must complete a minimum of 12 credits in the major at Carthage.

9. Distribution Requirements
   - Fine Arts (FAR) 4 cr.
     (Four private applied lessons, or one class lesson and three private applied lessons may count as a course for the fine arts distribution requirement.)
   - Humanities (HUM) 4 cr.
   - Natural Science (SCI) (One course must be a lab)
   - Social Science (SOC) 4 cr.
   - Students who major in a discipline in any of these divisions will be exempt from the requirement in that division.

10. Minor
    - Minors are optional unless specified as a requirement for the major. Minors may be pursued through electives and through general requirements such as the Carthage Symposium. 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.

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

12. J-Term
    - All students must enroll in J-Term during their freshman year and in at least one additional year.
13. **Writing Across the Curriculum**

Writing well is a powerful life-skill, and Carthage is committed to teaching its students to write well in all disciplines. All students are therefore required to take a total of four courses (four credit hours each) that are designated Writing Intensive (WI). The first two of these courses are COR 1100 Western Heritage I and COR 1110 Western Heritage II. Of the remaining two courses, one must be in the academic major of the student's choice, while the other course may be any WI course in the curriculum. If students are completing more than one major they only need one WI 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 1100 Western Heritage I and COR 1110 Western Heritage II, and two other WI courses before graduation, as spelled out in Degree Requirements. Writing Intensive courses vary according to the discipline in which they are taught, but they all share the following criteria:

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

14. **Additional Requirements**

- Achieve a final grade-point average of 2.0 in the major and minor, and in all course work at Carthage.
- Finish the last 32 credits 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 there are outstanding credits the student will be able to participate in the following May ceremony. 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 - 17 credits during the 14-week terms. Students in good academic standing may register for up to 18 credits. There is an additional charge for registration in excess of 17 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 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 1990; those for sophomores and juniors are numbered 2000 to 3990; those for seniors are numbered 4000 to 4990.

**Grading System**

The College maintains progress records that are furnished to students on a regular basis. 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 the first four weeks of the following regular 14-week term, or the grade will be recorded as an "F." The student may file a petition for an extension within the first two weeks of the following regular term.

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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>3.76</td>
</tr>
<tr>
<td>B+</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>C-</td>
<td>1.67</td>
</tr>
<tr>
<td>D+</td>
<td>1.33</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>D-</td>
<td>.67</td>
</tr>
<tr>
<td>F</td>
<td>No points</td>
</tr>
</tbody>
</table>

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

**Auditing Courses:**

A student who wishes to audit a course must seek the permission of the instructor and file a report with the Registrar's Office by the add deadline for the term.

**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 permanent record as an "R" and will appear on all transcripts. Only the last enrollment and 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 in class at Carthage. A repeated course may not be by correspondence study, by independent study, by specially arranged study or by study at another institution.

**Add/Drop Policy**

A student may not add or drop a course after registration day without the knowledge of his or her advisor and the instructor. Add-drop forms must be filed with the Registrar's Office. The Registrar may authorize permissible changes falling within the academic rules of the College. The Subcommittee for Academic Review and Recommendation must approve changes involving departure from the rules.

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

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

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

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

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

**Pass-Fail Option**

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

1. The student must have achieved junior or senior standing.
2. A student may not register for more than one Pass/Fail course during a term.
3. 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.

4. 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.

5. To receive a "P" grade for a course graded Pass/Fail, the student must receive a letter grade of D- or better. The "P" grade does not calculate into the GPA; however, if the student receives an "F" for the course it does calculate like a regular "F" into the grade point average.

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

**Examination for Credit**

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

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

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

**Transfer/Correspondence Courses**

A student enrolled at Carthage who wishes to apply transfer or correspondence 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 North Central Association of Colleges and Secondary Schools 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 junior 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 (CLEP) and correspondence courses 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 Dean of the College 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. 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 credit hours attempted at Carthage plus all credit hours transferred into Carthage.

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

Students whose cumulative average, for the first time, falls below the required minimum for dismissal 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 dismissed 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 Dean 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 dismiss 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 committee for review.

**Readmission after Dismissal**

Students who have been academically dismissed from Carthage College will be given the opportunity to reapply for admission. All academically dismissed students will be sent a letter at the time of dismissal 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 that have previously attended Carthage College and have subsequently officially or unofficially withdrawn will be given the opportunity to re-apply for admission. A student is considered as a withdrawn student if consecutive registrations are not maintained. All requests for admission back into the College should be directed to the Admissions Office for review. Applications will be given careful consideration for reinstatement. Readmission into the College is not guaranteed.

**Disciplinary Actions**

If a student is dismissed from the College for disciplinary reasons, a grade of "W" (withdrawal) is recorded for each course, and notation of the dismissal 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:

- 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**

The First-Year Advising Center staff provides support to all incoming students. Professional advisers help students enhance academic potential, improve interpersonal relationships, increase self-understanding, and explore vocational and educational goals. First-year student advisers are responsible for each student's academic advising needs and are available for counseling in all areas of college life.

Seniors, juniors, and sophomores who have declared a major are advised by a faculty member in that major. First-year students have the opportunity to move to a faculty adviser over the course of their first year at Carthage.

Along with the scheduling of classes, advisers help students improve the quality of their academic performance. They are available to discuss the role of co-curricular and extra-curricular activities, and to work with students to create long-term academic and career plans.

**Support for Students with Disabilities**

Support will be arranged for students with documented disabilities including learning disabilities, attention disorders, and physical and psychological disabilities. Students who do not have current documentation or suspect they may have a learning disability may arrange for evaluation services. Students are responsible for contacting the Advising Center and providing current (within three years) documentation. In compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Carthage is committed to achieving equal educational opportunities and full participation for people with disabilities. The Advising Center is located on the lower level of South Hall.

**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, and 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.

Supplemental Instruction
Supplemental Instruction is a nationally-recognized program designed to increase student academic performance. Upper-class students attend class and facilitate discussion/review sessions. Participation in the program allows students to be more active in their learning process.

Writing Center Online
The Writing Center also provides an online tutoring service. Students submit drafts and questions via the Internet and receive a detailed response within three business days. Those wishing to register for the service should contact the Writing Center for details.

Tutoring
Tutors are students trained and recommended by academic departments. They are available upon request for all scheduled courses.

January Term
The January Term, Jan. 4 - Jan. 27, 2011, 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. The J-Term catalog lists specific field placement courses that are available. In addition to these courses, students may propose their own specially-arranged placements through the Career Center.

On-campus courses and independent studies are graded, unless otherwise indicated in the J-Term Catalog, 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. Some J-Term courses require an additional fee to cover cost of travel and other activities; payment of these non-refundable fees is due at registration.

A J-Term catalog, available on the Carthage web site during the Fall Term, provides full details on the various courses, independent study courses, and divisional field placements that are available. The catalog also includes the registration procedures and descriptions of the courses offered for the 2011 J-Term. All students must successfully complete a J-Term course during their freshman year, and one additional year.

Career Services
Carthage Career Services is the primary campus resource for students and alumni making career choices, developing careers, and seeking employment while in school or after graduation. Career services include career counseling, interest and ability assessment and interpretation, internship and job search assistance, on-campus interviewing, career development workshops, and guidance with graduate school selection and application.

Career Services helps students find paid and unpaid internships, summer and part-time employment, and prepare for the seasonal visits of national and regional employers who interview students on campus. Carthage alumni actively coach students in employment preparation by reviewing resumes, helping students practice interviewing, and providing informational interviews.

Career Services also administers the ACT and Miller's Analogy tests several times a year. Career Services and its resource library are located on the top floor of Lentz Hall. Carthage Career Services is a member of the Wisconsin Association of Colleges and Employers and the National Association of Colleges and Employers.

Foreign Study Abroad
The Study Abroad advisor helps interested Carthage students organize a study-abroad experience. Approved earned credits are accepted toward the degree. Carthage has special affiliations with several institutions; however, participation in other programs also may be approved.

GNRL 3510 Immersion Abroad  12-16 cr.
Linguistic and cultural immersion abroad for one or more terms in an academic setting in a country speaking the target language. Classroom instruction for all courses, regardless of discipline, will be in the Target Language. (In exceptional cases, approval may be granted for substituting two summers for the term.)

**Prerequisite for applying study abroad to the major in any modern language: MLA 2200, 3010, 3110, and either 3080 or 3090. P/F**

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 the department and instructor approval. Specially arranged courses may not be used to repeat the grade from a previous course (repeat/delete).

Self-Designed Major / Minor
The faculty has provided an opportunity for students with special interests to design their own major/minor programs. Specialized major/minor programs must consist of existing courses; proposals should be thoughtfully prepared in consultation with a faculty adviser and the department chairperson whose course offerings will be
Departments will have discretion in the placement and internships during the regular term. The following policies shall govern field programs. The central feature of the program is the opportunity for significant 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 the students' work experiences and their academic programs.

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

1. The student may register for up to eight hours of field placement or internship per term. He or she may count up to 12 hours of field placement or internship toward graduation including J-Term field placement credits but excluding student teaching. Credits earned in departmental offerings involving field work, such as Parish Service, Field Work in Psychology, 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. Placements are open to juniors and seniors in good standing who receive the consent of the supervising faculty member and the appropriate department chairperson or program director.
3. Attendance at a regularly held on-campus seminar conducted by the instructor is expected.
4. A minimum of two hours of on-the-job activity shall be spent per week for each credit.
5. The instructor will take into account the evaluations of the on-the-job supervisor, grading placements on an "A" to "F" scale.

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 is necessary. Departments may establish guidelines in addition to these listed.

**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.

**3550 Internship** 4-8 credits
An internship has a longer duration than a field placement and 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. No further credit will be given for internships in subsequent terms in the same placement. All internships must be arranged through Career Services.

**Adult Education**
Carthage Adult Education offers ways for busy adults to enhance their careers and get more out of life. Part-time students can earn a bachelor's degree in a variety of majors, advance their career with a graduate degree, or pick up classes that continue their education and augment their skills.

Adult Education enrolls students who are able to attend college on a part-time basis in day, evening or summer sessions. The evening and summer classes meet at non-traditional times to accommodate the needs of adult learners who are otherwise unable to obtain a college degree during the day because of full-time job and family responsibilities.

Adult students come from diverse backgrounds, manage multiple roles, and actively participate in their own academic awareness, achievement, and career potential. They form a cohesive and significant group of students on campus.

**Advanced Licensing as a Principal**
The Education Administration Program was developed by a team of administrators from Kenosha Unified School District, Racine Unified School District, other surrounding schools, and members of the Carthage Education Department. The administration concentration prepares educators for leadership roles as building principals in the K-12 setting. The course work focuses on site-based management, school law, school finance, and leadership development. Eligible candidates must hold a valid education license or be licensed as a school counselor, school psychologist, or a school social worker, have at least three years experience in these areas, and evidence of at least 540 hours of successful classroom teaching experience. The program's capstone course is the seminar and practicum in field experience as a principal, which will be the foundation for the master's thesis. The program can be completed in two years by taking two courses per term. Students who already possess a master's degree and who wish to gain the #51 license will need to complete the required courses only. No culmination experience or research courses will be required.

For further information, contact the Director of the Graduate Program.

**GNR 0002 Elements of College Learning for the Adult Education Student** 2 credit
This course is designed for the specific academic and adjustment needs of adults who are coming to college for the first time or are returning to college after a long hiatus. The theory, study, and practice of college level study skills including critical reading and thinking, note taking, reading rate and preparation, use of college resources, stress management, and time management are some of the topics that will be included. Students will apply these techniques directly to their coursework as they adjust to their new role of being a bachelor of arts degree seeking student.

**Summer Program**
The Summer Program at Carthage meets the needs of day and evening students. There are three sessions during the summer; Summer Semester (Day): Summer I and Summer II (Evening). Summer classes are open to high school students, college students from other institutions, Carthage students, teachers, and other professionals.

**7-Week Format**
The 7-week format offered at Carthage is designed for qualified part-time learners who wish to earn a quality degree in a timely manner. The 7-week format offers an alternative to the traditional semester format for part-time students. Classes in the 7-week format begin year-round.

To apply for admission to the Carthage Adult Education program, interested students need to complete the following steps:
1. Submit an Adult Education application form accompanied by a non-refundable $10 application fee.
2. Request official transcripts from all previously attended colleges, universities and/or equivalent college programs (i.e. military service, CLEP/DANTEST test results). Official transcripts should be sent directly to: Carthage Adult Education 2001 Alford Park Drive Kenosha, Wis. 53140-1994
3. Schedule a required interview with an Adult Education recruitment coordinator.

Transfer work must show a 2.50 grade point average or higher to begin studies in the Adult Education program. 7-week courses fulfill accounting, business administration, criminal justice, marketing, education, criminal justice, general education, and elective requirements. Students devote about 24 hours each week to studies (three hours in class and 21+ hours of independent study outside of class). Coursework may entail individual reading, writing, research, and occasional group work with fellow students.

Adult students enroll in the 7-week format:
- To complete a bachelor of arts degree in accounting, business administration, marketing, criminal justice, education or social work.
- To fulfill general education requirements and electives as a part of other Carthage majors (i.e. education and social work) and programs
- To review and prepare for graduate school
- To complete a second major
- To enrich an area of interest
- To complete classes at times convenient to work and personal schedules.

Most classes meet for three hours, one night a week.

Accelerated Certification Program (ACT) for Teachers
The Accelerated Certification Program for Teachers (ACT) and Master's Program prepare highly qualified individuals to serve as Wisconsin public school teachers. Developed in collaboration with a team of educators, this 15-month program delivers specific professional staff development through summer course work, combined with a year-long clinical experience serving in a participating secondary school.

The program is dedicated to high standards and is reflected in the admissions and course requirements. To be considered for admission to ACT, candidates should:
- Be currently employed (or will be employed) by a sponsoring school district.
- Receive admission to the Carthage Education program by providing evidence of:
  - 3.0 G.P.A. in all courses taken in the area of licensure
  - A record demonstrating the completion of a bachelor's or advanced degree from an accredited institution
  - Passing the Pre-Professional Skills Tests
  - Passing the appropriate Praxis II content test for the area of licensure
  - Meet requirements for admission to the Carthage Graduate Program

ACT courses fulfill teacher-licensing requirements by the state of Wisconsin and for the master of education degree. Students complete licensing requirements beginning with course work taken during the summer, followed by a year-long clinical experience as the teacher of record in a school district and evening/weekend course work, and ending with a second summer of course work. After completion of the teacher licensing requirements, graduate candidates can complete the required courses for the master of education degree.

Master of Education Program
The Master of Education program, accredited by the North Central Association 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. Concentrations are offered in broad areas that include administration, language arts, social science, religion, reading, creative arts, natural science, classroom guidance and counseling, gifted and talented children, modern language, and teacher leadership. This program is an extension of Carthage's dedication to the liberal arts. The program is offered in the evening school and summer school.

Working with the advisor assigned by the Director of the Graduate Program, students design their own programs. The program is then approved by two advisory committee members, followed by the approval of the Director of the Graduate Program.

Each program comprises a minimum of 36 credits, and 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. Students who intend to write a thesis may take EDU 5500G Master's Thesis in addition to, or in the place of, one of the courses. EDU 5490G, the project option, may also be taken as a culminating experience.

Requirements for admission into the program are a bachelor's degree, a valid teaching license, and successful completion of the Miller Analogies Test. Further information about the program may be obtained by contacting the Director of the Graduate Program.

Advanced Licensing as a Reading Teacher or Reading Specialist
Carthage offers a Graduate Reading Program for the following:

1. Students with a Wisconsin teaching license who are seeking a master's degree in education. A program may be designed so that the individual may complete the Master of Education Program at Carthage and be eligible for Wisconsin licensure as a reading teacher and reading specialist (#316 and #17). A program such as this must be planned well in advance to accomplish this objective.
2. Students with a current Wisconsin teaching license based on a bachelor's degree, who are seeking a reading teacher license.
3. Students holding a master's degree, a current Wisconsin teaching license, and a current Wisconsin reading teacher license, who are seeking a reading specialist license.
4. Teachers seeking reading teacher and/or reading specialist licensure must schedule an interview with Director of the Graduate Program and the Director of the Reading Program. Out-of-state students will find that the Graduate Reading Program at Carthage usually reciprocates with other states' requirements for similar reading certification programs.

For further information, contact the Director of the Graduate Program.

Paralegal Program
The Paralegal Program is a 14-week, 11-credit generalist course designed for individuals seeking professional enhancement, career change, or self-enrichment. Fall, spring, and summer sessions are offered. Classes meet evenings and are taught by practicing attorneys and paralegals. After successfully completing the intensive curriculum, the student is awarded a certificate of completion.
Academic Information

To qualify, a prospective student must have one of the following:

1. A bachelor's degree
2. Directly-related work experience in a law firm or law-related agency
3. Four years of full-time work experience in any field, in addition to some college course work.

For further information, contact the Adult Education Office.

The Loyola University Chicago MBA for Executives at Carthage

The Loyola MBA for Executives at Carthage awards the prestigious Loyola MBA degree to successful candidates. This is an 18-month general management MBA program designed to meet the needs of executives preparing for senior management. Classes are held every other Friday and Saturday at Carthage, beginning once a year in August, and ending eighteen months later in February. For more information contact the Adult Education Office or learn more on the Web at www.loyolambs.com.

The Loyola University Chicago Master of Social Work at Carthage

Loyola University Chicago's Graduate School of Social Work offers a clinical social work program with a comprehensive focus on child and family, medical health, school social work or mental health. This program, which has long been offered at the Loyola University Chicago Water Tower campus, has been available at Carthage since May 2001. Classes are held in an all-Saturday format. The program begins each spring and takes just a little more than two years to complete. Applicants with an undergraduate degree in social work from a CSWE accredited program are eligible to apply for advanced standing. For further information, contact the Adult Education Office or learn more on the Web at www.loyolamsw.com.

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 extends to employment therein and to admission thereto.

Carthage is in compliance with the Family Educational Rights and Privacy Act (FERPA) of 1974 (as amended) as regards 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 Student Community Code Handbook and forms authorizing institutional withholding of student records are available in the Registrar's Office.

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 autumn.

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 Administration and 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: 262-551-5850.
3. The Dean of Students for matters relating to students, student services, and the student administrative grievance procedure. Telephone: 262-551-5800.


If a student believes the institution has failed to comply with FERPA, he or she has the right to file a complaint with the Family Education Rights and Privacy Act Office, Department of Education, 400 Maryland Ave. S.W., Washington, D.C. 20202.

Academic Divisions

Division of Education
Division of the Fine Arts
Division of the Humanities
Division of Interdisciplinary Studies
Division of the Natural Sciences
Division of the Social Sciences

Carthage comprises six academic divisions and their respective departments as outlined below:

Education Division
Education
Exercise and Sports Science
Program: Athletic Training

Fine Arts Division
Art
Communication & Digital Media
Music
Theatre

Humanities Division
Classics
English
History
Modern Languages
Philosophy
Religion

Interdisciplinary Studies Division
Great Ideas
Western Heritage
Global Heritage
Asian Studies
Women's and Gender Studies
Honors

Natural Sciences Division
Biology
Chemistry
Computer Science
Geography and Earth Science
Mathematics
Physics and Astronomy
Programs: Entrepreneurial Studies in the Natural Sciences, Environmental Science, Neuroscience

Social Sciences Division
Business
Economics
Political Science
Psychology
Social Work
Sociology
Programs: Criminal Justice, International Political Economy, Social Science

Division of Education

The Division of Education represents a union of a liberal arts education with a professional career. This orientation is compatible with the Carthage mission and goals, especially those of transmitting the concepts of human heritage, personal satisfaction, and service to society. Licensure programs are offered in middle childhood/early adolescent (elementary/middle ages 6-13), cross-categorical special education, early adolescent/adolescent (middle/secondary ages 10-21), and athletic coaching, as well as special fields (Grades K-12 or Early Childhood - Adolescent) in physical education, music and modern language. Details of each program, as well as those for teaching licensed academic majors and minors, are presented in the separate areas of the academic departments within each division.

The Division of Education also offers a major in athletic training. This program emphasizes our commitment to service to society, preparing our graduates for careers in such diverse areas as geriatric facilities, sports facilities, and sports teams.

Our faculty and staff are dedicated to the preparation of outstanding professional people who will be future leaders in their communities. Thus, we serve the interests of our students and their constituent entities within the framework of the Carthage mission.

Title II Reporting Requirement

Section 207 of Title II of the Higher Education Act mandated that the Department of Education collect data on state assessments, other requirements, and standards for teacher certification and licensure, as well as data on the performance of teacher preparation programs. The law requires the Secretary to use these data in submitting an annual report on the quality of teacher preparation to the Congress.

Representatives of Carthage annually present that report to the Wisconsin Department of Public Instruction. Reports from teacher education institutions around the state are compiled by the Department of Public Instruction and submitted to the Federal Government in a state report.

The state of Wisconsin currently does not have an exit examination, however, the Praxis II content area exams must be successfully completed by students prior to student teaching. The passing rate for completers of the teacher licensing program at Carthage College is 100%.

The following is program information that has been included in the report:

- The number of students in the teacher preparation program during the academic year 2008-2009, including all areas of specialization was 240.
- The number of students in programs of supervised student teaching during the academic year 2008-2009 was 87.
- Three appointed full-time faculty in professional education spend at least part of the time in supervision of teacher preparation students.
- Three appointed part-time faculty in professional education and full-time in the institution may also be supervising in the teacher education program.
- Nine appointed part-time faculty in professional education, not otherwise employed by the institution.
- The total number of supervising faculty for the teacher preparation program during 2008-2009 was 15.
- The student/faculty ratio of supervising student teachers was 5.7 to 1. The average number of hours per week required of student participation in supervised student teaching in these programs was 40 hours. The total number of hours required is 720 hours.
- The Carthage teacher preparation program is accredited by the state of Wisconsin.
- The teacher preparation program is not designated as low-performing by the state.

To review the Carthage report submitted in compliance with Section 207 of Title II of the Higher Education Act, visit www.carthage.edu/education/certification.

Performance Based Assessment

The faculty of the Division of Education is committed to a performance-based assessment system that is based on the Ten Wisconsin Teacher Standards and which relates to the seven principles in our conceptual framework. The Ten Wisconsin Teacher Standards are:

1. The teacher understands the central concepts, tools of inquiry, and structures of the disciplines he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for pupils.
2. The teacher understands how children with broad ranges of ability learn and provides instruction that supports their intellectual, social, and personal development.
3. The teacher understands how pupils differ in their approaches to learning and the barriers that impede learning and can adapt instruction to meet the diverse
4. The teacher understands and uses a variety of instructional strategies including the use of technology to encourage children's development of critical thinking, problem solving, and performance skills.

5. The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.

6. The teacher uses effective verbal and nonverbal communication techniques as well as instructional media and technology to foster active inquiry, collaboration, and supportive interaction in the classroom.

7. The teacher organizes and plans systematic instruction based upon knowledge of subject matter, pupils, the community, and curriculum goals.

8. The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the pupil.

9. The teacher is a reflective practitioner who continually evaluates the effect of his or her choices and actions on pupils, parents, professionals in the learning community and others, and who actively seeks out opportunities to grow professionally.

10. The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support pupil learning and well-being, and who acts in an ethical manner with integrity and fairness.

To receive a license to teach in Wisconsin, an applicant shall complete an approved program and demonstrate proficient performance in the knowledge, skills, and dispositions under all of the above standards. Carthage's Teacher Education Program has been approved by the Wisconsin Department of Public Instruction. Students demonstrate their proficient performance through class assignments, pre-student teaching field experience, student teaching, and a pre-student teaching portfolio. (Please see division faculty members for more specific information.)

**Conceptual Framework**

In relation to the College, the Division of Education's conceptual framework represents both the liberal arts foundation of the college's general curriculum and the educator preparation program's curriculum. The framework builds on candidates' liberal arts experiences to provide a common set of expectations that, when realized, become hallmarks of a Carthage College graduate.

The accreditation of the Carthage College program is the result of compliance with the regulations of the Wisconsin Department of Public Instruction and the North Central Accreditation Agency.

The conceptual framework is a shared vision that identifies the teaching knowledge, skills, and dispositions teacher candidates will master at a level appropriate for beginning teachers or administrators. The Division of Education objective, using the conceptual framework as the cornerstone, is to provide the region with educators who are well prepared to serve their communities. The Division of Education maintains high standards of professional development through research endeavors and extensive local, state, and national involvement. The research and knowledge base is adopted from standards of learned societies to which the members of the Education Division faculty belong and in which they are active participants. Faculty members incorporate research knowledge and the knowledge base depicted by the 10 Wisconsin Standards for Teacher Development and Licensure into their syllabi and their specific course objectives. The graduate level licensing programs for reading specialists and principals are based on the 7 Wisconsin Standards for Administrators in addition to the 10 Wisconsin Standards for Teacher Development and Licensure. Courses taken while at Carthage include various strands of essential knowledge and skills, and affirm the relationship between the liberal arts foundation and the professional education knowledge base. The Division also strives to maintain its positive relationship with the public and private schools through its undergraduate and graduate program, and responds readily to the needs of the schools and their communities.

The basic preparation and advanced programs in the Division of Education are designed to provide experiences and lay a foundation for a professional who continues to learn. The division's conceptual framework has certain fundamental principles that prepare students for licensure as teachers and administrators in Wisconsin and other states. These principles are part of every education program within the College and allow graduates to encounter the philosophy that teachers should be educated to be competent, caring, and committed while being reflective decision-makers:

1. Graduates will possess a general knowledge of human heritage in several fields of learning including the arts, humanities, and sciences.

2. Professional knowledge of graduates will include the development of oral and written communication skills and a facility for critical and constructive thinking.

3. Graduates will demonstrate knowledge of appropriate instructional foundations, including the knowledge of learners' needs and the ability to meet those needs.

4. Graduates will demonstrate the ability to apply content and pedagogical knowledge in appropriate educational settings, including experiences related to multicultural education, cultural pluralism, and students with disabilities.

5. Graduates will be able to integrate content knowledge and professional knowledge with theory, methods, research, and instructional technology appropriate to the educational field, with emphasis on what is best for the learner.

6. Graduates will complete a program with a basic knowledge and skill base that fosters a love of learning, openness to diverse ideas, and a commitment to education as a lifelong process.

7. Graduates will demonstrate a knowledge and understanding of the professional roles and responsibilities related to their selected discipline in appropriate clinical experiences and practicums.

Each education class has a performance-based system embedded within the class. Candidates will demonstrate their proficiency with regard to the strands of the conceptual framework, state-approved teaching and content standards, and the knowledge and performance indicators specified in statutory requirements and rules. Graduates will be assessed continuously with multiple measures based on performance-based standards. The results of these assessments will also be used in evaluating the program along with data collected from other stakeholders.

The Carthage College education provides the opportunities for individuals to identify themselves, recognize the defining aspects of the cultures in our society, as well as their individual roles within this society while preparing for their professional roles and responsibilities. The conceptual framework used by the Division of Education ensures students will have the opportunities to become creative thinkers who are competent, caring, and committed and who make appropriate decisions. The College places significant value on producing educators who are reflective, effective planners and
Division of the Fine Arts

The arts are thriving at Carthage. The College is nestled between Chicago and Milwaukee - two culturally rich metropolises that offer some of the world’s finest museums, concert halls, and theatres. But easy access to Chicago and Milwaukee is only the beginning of the Carthage advantage in the arts. The Departments of Art, Communication and Digital Media, Music, and Theatre nurture traditions of excellence that date back many decades. And they are striding into the changing environment of the twenty-first century with confidence.

Faculty and students proudly offer plays, concerts, exhibits, and performances for the Carthage campus and the broader community. Frequent events include art and graphic design exhibits, acclaimed theatre productions, appearances by guest artists and directors, faculty and student music concerts, and screenings of student video productions. Several music ensembles regularly tour in and beyond the Midwest, often to Europe. Theatre students participate annually in the Kennedy Center American College Theatre Festival. The Division’s annual Christmas Festival attracts thousands of people to A.F. Siebert Chapel every December.

Our facilities include six large naturally-lit art studios; a state-of-the-art computer graphics and electronic music laboratory; the magnificent Fritsch Memorial Organ in Siebert Chapel; a flexible recital hall and art gallery; the Wartburg Auditorium and Studio Theater; and music teaching studios, ensemble rooms, and practice rooms with fine pianos. Siebert Chapel itself is an outstanding concert hall. Hedberg Library, recently recognized as Wisconsin Library of the Year, was designed and constructed to include modern production, editing, and broadcasting facilities appropriate for digital media.

The curricular programs offered in the division ensure not only highly developed performance and production skills, but also rigorous intellectual grounding in the history and theory of the arts. The study and pursuit of excellence in the arts at Carthage are deeply embedded in our mission as a college of the liberal arts and sciences in the Lutheran tradition.

Studying with the faculty of the division represents an opportunity for a distinctive education in the arts. The members of the faculty possess both broad professional experience and degrees from distinguished graduate programs. But these scholars have assembled at Carthage because they love to teach and to work directly with students.

Carthage is one of only five private colleges in Wisconsin accredited by the National Association of Schools of Music. The Departments of Art, Communication and Digital Media, and Theatre each offer multiple majors to accommodate a variety of emphases and interests. The division’s graduates enjoy substantial success in professional careers and graduate work.

Division of the Humanities

The Division of Humanities provides a storehouse of opportunities for the development and enrichment of the whole person: a person who can think logically, write persuasively and entertainingly, and read analytically; a person who is keenly aware of the inner life of choice, reflection, and commitment.

Through the study of literature, history, classics, religion and philosophy, students engage themselves with cultural heritage and with the questions and issues with which humans have struggled through the ages. Through the study of English, students develop capacities for more articulate expression, through the study of other languages, they develop the capacity for appreciating and understanding more fully different cultures.

Majors are offered in Classics, English, History, Religion, Philosophy, and, within the Modern Languages Department; French, German, and Spanish. Students also may be licensed to teach in English, History, French, German, and Spanish. Students in the humanities find careers in a broad variety of fields, including business, law, ministry, journalism, and various fields within the arts. The Carthage humanities faculty is committed to working with students to help them become “people who know how to live, as well as how to earn a living.”

Division of Interdisciplinary Studies

The Interdisciplinary Studies Division includes programs that support rigorous inquiry that transcends, cuts across, or combines traditional academic disciplines. The Interdisciplinary Studies Division comprises the Western Heritage and Global Heritage programs required of all Carthage students; the Honors Program for students of outstanding achievement; and majors or minors in Asian Studies, Great Ideas: Intellectual Foundations of the West, and Women’s/Gender Studies for students wishing to pursue in depth important questions that fall outside conventional disciplinary boundaries.

Before, during, and after the selection of their major courses of study, students are whole human beings. Carthage acknowledges and seeks to cultivate that wholeness by means of the Western Heritage sequence which introduces first-year students to fundamental questions of human life through rigorous study of key texts in Western thought and develops the essential abilities to think, read, write, and speak effectively. In addition, since living responsibly and functioning effectively in our increasingly interconnected world requires understanding alternative worldviews, the Global Heritage requirement ensures that every Carthage student takes at least one course on a cultural tradition with substantial non-Western roots.

Individual programs of study in the Interdisciplinary Studies Division draw on traditional disciplines at the same time that they inquire into or challenge the limits of those disciplines. Asian Studies is thoroughly interdisciplinary in that it draws on courses from three academic divisions and six departments to provide a broad and deep understanding of Asia. Great Ideas: Intellectual Foundations of the West inquire into the very foundations of Western thought and therefore into the origins of the disciplinary frameworks that determine all other academic study. Women’s/Gender Studies is a cross-disciplinary course of study that addresses the way gender functions in society while at the same time seeking to fill lacunae in all of the traditional disciplines where women have been omitted.

These individual programs of study are described in detail under Academic Departments and Programs of Study; Western Heritage, Global Heritage, and the Honors Program are described below.

Western Heritage Program

Carthage students take two seminar courses called Western Heritage. The goal of the program is to introduce students to a true liberal-arts education through discussing and writing about key texts from the Greek and Roman worlds through the Renaissance and into our modern era. The yearlong seminar sequence uses a chronological approach and is taught collaboratively by faculty from academic departments and programs across disciplines.

The West marks an intellectual tradition of active dialogue among literary, scientific, philosophical, political and spiritual thinkers, ancient and modern, who have seen...
themselves as part of a shared intellectual tradition. A premise of the Western Heritage courses is that this dialogue has always contained contention and debate, and that students can themselves participate in this ongoing intellectual journey.

As a community of learners, students and faculty critically engage in this dialogue, contained in seminal works in the arts and humanities (including drama, philosophy, literature, spirituality and history), in the social sciences (including political and economic thought); and in the natural sciences. In Western Heritage seminars students are called upon to discuss intensely, write engagingly, and articulate clearly their thoughts through critical essays and conversations in dialogue with one another and with the texts of the course.

Please consult the Western Heritage website for further information about the program and its goals and objectives: http://www.carthage.edu/western-heritage

**Conditions:**

1. Because of the seminar nature of Western Heritage, no student (day, evening, or Adult Education) may take the course as an independent study;
2. Consistent attendance and participation are required of all students in Western Heritage;
3. Students who fail the first Western Heritage seminar may not advance to the second seminar in the sequence.

**1100 (110) The Intellectual History of Western Heritage I (WI)**

Staff 4 credits

In Western Heritage I, key texts are used to illustrate how themes and ideas develop over the course of Western philosophy, political thought, spirituality, science, and literature. Texts are read and discussed in seminar with a sense of chronology to reveal how thinkers over time have borrowed from, adapted, and challenged ideas from preceding generations. Course themes may include Justice, Love, Happiness, the One and the Many, Order and Disorder, or Faith and Reason. For 2010-2011, the theme is Journeys and Transformations. Students will examine course texts in relation to this theme through commentary provided in the Western Heritage Guide, supplemented from time to time with field trips, guest speakers and experts on campus.

**Fall**

**1110 (111) The Intellectual History of Western Heritage II (WI)**

Staff 4 credits

As a continuation of Western Heritage I, course seminars develop the semester-long conversation begun in the fall, where the ideas of the ancient world come to be read against the emerging intellectual worlds of the Renaissance, Enlightenment and our modern era. As the range and treatment of ideas from different fields and time periods proceeds, the course draws together the divergent strands that compose the complex history of Western thought. Students continue to examine course texts in relation to the theme Journeys and Transformations through commentary provided in the Western Heritage Guide, supplemented from time to time with field trips, guest speakers and experts on campus.

**Spring**

**Global Heritage Program (GH)**

While Western Heritage I and II cover the roots of European cultural traditions, Global Heritage courses explore cultures and civilizations with substantial non-European elements. The Global Heritage requirement includes courses that seek to encounter and understand an alternate worldview. All Global Heritage courses not only seek to explore the culture or civilization being studied, but also to enable our students to understand cultural difference whether while traveling abroad, or in our own increasingly plural nation.

The Global Heritage requirement can be completed by courses taken either on campus or through off-campus study. In either case, courses satisfying this requirement are approved by the Global Heritage Oversight Committee and are so designated in the course schedule.

**Honors Program**

**Honors Carthage Symposium**

Honors students may arrange Honors Contracts (see below) in any appropriate Carthage Symposium. Occasionally, Carthage Symposia may be designated specifically for Honors students.

**Overview**

The Honors Program is a program of the Division Interdisciplinary Studies, through which Carthage offers enhanced educational opportunities to students with outstanding achievement and promise. 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 co-curricular careers as learners at Carthage and beyond;
2. Enhanced instructional experiences and opportunities for developing and delivering new courses;
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 admits only approximately 10 percent of the class entering Carthage each year. Generally, these students enter the Honors Program through an honors section of Western Heritage I (COR 110). However, we also actively recruit highly-talented and motivated students who have completed at least 16 credits of balanced course work (at Carthage and elsewhere). These students may enter the Honors Program in the second term of their first year or as sophomores. While it is rare for students to complete the entire Honors curriculum when entering the program after their sophomore year, interested students should discuss their options with the Director of Honors. Any qualified student may enroll in a particular Honors course with the consent of the instructor.

The following norms for admission to the Honors Program are offered only as guidelines. Highly-motivated and ambitious students who do not meet particular criteria are encouraged to apply for consideration through the Director of Honors.

**Incoming First-Year Students**

Highest priority will be given to students...
who present outstanding high school credentials (e.g., ACT scores, G.P.A., class rank) and/or excel in Carthage’s competitive scholarship competitions. Additional students will be invited to apply and will be considered for admission to the Honors section of Western Heritage or another Honors course.

Transfer Students
Individuals admitted to the Honors Program as new transfer students typically have maintained at least a 3.25 college G.P.A., 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 G.P.A., 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 also may be asked to complete a brief written application.

Courses
Honors Western Heritage I and Honors Western Heritage II
4250 Honors Senior Colloquium
Staff 4 credits
Variable content. An interdisciplinary colloquium designed to provide opportunities for intellectual synthesis and to cultivate advanced principles and practices of scholarship. (Offered once a year, usually in Spring.)

Honors Contract
An enhanced component of approved course. In consultation with an instructor, a student constructs a rationale and plan for doing independent work of a character and quality not expected of other students within the context of a particular class. This plan typically involves a combination of research, writing, and oral presentation. Typically, it requires something more distinctive than simply an extra paper or a longer report. A different quality, not just quantity, of thinking is expected.

Forms for Honors contracts are available from the Director of Honors or the Honors Program Office. On these forms, the student and the faculty member must provide the following information: the names of the student and the professor; the name and number of the course; the term in which the student is enrolled in the course; an overview of the non-Honors requirements for the course; a description of the work required of the Honors student; the deadline for submitting this work; and signatures of the student and the professor.

Carthage encourages students to begin work on the Honors component of each course at the beginning of the term. To facilitate this, Honors contract forms must be submitted to and approved by the Director of Honors no later than the end of the third week of class during the Fall or Spring Term, and no later than the end of the first week of class during J-Term. This deadline can be extended only at the request of the professor. Honors contracts may be submitted in advance, prior to the beginning of the term. Honors contracts submitted to the Director of Honors will be kept in the Honors Office and will be placed in the student's Honors file only after notification by the professor that the student has completed the work outlined in the Honors contract.

If a student does not earn a grade of "B" or higher during the term (including the work outlined in the Honors contract), the student will not receive Honors credit for the course.

Carthage Honors Plan of Study
Students who complete the Carthage Honors Program are expected not only to commit themselves to rigorous in-depth study of a specific subject, but also to demonstrate intellectual balance and flexibility through their ability to make connections across disciplines.

The Honors Plan of Study requires students to complete the three components of the Honors Program successfully. Please note that qualified students (including transfers) may petition the Director of Honors for a modified plan of study.

1. Foundation Component
These requirements consist of four courses intended to ensure that students explore their academic options and their intellectual abilities through challenging and enriched fundamental courses. Typically, Honors students complete this component of the program during their first three or four terms at Carthage. Four courses including at least one of the following courses:

- Honors Western Heritage I
- Honors Western Heritage II
- A Global Heritage course with an Honors Contract

AND

- At least one Honors General Education Course (a 1000 or 2000 level course with an Honors Contract).

2. Students who successfully complete these four courses and maintain an overall G.P.A. of at least 3.25 will be eligible to continue in the Carthage Honors Program.

3. Concentration Component
These requirements intend to ensure that Honors students do high-level work in a particular academic discipline. Students seeking All-College Honors must earn Honors in at least one of their majors. If a department has not established requirements for Honors in a given major, the student must complete the following requirements:

- 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:
- Complete all requirements for the major;
- Receive a rating of "excellent" on the Senior Thesis from the faculty of the major department;
- Be formally recommended by the faculty of the major department;
- Maintain an overall G.P.A. of 3.5 at graduation.

4. Integration Component
These requirements intend to ensure that Honors students stretch themselves across the curriculum, that they connect what they are learning about a particular discipline with other ways of knowing, learning, and doing.

- Carthage Symposium (with Honors Contract)
- Honors 4250: Senior Colloquium
- Overall G.P.A. of 3.5 at graduation

Students who successfully complete all three components of the Honors Program will be granted All-College Honors and that designation will appear on their transcripts and on their diploma. They also will be acknowledged at the spring Honors Convocation and at Commencement.

Honors Co-Curriculum
The Honors Program seeks to enhance classroom experiences through a wide variety of intellectual, cultural, and social opportunities. Honors students, with appropriate faculty encouragement and support, assume visible leadership in a variety of contexts across campus and help elevate its intellectual and cultural tones.
The Honors Council serves as an umbrella organization for student-led Honors activities on campus. Through Honors Council, students can participate in service projects, social activities, and special programming and student-faculty gatherings. The Honors Council has an executive board and is structured so that 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.

**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 Honoraries**
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 at the Honors Convocation.

**Dean's List**
Full-time students who earn at least a 3.5 G.P.A. while completing at least 14 graded credits in a term are acknowledged on the Carthage Dean's List.

To have one's name placed on the Adult Education Dean's List, a part-time undergraduate evening student must have completed 32 undergraduate graded credits at Carthage, have taken at least eight graded credits in both the previous and current terms, and have a GPA of 3.7.

**Honors in the Major**
Departments at Carthage offer students the opportunity to earn Honors in the 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 requirement will apply to students seeking Honors in the major:

1. Honors Contracts in two advanced courses in one major

   **AND**

2. 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;


Please see the appropriate department chair for details on Honors in the major.

Successful completion of Honors in the major will be recognized at Commencement.

**Latin Honors**
Diplomas of graduating seniors with **at least 64 graded Carthage credits** are inscribed as follows:

- **cum laude** in recognition of a final, cumulative grade-point average of at least 3.5/4.0
- **magna cum laude** in recognition of a final, cumulative grade-point average of at least 3.7-3.889/4.0, and a senior thesis or equivalent project deemed to be of Honors quality by the appropriate department or program and presented to an audience including people outside of the student's major
- **summa cum laude** in recognition of a final, cumulative grade-point average of at least 3.9-4.0, and a senior thesis or equivalent project deemed to be of Honors quality by the appropriate department or program and presented to an audience including people outside of the student's major

Students must complete all course work by the end of the spring term, meeting the above criteria, in order to have their Latin Honors recognized at graduation.

**Division of the Natural Sciences**
The Division of Natural Sciences is composed of the departments of biology, chemistry, geography and earth science, mathematics, physics and astronomy, computer science, and programs in Entrepreneurial Studies in the Natural Sciences, Environmental Science and Neuroscience. The Division strives to provide the highest quality experience in science and mathematics within the context of a liberal arts education. Each student approaches the offerings of the division with different needs. For many students, the courses taken will be their only academic experience in science and mathematics. The courses taken by these students will expose them to the diversity in science and mathematics while helping to develop a sense of intellectual curiosity and the judgment necessary to function effectively in our increasingly complex world.

The cornerstone of an education in science and mathematics is the opportunity to explore a chosen discipline in depth. The faculty is dedicated to providing an environment that will nurture this exploration and allow the student to develop a close academic relationship with a faculty mentor. Thus, students are encouraged to participate in research projects as early in their academic career as possible.

Students majoring in one of the many disciplines within the division are well prepared for careers in education, research, or industry. Many students choose to continue their education and are admitted to some of the finest graduate and professional schools in the nation. A special science-related program available to Carthage students is Entrepreneurial Studies in the Natural Sciences (ESNS).

The Division is keenly aware of the importance of science education for the population at large. For this reason, the Division has general education courses in each department, and NAT 1500 Discovery, a series of thought-provoking, topic-oriented seminars and laboratory experiences in the natural sciences, especially designed for the student who is not majoring in one of the science disciplines.

**Natural Science minor for Teacher Candidates Seeking Grades 1-9 (Middle**
Childhood to Early Adolescence Certification

The structure of the Teacher Education Program and the Natural Science Division for this minor is as follows:

4 credits each in physics, earth/space science, chemistry, and biology; plus a concentration of 12 additional credits in one of the above areas. Additionally the students will complete the Science Methods course for the elementary/middle school certification program.

Broadfield Science minor for Teacher Candidates Seeking Grades 6-12 (Early Adolescence to Adolescence Certification)

Recent trends in education show that teachers are being asked to teach broad, general science classes, that often stretch beyond their major field. In fact, applicants with a single science major may get overlooked in favor of applicants that have some broadfield training. The broadfield science minor, as a supplement to the science major and education certification, will prepare students to teach science in junior and senior high schools.

Requirements for the Minor:
The students will:
1. Major in biology, chemistry, physics, or other DPI certifiable natural science
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 1100 Biodiversity and Evolution
   BIO 1020 Plants and People or
   BIO 1030 Conservation or
   BIO 2200 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
   GEO 1700 Intro to Physical Geography or
   ENV 1600 Intro to Environmental Science
   NAT 1500 Discovery
   SCI

A series of thought-provoking, topic-oriented undergraduate seminars and laboratory experiences in the natural sciences. The seminars will deal with a set of relevant scientific issues and ideas. Past courses have examined issues such as infectious disease, climate change, relativity, and chaos theory. These issues are explored through hands-on experience, reading, writing, and discussion. The ethical and moral dilemmas faced by scientists throughout the ages are an essential component of this course. Students who have completed 12 or more credit hours in courses designated SCI cannot receive credit for NAT 150 Discovery.

NAT 4200 Methods and Materials in 4 cr.
Teaching Natural Science

A study of natural science teaching methods and instructional materials. Special attention is given to the selection and organization of subject matter and learning activities. Field work required.

Division of the Social Sciences

Course work and programs of study in the social sciences offer students a broad understanding of the forces shaping the evolution and function of human society. Through various disciplines, the nature of social interaction in the spheres of the family and community; workplace and economy; and national and international relations are explored, and the role that a liberally-educated individual and citizen can play in advancing the well-being of constituent groups is examined and debated.

The Division of Social Sciences include several fields of departmental study: business administration, economics, political science, psychology, social work, and sociology. In addition to majors and minors in each of the above disciplines, the division offers majors in accounting, criminal justice, social work, information systems, marketing, international political economy, environmental sciences, and other interdisciplinary programs.

The division provides all Carthage students with a wide range of courses for meeting the social science distribution requirement of the general education curriculum, and its several majors to balance theoretical and applied study. Opportunities for field placement are integral to several programs. Throughout the curriculum, students will find courses that sharpen their analytical skills while encouraging an examination of their value precepts.

After completing the program of study as majors, Carthage graduates find themselves prepared to begin professional careers in business management, public service, secondary education, or human service organizations. A few majors, who together make up approximately one-third of all Carthage students, choose to continue immediately with their education by entering the various graduate programs in their respective disciplines or professional schools in law, management, and social work.
Undergraduate Academic Departments and Programs of Study

<table>
<thead>
<tr>
<th>Department/Program</th>
<th>Courses</th>
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<tbody>
<tr>
<td>Art</td>
<td>ART 2700 Art Survey I (4 cr.)</td>
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<td>ART 2701 Art Survey II (4 cr.)</td>
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<td>ART 1070 2-Dimensional Design (4 cr.)</td>
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<td>ART 1071 3-Dimensional Design (4 cr.)</td>
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<td>ART 2000 Drawing I (4 cr.)</td>
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<td></td>
<td>ART 4000 Senior Seminar in Studio Art (4 cr.)</td>
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<td></td>
<td>Choose one art history (4 credits):</td>
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<td>ART 2710 Arts of the Americas (4 cr.)</td>
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<td>ART 200T Topics in Art History (4 cr.)</td>
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<td>ART 3710 20th Century American Art (4 cr.)</td>
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<td>ART 4500 Independent Studies in Art (4 cr.) History</td>
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<td>Choose three. Two must be upper level studio that reflect your 2-D or 3-D emphasis. Upper level studio courses may be repeated up to three times. (12 credits):</td>
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<td>ART 1050 Crafts (4 cr.)</td>
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<td>ART 2100 Darkroom Photography (4 cr.)</td>
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<td>ART 2200 Painting (4 cr.)</td>
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<td>ART 2330 Relief Printing (4 cr.)</td>
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<td>ART 2310 Lithography (4 cr.)</td>
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<td>ART 2320 Intaglio (4 cr.)</td>
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<td>ART 2300 Silkscreen (4 cr.)</td>
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<td>ART 2400 Introduction to Sculpture (4 cr.)</td>
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<td>ART 2500 Ceramic Hand-Building (4 cr.)</td>
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<td>ART 2510 Ceramic Wheel-Throwing (4 cr.)</td>
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<td>ART 2520 Architectural Ceramics (4 cr.)</td>
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<td>ART 3100 Studio Photography (4 cr.)</td>
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<td>ART 3010 Illustration (4 cr.)</td>
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<td>ART 3500 Advanced Ceramics (4 cr.)</td>
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<td>ART 3300 Advanced Printmaking (4 cr.)</td>
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<td>ART 3200 Advanced Painting (4 cr.)</td>
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<td>ART 3400 Advanced Sculpture (4 cr.)</td>
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<td>ART 400T Topics in Art (4 cr.)</td>
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<td></td>
<td><strong>Art History Major:</strong> 40 credits</td>
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<td><strong>Required (16 credits):</strong></td>
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<td>ART 2700 Art Survey I (4 cr.)</td>
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<td>ART 2701 Art Survey II (4 cr.)</td>
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<td></td>
<td>ART 3700 Research Methods (4 cr.)</td>
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<td>ART 4700 Senior Seminar (4 cr.)</td>
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Social Science:
- Sociology
- Women's and Gender Studies

Sociology:

The 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 and three dimensions, students learn to relate abstract ideas and visual forms, acquiring languages of visual communication.

The studio 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 classes and internships, visiting artist workshops, and involvement in Carthage's Johnson Art Gallery 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.

A concentration in the visual arts provides essential preparation for employment, or graduate study leading to employment, in: forensic illustration; industrial design, art conservation and restoration; visual merchandising; scenic arts for the entertainment industry; art therapy; production pottery, master printmaking, arts administration; visual and data analysis; research; teaching; publishing (editorial, design, research); curating growing government or corporate collections; museum, university or college archive curation; positions with local arts councils and non-profit agencies.

**Studio Art Major** Total credits: 40
Required (24 credits):

- ART 2700 Art Survey I (4 cr.)
- ART 2701 Art Survey II (4 cr.)
- ART 1070 2-Dimensional Design (4 cr.)
- ART 1071 3-Dimensional Design (4 cr.)
- ART 2000 Drawing I (4 cr.)
- ART 4000 Senior Seminar in Studio Art (4 cr.)

Choose one art history (4 credits):

- ART 2710 Arts of the Americas (4 cr.)
- ART 200T Topics in Art History (4 cr.)
- ART 3720 Arts of Africa (4 cr.)
- ART 3730 Masterpieces of Asian Art and Architecture (4 cr.)
- ART 3710 20th Century American Art (4 cr.)
- ART 4500 Independent Studies in Art (4 cr.)

Choose three. Two must be upper level studio that reflect your 2-D or 3-D emphasis. Upper level studio courses may be repeated up to three times. (12 credits):

- ART 1050 Crafts (4 cr.)
- ART 2100 Darkroom Photography (4 cr.)
- ART 2200 Painting (4 cr.)
- ART 2330 Relief Printing (4 cr.)
- ART 2310 Lithography (4 cr.)
- ART 2320 Intaglio (4 cr.)
- ART 2300 Silkscreen (4 cr.)
- ART 2400 Introduction to Sculpture (4 cr.)
- ART 2500 Ceramic Hand-Building (4 cr.)
- ART 2510 Ceramic Wheel-Throwing (4 cr.)
- ART 2520 Architectural Ceramics (4 cr.)
- ART 3100 Studio Photography (4 cr.)
- ART 3010 Illustration (4 cr.)
- ART 3500 Advanced Ceramics (4 cr.)
- ART 3300 Advanced Printmaking (4 cr.)
- ART 3200 Advanced Painting (4 cr.)
- ART 3000 Advanced Drawing (4 cr.)
- ART 3400 Advanced Sculpture (4 cr.)
- ART 400T Topics in Art (4 cr.)

**Art History Major** 40 credits

Required (16 credits):

- ART 2700 Art Survey I (4 cr.)
- ART 2701 Art Survey II (4 cr.)
- ART 3700 Research Methods (4 cr.)
- ART 4700 Senior Seminar (4 cr.)
Choose 12 credits from:
ART 2710 Arts of the Americas (4 cr.)
ART 200T Topics in Art History (4 cr.)
ART 3720 Arts of Africa (4 cr.)
ART 3730 Masterpieces of Asian Art and Architecture (4 cr.)
ART 3710 Twentieth Century American Art (4 cr.)
ART 3550 Internship (4-8 cr.)
ART 4500 Independent Studies in Art History (4 cr.)
ART 400T Topics in Art History (4 cr.)
CDM 3150 History of Graphic Design (4 cr.)

Choose 4 credits from:
ART 1030 Exploring Studio Arts (4 cr.)
ART 1050 Crafts (4 cr.)
ART 1070 2-Dimensional Design (4 cr.)
ART 1071 3-Dimensional Design (4 cr.)
ART 2000 Drawing I (4 cr.)
ART 2400 Introduction to Sculpture (4 cr.)
ART 2100 Darkroom Photography (4 cr.)
ART 2200 Painting (4 cr.)
ART 2500 Ceramic Hand-Building (4 cr.)
ART 2510 Ceramic Wheel-Throwing (4 cr.)
ART 2520 Architectural Ceramics (4 cr.)
ART 3010 Illustration (4 cr.)

In consultation with advisor, choose 8 credits from:

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Choose two (8 credits):
ART 1700 Introduction to Art History (4 cr.)
ART 2700 Art Survey I (4 cr.)
ART 2710 Arts of the Americas (4 cr.)
ART 200T Topics in Art History (4 cr.)
ART 3720 Arts of Africa (4 cr.)
ART 3730 Masterpieces of Asian Art (4 cr.)
ART 3710 Twentieth Century American Art (4 cr.)
ART 4500 Independent Studies in Art History (4 cr.)
ART 400T Topics in Art History (4 cr.)
CDM 3150 History of Graphic Design (4 cr.)

Choose 4 credits:
ART 1070 Two-Dimensional Design (4 cr.)
ART 2000 Drawing I (4 cr.)

History of the Arts Minor
Choose six (24 credits):
ART 1700 Introduction to Art History (4 cr.)
ART 2700 Art Survey I (4 cr.)
ART 2710 Arts of the Americas (4 cr.)
ART 200T Topics in Art History (4 cr.)
ART 3720 Arts of Africa (4 cr.)
ART 3730 Masterpieces of Asian Art (4 cr.)
ART 3710 Twentieth Century American Art (4 cr.)
ART 4500 Independent Studies in Art History (4 cr.)
CDM 3450 Mass Communications (4 cr.)
MUS 3060 Music History II (4 cr.)
MUS 3070 Music History III (4 cr.)
THR 2270 History of Classical Theatre (4 cr.)
1030 (103) Exploring Studio Arts
Staff 3 credits
FAR
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. Fullfills the fine art requirement for non-art majors only.
Fall/Spring

1050 (105) Crafts
Staff 4 credits
FAR
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

1070 (153) Introduction to Two-Dimensional Design
Staff 4 credits
FAR
Application of design studies to drawing, painting, printmaking. A studio art course containing theory and practice. Students are taught an awareness of elemental design factors involved in creating various types of images and investigate individual ways in which to express these factors.
Fall

1071 (154) Introduction to Three-Dimensional Design
Greene/Staff 4 credits
FAR
Application of design studies in sculptural media, pottery and techniques. Lectures and demonstrations combined with theory and analysis enables the student to develop a plastic language for creating in clay, plaster, wood, welding, assemblage and mixed media.
Spring

1700 (115) Introduction to Art History
Cassidy/Hudson 4 credits
FAR
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 - and shaped by - social, political, cultural, religious and individual forces.
Fall/Spring

2000 (201) Drawing I
Levesque/Staff 4 credits
FAR
Introduction to the visual language and techniques of drawing techniques. Aims to develop manual and visual skills through a series of problems that make use of figurative and non-figurative materials. A studio art course containing lectures, demonstrations, theory and practice.
Fall/Spring

200T (271) Topics in Art/Art History
Staff 1-4 credits
A variable-content course for studying a particular development in art/art history in which there is no specific, regular course.

2100 (204) Darkroom Photography
Staff 4 credits
FAR
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: Consent of instructor
Fall/Spring

2200 (205) Painting
Levesque 4 credits
FAR
A beginning course in oil, acrylic/ mixed media or watercolor. Emphasis on developing skills and techniques in controlling the paint medium, color theory, and inventive compositional strategies based on study of painters from the past; modern and contemporary. Individual attention will be given towards developing personal artistic voice in the medium. Paintings will be based on direct observation of still-life, self-portrait and other subject matter, including an assignment on social commentary. A studio course containing lecture, discussion and theory. Depending on contents in given terms. Medium is determined by term. Prerequisite: ART 2000, or consent of instructor
Fall/Spring

2300 Silkscreen
Staff 4 credits
FAR
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.

2310 Lithography
Staff 4 credits
FAR
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.

2320 Intaglio
Staff 4 credits
FAR
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.
### 2330 Relief Printing
Staff 4 credits  
**FAR**  
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.

### 2400 (211) Introduction to Sculpture
Staff 4 credits  
**FAR**  
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.
**Fall**

### 2500 (215) Ceramic Hand-Building
Greene 4 credits  
**FAR**  
Introduction to ceramic hand-building techniques, ceramic sculpture, and basic ceramic processes including clay and glaze formulation and kiln firing.
**Fall/Spring**

### 2510 (216) Ceramic Wheel-Throwing
Greene 4 credits  
**FAR**  
Introduction to ceramic wheel-throwing techniques, functional pottery, sculpture and basic ceramic processes including clay and glaze formulation and kiln firing.
**Fall/Spring**

### 2520 (217) Architectural Ceramics: Tile and Brick
Greene 4 credits  
**FAR**  
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.
**Once a year, Fall or Spring**

### 2700 (221) Art Survey I
Staff 4 credits  
**FAR**  
An introduction to the the history of the Western tradition of art, from the Paleolithic through late mediaeval. This course is offered every fall.
**Fall**

### 2701 (222) Art Survey II
Staff 4 credits  
**FAR**  
An introduction to the history of the Western tradition of art, from the early Renaissance through contemporary art. This course is offered every spring.
**Spring**

### 2710 (224) Arts of the Americas
Cassidy 4 credits  
**FAR**  
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.
**Fall**

### 3000 (318) Advanced Drawing
Levesque 4 credits  
**FAR**  
Advanced drawing with emphasis on the human figure. A studio art course containing theory and practice. Emphasis is on projects that focuses 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**

### 3010 (303) Illustration
Staff 4 credits  
Development of drawing skills with an emphasis on individuality of style and expression. Teaching is directed toward a variety of drawing techniques to be used as a means of communicating ideas for commercial reproduction.
**Fall/Spring**

### 3100 (300) Studio Photography
Staff 4 credits  
**FAR**  
An introduction to the use of large format view cameras. Technical instruction includes the use of camera, lighting equipment, film handling, exposure procedures, film development and printing.
**Prerequisite: ART 2100, or consent of the instructor**
**Fall/Spring**

### 3100 (300) Advanced Painting
Levesque 4 credits  
Advanced studio work in painting with an emphasis on individual work and the formulation of individual language. Independent exploration in areas of interest highly encouraged within the parameters of class assignments. Students will meet with the ART 2200 section. This course may be repeated up to three times to encompass all media; oil, acrylic/mixed media, and watercolor.
**Prerequisite: ART 2200**
**Fall/Spring**

### 3300 (317) Advanced Printmaking
Staff 4 credits  
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**
Asian Studies

3310 (301) Graphic Production Techniques
Staff 4 credits
Camera-ready layout will be reproduced through serigraphic printing techniques. A studio art course containing theory and practice.
Prerequisite: Consent of instructor
Fall

3400 Advanced Sculpture
Staff 4 credits
Advanced studio work in sculpture. Emphasis 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 free-standing works. This course may be repeated up to three times.

3500 (315) Advanced Ceramics
Greene 4 credits
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

3700 (304) Research Methods in Art History
Cassidy 4 credits
An introduction to resources and methods of research in Art History. The class gives an overview of types of evidence, methods of scholarship, and the discipline's historiography. A case study in a single area will be the focus for practical exercises in research and writing. Available to Art History majors only.
Prerequisite: ART 2700 and ART 2701

3710 (312) Twentieth Century American Art
Staff 4 credits
FAR
This course is intended to provide students with an in-depth understanding of the artistic, socio-political, 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 Euro-centric 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.

3720 (305) Arts of Africa
Cassidy 4 credits
FAR
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.

3730 (306) Masterpieces of Asian Art and Architecture
Cassidy 4 credits
FAR
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.
Fall

4000 (402) Senior Seminar in Studio Art
Greene/Levesque 4 credits
Studio Art Senior Seminar provides the Studio Art major with an opportunity to design and install a capstone senior exhibition. Critical theory and contemporary art criticism will be covered as well as current practices in the display of contemporary art. The Seminar will include practical issues for the career artist.
Prerequisite: Completion of four studio courses and the consent of the instructor
Spring

400T (471) Topics in Art/Art History
Staff 1-4 credits
A variable content course for studying a particular development in art/art history for which there is no specific regular course.

4500 (450) Independent Studies in Art History
Staff 2-4 credits
Individual reading and research into art history topics. Instructor will approve and direct a specific program of research submitted by the student.
Prerequisite: Consent of instructor
Fall/Spring

4700 (403) Senior Seminar in Art History
Cassidy 4 credits
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.
Prerequisite: ART 2700, ART 2701 and ART 3700

Asian Studies
Recent economic, political and social changes clearly show that broader and deeper understanding of Asia is essential. Despite the significance of Asian culture, the study of Asia has received little emphasis in our educational system, where the thrust of instruction tends to reflect the origins of the majority of the population. These conditions have changed over time, sometimes dramatically, as the United States has become a more pluralistic society. As a relatively recent example, the 1965 liberalization of immigration law has resulted in an enormous expansion in the number of Americans of Asian origin. The need to know about Asia also stems from the changing economic landscape abroad, as well as developments at home. Since 1981, the trade deficits with both China and Japan have become enormous, creating political tensions. Both of these Asian nations are undergoing significant economic and political changes, which in turn will influence relations with the U.S. Furthermore, the 1997 financial crisis afflicting Indonesia, Korea, Malaysia, Thailand, and other Asian nations had serious long term implications, and is an instructive example of how developments in commercial markets can have truly global implications.

The Asian Studies major will provide substantial and systematic instruction about
Asia; the minor will supplement students existing majors through systematic instruction in appropriate Asia-related areas. The goal is to broaden understanding to prepare Carthage graduates for careers involving Asia, and more broadly for work and life in an increasingly global economy. The College has faculty strength in East and South Asian studies. The existing Mizuno fellowships, the exchange program with Tokyo Gakugei University, and the Carthage/Hong Lou Si study abroad program are important components in helping to give students direct study and work experience in Asia.

Developments in each decade since World War II have alerted Americans to the importance of Asia. From a longer perspective, Asian cultures and history have had profound effects on our own. The proposed major and minor are designed to give Carthage students an effective and interdisciplinary education on different dimensions of this significant region.

Requirements for the Major:
The Asian Studies major consists of 40 credits, of which 16 credits must be in a single Asian language. The remaining 24 credits will include ASN 4000, Senior Seminar in Asian Studies, HIS 1200: Issues in Asian History, and four additional courses either drawn from the list below, or approved by the Director of Asian Studies. A further requirement is that the courses, other than the Senior Thesis, must be drawn from at least four different academic departments.

Requirements for the Minor:
The minor consists of six 4-credit courses. Students are required to take HIS 1200: Issues in Asian History, and five other courses from the list below. These six courses must be from at least three departments. Students may choose their other courses from among the following:

Art Department
ART 3730 Masterpieces of Asian Art and Architecture

Economics Department
ECN 200T Topics in Economics (when the course has substantial Asian content)
ECN 3100 Political Economy of the Pacific Rim
ECN 4030 International Political Economy

History Department
HIS 3400 Modern China
HIS 3450 Modern Japan

Modern Language Department
CHN 1010 Introductory Chinese I
CHN 1020 Introductory Chinese II
CHN 2010 Elementary Chinese I
CHN 2020 Elementary Chinese II
CHN 3010 Intermediate Chinese I
CHN 3020 Intermediate Chinese II
JPN 1010 Introductory Japanese I
JPN 1020 Introductory Japanese II
JPN 2010 Elementary Japanese I
JPN 2020 Elementary Japanese II
JPN 3011 Intermediate Oral Japanese I
MLA 3060 East Asian Civ. and Culture
MLA 3100 East Asian Lit. in Translation

Political Science Department
POL 1030 Introduction to Comparative Politics (when the course has substantial Asian content)
POL 200T Topics in Political Science (when the course has substantial Asian content)
POL 3390 Politics of Rapid Growth East Asia
POL 3400 Chinese Politics
POL 3580 American Foreign Policy

Religion Department
REL 3110 Hinduism
REL 3120 Islam
REL 3130 Buddhism
REL 3140 East Asian Religion
REL 3380 Religion and Society in Modern India.

Other courses may also be counted toward the major or the minor. These courses must have substantial Asian content, and be approved by the Director of Asian Studies.

4000 (400) Senior Seminar in Asian Studies

Staff 4 credits

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.

Athletic Training

MAJOR 56 credits

Carthage is accredited for the athletic training program by the Commission on Accreditation of Allied Health Education Programs.

The athletic training major at Carthage is an undergraduate entry-level program. The program begins its clinical instruction program in the student's second term of their sophomore year. Transfer students must have 32 credits to be eligible for admission. The student's acceptance into the program is based on the following criteria:

1. Formal admission and acceptance by Carthage Office of Admissions.
3. Completion of 50 observation hours.
4. A personal interview with the Athletic Training Program director and admissions committee.
5. High school grade point average, ACT scores, and class rank.
6. A completed application.

The student must have a minimum G.P.A. of 2.75 to apply to the athletic training program. There is no minimum high school G.P.A., ACT score, or class rank. The student is selected based on the comparison of all criteria listed above with other students applying at the same time. The application for admission into the program will be provided to the student by the program director. The deadline for admission is December 1 of the student's sophomore year. All students applying for admission will be notified in writing of their acceptance or rejection into the program within three weeks after the admission deadline. If students are not accepted they can reapply the following year.

Athletic Training Educational Program

Technical Standards for Admission

The Athletic Training Educational Program at Carthage is a rigorous and intense curriculum. One objective is to prepare graduates to enter a variety of employment settings and to render care to a wide spectrum of individuals engaged in physical activity. The technical standards set forth by the Athletic Training Educational Program establish the essential qualities considered necessary for students admitted to this program to achieve the knowledge, skills, and competencies of an entry-level athletic trainer, as well as to meet the expectations of the program's accrediting agency (Commission on Accreditation of Athletic Training Education [CAATE]).

The abilities and expectations listed below must be met by all students admitted to the Athletic Training Educational Program. In the event a student is unable to fulfill these technical standards, with or without reasonable accommodation, the student will not be admitted into the program. Compliance with the program's technical standards does not guarantee a student's eligibility for the BOC certification examination.
Candidates for selection to the Athletic Training Educational Program must demonstrate:

1. The mental capacity to assimilate, analyze, synthesize, and integrate concepts to problem solve to formulate assessment and therapeutic judgments, and to distinguish deviations from the norm.

2. Sufficient postural and neuromuscular control, sensory function, and coordination to perform appropriate physical examinations using accepted techniques; and to accurately, safely, and efficiently use equipment and materials during the assessment and treatment of patients.

3. The ability to effectively communicate with patients and colleagues, and to show sensitivity to individuals from different cultural and social backgrounds; to effectively communicate judgments and treatment information; and to understand and speak the English language at a level consistent with competent professional practice.

4. The ability to clearly and accurately record the physical examination results and a treatment plan.

5. The capacity to maintain composure and continue to function well during periods of high stress.

6. The perseverance, diligence, and commitment to complete the athletic training education program as outlined and sequenced.

7. The flexibility and ability to adjust to changing situations and uncertainty in clinical situations.

8. Affective skills, appropriate demeanor and rapport that relate to professional education and quality patient care.

Candidates for selection to the Athletic Training Educational program will be required to verify that they understand and meet these technical standards, or that they believe that, with certain accommodations, they can meet the standards.

Students with disabilities who request accommodations to meet the program standards must provide the program director with documentation appropriate to the condition from an appropriate authority. The program director will have the Disability Services personnel evaluate documentation and determine whether the stated condition qualifies as a disability. The Disability Services personnel together with the program director will determine what appropriate accommodations will be provided to a student so that he or she can meet the program's technical standards.

The Athletic Training Program includes:

**ATH 1020 Introduction to Athletic Training**  
Jensen 2 credits  
This course will introduce the student to the core domains of athletic training. The student will describe and demonstrate proficiency in fundamental skills required to be an entry-level certified athletic trainer.  
*Fall*

**ATH 2080 Structural Kinesiology**  
Jensen 4 credits  
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: ATH 1020*  
*Fall*

**ATH 2190 Principles of Athletic Training**  
Jensen 4 credits  
This clinical experience will provide the student a controlled environment to practice and master the clinical proficiencies as outlined by the NATA. The corresponding didactic course work is learned in ATH 2190: Principles of Athletic Training.  
*Spring*

**ATH 3040 Clinical Skills in Athletic Training Practicum I**  
Jensen 2 credits  
This course will cover in detail the origin, insertion, function, and innervation of the major skeletal muscles as they relate to human 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: Admission into the Athletic Training Program, ATH 1020, 2080*  
*Spring*

**2080 (208) Structural Kinesiology**  
Ruffner 4 credits  
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: ATH 1020*  
*Fall*

**2100 (220) Athletic Training Practicum I**  
Jensen 2 credits  
This clinical experience will provide the student a controlled environment to practice and master the clinical proficiencies as outlined by the NATA. The corresponding didactic course work is learned in ATH 2190: Principles of Athletic Training.  
*Spring*

**2190 (219) Principles of Athletic Training**  
Jensen 4 credits  
The student will be provided an overview of the principles of injury as they relate to environmental conditions, protective equipment, and physical conditioning. An in-depth study of sports injuries to regional areas of the body will focus on the etiology, symptoms and signs, and management. The laboratory section will explore various protective taping and bandaging along with rehabilitation techniques.  
*Prerequisite: Admission into the Athletic Training Program, ATH 1020, 2080*  
*Spring*

**3040 (304) Clinical Skills in Athletic Training**  
Dinauer 4 credits  
This class is designed to specifically prepare the upper-level student in the area of evaluation and assessment of orthopedic injuries.  
*Fall*

**3070 (370) Clinical Skills in Athletic Training II**  
Ruffner 4 credits  
This course is designed to continue where Clinical Skills I ended in the fall semester. Special emphasis is on evaluating orthopedic injuries sustained by those involved in physical activity. Physical therapists will be utilized to help teach thoracic and lumbar spine assessment.  
*Spring*
3080 (380) Modalities in Athletic Training
Dinauer 4 credits
This course provides the student with the principles of therapeutic modalities and a variety of athletic training room skills. An overview of the body's physical and psychological reactions to stress and injury will be covered. The student will describe and demonstrate the use of thermal agents, electrical agents, ultrasound, and mechanical modalities.

Spring

3200 (305) Athletic Training Practicum II
Dinauer 2 credits
This is a supervised clinical experience of the procedures for injury evaluation and physical examination skills.

Fall

3300 (381) Athletic Training Practicum III
Dinauer 1 credit
This course will provide the student with the opportunity to demonstrate the use of thermal agents, electrical agents, ultrasound, and mechanical modalities. Clinical problem solving will be addressed through the use of case studies.

Spring

3510 (351) Field Placement in Athletic Training
Ruffner 4 credits
An off-campus practical experience for the student majoring in athletic training. The student will be placed in a health care facility to work with a licensed athletic trainer/physical therapist.

400T Topics in Athletic Training
Staff 1-4 credits
A variable-content course for studying a particular development in athletic training for which there is no specific, regular course.

4080 (408) Administration in Athletic Training
Jensen 4 credits
This course will provide an overview of program, human resources, financial, and informational management. Facility design/planning and insurance systems also will be discussed. An in-depth study of legal considerations in athletic training also will be included.

Fall

4090 (440) Therapeutic Principles of Rehabilitation in Athletic Training
Ruffner 4 credits
Successful rehabilitation depends on developing a problem list from the evaluation of the injured athlete. Once the problem list has been established, short- and long-term goals should be developed to motivate and measure the athlete's progression in the rehabilitative program. This class will prepare the student to administer appropriate rehabilitation programs and help prepare them for entry-level certification in athletic training.

Fall

4100 (471) Pharmacology
Jensen 2 credits
This course will cover pharmacology, ergogenic aids, and drug/alcohol abuse as it relates to athletics and the physically active population.

Spring

4400 (441) Athletic Training Practicum IV
Ruffner 1 credit
This course will provide the athletic training student the opportunity to practice evaluation and rehabilitation skills in a safe and supervised classroom setting. Off-site clinical rotations will occur at local physical therapy facilities.

Fall

4600 Athletic Training Practicum V
Staff 1 credit
Practicum V is designed for the senior athletic training student who is preparing to take the Board of Certification exam. Practicum V is for the student who is preparing to take the Board of Certification exam.

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. Students interested in a major in biology are strongly encouraged to begin their major with Biology 1100/2300 and Chemistry 1010/1020. Biology 1100 serves as an introduction to the fundamentals of biology as well as the prerequisite for the more specialized courses.

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, environmental 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 but who do not plan to major in biology. Plants and People, BIO 1020 provides the non-science major with a broad background in plant biology with emphasis on how humans use plants. Conservation, BIO 1030 focuses on issues important to humans and their environment. Human Anatomy and Physiology, BIO 1040 provides a strong background in the basic structure and function of humans.

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

Courses Designed for non-science majors: BIO 1010, 1020, 1030, 1040, 200T, and 2500.

Biology Major
A major in Biology consists of the following courses:

1. Core Courses:
   - BIO 1100 Biodiversity and Evolution (4 cr.)
   - BIO 2200 Intro to Ecology (4 cr.)
   - BIO 2300 Cell and Molecular Biology (4 cr.)
   - BIO 2400 Genetics (4 cr.)
   - BIO 4100 Experimental Design (4 cr.)
   - BIO 4120 Senior Seminar (4 cr.)

2. Four laboratory-based Biology elective courses numbered 3000 or above, or three courses in Biology numbered 3000 or above, and Chemistry 3010.

3. CHM 1010, 1020, 2070, and 2080.

4. The following courses will not count for credit toward a biology major: BIO 1010, BIO 1020, BIO 1030, BIO 1040, and BIO 200T.
Biology Minor
A minor in Biology consists of the following:
Six courses in biology, or five courses in biology plus Chemistry 3010.

Senior Thesis in Biology
The Senior Thesis is developed in consultation with the department faculty. Theses may include a scholarly manuscript of research performed or a detailed proposal for future research. Alternative projects may be approved by the faculty. In addition, students may be required to present their Senior Thesis in an oral presentation at a Division Colloquium, as a poster presented at a Division Poster Session, or to teach a class using the developed materials.

Honors in Major
Honors in Biology requires a 3.5 GPA in Biology, honors contracts in two advanced courses in Biology, presentation of an outstanding Senior Thesis project to the public, satisfactory performance on an exam before the Biology faculty, and a formal recommendation from the Biology Department.

1010 (101) Concepts in Biology
Staff 4 credits
SCI
A study of life phenomena with focus on macromolecules, cells, inheritance, and the structure and function of bacteria and plants. Lecture and laboratory. This course is not meant for Biology majors.
Fall, Spring

1020 (200) Plants and People
Radwanski 4 credits
SCI
Fundamentals of growth and development of plants with special reference to the history and social influence of cultivated plants. Designed for the non-science major. Lecture and laboratory.
Spring

1030 (220) Conservation
Staff 4 credits
SCI
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. Lecture, laboratory, and field trips.
Spring

1040 (260) Human Anatomy and Physiology
Staff 4 credits
SCI
A study of structure and function of organs and systems of the human body. Lecture and laboratory.
Fall/Spring

1100 (171) Unity and Diversity of Life
Staff 4 credits
SCI
This introductory course for Biology majors focuses on four core areas: cells, genes, evolution, and ecology. The course will relate these core areas to students lives and clarify the process of science.
Fall, Spring

200T (271) Topics in Biology
Staff 1-4 credits
SCI
A course of variable content on issues not covered in other courses in the department. The course may be taken more than once as long as the content is different. Not for Biology majors.
Prerequisite: Varies depending on course content

2200 (222) Introductory Ecology
Staff 4 credits
SCI
A field ecology course examining the factors influencing the distribution and abundance of organisms including the physical environment, species interaction, evolutionary adaptations and behavioral strategies. Lecture and laboratory.
Prerequisite: Biology 1100 or ENV 1600
Fall

2300 (251) Cell and Molecular Biology
Staff 4 credits
SCI
A lab-oriented study of sub-cellular phenomena with emphasis on current techniques necessary for understanding nucleic acids, proteins, and their regulatory roles in living systems. Lecture and laboratory combined.
Prerequisite: Biology 1100
Fall, Spring

2400 (303) Genetics
Staff 4 credits
SCI
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 Lab.
Prerequisite: Biology 1100 and Chemistry 1020 or consent of instructor
Fall, Spring

2500 Medical Ethnobotany
Choffnes 4 credits
SCI
In this course students will learn about the roles of plant products as drugs to treat disease and modify human physiology. Students will gain insight into the culture and biological implications of plant medicines in ancient and modern societies, and achieve an understanding of the changing roles of traditional drugs in an era of scientific medical practice. As herbal treatments to myriad conditions proliferate, students will develop the skills to assess scientifically the potential effects of plant products on human health.

3050 (305) Plant Physiology
Choffnes 4 credits
SCI
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: Biology 2400
Spring

3200 (380) Aquatic Ecology
Hegrenes 4 credits
SCI
A study of the interactions between the physical, chemical, and biological components of lakes and streams. Lecture, laboratory, and field trips.
Prerequisite: Biology 2200
Fall

3210 Animal Behavior
Hegrenes 4 credits
SCI
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, Lab.
Prerequisite: BIO 2200 or ENV 1600
3300 (370) Human Anatomical Systems
Martino 4 credits
SCI
Examination of structure as it relates to the organization of tissues, organs, and systems of the human body. Includes a study of human structure and its functional adaptation to changing environments. Lecture and Lab. Prerequisite: Biology 1100 or 1040

3310 (470) Systemic Physiology
Martino 4 credits
SCI
A systemic approach to the study of human physiology. Includes the fundamental regulatory mechanisms associated with homeostatic functions of major body systems. Lecture and laboratory. Prerequisite: BIO (1100 and 2300) or (2300 and 3300) Spring

3320 (405) Entomology
Staff 4 credits
SCI
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. Lecture, laboratory, and field trips. Prerequisite: Biology 1100 Fall

3330 (407) Comparative Anatomy of Vertebrates
Carr 4 credits
SCI
A study of structural, functional, and phylogenetic relationships among the chordates, particularly the vertebrates. Lecture and laboratory. Prerequisite: Biology 1100 Fall

3340 (306) Microbiology
Tobiason 4 credits
SCI
An introduction to bacteria, yeasts, molds, actinomycetes and other microorganisms with considerable attention to methods of culture of microorganisms. Lecture and laboratory. Prerequisite: BIO 2300 and 2400 Fall

3350 (310) Parasitology
Staff 4 credits
SCI
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. Prerequisite: BIO 2300

400T (471) Topics in Biology
Staff 1-4 credits
Intensive lecture and laboratory study of a specific area in biology. This course may be taken more than once as long as the content is different. Prerequisite: Varies depending on course content Fall/Spring

4100 (466) Experimental Design
Staff 4 credits
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. Prerequisite: Junior standing and 16 credits in biology Typically taken Spring of Junior year

4110 (470) Neuroscience III: Development and Neuroanatomy
Seymour 4 credits
This course provides the student with an understanding and an appreciation of the development and the structural-functional organization of the central nervous system. The architecture of the nervous system is examined with a special emphasis on sensory and motor modalities, functions, and disorders across a variety of species. Students participate in dissection exercises with nervous system tissue. Prerequisite: Grade of 'C' or better in Neuroscience 3950 or consent of instructor Spring

4120 (467) Senior Seminar
Staff 4 credits
Students are expected to use the techniques mastered in the Experimental Design course to write and successfully present research results to a broad audience. The course culminates in a completed Senior Thesis. Prerequisite: Biology 4100 This course is typically taken Fall of Senior year Fall

4200 (320) Advanced Ecology
Staff 4 credits
SCI
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. Prerequisite: Biology 2200

4300 (330) Immunology
Staff 4 credits
SCI
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. Offered second term, alternate years. Lecture and laboratory. Prerequisite: BIO 2300 and 2400 Fall

4310 (408) Developmental Biology
Choffnes 4 credits
SCI
A 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: Biology 2400

4320 (451) Recombinant DNA Technology
Pfaffle 4 credits
SCI
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: Biology 2300 or Biology 2400 or Chemistry 3010
Business Administration

4500 (450) Independent Study in Biology
Staff 2-4 credits
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

4900 (490) Research in Biology
Staff 1-4 credits
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

Business Administration
The mission of the Department of Business Administration is to create a learning environment that produces graduates in multiple business specialties who have:

1. Current skills and knowledge that make them desirable to a variety of organizations.
2. Enduring analytical, communication, and critical thinking skills to be life-long learners, advance in their careers, and contribute to the global community.

To achieve these broad objectives, graduates of the Department of Business Administration will:

1. Demonstrate knowledge of business terminology and theories both in general business and specific to their subject specialties.
2. Be able to select and apply appropriate technology for analysis, research, and presentation.
3. Work as effective members of a team.
4. Demonstrate critical thinking skills in decision making and problem solving.
5. Demonstrate appropriate oral and written communication skills.

In addition to the requirements listed below, students in all areas of business are encouraged to take MTH 1070 Functions, Graphs, and Analysis. Students who plan to pursue an MBA are also encouraged to take Mathematics 1120 Calculus I.

Management Major
MGT 1110 Introduction to Business and Technology
MGT 3120 Principles of Management
MGT 3210 Financial Management
MGT 3300 Production and Operations Management
MGT 3400 Human Resource Management
MGT 3600 Legal Environment of Business or MGT 3650
MGT 4900 Business Policy Seminar
MKT 3130 Principles of Marketing
ACC 2010 Financial Accounting
ACC 2020 Managerial Accounting (or ACC 2040)
ECN 1010 Principles of Microeconomics
ECN 1020 Principles of Macroeconomics
BUS/ECN 2340 Applied Statistics for Economics
ECN 2340

Business Administration Minor (not available for majors in the Business Administration Department):
ECN 1030*, MGT 1110**, ACC 2000***, MGT 3120, plus eight credits of electives from other Business Administration Department courses.

NOTE:
*Students may substitute the ECN 1010,1020 sequence for ECN 103 but will still need 8-credits of electives from the Business Administration Department.
**Students taking both ESN 3100 and ESN 3200 may substitute that sequence for MGT 1110 and one 4 credit business elective.
***Students may substitute the ACC 2010-2020 or ACC 2010-2040 sequence for ACC 2000 and one four credit business elective.

Accounting Major
ACC 2010 Financial Accounting
ACC 2040 Cost and Managerial Accounting or (ACC 2020 and ACC 2050)
ACC 3010 Intermediate Accounting I
ACC 3020 Intermediate Accounting II
ACC 4010 Advanced Accounting
ACC 4020 Auditing
MGT 4900 Business Policies Senior Seminar
MGT 1110 Introduction to Business and Technology
MGT 3650 Business Law for Accountants or (MGT 3600 and MGT 3610)
MGT 3210 Financial Management.
BUS/ECN 2340 Applied Statistics for Economics
ECN 2340

Finance Major
ACC 2010 Financial Accounting
ACC 3010 Intermediate Accounting I
ECN 1010 Principles of Microeconomics
ECN 1020 Principles of Macroeconomics
ECN 3200 Money and Banking
ECN 3290 International Finance
MGT 1110 Introduction to Business and Tech.
MGT 3120 Principles of Management
MGT 3210 Financial Management
BUS/ECN 2340 Business Statistics
ECN 2340
MGT 3600 Legal Environment of Business or MGT 3650 Business Law for Accountants
MGT 4050 Security and Portfolio Analysis
MGT 4900 Business Policy Senior Seminar

Chose One:
ACC 3020  Intermediate Accounting II
ECN 3340  Introduction to Econometrics

Marketing Major
ECN 1010 Principles of Microeconomics
ECN 1020 Principles of Macroeconomics
ACC 2000 Survey of Accounting or a sequence of: ACC 2010, 2020 or ACC 2010, 2040
BUS/ECN 2340 Applied Statistics for Economics
MGT 1110 Introduction to Business and Tech.
MGT 3120 Principles of Management
MKT 4900 Business Policies Senior Seminar
MKT 1110 Introduction to Business and Tech.
MKT 3130 Marketing Principles
MKT 3230 Personal Selling and Sales Management
MKT 4100 Marketing Communications
MKT 4220 Business to Business Marketing
MKT 4230 Consumer Research

Choice of one:
MGT 3060  Individual Taxation
MGT 3090  Business Taxation

Students who plan to sit for the Uniform CPA Examination in the state of Wisconsin are strongly encouraged to take MGT 3120 in addition to the courses listed above.
One of:
- GEO 2300 Economic Geography
- GEO 2600 Mapping Your World
- SOC 1000 Introduction to Sociology
- GEO 3100 Business Geographics
- CDM 3300 Writing for the Media
- CDM 2200 Principles of Public Relations
- SOC 1020 Cultural Anthropology
- PSY 2200 Social Psychology

**Information Systems Major**
- ECN 1030 Issues in Economics or (ECN 1010 and ECN 1020)
- ECN/ Applied Statistics
- BUS 2340
- ACC 2000 Survey of Accounting or one of the following sequences (ACC 2010, 2020) (ACC 2010, 2040)
- MGT 1110 Introduction to Business and Technology
- MGT 3120 Principles of Management
- MGT 4900 Business Policies Senior Seminar
- ISS 3110 E-Commerce
- ISS 3450 Information Systems Theory and Practice
- ISS 4250 Systems Analysis

One of:
- CSC/ Introduction to Computing
- ISS 1100
- CSC 1110 Principles of Computer Science I

One of:
- ISS 2110 Database Applications and Analysis
- CSC 3410 Database Design and Management

Students pursuing an Information Systems major should consider using electives to enhance their career plans. For example:
- Web Development and Graphic Design: CDM 1150, 1300, 2000, and 3530
- Business and Data Analytics: GEO2600, 3100, 3600, and MGT 3100
- Programming and Software Engineering: CSC 1110 and 3410 from the above electives and CSC 1120, 2560, 3600, and 3050

**Information Systems Minor:** MGT 1110, ACC 2000 or 2010. One of the following: CSC 1100 or CSC 1110. Three of the following: ISS 3110, ISS 3450, and ISS 4250 or ISS 2110.

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**Business Administration**

**2110 (211) Business Ethics**
- Miller, Magurshak 4 credits
- HUM

In this course, students explore major ethical issues arising in the practice of business and learn to apply various methods of ethics in solving these problems. Whistle-blowing, inside trading, employees' rights, multinational corporations and other topics are discussed. Course offered as BUS 2110 and PHL 2110.

**2340 (333) Applied Statistics for Management and Economics**
- Groleau 4 credits
- MTH

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. 

**Prerequisite:** MTH 1070, MTH 1060, or equivalent

Fall/Spring/Summer

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**Accounting**

**2000 (200) Survey of Accounting**
- Duffy 4 credits

The course will examine all aspects of company formation, looking first at the strategic planning and research to organize the business, financing the plan, investing in the resources, and operating the business. Specifically, the basic accounting equation, journalizing accounting transactions using debits and credits, financial statement analysis, cost terms, concepts and behavior, cost-volume-profit relationships, profit planning, and capital budgeting will be covered. NOTE: This course does not satisfy any requirements for Accounting or Management majors.

**Prerequisite:** MGT 1110

Fall

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**2010 (201) Financial Accounting**
- Brunn, Dawson, Duffy, Schlichting 4 credits

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.

**Prerequisite:** MGT 1110

Fall/I-Term

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**2020 (202) Managerial Accounting**
- Duffy, Dawson, Schlichting 4 credits

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

**Prerequisite:** ACC 2010

Spring

**2040 (204) Cost and Managerial Accounting**
- Brunn, Schlichting 4 credits

This course focuses on the information developed and used internally within a business organization to effectively manage its operation. It deals with using information about the behavior of its costs to make good management decisions. It covers the development of a profit plan for the organization's operations and the use of that same information to develop product/service costs. It includes analytical approaches to measuring performance and taking corrective action, as well as alternative approaches to valuing work-in-process inventory. The course also incorporates the theory of constraints where appropriate. Case studies that model real-world situations are used to develop students' analytical skills and to provide practice in written and oral expression.

**Prerequisite:** ACC 2010

Spring

**2050 (205) Cost Accounting**
- Schlichting 2 credits

This course focuses on the compilation and analysis of accounting information and the procedures involved in determining the cost of various cost objects, such as the products or services sold to customers, and the importance and relevance of this information in making the short-term and long-term decisions involved in managing an entity. Students cannot receive credit for this course and ACC 2040 (204).

**Prerequisite:** ACC 2020 (202)
3010 (301) Intermediate Accounting I  
Brunn, Duffy 4 credits  
A comprehensive, in-depth, analytical, and interpretive study of alternative accounting procedures for communicating financial and economic information, supported by critical evaluations of current issues and reporting practices. Students conduct a separate analysis of each of the major items appearing in corporate financial statements, with emphasis on theory and the logic involved in selecting one accounting or financial reporting approach over another.  
Prerequisite: ACC 2010  
Fall

3020 (302) Intermediate Accounting II  
Brunn, Duffy 4 credits  
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  
Spring

3060 (306) Individual Taxation  
Schlichting 4 credits  
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: Junior Standing  
Spring

3090 (309) Business Taxation  
Schlichting 4 credits  
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: Junior Standing  
Fall

3750 (375) International Accounting and Finance  
Brunn 4 credits  
A survey course exploring the implication of international transactions on financial decisions. As businesses continue to globalize, anyone involved in international commerce needs to understand the effects of disclosure disparity, exchange rates, and multinational taxation on the entity's performance. In addition, they should understand the implications of international accounting standards on financial disclosure and capital market efficiency. Special schedule.  
Prerequisite: ACC 2000 or ACC 2010  
J-Term

4010 (401) Advanced Accounting  
Brunn 4 credits  
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  
Fall

4020 (402) Auditing  
Duffy 4 credits  
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  
Spring

3110 (311) E-Commerce  
Fredericks 4 credits  
This course covers theory and practice in developing electronic commerce systems. The emphasis is on business issues, technology issues, and modern e-commerce development tools.  
Prerequisite: CSC 1110 or CSC 1110  
Alternating Spring

3450 (345) Information Systems Theory and Practice  
Groleau 4 credits  
A survey course covering the use of technology for organizational strategy, planning, and decision-making. Topics may include: introduction to information systems and issues; management of information technology (including development, security, and ethics); business applications; and systems architecture (hardware and software). Case studies will be used where appropriate.  
Prerequisite: MGT 1110 or permission of instructor  
Alternating Spring

4250 (425) Object Oriented Systems Analysis  
Fredericks 4 credits  
This course covers system development and modification methodologies. Topics may include: life-cycle phases; object-oriented analysis and design using UML; prototyping; modeling information flows and decision processes; data modeling; database design; project and team management; software quality; application categories; and software package evaluation.  
Prerequisite: CSC 1110 or CSC 1110  
Fall

Management  
1110 (111) Introduction to Business and Technology  
Fredericks, Groleau 4 credits  
An introduction to personal and organizational information technology. Through readings, hands-on applications, and cases students will study current topics and trends relating to business while developing personal technology skills for problem-solving, communication, research, analysis, and presentation.  
Spring/Fall
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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| 3100 (310) | Introduction to Management Science               | 4       | 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.  
Prerequisite: MGT 1110 and MTH 1050, BUS/ECN 2340, SOC 2330, GEO 2900 or MTH 3050 |
| 3120 (312) | Principles of Management                         | 4       | A study of managerial roles, functions, and skills; covers planning, organizing, controlling, leading, staffing, decision-making, and problem-solving in contemporary organizations (public, private, and not-for-profit); reviews foundations of management thought and managerial processes that lead to organizational effectiveness.  
Prerequisite: MGT 1110 and ACC 2000 or ACC 2010 |
| 3210 (321) | Financial Management                             | 4       | This course focuses on three primary areas. One is gaining an understanding of the capital markets and how those markets work to value corporate securities. The second area is how financial managers make decisions about the target capital structure for their firm and the dividend policy that would support that capital structure. The third area is the method(s) by which prospective investments in property, plant and equipment, and working capital are evaluated. Some limited attention will be given to the special problems confronting financial managers in multinational organizations.  
Prerequisite: ACC 2000 or ACC 2010 and BUS/ECN 2340 |
| 3300 (330) | Operations Management                            | 4       | 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.  
Prerequisite: MGT 3120 and (BUS/ECN 2340 or MTH 3050) |
Prerequisite: MGT 3120 |
| 3600 (360) | Legal Environment of Business                    | 4       | 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: Junior Standing Not open for credit to students who have taken MGT 3650 |
| 3610 (361) | Accounting Law                                  | 2       | An overview of legal concepts covered on the CPA exam 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. Students cannot receive credit for this course and MGT 3650.  
Prerequisite: MGT 3600 |
| 3650 (365) | Business Law for Accountants                    | 4       | 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.  
Prerequisite: ACC 2020 or ACC 2040 Not open for credit to students who have taken MGT 3600 |
| 3710 (371) | International Management                        | 4       | 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 |

Fall/Spring
International Legal Environment of Business

Staff  4 credits
SOC

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: MGT 3600

Business Research Projects

Staff  2 credits

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 on local business.

Prerequisite: MGT 3120

4050 Security and Portfolio Analysis

Wall  3 credits

An interpretive, analytical study of classic and modern day valuation techniques. Additional attention shall be given to professional trading methodology and strategy. Special topics of discussion will include risk management metrics, spread/pairs trading, modern hedging techniques, security appraisal, and modern portfolio theory.

Prerequisite: MGT 1110, ACC 2000 or ACC 2010 and BUS/ECN 2340

Labor and Employment Law

Staff  4 credits

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

Business Policies Senior Seminar

Staff  4 credits

Business Policies Seminar is a capstone course for seniors majoring in business administration. It is designed to allow students to integrate their knowledge from other business department curriculum and apply those insights to profit and loss management of a business operation. This is accomplished through use of a computer simulated business environment that allows for dynamic competitive interactions between several firms. Additionally, under supervision, 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 in a learning proposal, and completed over the course of the scheduled term.

Prerequisite: Senior standing and MGT 3120 and BUS/ECN 2340

Fall/Spring

Marketing

3130 (313) Marketing Principles

Owens  4 credits
SOC

A survey of current marketing theory and practices to familiarize the student with the role of marketing in the free enterprise system. Cases and/or simulation will be used to demonstrate applications.

Prerequisite: ACC 2000 or 2010

Fall/Spring

3230 Selling and Sales Management

Staff  4 credits

This introductory class focuses on both personal selling and sales force management. The course provides knowledge and understanding of the principles, concepts and procedures underlying personal selling and sales management. Lectures, role playing exercises, simulations, class exercises and case studies are used to reinforce the text. Topics include recruitment, selection, motivation, compensation, leadership and evaluation of the sales force; making sales presentations and sales calls; handling objections and closing deals.

Prerequisite: MGT 3130

4100 (410) Marketing Communications

Owens  4 credits

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 planning; research and assessment of target markets; media buying strategy; and national, global, and ethical issues. Recent developments in marketing communications are also addressed.

Prerequisite: MKT 3130 and Junior standing

Fall/Spring

4200 (420) Database Marketing

Owens  4 credits

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
4220 Business to Business Marketing
Staff 4 credits
This course focuses on the unique characteristics of the Business-to-Business customer in the context of an increasingly complex, competitive and global marketplace. The course exposes students to a wide range of industrial products and services. Lectures, role playing exercises and case studies are used to reinforce the text. Topics include: organizational buying behavior, segmenting, supply chain management, customer relationship management, pricing, product development, and e-commerce.
Prerequisite: MKT 3130 and MKT 3230

4230 Consumer Research
Staff 4 credits
This course focuses on the development of successful 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. Research projects will incorporate both qualitative and quantitative methods.
Prerequisite: MKT 3130 and ECN/BUS 2340

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 Department of Chemistry prepares students for graduate study in chemistry, industrial chemistry, medical school, law school, engineering, and teaching.

All chemistry majors take the following core courses: CHM 1020, 2070, 2080, 2120, 3130, 3140, 3230, and 4000, as well as Calculus I and II, and General Physics I and II. The standard major also requires eight more credits in CHM 3010, 3240, 4070, 4120, or 4900.

For the distinction of a degree certified by the American Chemical Society, a chemistry major must take the above 13 core courses in Chemistry, Mathematics, and Physics; CHM 3010, 3240 and 4120 or 4070; and Multivariate Calculus or Mathematical Methods in the Physical Sciences. Research must also be performed on- or off-campus for an ACS certified degree. An advanced course in Physics may replace 4 elective credits with departmental approval.

The minor in chemistry comprises Chemistry 1010, 1020, 2070, 2080, and 8 credits in chemistry courses numbered above 3000.

Students with adequate high school preparation may take Chemistry 1020 without taking Chemistry 1010 and be awarded credit for Chemistry 1010 upon completion of Chemistry 1020 with a minimum grade of C.

Honors in the Major
Please see department chair for details.

1000 (100) Better Living Through Chemistry
Staff 4 credits
SCI
A one-semester introduction to the field of 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.

Spring

1010 (101) General Chemistry I
Morris, Smith, Pellino 4 credits
SCI
The basic principles and concepts of chemistry, including atomic structure, formulas and equations, gas laws, and periodic classification of the elements. Lecture, three periods; laboratory, three periods.

Fall

1020 (102) General Chemistry II
Blaine, Morris, Smith 4 credits
SCI
A study of the chemical nature of cellular substances such as amino acids, nucleic acids, proteins, enzymes, carbohydrates and lipids. Intermediary metabolism will be studied. Lecture, three periods; laboratory, three periods.

Prerequisite: Chemistry 1010 or departmental approval of high school preparation. A grade of "C" or better in Chemistry 1010 provides credit for Chemistry 1010.

Fall/Spring

200T (271) Topics in Chemistry
Staff 1-4 credits
A course of variable content for lower-level students. Topics will not duplicate material covered in other courses.

2010 (201) Experimental Chemistry
Staff 1 credit
An exploration of modern experimental chemistry. Molecular modeling, electrochemistry, chemical instrumentation, synthesis, and biochemistry experiments will be performed. Students will also design and complete independent projects and explore recent developments in chemistry from the literature.
Prerequisite: Chemistry 1020
Spring

2070 (207) Organic Chemistry I
Eckert, Stephenson 4 credits
SCI
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: Chemistry 1020
Fall

2080 (208) Organic Chemistry II
Eckert, Stephenson 4 credits
SCI
A continuation of Chemistry 2070, involving increasingly complex molecules, including biochemicals. Lecture, three periods; laboratory, three periods.
Prerequisite: Chemistry 2070
Spring

2120 (212) Inorganic Chemistry
Blaine 3 credits
SCI
A study of the principles of molecular orbital theory, coordination chemistry of transition metals and its relationship to magnetic and spectroscopic properties, bioinorganic chemistry and solid-state chemistry. Lecture and laboratory, 5 periods.
Prerequisite: Chemistry 1020
J-Term

3010 (311) Biochemistry
Pellino, Koudelka 4 credits
SCI
A study of the chemical nature of cellular components such as amino acids, nucleic acids, proteins, enzymes, carbohydrates and lipids. Intermediary metabolism will be studied. Lecture, three periods; laboratory, three periods.
Prerequisite: Chemistry 2080
Spring
### Classics

#### 3130 (313) Physical Chemistry I
- **Morris** 4 credits
- **SCI**
- A study of the states of matter, equilibrium thermodynamics, the properties of solutions and the rates of chemical and physical processes. Lecture, three periods; laboratory, three periods.
- **Prerequisite:** CHM 2080, MTH 1220, and PHY 2200
- **Fall**

#### 3140 (314) Physical Chemistry II
- **Morris** 4 credits
- **SCI**
- A continuation of Chemistry 3130. A study of quantum theory, the electronic structure of atoms and molecules, group theory, and vibrational, electronic, and magnetic resonance spectroscopy. Lecture, three periods; laboratory, three periods.
- **Prerequisite:** Chemistry 3130; **Corequisite:** Physics 2210
- **Spring**

#### 3230 (323) Analytical Chemistry I
- **Blaine** 4 credits
- **SCI**
- A study of the principles, methods, and calculations of volumetric, compleximetric, and potentiometric methods of quantitative analysis. An understanding of the analytical method, specifically sampling in also examined. Lecture, three periods; laboratory, three periods.
- **Prerequisite:** CHM 1020
- **Fall**

#### 3240 (324) Analytical Chemistry II
- **Blaine** 4 credits
- **SCI**
- 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; laboratory, three periods.
- **Prerequisite:** CHM 3230 or permission of the department
- **Spring**

#### 4000 (400) Chemistry Seminar
- **Staff** 4 credits
- Reports and discussion of current chemical literature. Seminar is required of all senior chemistry majors.
- **Fall/Spring**

#### 400T (471) Topics in Chemistry
- **Staff** 4 credits
- A course of variable content for upper-level students. Topics will not duplicate material covered in other courses.
- **Prerequisite:** Chemistry 3010
- **Fall**

#### 4070 (411) Advanced Organic Chemistry
- **Eckert, Stephenson** 4 credits
- **SCI**
- An advanced survey of modern organic chemistry, linking structural aspects to reaction behavior. Concepts, including stereochemistry, kinetics, thermodynamics, and orbital symmetry, are applied rigorously to selected reactions. Lecture, three periods; laboratory, three periods.
- **Prerequisite:** CHM 2080
- **Fall**

#### 4120 (412) Advanced Inorganic Chemistry
- **Blaine** 4 credits
- **SCI**
- A focus on the chemistry of the transition metals and main group elements. Advanced treatments of chemical-bonding theories and the chemistry of organometallic and bioinorganic compounds. Lecture, three periods; laboratory, three periods.
- **Prerequisite:** Chemistry 2120
- **Spring**

#### 4900 (490) Research in Chemistry
- **Staff** 2 or 4 credits
- Work on a research topic under the direction of staff members. Students may enroll for credit more than once. Can substitute for Honors 4500: Independent Study.
- **Prerequisite:** The student and instructor must agree on a topic before the term begins
- **Fall/Spring/J-Term**

### Classics

The field of Classics familiarizes students with the incredibly rich origins and heritage of Western civilization in language, literature, art, history, philosophy, mythology and religion. But Classics is more than the study of physical remains and legacy of the Greco-Roman world; it is about role of that legacy in "Western" culture. As the precursors to our Western civilization, the Greeks and Romans were both similar to and different from us. The courses are designed to give students a broad, interdisciplinary perspective, and encourage tolerance and understanding of cultural differences. In short, Classics is a way of studying the human condition.

Classical studies, like other branches of the liberal arts, provides both skills for making a living and learning as a life-long endeavor. The student who chooses to take courses in the Classics, therefore, has the choice of many professional opportunities. Graduate and professional schools in law, medicine, or business welcome students with training in the Classics. In a world of rapid technological advances in which highly specialized skills rapidly become obsolete, the student with a strong background in a respected area such as Classics offers the diversity, flexibility, precision, and ability to learn something that employers in business, government, education and industry find attractive. Classics also teaches one how to solve problems and correlate disparate ideas. Above all, it is a discipline that teaches discipline. If students of Classics have taken the appropriate courses in the natural sciences, they will be able to enter medical school or any other program in the health sciences.

### Classical Studies Major

Forty credits constitute the major in Classical Studies. Students must take the following:

- Two courses (8 credits) in Latin or Ancient Greek. At least one course must be 1020 level or above.
- CLS 2750 Research Methods
- Two of the following courses:
  - CLS 1310 Introduction to Greece and Rome
  - CLS 1320 The Ancient Near East
  - CLS 2310 The Greeks
  - CLS 2350 The Romans
- Four courses among the following, one must be at least 3000 level or above:
  - CLS 200T Topics in Classics
  - CLS 2310 The Greeks
  - CLS 2350 The Romans
  - CLS 2400 World of Late Antiquity
  - CLS 2450 Race, Gender and Sex in Greece and Rome
  - CLS 3000 Golden Age of Athens
  - CLS 3100 Age of Augustus
  - CLS 3200 Ancient Egypt
  - CLS 3310 Seminar in Greek Studies
  - CLS 3250 Field Archaeology
  - CLS 3260 Seminar in Roman Studies
  - CLS 3310 Greek Religions
  - CLS 3320 Roman Religions
  - CLS 3400 Homer's Iliad and Odyssey
  - CLS 3420 Socrates: Then and Now
  - CLS 3440 Herodotus and Thucydides
  - CLS 400T Topics in Classics
Greek
GRK 2010 Intermediate Ancient Greek I
GRK 2020 Intermediate Ancient Greek II
GRK 3010 Advanced Ancient Greek I
GRK 3020 Advanced Ancient Greek II

Latin
LTN 2010 Intermediate Latin I
LTN 2020 Intermediate Latin II
LTN 3010 Advanced Latin I
LTN 3020 Advanced Latin II

Classics 4000 Senior Seminar.
To be offered or directed by one member of the department with the possibility of participation of other members of the humanities, fine arts, or social science divisions. Offered fall only.

Classical Studies Major with Emphasis on Classical Archaeology
48 credits constitute the major in Classical Studies Archaeology. Students must take the following:

Two courses (8 credits) in either Latin or Ancient Greek. At least one course must be 1020 or above.
CLS 1400 Classical Archaeology (4 cr.)
One course (4 credits) from among the following:
CLS 1310 Introduction to Greece & Rome
CLS 1320 Introduction to the Ancient Near East
CLS 1350 Classical Mythology
CLS 1410 Greek and Roman Art
CLS 3250 Field Archaeology (4 credits)
Two courses (8 credits) from among the following, at least one of which must be 300-level or above:
CLS 2310 The Greeks
CLS 2350 The Romans
CLS 2400 The World of Late Antiquity
CLS 2450 Race, Gender and Sex in Greece and Rome
CLS 200T Topics in Classics
CLS 3000 The Golden Age of Athens
CLS 3100 The Age of Augustus
CLS 3200 Ancient Egypt
CLS 3210 Seminar in Greek Studies
CLS 3260 Seminar in Roman Studies
CLS 3310 Greek Religions
CLS 3320 Roman Religions

Latin Minor
Latin Minor Requirements (20 credits):
Three Latin courses, LTN 1020 or above (12 credits)
Two courses in Roman history or culture, 200-level or above (8 credits)
Two terms of either Latin or Classical Greek fulfill Carthage's language requirement.

Honors in Major
Please see requirements for Honors under the Honors section that is located in the "Interdisciplinary Studies" section of the catalog.

Classical Studies Minor
One course 102 or above (4 credits) in Latin or Ancient Greek
Two courses (8 credits) from among the following:
CLS 1310 Introduction to Greece & Rome
CLS 1320 Introduction to the Ancient Near East
CLS 1350 Classical Mythology
CLS 1400 Classical Archaeology
CLS 1410 Greek and Roman Art
Three courses (12 credits) from the following, at least one of which must be 300-level or above:
CLS 2310 The Greeks
CLS 2350 The Romans
CLS 2400 The World of Late Antiquity
CLS 2450 Race, Gender, and Sex in Greece and Rome
CLS 200T Topics in Classics
CLS 3000 The Golden Age of Athens
CLS 3100 The Age of Augustus
CLS 3250 Field Archaeology
CLS 3310 Greek Religions
CLS 3320 Roman Religions

CLS 3400 Homer's *Iliad* and *Odyssey*
CLS 3420 Socrates: Then and Now
CLS 3440 Herodotus and Thucydides
CLS 400T Topics in Classics

Greek
GRK 2010 Intermediate Ancient Greek I
GRK 2020 Intermediate Ancient Greek II
GRK 3010 Advanced Ancient Greek I
GRK 3020 Advanced Ancient Greek II

Latin
LTN 2010 Intermediate Latin I
LTN 2020 Intermediate Latin II
LTN 3010 Advanced Latin I
LTN 3020 Advanced Latin II

Three courses (12 credits) from among the following courses in the Geography and Earth Sciences department:
GEO 1500 Human Geography
GEO 1700 Physical Geography
GEO 2100 The Human Landscape
GEO 2600 Mapping Your World: Introduction to GIS
GEO 2700 Satellite Image and Airphoto Analysis.

CLS 2750 Research Methods (4 credits)
CLS 4000 Senior Seminar (4 credits)

Students in the Classical Archaeology major are strongly encouraged to minor in Geography, Computer Science, Art History or Communication (with a focus on digital media).

Self-designed majors with an emphasis in the classical languages or in either Ancient Greek or Latin are possible. Please speak to the chair of Classics.

Carthage 2010-2011 Catalog
Classics Courses

1310 (131) Introduction to Greece and Rome
Renaud 4 credits
HUM

As inhabitants of the “West,” our culture often invokes the influence of the Greeks and Romans without understanding what that legacy was/is. This class will cover the cultures of Greece (from Mycenaean Greece to death of Cleopatra in 30 BCE) and Rome (from its beginnings in the eighth century BCE to mid-fourth century CE), and how the two cultures became intertwined so that by the first century CE, we are speaking of a Greco-Roman culture. The course will focus on crucial turning points and legacy of the cultures studied and how the history of the area has shaped subsequent history of the West.

1320 (132) The Ancient Near East
Renaud 4 credits
HUM

As inhabitants of the West, our culture often invokes the influence of the Greeks and Romans without understanding the contributions the Ancient Near East (today's Middle East) bequeathed to the Greeks and Romans. Thus the class will study the cultures of ancient Mesopotamia (Iraq), Persia (Iran), Turkey (Hittites and Troy), Syria (including Palestine), Phoenicia (Lebanon), ending with the defeat of the Persians under Alexander the Great and examine its impact on the cultures of Greece and Rome.

1350 (135) Classical Mythology
Staff 4 credits
HUM

Survey of the major myths of the ancient Mesopotamians, Greeks, and Romans, and their influence in art and literature. The class examines different schools of myth interpretation.

Fall

1400 (140) Classical Archaeology
Renaud, Schowalter 4 credits
HUM

Classical Archaeology introduces students to the material culture of the Greco-Roman world as well as the methodologies that allow scholars to reconstruct such a distant time period. Students develop an appreciation of the contributions of the Greeks and Romans in such fields as art, architecture, urban planning, and landscape that will enable the student to appreciate the extensive impact such a culture (or cultures) had on the evolution of Western culture. Within the scope of the course, students look at the formative periods of the Greco-Roman world, from the period of Iron Age Greece to the transitional period of the late antique. In addition, students learn how to distinguish between different artistic styles (archaic, classical, Hellenistic, Roman, etc.).

200T (271) Topics in Classics
Staff 1-4 credits
HUM

A course of variable content for lower-level students. Topics will not duplicate material covered in any other course.

2310 (231) The Greeks
Staff 4 credits
HUM

A survey of Greek culture which 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 and History.

2350 (235) The Romans
Staff 4 credits
HUM

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 and History.

2400 (240) The World of Late Antiquity
Staff 4 credits
HUM

The World of Late Antiquity studies the transformation of what had been the Roman Empire, beginning with the reign of Diocletian, into the worlds of Byzantium, Islam, and the West. In this course, the student focuses on the major political, social, and cultural changes from 284-750 when the culture is no longer considered "classical." Students will also discover how ancient civilizations, as we understand them, disappear for all time and how in the deeply fragmented remains of a once-homogeneous world three different (Medieval, Byzantine, and Islamic) cultures arise. The impact of Christianity's emergence is central to the study of this period.

2450 (245) Race, Gender and Sex in Greece and Rome
Renaud 4 credits
HUM

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).

Fall
2750 (275) Research Methods in Classics
Staff 4 credits
An introduction on how to conduct research through the focus on one topic from the following disciplines: philosophy, religion, or classics. The class will focus on learning how to distinguish and evaluate primary and secondary sources; to write a researched paper; to recognize different approaches (theoretical) to a given topic; and to become familiar with the work of representative classicists/philosophers/theologians/historians. Offered only in spring term.
Prerequisite: Open to majors only
Spring

3000 (300) The Golden Age of Athens
Staff 4 credits
HUM
An intensive and interdisciplinary approach to one of the most seminal periods in Western history: the Age of Pericles. Called the Golden Age of Athens, this period bequeathed to Western culture ethical philosophy, the ideals of democracy, the classical style as perfected in the Parthenon, and masterpieces of tragedy and history. Students will read the literature of the time, study Athens' monuments and art, and come to understand how, under the driving force of the 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: Understandings of Religion 1000 or consent of instructor

3100 (310) The Age of Augustus
Staff 4 credits
HUM
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. This course is cross-listed in Classics and History.
Prerequisite: Upper division status or consent of instructor

3200 Ancient Egypt
Renaud 4 credits
HUM
A survey of the history, culture, politics, and religion of Ancient Egypt from pre-dynastic times through late antiquity (c. 3300BCE to 392 CE), with particular focus on the period when Egypt was at the height of its power (Old, Middle and New Kingdoms).

3210 Seminar in Greek Studies
Staff 4 credits
HUM
An in-depth exploration of a particular period of Greek history or culture. Possible topics include: the Alexander the Great, Hellenistic History, the Greek Drama, Greek Historians, Golden Age of Athens, and Second Sophistic Movement. Course builds on topics covered in a more general way in CLS 2310.

3250 (325) Field Archaeology
Renaud, Schowalter 4 credits
HUM
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. Course builds on topics covered in a more general way in CLS 2350.

3260 Seminar in Roman Studies
Renaud, Schowalter, DeSmidt, McAllhany 4 credits
HUM
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. Course builds on topics covered in a more general way in CLS 2350.

3310 (331) Greek Religions
Renaud, Schowalter 4 credits
HUM
Like most ancient peoples, the Greeks believed that a pantheon of heavenly, sublunar, and subterranean deities 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 and the rich body of Greek myth.
Prerequisite: Understandings of Religion 1000 or consent of instructor
Fall

3320 (332) Roman Religions
Renaud, Schowalter 4 credits
HUM
Like most ancient peoples, the Romans believed that a pantheon of heavenly, sublunar, and subterranean deities 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: Understandings of Religion 1000 or consent of instructor

3400 (340) Homer's Iliad and Odyssey
Heitman 4 credits
HUM
The Iliad and the Odyssey are the earliest texts of the Western tradition. Though everyone recognizes the sophistication of their poetic style and the breadth of their epic vision, too many readers have assumed that Homer composed in an oral tradition that had no conscious interest in philosophy or cultural critique. This course will investigate the philosophy that is embedded, implied, and elaborated in each epic as well as through a comparison of the two. Why is each story told so differently? How do Achilles, Agamemnon, Hector, Helen, compare to Odysseus, Telemachos, and Penelope? We will especially study Penelope for what she reveals about the Homeric view of ethics and epistemology, of what should be done and of what can be known.
3420 (342) Socrates: Then and Now

Heitman 4 credits HUM

This course will investigate Socrates from three points of view. First, we will investigate the historical Socrates and his profound but vexed relationship to Athenian history in the fifth century. Next, we will look at the philosophical Socrates, concentrating on the innovations that he brought to philosophy before people began to write about him: ethics, elenchus, irony, self-examination, independence, inwardness, and rationality. We will then study what subsequent classical philosophers made of the innovations and to what extent Socrates was eclipsed by their writings. Finally, we will look at the cultural Socrates, beginning in the Renaissance rediscovery of him and continuing through the great reinvigoration of his significance for the problems of modernity.

3440 (344) Herodotus and Thucydides

Heitman 4 credits HUM

Unlike previous writers, Herodotus and Thucydides attempted to explain human nature and human institutions through humanistic inquiry, not divine revelation. In this, they earned the claim to be the first historians. But is reading them as though they privileged the reporting of fact over imaginative interpretation to blind ourselves to much of what is best in them? Were they not also artists strongly influenced by the poets who had gone before? Herodotus, who traveled Greece entertaining people with his colorful stories, patterned himself on Homer and the Homeric bards. Thucydides, though scornful of romantic escapism, seems to have been bent on outdoing the tragic dramatists. And both seem to anticipate the philosophical concerns of Plato and Aristotle.

400T (471) Topics in Classics

Staff 1-4 credits

A course of variable content for upper level students. Topics will not duplicate material covered in any other course. 
Prerequisite: Upper division status or consent of instructor

4100 (400) Senior Seminar

Staff 4 credits

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; Research Methods 2750; Open to seniors only

3010 (301) Advanced Greek I

Staff 4 credits

The course focuses on the reading of a major prose author or genre (history, philosophy or oratory). Authors may include Plato, Attic Orators, Herodotus or Thucydides.
Prerequisite: GRK 2020

3020 (302) Advanced Greek II

Staff 4 credits

The course focuses on the reading of a major poet or genre. Authors may include Homer, Hesiod, Euripides, Sappho, etc. It may also focus on poetry genres such as epic poetry, elegy, tragedy etc.
Prerequisite: GRK 3010

Latin

1010 (101) Elementary Latin I

Staff 4 credits MLA

Introduction to Latin. The focus is on mastering the grammar and reading simple passages in Latin. 1010 is a prerequisite for Elementary Latin 1020.

2010 (201) Intermediate Latin I

Staff 4 credits MLA

Completion of grammar and reading of selections from major authors from Cicero to Virgil.
Prerequisite: LTN 1010

2020 (202) Intermediate Latin II

Staff 4 credits MLA

The course focuses on a major Latin poet or genre of poetry (elegy, lyric, epic).
Prerequisite: LTN 2010

3010 (301) Advanced Latin I

Staff 4 credits MLA

The course focuses on a major prose author or genre (history, oratory, biography, etc.) Authors may include Cicero, Livy, Nepos, Tacitus, etc.
Prerequisite: LTN 2010

3020 (302) Advanced Latin II

Staff 4 credits MLA

The course focuses on a major poet or genre in poetry. Authors may include Virgil, Horace, the Elegiac poet (Ovid, Catullus, etc.) It may also focus on a poetic genres such as epic poetry, satire, letters (Horace), elegy, etc.
Prerequisite: LTN 3010
Communication and Digital Media

The programs and courses of the Department of Communication and Digital Media focus on human symbolic activity and its role in culture and commerce. The department offers majors in Communication, Graphic Design and Public Relations; and minors in Communication and Public Relations.

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. Special emphasis is placed on ethical considerations, and on the ability to communicate using electronic and digital media.

The department believes that the technologies and attendant cultures of the information age are deeply impacting human communication in the twenty-first century. Global and local cultures are undergoing profound shifts in communication practices, the outcome of which we can only dimly perceive. This department is committed to helping our students develop the understandings and practical skills necessary for effective communication and leadership in these changing circumstances.

No discipline taught in the academy remains unaffected by the convergence of older oral and print cultures with the burgeoning world of digital communication. New literacies have become essential for the education of free men and women as envisioned by the Carthage College mission statement. Media literacy and visual literacy are increasingly as foundational for an educated citizenry as reading, writing, and speaking have long been acknowledged to be. The department offers general education courses and academic majors that develop competencies in, as well as sophisticated critical understanding of, an increasingly mediated world.

Our goals for our students involve more than technical proficiency. 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. In our pedagogy, we actively seek opportunities to engage and affirm the relevance of other discourses and disciplines in the liberal arts and sciences.

The faculty of the department 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 the senior capstone seminar, which involves a major thesis, project, or exhibition.

Recent graduates have gained employment or pursued graduate study in graphic design, public relations, media, journalism, sales, education, and law.

**Departmental Core Requirements (16 credits)**

The following four courses are required for the Communication major, the Graphic Design major, the Public Relations major and the Communication minor. Students are encouraged to complete these courses early in their studies in the department.

- **CDM 1150 Introduction to Human Symbolic Activity**
- **CDM 1200 Public Speaking**
- **CDM 1300 Introduction to Visual Communication**
- **CDM 2700 Digital Cinema Production**

**Requirements for the Communication Major (40 credits)**

1. Departmental Core (16 credits)
2. Communication Major Core (12 credits)
   - **CDM 3000 Rhetoric and Persuasion**
   - **CDM 3450 Mass Communication**
   - **CDM 4010 Senior Seminar for Communication Majors**
3. Twelve credits selected from the following:
   - **CDM 2100 Communication and Community**
   - **CDM 2200 Principles of Public Relations**
   - **CDM 3300 Writing for Media**
   - **CDM 3400 Communication and Technology**
   - **CDM 3550 Internship (up to 4 credits)**
   - **CDM 200T/400T Topics**
   - **CDM 3950 Advanced Cinema Production**

**Requirements for the Graphic Design Major (44 credits)**

1. Departmental Core (16 credits)
2. Graphic Design Major Core (20 credits)
   - **ART 1070 Introduction to Studio 2D**
   - **CDM 2000 Graphic Design I**
   - **CDM 3750 Graphic Design II**
   - **CDM 2850 Typography**
   - **CDM 4020 Senior Seminar for Graphic Design Majors**
3. Eight credits selected from the following:
   - **CDM 3150 History of Graphic Design**
   - **CDM 3650 Image**
   - **CDM 3530 Digital Media-Web Design (2 cr.)**
   - **CDM 3540 Digital Media-Time Based (2 cr.)**
   - **CDM 3550 Internship (up to 4 cr.)**
   - **CDM 3950 Advanced Cinema Production**

**Requirements for the Public Relations Major (56 credits)**

1. Departmental Core (16 credits)
2. Public Relations Major Core (28 credits)
   - **MGT 1110 Introduction to Business and Technology**
   - **ACC 2000 Survey of Accounting OR ACC 2020 Financial Accounting**
   - **CDM 2200 Principles of Public Relations**
   - **MGT 3120 Organizational Management**
   - **MKT 3130 Marketing Principles**
   - **MKT 4100 Marketing Communications**
   - **CDM 4010 Senior Seminar for Communication Majors (or other appropriate senior seminar)**
3. Twelve credits selected from the following:
   - **CDM 4020 Senior Seminar for Graphic Design Majors**
   - **MGT 3600 Legal Environment of Business**
   - **CDM 3000 Rhetoric and Persuasion**
   - **CDM 3300 Writing for the Media**
   - **CDM 3450 Mass Communication**
   - **CDM 3550 Internship (up to 4 credits)**
   - **CDM 200T/400T Topics**
   - **CDM 3950 Advanced Cinema Production**
   - **CDM 3000 Rhetoric and Persuasion**
   - **CDM 3300 Writing for the Media**
   - **CDM 3450 Mass Communication**
### Requirements for the Public Relations Minor (24 credits)
MGT 1110 Introduction to Business Technology
CDM 1150 Introduction to Human Symbolic Activity
CDM 1200 Public Speaking
CDM 2200 Principles of Public Relations
CDM 3300 Writing for the Media
Plus any course from #2 or #3 of the Public Relations major above.

### Requirements for the Communication Minor (24 credits)
Departmental Core (16 credits) plus eight additional credits at the 2000 level or above, selected in consultation with the student's CDM department advisor.

#### 1100 (110) Media Literacy
Staff 4 credits
FAR An exploration of controversial issues in the mass media as they relate to today's society. Students will read contemporary literature expressing divergent viewpoints on numerous media-related issues. The ultimate focus is on fostering critical literacy in media consumption. This course does not count toward majors or minors in the department.

#### 1150 (115) Introduction to Human Symbolic Activity
Bruning, Schulze, Brownson, Huaracha 4 credits
This course provides a broad grounding in the history and current interdisciplinary understandings of human communication. It also provides an introduction to the skills and competencies students develop through their program of study as communication majors, graphic design majors, and public relations majors. Lecture and laboratory.

#### 1200 (120) Public Speaking
Staff 4 credits
FAR 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.

### Communication and Digital Media

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Instructor(s)</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>2000 (200)</td>
<td>1300 (130) Introduction to Visual Communication</td>
<td>4</td>
<td>Montoto, Huaracha</td>
<td>CDM 1150</td>
</tr>
<tr>
<td>2500 (250)</td>
<td>2000 (200) Graphic Design I</td>
<td>4</td>
<td>Montoto, Huaracha</td>
<td>CDM 1300</td>
</tr>
<tr>
<td>2700 (270)</td>
<td>2000 (200) Graphic Design I</td>
<td>4</td>
<td>Montoto, Huaracha</td>
<td>CDM 1300</td>
</tr>
<tr>
<td>2850 (385)</td>
<td>2100 (210) Communication and Community</td>
<td>4</td>
<td>Bruning</td>
<td>CDM 1150 or consent of instructor</td>
</tr>
<tr>
<td>3000 (300)</td>
<td>2200 (220) Principles of Public Relations</td>
<td>4</td>
<td>Bruning</td>
<td>CDM 1150 or consent of instructor</td>
</tr>
<tr>
<td>2500 (250)</td>
<td>3000 (300) Rhetoric and Persuasion</td>
<td>4</td>
<td>Brownson, Isham</td>
<td>CDM 1150 or consent of instructor</td>
</tr>
</tbody>
</table>

This communication practicum engages students in the process of developing, writing, producing, and editing video-based multi-media programs. Students study the process of media production by critical analysis of film texts and by active participation in the production process. Students must have unlimited access to an external FIREWIRE 400 hard drive (recommended free space: 250 GB).

**Prerequisite:** CDM 1150 and CDM 1300/1050; or consent of instructor

**FAR**
An introduction to photography using the digital camera. Course content covers aesthetics, shooting techniques, basic retouching and collage, as well as explorations with paper. Students must have a digital camera, a laptop computer (or access to one), and Photoshop LE. This course does not count toward majors in the department.

**FAR**
This communication practicum engages students in the process of developing, writing, producing, and editing video-based multi-media programs. Students study the process of media production by critical analysis of film texts and by active participation in the production process. Students must have unlimited access to an external FIREWIRE 400 hard drive (recommended free space: 250 GB).

**Prerequisite:** CDM 1150 and CDM 1300/1050; or consent of instructor

This course is an introduction to typography from the perspective of visual-perception principles, skills, and craft. Major topics include: elements of typographic form, composition, Gestalt psychology, and basic graphic design theory as applied to the design and use of typography. Initial projects include theoretical exercises that build perceptual acuity and hand skills using simple tools and materials. Subsequent projects include practical visual communication applications. Other areas of emphasis include the exploration of meaning, connotation, and type design concept development. Contemporary trends and practitioners are also discussed.

**Prerequisite:** CDM 2000 and ART 1070

This study as communication majors, graphic design and digital media.

**Prerequisite:** CDM 1150 or consent of instructor
3150 (315) History of Graphic Design
Huaracha 4 credits
This class covers the history of graphic design from 1450 to the present. Emphasis is on the development of design from the late 19th century to the present. 
Prerequisite: CDM 2000 or consent of instructor

3300 (330) Writing for Media
Chilsen 4 credits
This course develops awareness and understanding of the conventions and practices that lead to effective writing for various media. Emphases may include newspapers, magazines, television, cinema, popular music, internet, radio, or other media. The focus is on developing writing skills through exercises in a variety of formats and styles appropriate to specific media.

3400 (340) Communication and Technology
Bruning 4 credits
This course examines digital technology as a medium of communication. Issues covered include the social, economic, civic, and global implications of the information age. 
Prerequisite: CDM 1150 or CDM 1100 or consent of instructor

3450 (345) Mass Communication
Bruning 4 credits
FAR
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 CDM 1100 or consent of instructor

3530 (353) Digital Media: Web Design
Montoto 2 credits
Students build and/or modify Web sites using industry-standard authoring software. Students register domain names, write code, and explore cascading style sheets. Course content covers software basics with an equal emphasis on the development of design skills.
Prerequisite: CDM 2000

3540 (354) Digital Media: Time-Based Media
Montoto 2 credits
This class explores the visual and technical possibilities afforded by programs such as Flash. The class begins with an overview of the history of motion graphics and title design. Throughout the course there is an ongoing study and discussion of contemporary motion graphics as students learn to incorporate motion and interactivity into their designs. 
Prerequisite: CDM 3530

3550 (355) CDM Internship
Staff 4-8 credits
An internship enabling the student to gain practical experience in communication or graphic design. The internship is typically arranged by the student, and must be approved by a member of the departmental faculty, as well as by Career Services. 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: CDM 1150 and consent of faculty sponsor

3650 (365) Image
Staff 4 credits
An introduction to the practice of image-making for graphic designers. The course emphasizes concept development and individual expression, in addition to the continuous development of skills. Demonstrations and discussions on traditional and experimental creative process and media are given. Students create images for advertising, editorial, institutional and corporate applications. Various black and white and color media are introduced.
Prerequisite: CDM 2000

3750 (375) Graphic Design II
Montoto, Huaracha 4 credits
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

3950 (395) Advanced Cinema Production
Chilsen 4 credits
This course draws on principles and skills developed in CDM 2700 and other first-year and second-year courses in the Communication and Graphic Design major. Under the direction of a faculty member, students in this course work as a team to design, produce, and edit several types of advanced video productions including one major piece. Coursework culminates in the presentation the major work to a campus-wide audience.
Prerequisite: CDM 2700 or consent of instructor

400T (471) CDM Topics
Staff 4 credits
Advanced study of a selected topic, movement, or figure in communication or graphic design.
Prerequisite: CDM 1150 or CDM 1100 or consent of instructor

4010 (401) Senior Seminar for Communication Majors
Bruning, Schulze 4 credits
The Senior Seminar is led by one member of the department faculty, with the assistance and participation of other members. This is a capstone course designed to provide students majoring in communication 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: Senior standing or consent of instructor

Fall
Computer Science

4020 (420) Senior Seminar for Graphic Design Majors
Montoto, Huaracha 4 credits
The Senior Seminar is led by one member of the department faculty, with the assistance and participation of other members. This is a capstone course designed to provide students majoring in graphic design 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 exhibition.
Prerequisite: Senior standing or consent of instructor
Spring

4200 (420) Methods and Materials in Teaching Communication
Staff 4 credits
A study of communication teaching methods and instructional materials. Special attention is given to the selection and organization of subject matter and learning activities. Field work required.

Computer Science

By taking computer science courses, students develop problem-solving skills that can be applied across many disciplines. These courses also provide students with a firm foundation of knowledge and practical experience in software development, computer architecture, and theoretical computer science. This knowledge will prepare students for successful careers in the computer industry or for graduate studies in computer science.

This major requires 45 credits, which must include the following four courses:
CSC 1110 Principles of Computer Science I
CSC 1120 Principles of Computer Science II
CSC 2510 Computer Organization
CSC 2560 Data Structures

Students also must take six computer science courses numbered above 3000.
Finite Mathematics (MTH 1060)
OR Discrete Structures (MTH 1240)
CSC 4000 Senior Seminar (1 credit)

A minor consists of Computer Science 1110, 1120, three additional Computer Science courses numbered above 2000, and either MTH 1060 OR MTH 1240.

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. A student majoring in Computer Science and considering an industrial career is strongly advised to consider minoring in the Entrepreneurial Studies in the Natural Sciences Program (ESNS).

1100 (110) Introduction to Computing
Crosby, Wheeler 4 credits
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 Javascript, HTML and Web programming also are introduced.
Fall/Spring

1110 (111) Principles of Computer Science I
Crosby, Mahoney, Wheeler 4 credits
A study of the fundamentals of writing computer programs and problem-solving, using structured and object-oriented techniques.
Fall/Spring

1120 (112) Principles of Computer Science II
Crosby, Mahoney 4 credits
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 1110

200T (271) Topics in Computer Science
Staff 1-4 credits
A course of variable content on topics not covered in other courses offered by the department. Possible topics may include artificial intelligence, computer graphics, functional programming, human-computer interaction, and other advanced topics in computer science.

2510 (251) Computer Organization
Chell 4 credits
A study of the logical organization of computers, including combinatorial and sequential digital logic, computer arithmetic, and circuits. Machine and assembly languages, memory, addressing techniques, interrupts, and input-output processing also are studied.
Prerequisite: CSC 1120 and either MTH 1060 or MTH 1240
Spring

2560 (256) Data Structures and Algorithms
Mahoney, Wheeler 4 credits
An examination of advanced programming techniques for problem-solving and manipulating data using primarily object-oriented approaches.
Prerequisite: CSC 1120
Fall

3050 (305) Object-Oriented Programming
Staff 4 credits
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 1120

3210 (321) Computing Paradigms
Staff 4 credits
A survey of language-design issues and runtime behavior of several programming languages suitable for different problem-solving paradigms (structured, functional, object-oriented).
Prerequisite: CSC 2560

3410 (341) Database Design and Management
Staff 4 credits
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 1120
Spring

3450 (345) Computer System Administration
Crosby 4 credits
The examination of the administration of Windows NT and Linux (a version of Unix) operating systems. Topics covered include installation, mail services, administering users, disk space, peripherals, backups, maintenance, security, and intercomputer communications. Special schedule.
Prerequisite: CSC 1110
J-Term
3530 (333) Artificial Intelligence and Cognitive Modeling
Staff 4 credits
This course explores the primary approaches for developing computer programs that display characteristics that 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 or with permission of instructor

3600 (360) Data Communications
Crosby, Mahoney 4 credits
An examination of data communications and communications networks including signal encoding, multiplexing, circuit and packet-switched networks, TCP/IP, WANs, LANs, and intranets.
Prerequisite: CSC 1120
Fall

3730 (373) Operating Systems
Mahoney 4 credits
A study of the basic components and concepts of a multitasking operating system including processes; scheduling; resource management; I/O and file systems; virtual memory; security; and semaphores.
Prerequisite: CSC 2510
Spring

3750 (375) Algorithms
Wheeler 4 credits
This course studies various problem-solving strategies and examines the classification, design, complexity, and efficiency of algorithms.
Prerequisite: CSC 1120 and either MTH 1060 OR MTH 1240
Spring

4000 (400) Senior Seminar
Staff 1 credit
Students review and discuss current issues and trends in Computer Science.
Prerequisite: Senior standing
Fall

400T (471) Topics in Computer Science
Staff 1-4 credits
A course of variable content on topics not covered in other courses offered by the department. Possible topics may include artificial intelligence, computer graphics, functional programming, human-computer interaction, and other advanced topics in computer science.

4350 (435) Software Design and Development
Mahoney, Wheeler 4 credits
An examination of the software development process from analysis through maintenance using both structured and object oriented methods. Students work together on a team project.
Prerequisite: CSC 2560
Fall

4500 (450) Independent Study
Staff 2-4 credits
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

4650 (465) Computer Architecture
Crosby, Mahoney 4 credits
Students examine various computer architectures including the von Neuman mode, RISC/CISC, and parallel architectures.
Prerequisite: CSC 2510
Spring

4810 (481) Foundations of Computer Science
Chell, Wheeler 4 credits
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
Spring

4900 (490) Research in Computer Science
Staff 1-4 credits
An opportunity to conduct research in computer science, culminating in a research paper.
Prerequisite: CSC 1120 and instructor approval

Criminal Justice
The criminal justice major at Carthage gives students a basic understanding of our criminal justice system, from law-making to law-breaking (including potential sanctions). For this reason, the curriculum is interdisciplinary, and includes courses in Political Science, Sociology and Criminal Justice.

The curriculum includes relevant traditional courses, along with new courses specifically created to address neglected areas and problems. The various institutions which make up the criminal justice system are all examined in their relationships to one another as well as in their relationship to our society, other social institutions, and related practices. The discussion of such matters raises questions concerning the types of laws and practices which constitute and are consistent with a free, humane, secure, and responsible society.

The major is designed for students who are planning a career in criminal justice areas such as law and judicially-related fields, law enforcement and administration, probation and parole, criminology, adult and juvenile corrections, urban planning and affairs, etc. There are a wide variety of criminal justice careers at the local, state, and national levels.

Criminal Justice Major (40 credits)
The Criminal Justice major consists of 40 credits, including a four hour Senior Seminar. Students considering law school are encouraged to take the Pre-Law track within the Criminal Justice major.

All majors must take a common core consisting of the following:
- CRJ 1000 Criminal Justice
- CRJ 2260 Criminology
- POL 2910 Constitutional Law II: Civil Rights and Civil Liberties
- POL 1040 Introduction to Public Policy
- CRJ 4990 or SOC 4990 or POL 4000 Senior Seminar

Students who wish to pursue the Pre-Law track must take the following three courses for 12 credits:
- CRJ 3010 Police and Society
- CRJ 3020 American Courts
- CRJ 3030 Corrections

Those students who choose to pursue either a Criminal Justice or Pre-Law track within this major, Students who wish to complete the regular Criminal Justice major must take the following three courses for 12 credits:
- CRJ 3010 Police and Society
- CRJ 3020 American Courts
- CRJ 3030 Corrections

The remaining eight credits for the Criminal Justice major, regardless of track pursued by the student, may be fulfilled by taking any two of the following courses:
- CRJ 2100 Probation, Parole & Community Supervision
CRJ 2700 Criminal Law
CRJ 2850 Constitutional Criminal Procedure
CRJ 200T/400T Topics
CRJ 3200 Restorative Justice
CRJ 3500 Field Placement
CRJ 3550 Internship
POL 2400 American Government (except for Pre-law track)
POL 200T Legal Topics
POL 3530 American Political Institutions
POL 3350 Human Rights
POL 3900 Comparative Law
POL 3930 Environmental Law
SOC 2270 Juvenile Delinquency
SOC 2530 Racial & Cultural Minorities
SOC 3020 Sociological Research I
SOC 3100 Deviance
SOC 3120 Elite Deviance
MGT 3600 Legal Environment of Business

Criminal Justice Minor (24 credits)
The minor includes CRJ 1000 Criminal Justice System and five courses from the following:

CRJ 2260 Criminology
CRJ 2700 Criminal Law
CRJ 2850 Constitutional Criminal Procedure
CRJ 3030 Corrections
CRJ 200T/400T Topics in Criminal Justice
POL 2400 American Government: National, State, Local
POL 200T/400T Topics in Political Science (if appropriate topic)
POL 2910 Constitutional Law II: Civil Rights and Civil Liberties
POL 2920 Judicial Process and Behavior
POL 3950 Liberty and Security in a Democracy
POL 3960 Legal Theory

1000 (200) Criminal Justice System
Thompson, Matthews, Ottman 4 credits
SOC
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 which the criminal justice system faces and evaluation of the adequacy of the existing system will be given emphasis.
Fall/Spring

200T (271) Topics in Criminal Justice
Staff 1-4 credits
A variable content course for intermediate students who will study in depth a specific topic of interest in criminal justice, such as the death penalty, private prisons, sentencing reforms, gun control, intermediate sanctions, or a number of other topics.
Prerequisite: CRJ 1000
Fall/Spring

2100 (210) Probation Parole and Community Supervision
Staff 4 credits
This course provides a detailed examination of alternative forms of punishment within the criminal justice system, namely probation, parole and community supervision. Given the enormous strain on the prison system, these forms of punishment have become increasingly common in recent years. This course examines the nature of such programs within the larger socio-historical context.

2260 (226) Criminology
Matthews, Miller 4 credits
This course examines the nature, extent, and distribution of crime in the United States. Theories of crime causation are also examined in this course.

2700 (270) Criminal Law
Zaph 4 credits
SOC
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

2850 (285) Constitutional Criminal Procedure
Staff 4 credits
SOC
A study of the balance of power and resources of the government and the liberties of citizens as provided for in the U.S. Constitution. The course focuses on arrest and search issues, but proceeds to examine questions related to pre-trial and trial processes and concerns for fundamental fairness. Attention is given to power and limits of power as they apply to persons in the criminal justice system.
Prerequisite: CRJ 1000
Spring

3010 (304) Police and Society
Miller, Staff 4 credits
This course will rely on a variety of scholarly materials to answer that and other related questions such 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 and POL 1040

3020 (302) American Courts
Matthews 4 credits
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 and POL 1040

3030 (303) Corrections
Miller, Staff 4 credits
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 and POL 1040

3200 (320) Restorative Justice
Staff 4 credits
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.
3300 Mock Trial
Phegley/Laufenberg 4 credits
Students who participate in this course will become a member 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.
Prerequisite: At least Sophomore standing

400T (471) Topics in Criminal Justice
Staff 1-4 credits
A variable content course for advanced students who will study in depth a specific topic of interest in criminal justice, such as the death penalty, private prisons, sentencing reforms, gun control, intermediate sanctions, or a number of other topics.
Prerequisite: CRMJ 2000
Fall/Spring

4990 (499) Senior Seminar
Matthews, Miller, Thompson 4 credits
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.
Prerequisite: Senior standing, major in Sociology or Criminal Justice
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.

Breath 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 are asked to complete the economic seminar course, which includes a survey of the history of economic thought, and to complete a senior thesis approved by a faculty advisor and presented to departmental faculty and students.

Economics Major
1st or 2nd year:
ECN 1010 Principles of Microeconomics
ECN 1020 Principles of Macroeconomics or
ECN 1030 Issues in Economics
2nd or 3rd year:
ECN 2510 Intermediate Microeconomics
ECN 2520 Intermediate Macroeconomics
BUS/ Applied Statistics for Economics
ECN 2340 & Management
ECN 3340 Introduction to Econometrics
3rd or 4th year:
Three (3) or four (4) electives in economics from courses 2500 or above. Note: Students who have taken ECN 1010 and ECN 1020 may meet this diversity requirement by taking only three elective courses; students who have taken only ECN 1030 are required to take four elective courses.

4th year:
ECN 4400 Seminar & History of Economic Thought
Senior Thesis
ECN 4990 Senior Thesis Completion

Economics Minor
ECN 1010 Principles of Microeconomics
ECN 1020 Principles of Macroeconomics or
ECN 1030 Issues in Economics
BUS/ Applied Statistics for Economics
ECN 2340 & Management
ECN 2510 Intermediate Microeconomics

Published: Spring 2010
Choice of one:
ECN 2510 Intermediate Microeconomics
ECN 2520 Intermediate Macroeconomics

Choice of three:
ECN 200T/Topics in Economics 400T
ECN 3290 International Finance
ECN 3300 Law and Economics
POL 200T/Topics in Political Science 400T
MGT 3730 The International Legal Environment of Business
ACC 3750 International Accounting and Finance
GEO 2100 The Human Landscape
GEO 2300 Economic Geography
GEO 3500 Transportation Geography and Business Logistics
FRN 3080 The French-Speaking World or GER 3080 The German-Speaking World or SPN 3080 The Spanish-Speaking World

1030 (103) Issues in Economics
Staff 4 credits
SOC This course offers students an introduction to economics, along with some elementary tools of economic analysis, with emphasis upon 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 Economics 1010 or Economics 1020.
Fall

200T (271) Topics in Economics
Staff 1-4 credits
Selected topics in economics. Depending upon content and level of work, the course may be taken more than once for academic credit.
Prerequisite: Consent of the instructor
Fall/J-Term/Spring

2340 (333) Applied Statistics for Economics and Management
Cronovich 4 credits
MTH 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.
Prerequisite: MTH 1070 or equivalent
Fall/Spring/Summer

2510 (251) Intermediate Microeconomics
Maltsev 4 credits
SOC 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

2520 (252) Intermediate Macroeconomics
McClintock 4 credits
SOC 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 incomes policies are examined and the uses and limits of these tools in promoting macroeconomic goals are discussed.
Prerequisite: ECN 1020 or 1030
Spring

3050 (305) Environmental Economics
Schlack 4 credits
This course explores the economic dimension of environmental and natural resource use questions. The actions of producers and consumer, 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: Economics 1010, or Economics 1030, or consent of the instructor
Fall

3100 (310) Political Economy of the Pacific Rim
McClintock 4 credits
SOC 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.
Fall

3200 (320) Money and Banking
Cronovich, McClintock 4 credits
SOC 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: Economics 1010 or 1030
J-Term
3220 (322) Regional and Urban Economics
Schlack 4 credits
SOC
The analysis of sub-national 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: Economics 1010 or 1030

3240 (324) Public Sector Economics
McClintock 4 credits
SOC
An analysis of the reallocate and redistributive functions of government federal, state, and local 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. Spring

3250 (325) Economics of Poverty and Income Inequality
Montanaro 4 credits
SOC
The course deals with a variety of economic and social issues of the United States and the world. Its scope includes the gender, educational, and cultural characteristics of poverty and inequality in different countries; the ways whereby people obtain income; and the factors affecting job turnover and social mobility. The course examines the changing economic roles of women and men in the labor market and in the family. Various methodological issues in the study of poverty and inequality also are examined as well as the relationship between income distribution and overall macroeconomic performance. Fall

3260 (326) Labor Economics
Maltsev 4 credits
SOC
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 impacts 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: Economics 1010 or 1030 Spring

3270 (327) International Trade
Schlack 4 credits
SOC
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, economic integration, balance of payments adjustment and foreign exchange markets are set forth and become a basis for examining policy issues. Prerequisite: ECON 1010 and 1020, or 1030 Fall

3290 (329) International Finance
Cronovich 4 credits
SOC
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. Prerequisite: ECON 1010 and 1020, or ECON 1030 Fall

3300 (330) Law and Economics
McClintock 4 credits
SOC
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 in order that alternative approaches might be evaluated. Prerequisite: Junior or senior standing Fall

3340 (334) Introduction to Econometrics
Cronovich 4 credits
SOC
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 Prerequisite: BUS/ECN 2340 or consent of instructor

3550 (355) Internship in Economics
Staff 4-8 credits
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. Prerequisite: Junior standing and permission of the instructor Fall/Spring
4030 (403) International Political Economy
McC Clintock 4 credits
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

4050 (405) Seminar in International Political Economy
Staff 4 credits
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 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

4400 (440) Seminar and History of Economic Thought
Staff 4 credits
Serving as a capstone for the major, the seminar goes beyond specific fields to consider how the institutions of any society shape, and are shaped by, the ongoing economic process. Inquiries into how economies have evolved in specific historical contexts, and into their accompanying ideologies, are central to the course. A major paper on a topic of individual student choice is required. Spring semester.

Spring

4990 Senior Thesis Completion
Staff 0 credits
Students must register for ECN 4990 during the semester of their Senior Thesis Completion

Education
The Education Department of Carthage offers majors in middle childhood/early adolescent (ages 6-13; grades 1-8) in cross-categorical special education (ages 6-21; grades 1-12) minors in early adolescence/adolescent (ages 10-21; grades 6-12) education and programs in special fields of music and physical education.

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

Please see the requirements for each major in the appropriate section of the catalog.

NOTE: Completion of the Carthage education program does not guarantee licensure. State requirements (such as student teaching, content tests, 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. 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 not seeking licensure in a minor area can choose any minor from the non-licensable minor list found in the Steps booklet. Middle Childhood/Early Adolescent majors seeking licensure in a minor area must choose from the licensable minor list also found in the Steps booklet.

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 course work for undergraduate programs at any and all post-secondary schools attended. The GPA needed in education courses, major and minor, must be at least 2.75.

Students are also expected to successfully complete an assessment of basic skills using standardized tests and other appropriate measures prior to admission to the teacher education program. All students who want to be admitted to the teacher education program to pursue state licensure must meet or exceed the following passing scores on the Pre-Professional Skills Test (PPST) prior to application for admittance to the teacher education programs: Reading 175, Writing 174, Mathematics 173. Passing scores on the computerized version of the tests are: Reading 322, Writing 320, and Mathematics 318.

Students should apply for admission to the teacher education program after having completed foundations courses in education (EDU 1010, 1050, and 2010) and in general education (Heritage sequence 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 may enroll in education courses numbered 3000 and above without first having been admitted to the teacher education program.

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 show an acceptable portfolio, passing the appropriate Praxis II content test, and successfully complete an interview. Students must be admitted to the teacher education program at least one term prior to application to student teaching.

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

Human Relations
The human relations requirement is satisfied by taking the Heritage sequence and completing required field experiences as cited above.

Environmental Education
Teacher education certification candidates in middle childhood/early adolescent education, science, social studies, and other related areas are required to gain competencies in environmental education through liberal arts.
and education courses as well as other experiences.

Students should be able to show exposure to knowledge of:

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

Middle childhood early adolescent majors fulfill the environmental education requirements in methods courses 3160 and 3260.

Early adolescence minors can fulfill their environmental education requirements in methods courses 3160 and 3260.

Content in education methods courses, especially methods courses EDU 3160 and 3260. GEO 2400 Environmental Geography: Working with the Earth, GEO 1700 Introduction to Physical Geography, as well as other selected courses reflect the requirements.

Students are urged to take BIO 2000 or BIO 2200 to satisfy the Biological Science Requirement, or GEO 1700 to satisfy the physical science requirement, or other appropriate courses.

**General Education Requirements**

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

- **Heritage Sequence:** appropriate catalog requirements
- **Carthage Symposium:** appropriate approved interdisciplinary course
- **Writing Across the Curriculum:** four courses including the following: 2 Heritage courses, 1 writing intensive labeled course in the department, and 1 choice writing intensive course in the college.
- **HIS 1000:** Issues in American History: 4 credits
- **Fine Arts:** Choose from approved catalog list of art, music, theatre, or communication courses with FAR distribution credit: 4 credits
- **Natural Sciences:** Choose from courses with SCI distribution credits with one being a lab.
  1. Any approved biological science: 4 credits
  2. Any approved physical science course (Physics or Chemistry): 4 credits
- **Social Science:** one class from the following areas with SOC distribution credit (4 credits): economics, geography, political science, psychology, or sociology.
- **Modern Language:** Choose two courses (8 credits) with MLN distribution credit. Modern language is not required for Wisconsin teacher licensure.
- **Mathematics:** Choose one course (4 credits) with MATH distribution credit.
- **Religious Studies:** 8 credits
  1. REL 1000 Understandings of Religion
  2. Choose one course with RELI distribution credit.
- **Exercise and Sport Science**
  1. Concepts of Physical Fitness: 1 credit
  2. Choose any lifetime/fitness activity: 1 credit

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

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

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

The Department of Education offers a major in Middle Childhood through Early Adolescent (Grades 1-9), which requires completion of the following courses:

1. **Courses for the major**
   - EDU 1010 Education and Society (4 cr.)
   - EDU 1050 Characteristics of Exceptional Learners (4 cr.)
   - EDU 2150 Creative Arts (4 cr.)
   - EDU 3160 Social Studies in the Elementary/Middle School (4 cr.)
   - EDU 2720 Behavior Management in the Classroom (4 cr.)
   - EDU 3220 Reading & Language Arts I (4 cr.)
   - EDU 3230 Reading & Language Arts II (4 cr.)
   - EDU 3250 Effectively Teaching Math in Elementary/Middle School (4 cr.)
   - EDUC 3260 Effectively Teaching Science in Elementary/Middle School (4 cr.)
   - EDU 4130 Children's & Early Adolescents' Literature (4 cr.)
   - EXS 2450 Physical Education & Health Methods* (2 cr.)

*This course fulfills the concepts of physical fitness (1 cr.) and fitness activity (1 cr.) general education requirements for the Carthage degree.

2. The following courses are required to complete the Wisconsin teacher licensure requirements:
   - EDU 2010 Educational Psychology and Assessment (4 cr.)
   - EDU 2220 Methods & Materials: Portfolio (2 cr.)
   - EDU 4900 Student Teaching & Portfolio (12 cr.)

3. The following courses are required for licensure and are taken as general education requirements for the Carthage degree:
   - HIST 1000 Issues in American History (4 cr.)

Any appropriate Social Science course (4 cr.)
Any appropriate Biological Science course* (4 cr.)
Any appropriate Physical Science course (Physics or Chemistry)* (4 cr.)

* At least one must be a lab science

4. The Middle Childhood through Early Adolescent major also may earn a minor or second major in a content area for teacher licensure.
**Cross-Categorical Special Education**

Students seeking the major in cross-categorical special education must also have a major in Middle Childhood through Early Adolescence education or a content major and an Early Adolescence and Adolescence minor. The cross-categorical special education major consists of the following courses:

1. **EDU 2080** Instructional Technology for Exceptional Learners (4 cr.)
2. **EDU 2140** Principles of Instructional Design (4 cr.)
3. **EDU 3110** Assessment of Exceptional Learners (4 cr.)
4. **EDU 4090** Methods for Teaching Elementary Level Exceptional Learners (4 cr.)
5. **EDU 4100** Methods for Teaching Secondary Level Exceptional Learners (4 cr.)
6. **EDU 4120** Advanced Study and Field Experience in Teaching Exceptional Learners (4 cr.)
7. **EDU 4300** Collaboration Between General and Special Educators (2 cr.)
8. **EDU 4410** Advanced Study and Field Experience in Teaching Exceptional Learners: Secondary (4 cr.)

**Early Adolescence and Adolescence Minor (Grades 6 through 12)**

Students preparing for middle/secondary teaching must complete an appropriate major in the academic area in which they plan to teach and an early adolescence and adolescence education minor. The minor consist of the following education courses:

1. **EDU 1010** Education and Society (4 cr.)
2. **EDU 1050** Characteristics of Exceptional Learners (4 cr.)
3. **EDU 2220** Methods and Materials Portfolio (2 cr.)
4. **EDU 3510** Techniques and Strategies for K-12 Schools (Required of Music and Physical Education majors only) (2 cr.)
5. **EDU 3520** Developmental and Content Reading (4 cr.)
6. **EDU 3540** Language Arts in Middle and Secondary Schools (Not required of Music and Physical Education majors) (4 cr.)
7. **EDU 3570** Classroom Management Middle/Secondary (Not required of Music and Physical Education majors) (4 cr.)
8. **(DEPT) 4200** Methods and Materials in the Major Field (4 cr.)

Note: English majors must also take **EDU 4130** Children’s & Early Adolescent Literature (4 credits)

1. The following courses are required to complete the Wisconsin teacher licensure requirements:
   - **EDU 2010** Educational Psychology and Assessment (4 cr.)
   - **EDU 4900** Student Teaching & Seminar (12 cr.)

3. The following courses are required for licensure and taken as general education requirements for the Carthage degree:
   - **HIS 1000** Issues in American History (4 cr.)
   - Any appropriate Social Science course (4 cr.)
   - Any appropriate Biological Science course (4 cr.)
   - Any appropriate Physical Science course (Physics or Chemistry)* (4 cr.)
   - *At least one must be a lab science.
   - 4. Science and social science majors must satisfy the environmental education requirement by completing **BIO 2000** Plants and People or **BIO 2200** Ecological Bases of Conservation as their biological science or **GEO 1700** Physical Geography or **GEO 2550** as their physical science requirement and other appropriate science courses.
   - 5. Secondary Education students will complete the Senior Thesis in their major field.
   - 6. All education majors and minors should plan their program with an advisor from the major and minor academic area and an advisor from the education department.

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

**1010 (101) Education and Society**

Short, Zavada, Wolff, Easley, Sconzert, Riemer

The history and philosophy of 4 credits 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. A governance issue will also be examined. Critical thinking skills will be developed through writing, speaking, and listening.

Fall/J-Term/Spring

**1050 (105) Characteristics of Exceptional Learners**

Moore, Zavada, Bass, Riemer 4 credits

The student will gain a foundation of knowledge for working with students with disabilities in an individualized education program. The course includes relevant knowledge and skills from the following areas: learning disabilities, mild cognitive disabilities, and emotional and behavioral disorders. Observation experience required.

Fall/J-Term/Spring

**200T (271) Topics in Education**

Staff 1-4 credits

Provides students the opportunity for learning experience in areas not readily available to them through normal curricular offerings.

**2010 (201) Educational Psychology and Assessment**

Bass, Munk, Zavada, Wolff, Sconzert 4 credits

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.

Fall/J-Term/Spring
2080 (208) Instructional Technology for Exceptional Learners
Moore 4 credits
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 1050
Spring

2140 (214) Principles of Instructional Design
Moore, Bass 4 credits
This course incorporates content on language and cognitive development, as well as theories of learning and modules for developing instructional systems. Students will develop the ability to link instructional methods to an underlying theory of learning and learner characteristics. Emphasis will be placed on methods for evaluating instructional systems.
Prerequisite: EDU 1050 and 2010

2150 (215) Creative Arts: Music and Art in the Elementary/Middle School
Ward, Easley 4 credits
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. Field work required.
Fall/Spring

2220 (222) Methods and Materials: Portfolio Development
Staff 2 credits
This course incorporates applications of teaching methods and satisfies senior thesis for elementary education. The Wisconsin teaching standards, development of a portfolio, inclusion, and parental involvement are stressed. Emphasis within the course may change to reflect current classroom needs.
Fall/J-Term/Spring

2720 (272) Behavior Management in the Classroom
Bass, Munk 4 credits
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. Field work required. Contributions of educational psychology to the areas of classroom management and conflict resolution will be addressed.
Fall/Spring

3110 (310) Informal Assessment of Exceptional Learners
Bass 4 credits
Students will demonstrate competence in designing, implementing, and interpreting informal assessment instruments.
Prerequisite: Admission to Teacher Education Program
Fall

3160 (316) Social Studies in the Elementary/Middle School
Ward, Short 4 credits
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. Field work required. This course must be taken at the same time that students take EDU 3260.
Prerequisite: Admission to Teacher Education Program and completion of HIS 1000 Must be taken at the same time as EDU 3260
Fall/Spring

3220 (322) Reading and Language Arts I (Grades 1-8)
Easley, Rieman 4 credits
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 bilingual speakers as reader. 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. Field work required. This course must be taken at the same time as EDU 3250.
Prerequisite: Admission to Teacher Education Program
Fall/Spring

3230 (323) Reading and Language Arts II
Easley, Rieman 4 credits
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 identification, diagnosis, and remediation of reading and language arts abilities. Field work required.
Prerequisite: Admission to Teacher Education Program, EDU 3220
Spring

3250 (325) Effectively Teaching Mathematics in the Elementary/Middle School
Short, Moore 4 credits
This course is designed to provide elementary/middle school pre-service teachers with knowledge of the development sequence of mathematical knowledge and fluency in the pedagogical concepts and skills needed for student success. The focus of this course is on the content, methods of teaching, and 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. This course must be taken at the same time as EDU 3220.
Prerequisite: Admission to Teacher Education Program
This course must be taken at the same time as EDU 3220
Fall/Spring
3260 (326) Effectively Teaching Science in the Elementary/Middle School
Moore, Short 4 credits
This course is designed to provide elementary/middle school pre-service 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 the 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. This course must be taken at the same time as EDU 3160.
Prerequisite: Admission to the Teacher Education Program
This course must be taken at the same time as EDU 3160
Fall/Spring

3290 (329) Formal Assessment of Exceptional Learners
Bass, Munk 4 credits
Students will demonstrate competence in administering, scoring, and interpreting standardized assessment instruments, along with writing evaluation reports and individual education programs.
Prerequisite: Admission to the Teacher Education Program
Fall

3510 (351) Techniques and Strategies for K-12 Schools
Staff 2 credits
An examination of courses of study, K-12, in the schools and the practical application of instruction in middle, junior and high schools. Practical application of audiovisuals, computers, teacher-generated materials, discipline and behavior management, teaching critical thinking, lesson plans, objective writing, mainstreaming and parental involvement will be covered and conflict resolution will be addressed. Computer laboratory work is included.
Prerequisite: Admission to the Teacher Education Program
Fall/Spring

3520 (352) Developmental and Content Reading
Easley, Rieman 4 credits
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 music and physical education. Field experience required.
Prerequisite: Admission to the Teacher Education Program
Fall/Spring

3540 (354) Language Arts in Middle and Secondary Schools
Easley, Rieman 4 credits
A study of the content, organization, and methods of middle and secondary school language arts programs. Emphasis will also be placed on written communication. Required for all subject matter certification candidates except music and physical education. Field work required.
Prerequisite: Admission to the Teacher Education Program
Fall/Spring

3570 (357) Classroom Management for Secondary Teachers
Sconzert 4 credits
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 field work, in which they evaluate effects of popular management strategies. Conflict resolution will be addressed.
Prerequisite: Admission to the Teacher Education Program
Fall/Spring

4090 (409) Methods for Teaching Elementary Level Exceptional Learners
Moore 4 credits
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

4100 (410) Methods of Teaching Secondary Level Exceptional Learners
Munk 4 credits
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; must be taken concurrently with EDU 4140
Spring

4120 (412) Advanced Study and Field Experience in Teaching Exceptional Learners
Zavada, Moore, Bass 4 credits
Students will work independently with a special education faculty member to design and complete a field-based research project in which they will concentrate on a specific category of disability (either learning disabilities, cognitive disabilities, or emotional disturbance) by researching current issues and best practice in working with students with the specific disability. Field experience required.
Prerequisite: Admission to the Teacher Education Program
Fall
4130 (413) Children's and Early Adolescents' Literature
Ward, Easley, Rieman 4 credits
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: Admission to the Teacher Education Program
Fall/Spring

4140 (414) Advanced Study and Field Experience in Teaching
Exceptional Learners: Middle/High School
Bass, Munk, Moore 4 credits
Students will work independently with a special education faculty member to design and complete a field-based research project in which they will concentrate on a specific category of disability (either learning disabilities, cognitive disabilities, or emotional disturbance) by researching current issues and best practices in working with students with the specific disability. Field experience required.
Prerequisite: Admission to the Teacher Education Program; EDU 4100 must be taken concurrently
Spring

4200 (420) Methods and Materials in Teaching Secondary Social Science
Sconzert 4 credits
A study of social sciences teaching methods and instructional materials in the student's field of preparation. Special attention is given to the selection and organization of subject matter and learning activities. Field work required.
Prerequisite: Admission to the Teacher Education Program
Fall

4300 (430) Collaboration between General and Special Education
Moore, Zavada 2 credits
The readings and assignments in this class will develop students' skills in collaborating with colleagues and parents to support student learning and well-being.
Prerequisite: This course is to be taken with EDU 4900 (student teaching)
Fall/Spring

4900 (490) Student Teaching Seminar
Melcher 12 credits
Observation and teaching in a classroom under the joint supervision of a qualified cooperating teacher and a college supervisor. A seminar covers current educational theories and topics related to professionalism and experiences in student teaching. Special attention will be given to classroom management. Students must be admitted to the Teacher Education Program at least one term prior to applying to student teaching.
Prerequisite: Admission to the Teacher Education Program, passing Praxis II, and approval by the Teacher Education Committee
Fall/Spring

English
The purpose of the English major at Carthage is to foster the imaginative understanding and appreciation of literature and language. Students have the opportunity to read and analyze texts, enhance critical thinking skills, and develop their writing, as they acquire knowledge of literary history, of literary forms and techniques, and of the questions and issues particularly relevant to the discipline.

The Department of English offers a program with several kinds of students in mind: those who are satisfying general education requirements, those who wish additional courses in composition, literature and creative writing as electives, those who wish to complete a teaching major or minor in English, and those who wish a major in English as preparation for graduate or professional school or for a career in fields such as publishing, advertising, law, civil service, journalism, public relations or the ministry.

In addition, the department encourages interested students to explore the art and craft of creative writing. The creative writing track of the English major, or the creative writing minor, encourages serious writers from all majors to develop a passion for creative writing and allows them to expand their understanding and practice of the writing of fiction, poetry, and creative nonfiction.

By majoring in English at Carthage, students will develop skills that will enable them to pursue any career that requires the ability to think critically and creatively, to write articulately, and to consider problems from a broad range of perspectives; these skills will contribute to their professional and personal lives as informed and effective communicators.

English majors are expected to take advantage of the many opportunities to attend literary programs and performances of plays, including those of the theatre department. As a minimum, majors are encouraged to participate in at least one of the annual fall trips to the Stratford Theatre Festival in Ontario.

English Major
40 credits in English, including the following:

- 1160 Introduction to Literary Studies (usually taken within a year of the declaration of the major)
- 2010 American Literary Traditions
- 2020 English Literary Traditions I (prior to 1800)
- 2030 English Literary Traditions II (after 1800)
- 4100 Senior Seminar

Of the following courses, one must be taken from each category:

Category I

- 3010 Literature in Its Time I (prior to 1800)
- 3110 Shakespeare
- 3150 Special Studies in a Major Author
  Prior to 1800 (English 2020 is a prerequisite to 3010 and 3150).

Category II

- 3020 Literature in Its Time II (after 1800)
- 3070 Film and Literature
- 3090 Literatures of Diversity
- 3100 Literature and Gender
- 3160 Special Studies in a Major Author
  After 1800

The balance of the 40 credits may be completed by choosing among the department course offerings.

English Minor
24 credits in English, including the following:

- 2010 American Literary Traditions

Choice of one:

- 1060 Interpreting Literature
English

1160 Introduction to Literary Studies
Choice of one:
- 2020 English Literary Traditions I
- 2030 English Literary Traditions II
Choice of one:
- 3110 Shakespeare
- 3150 Special Studies in a Major Author Prior to 1800
- 3160 Special Studies in a Major Author After 1800
The balance of the 24 credits may be completed by choosing among the department course offerings.

Teaching Licensure

English Major with Secondary Education Minor
Students majoring in English and seeking teaching licensure at the secondary level must include the following among the 40 credits taken within the department: English 2040; English 2050 or 2060; and English 3750. In addition, students are required to take Education 4130 and Education/English 4200.

Elementary Education Major with English Minor
Students majoring in elementary education and minor in English/language arts must include the following among the 24 credits taken within the department: English 1060 or 1160; English 2010; English 2050 or 2060; English 2020 or 3110; English 2030 or 2040 or 3750; and one elective. In addition, students are required to take Education 4130. Students interested in teaching licensure should contact the Department of Education.

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 will take 41 credits in the department, including the following required courses:
- 1160 Introduction to Literary Studies
- 2010 American Literary Traditions
- 2020 English Literary Traditions I
- 2030 English Literary Traditions II
- 2050 Creative Writing
- 3040 Advanced Writing (in the area appropriate to the student's writing interest)
- 3140 Literary Genre (in the area appropriate to the student's writing interest)
- 4100 Senior Seminar
- 4300 Seminar in Creative Writing
And a choice from Category I and Category II as listed under "The Major."
Students graduating with an emphasis in creative writing will also be required to take ENG 4300 Seminar in Creative Writing to produce a chapbook and give a public reading of their work. A chapbook is a short book of original poetry, fiction, or creative non-fiction that is unified by content, theme or style. Poetry chapbooks should be 10-20 pages; fiction and non-fiction chapbooks will generally be 15-30 pages. The chapbook will be written and revised during senior year under the guidance of two creative writing faculty members, and may satisfy part of the course requirements for English 3040: Advanced Writing (within the student's chosen genre). Guidelines for the chapbook and public reading can be obtained from the English Department chairperson or the Director of Creative Writing.

Creative Writing Minor for Non-English Majors
Students seeking to minor in creative writing must first pass COR 1100 and 1110 or the equivalent. The minor in creative writing for non-English majors consists of the following 25-credit course of study:
- 2010 American Literary Traditions
- 2050 Creative Writing
- 3040 Advanced Writing (in the area appropriate to the student's writing interest)
- 3140 Literary Genre (in the area appropriate to the student's writing interest)
- 4300 Seminar in Creative Writing
In addition, non-English majors seeking a minor in creative writing must take English 2020 or 2030, and one free elective from the department course offerings.
Like those majoring in English with an emphasis in creative writing, students who wish to graduate with a minor in creative writing will also be required to produce a chapbook and give a public reading of their work. A chapbook is a short book of original poetry, fiction, or creative non-fiction that is unified by content, theme or style. Poetry chapbooks should be 10-20 pages; fiction and non-fiction chapbooks will generally be 15-30 pages. The chapbook will be written and revised during senior year under the guidance of two creative writing faculty members, and may satisfy part of the course requirements for English 3040: Advanced Writing (within the student's chosen genre). Guidelines for the chapbook and public reading can be obtained from the English Department chairperson or the Director of Creative Writing.

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 in the Honors Program section of the catalog.

1060 (106) Interpreting Literature
Staff 4 credits
HUM
This is a course designed to introduce students to critical reading and literary analysis, focusing on the terminology and tools needed to study literature in an informed, imaginative way. The course provides students with knowledge of the conventions and varieties of fiction, poetry, and drama, and seeks to instill in them an awareness of the range and diversity in literary voices and how literature and culture interact.
Fall/Spring/Summer

1160 (116) Introduction to Literary Studies
Carrig, Michie, Smiley 4 credits
HUM
This gateway course for English majors and prospective English majors introduces students to the essential techniques, approaches, and fundamental questions of literary discourse and the practice of literary criticism, as well as to the central issues raised by literary theory. Although a review of genres and literary elements along with an introduction to the most frequently anthologized authors is a component of the course, its main aim is to teach students how to read with a greater awareness of the process of interpreting literary texts. This course is required of all majors, and must be taken within a year of declaration. English 1160 also may be used for distribution credit in the Humanities.
Fall/Spring

200T (271) Topics in Literature
Staff 1-4 credits
HUM
A course of variable content for lower-level students. Topics will not duplicate material covered in other courses.
2010 (201) American Literary Traditions
Duncan, Smiley, Steege, Wallace 4 credits HUM
This course is designed to give students an understanding of key characteristics, historical phases, and issues in American literature. In order to experience the range and diversity of American literature, students read both canonical authors such as Bradstreet, Hawthorne, Dickinson, Twain, Hemingway, Faulkner, and Ellison and non-canonical writers from a variety of regional and ethnic backgrounds, such as Harriet Wilson and Emma Lazarus. The works will be arranged in chronological order and will be discussed as representative of the time period from which they come. The works taught will be chosen so that students will encounter a variety of genres such as poetry, novels, short stories, drama, and essays.

This course is a prerequisite for subsequent courses that focus on American literature (e.g. Literature in its Time II and Special Studies in a Major Author after 1700). Fall/Spring/Summer

2020 (202) English Literary Traditions I
Carrig 4 credits HUM
In this course, students study English literature written prior to 1800. Such works and writers as Beowulf, Chaucer, medieval lyrics, medieval drama, the major sonnet writers, Sidney, Spenser, Marlowe, Shakespeare, Milton, Swift and Pope will be included. In addition to these canonical writers and works, attention will be given to non-canonical works as well, such as The Book of Margery Kempe and The Paston Letters. The works will be arranged in chronological order and discussed as representative of the time period from which they come. Fall

2030 (203) English Literary Traditions II (After 1800)
Carrig 4 credits HUM
In this course, students study English literature written after 1800, reading works by such writers as Wordsworth, Coleridge, Byron, Blake, Shelley, Keats, Tennyson, Browning, Arnold, Austen, Dickens, Conrad, Joyce, Lawrence, Yeats, and Woolf. In addition to these canonical writers, attention will be given to non-canonical writers whose works can provide diversity in ethnicity, class and gender. Spring

2040 (204) The Classical Tradition in Literature
Carrig, Alli 4 credits HUM
The content of the course consists of the great texts of the Western European tradition and also from non-Western traditions. The works included will represent the Heroic and Classical periods in Greece (Homer, Sappho, the Greek dramatists), The Golden Age of Latin Writings (Virgil, Ovid), and the medieval continuation of the tradition. Such non-Western works as Gilgamesh or Chinese poetry may be included. Emphasis will be on how these works both reflect their cultural world and treat problems which will confront us. Spring

2050 (303) Creative Writing
Meier, Wallace 4 credits
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. Prerequisite: COR 1100 and COR 1110 Fall/Spring

2060 (305) Expository Composition
Meier, Wallace 4 credits
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. Prerequisite: COR 1100 and 1110

3010 (301) Literature in Its Time I
Carrig 4 credits HUM
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. Prerequisite: ENG 2020: English Literary Traditions I

3020 (302) Literature in Its Time II
Smiley, Steege 4 credits HUM
A rotating selection of courses engaging important themes, voices, and works of the British romantic period, the Victorian period, the modern period, and 19th-21st century American literature. These courses follow the same interdisciplinary approach as Literature in Its Time I. Prerequisite: ENG 2030: English Literary Traditions II or ENG 2010: The American Literary Tradition, depending on course content

3040 (304) Advanced Writing
Meier, Smiley, Wallace 4 credits
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. Prerequisite: COR 1100, COR 1110 and ENG 2050; or consent of the instructor Spring

3070 (307) Film and Literature
Staff 4 credits HUM
This class will explore the relationship between film and literature. Students will be taught to "read" literature and film, analyzing narrative structure, genre conventions, 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.
3090 (309) Literatures of Diversity
Smiley 4 credits
HUM
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.

3100 (310) Literature and Gender
Carrig, Smiley 4 credits
HUM
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 male or female. 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.

3110 (311) Shakespeare
Carrig, Michie, Smiley 4 credits
HUM
Students may choose this course as one of the required upper-division courses prior to 1800. In this course, representative tragedies, comedies, histories, and romances will be studied. Attention will be given to how Shakespeare's plays reflect the fundamental concerns of the Renaissance. The course also will include attention to genre, history of ideas, and literary criticism.

3140 (314) Literary Genres
Carrig, Michie, Smiley, Steege 4 credits
HUM
This umbrella covers a series of courses on a single literary genre such as the short story, poetry, drama, the epic, 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, socio-historical contexts, the influence of gender, race, and class, and the role of the reader.

3150 (315) Special Studies in a Major Author Prior to 1800
Carrig, Michie, Smiley, Steege 4 credits
HUM
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 chose to study two authors rather than one, if the two complement each other.
Prerequisite: ENG 2020: English Literary Traditions I

3160 (316) Special Studies in a Major Author After 1800
Carrig, Michie, Smiley, Steege 4 credits
HUM
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.
Prerequisite: ENG 2030: English Literary Traditions II or ENG 2010: American Literary Traditions

3750 (375) History and Structure of the English Language
Carrig, Schulze, Wallace 4 credits
A course that seeks to enlarge students' understanding and appreciation of the English language by examining the history of its development and the systematic ways that it expresses meaning.
Spring

400T (471) Topics in Literature
Carrig, Smiley, Steege 1-4 credits
An in-depth study in literature or related subject matter such as literary criticism, folklore, film, or great literary works representing a common theme, genre, perspective or period. Recent offerings have examined twentieth century feminist literature, Faulkner, and Southern women writers. Topics that are under consideration include Midwestern literature, Anglo-Irish literature, and Arthurian literature.

4100 (410) Senior Seminar
Carrig, Smiley 4 credits
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
4200 (420) Methods and Materials in Teaching English
Staff 4 credits
A study of English teaching methods and instructional materials. Special attention is given to the selection and organization of subject matter and learning activities. Field work required.

Fall

4300 Seminar in Creative Writing
Staff 1 credit
In this course students will develop the content of their Senior Chapbooks in a workshop setting, study various methods of chapbook production, produce a chapbook of their work, and prepare to present that work in a public reading.

Entrepreneurial Studies in the Natural Sciences

The Science Works (Entrepreneurial Studies in the Natural Sciences - ESNS) program is a unique offering at Carthage. It is nationally recognized and has been widely publicized. The program provides students with opportunities to explore and develop skills and knowledge needed to succeed in their careers and to potentially create new enterprises. Students can combine their studies at Carthage with career and business preparation that will enhance their postgraduate success, including job performance, graduate school training, or developing and operating a business.

The Science Works program includes a one-year course sequence, normally completed during the junior year, that covers all aspects of business and careers. During their senior year, students will study and develop full scale business plans in partnership with a technology business company or organization. This mixture of courses, hands-on experience, and advanced project work gives the best training before beginning a career or graduate training. The program also provides the student with a business plan product that he or she can show to potential employers, making them more desirable in the job market after graduation and improving the likelihood for advancement. Preparing a full-scale business plan provides students with the skills that will help make them successful in all aspects of their future careers, including financial planning, strategic and operational planning, product and service development, market analysis, and staff and management strategy.

The program integrates a unique combination of skills and knowledge training. The coursework emphasizes integration of important skills, such as written and oral communication, graphical presentation, business finance and accounting, management, marketing, legal issues and regulation, intellectual property, and business ethics. In addition, the courses cover characteristics of many types of industries and businesses, and includes speakers from local, regional, and national organizations.

Carthage is a member of the National Collegiate Innovators and Inventors Association, through which students can apply for grants to support their business plan projects. Carthage is also a partner in the Center for Advanced Technology and Innovation, a technology transfer and entrepreneurship center in Racine, Wis., through which students can obtain projects and internships.

The program is offered as a minor, complementing majors across the Carthage curriculum. It requires 20 credits of work. Required courses include ESN 3100, 3200, 4100, 4300 and one of the following: ESN 2000, ESN 3250, ACC 2000, MGT 3600, MGT 3120, MKT 3130, ISS 3450 or GEO 2600.

In addition, ESN 3100 is generally offered as a Carthage Symposium, and ESN 3200 is a Writing Intensive Course, providing students with opportunities to meet those graduation requirements through participation in the program.

2000 Classic to Contemporary Leadership Theory
Williams 4 credits
Leadership theory has made a significant transformation over time. This course will examine the evolution of leadership theory from the classical period through contemporary models. Students will analyze these theories and identify the major perspectives, strengths, and areas of weakness. The course will provide the students an opportunity to become more self-aware of their own personality characteristics, current leadership strengths, and areas of challenge. Students will develop an authentic personal theory of leadership and use leadership theories and models to address contemporary problems in current and actual leadership settings.

3100 (310) Elements of Technology-Based Business Careers
Staff 4 credits
Introduction to technology-based businesses and the skills necessary to succeed in a career. This course will introduce business and career topics such as business formation and incorporation, business structures and cultures, business economics, personal and business budgeting, oral and written communications skills for business, interviewing and resume reviews, and other topics appropriate for career development. Opportunities to meet with business leaders and other outside speakers will be provided. ESN 3100 is generally offered as a team-taught Carthage Symposium.
Prerequisite: Permission of the ESN Program Director

3200 (320) Development and Operation of Technology-Based Business
Staff 4 credits
A comprehensive course covering all of the major aspects of operating a business. Included among the topics are management skills, legal and regulatory issues, business ethics, financial planning, business finance, investing and retirement planning, accounting and taxation, and intellectual property. Students will work in teams to develop business plans.
Prerequisite: ESN 3100
Environmental Science

3250 (325) Commercial Technologies in Business
Staff 4 credits
A January-term course designed around student teams engaging in week-long projects through which they learn how to develop and produce new products and services. The course emphasizes fact-finding and on-the-fly design and systems integration. The course includes field trips to regional industries.

J-Term

3500 (350) Field Placement
Staff 2-8 credits
A field placement in entrepreneurial studies enables the student to explore a possible technology business 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 ESN Program Director

3550 (355) Internship
Staff 4-8 credits
An internship enables students to gain practical experience in technology business. 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 ESN Program Director

4100 (410) Technology Based Business Project Development
Staff 4 credits
Students will develop a business concept in concert with an outside organization and industry mentor. Students will work directly with an industry mentor and College faculty to develop a product or business concept. Product design and market research form the core of the course activities. Students will present their projects and findings before the ScienceWorks Advisory Board.

Prerequisite: ESN 3200

4300 (430) Business Plan Development and Presentations
Staff 4 credits
Students will develop business plans and other business documents for their core project. Students will work directly with an industry mentor and College faculty to develop a complete and detailed business plan. Students will defend their business plans before the ScienceWorks Advisory Board and a public audience. In addition, students are strongly urged to participate in an internship or work experience following completion of ESN 3200 and prior to enrolling in ESN 4100. Students must select a suitable business plan project and identify an industry mentor/partner prior to the start of ESN 4100. While this is best accomplished through an internship, students may elect to conduct projects with other organizations or companies. It is the student's responsibility to make arrangements for the project. Students can elect to enroll in a Carthage Symposium consisting of ESN 3100, 3250, and 3200. ESN 3250 may be taken out-of-sequence, but ESN 3100 and 3200 must be taken consecutively. Students enrolled as majors in the Division of Natural Sciences will have priority in enrolling in ScienceWorks courses. In addition to the above courses that constitute the ESN Minor, additional elective courses may be offered. These will not generally serve for completion of the minor.

Prerequisite: ESN 4100

4500 (450) Independent Study
Staff 2-4 credits
A student can conduct independent study in a topic of interest in entrepreneurial studies. 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 the ESN Program Director

4900 (490) Independent Research
Staff 2-4 credits
Independent research is an opportunity for students to develop and study an original or new idea within the Entrepreneurial Studies Program. Suitable topics are those that require substantial library and/or laboratory research, reading, and in-depth study, and will result in new knowledge or understanding.

Prerequisite: Permission of the ESN Program Director

Environmental Science
Students in the Environmental Science Program focus on the study of the problems that arise when human beings interact with the physical/natural environment. As an area of study in a liberal arts college, this major highlights the interconnections between the natural and social sciences for approaching environmental problems. The approach is broadly based, and yet also focused on the student's choice of an individual study track (Conservation and Ecology, Environmental Policy Analysis, Environmental Data Analysis, or Water and Life). One of the primary goals 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 56 credits including a core set of courses (28 credits) and a plan of study (28 credits) chosen by the student in conjunction with his or her advisor. Students are also expected to attend one campus colloquium per month during their junior and senior years, unless they are participating in an off-campus program.

In consultation with an advisor the student selects a plan of study that is both focused and interdisciplinary. Four 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 Oversight Committee. Under special circumstances, highly motivated students can self-design a sequence to best fit their needs. Again, the academic advisor and the Oversight Committee must approve the plan prior to student's beginning advanced coursework.

Per the college requirement, all Environmental Science majors must complete a Senior Thesis. An oral presentation of the Senior Thesis is required as part of the Environmental Science Senior Seminar (ENV 4000). Starting with the 2005-2006 catalog, 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:
Focus in Conservation and Ecology

Core
ENV 1600: Introduction to Environmental Science
ENV 2610: Case Studies in Environmental Science
Statistics Course that meets the Math requirement
GEO 2600: Introduction to GIS
ECN 3050: Environmental Economics
POL 3620: Environmental Politics
ENV 4000: Senior Seminar
ENV 4980: Field Experience Completion
ENV 4990: Senior Thesis Completion

Track
CHM 1000: Fundamentals of Chemistry
BIO 1030: Conservation OR BIO 2200: Ecology
BIO 3050: Plant Physiology OR GEO 3800 Soil Science OR BIO 3060 Microbiology OR BIO 4050 Entomology
GEO 2450: Biogeography OR GEO 3400: Forest Ecology
GEO 3900: Field Methods
GEO 3200: Hydrology
Elective: 3000+ Level or Other Approved Topics Course

Focus on Environmental Policy Analysis

Core
ENV 1600: Introduction to Environmental Science
ENV 2610: Case Studies in Environmental Science
Statistics Course that meets the Math requirement
GEO 2600: Introduction to GIS
ECN 3050: Environmental Economics
POL 3620: Environmental Politics
ENV 4000: Senior Seminar
ENV 4980: Field Experience Completion
ENV 4990: Senior Thesis Completion

Track
CHM 1020: General Chemistry II
CHM 2070: Organic Chemistry I
CHM 3230: Analytical Chemistry
GEO 3200: Hydrology
GEO 3800: Soil Science OR GEO 2950: Process Geomorphology
BIO 3060: Microbiology
BIO 3200: Aquatic Ecology

Focus on Environmental Data Analysis

Core
ENV 1600: Introduction to Environmental Science
ENV 2610: Case Studies in Environmental Science
Statistics Course that meets the Math requirement
GEO 2600: Introduction to GIS
ECN 3050: Environmental Economics
POL 3620: Environmental Politics
ENV 4000: Senior Seminar
ENV 4980: Field Experience Completion
ENV 4990: Senior Thesis Completion

Track
GEO 2700: Satellite and Air Photo Analysis
GEO 3600: Advanced GIS
BIO 1030: Conservation OR BIOL 2200: Introductory Ecology
CSC 1110: Principles of Computer Science
CSC 2560: Data Structures and Algorithms
CSC 3410: Database Design and Management
ISS 3450: Information Systems Theory and Practice

Focus in Water and Life

Core
ENV 1600: Introduction to Environmental Science
ENV 2610: Case Studies in Environmental Science
Statistics Course that meets the Math requirement
GEO 2600: Introduction to GIS
ECN 3050: Environmental Economics
POL 3620: Environmental Politics
ENV 4000: Senior Seminar
ENV 4980: Field Experience Completion
ENV 4990: Senior Thesis Completion

Track
GEO 2600: Introduction to GIS
ECN 3050: Environmental Economics
POL 3620: Environmental Politics
ENV 4000: Senior Seminar
ENV 4980: Field Experience Completion
ENV 4990: Senior Thesis Completion

Focus on Water and Life

Core
ENV 1600: Introduction to Environmental Science
ENV 2610: Case Studies in Environmental Science
Statistics Course that meets the Math requirement
GEO 2600: Introduction to GIS
ECN 3050: Environmental Economics
POL 3620: Environmental Politics
ENV 4000: Senior Seminar
ENV 4980: Field Experience Completion
ENV 4990: Senior Thesis Completion

Track
GEO 2600: Introduction to GIS
ECN 3050: Environmental Economics
POL 3620: Environmental Politics
ENV 4000: Senior Seminar
ENV 4980: Field Experience Completion
ENV 4990: Senior Thesis Completion

Field Experience (ENV 4980)
Finally, students must complete an approved field experience. It is the intention of this program that our students all have practical experience in the environmental science major before they graduate. The field experience can be completed in the following formats:
An off-campus field course.
A J-Term or summer trip.
Research experience through the Carthage SURE program or an off-campus program
An internship either as part of an interest group such as Greenpeace, Sierra Club, or the Reason Public Policy Institute, or by working in an industry or government setting.
Relevant employment in the discipline.
Field experiences are approved as part of your plan of study. Consult your advisor for specific examples.

1600 (160) Introduction to Environmental Science

Gartner 4 credits

SCI
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

200T (271) Topics in Environmental Science

Staff 1-4 credits

Specialized topics in environmental science developed by the faculty. On occasion, the course is team-taught. Can be considered a SCI or SOC distribution requirement, depending on the topic and credit.
Prerequisite: Varies based on topic
2610 (161) Case Studies in Environmental Science
Gartner, Staff 4 credits

This course uses case studies and research experiences to build upon the concepts introduced in ENV 1600. 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 at 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. This course is often team-taught.
Prerequisite: ENV 1600
Spring

4000 (400) Senior Seminar
Gartner 4 credits

This is the capstone course for Environmental Science majors. During this course seniors complete and present their Senior Thesis work in consultation with faculty in the Environmental Science program.
Prerequisite: Senior Standing
Fall

400T (471) Topics in Environmental Science
Staff 1-4 credits

Specialized topics in environmental science developed by the faculty. On occasion, the course is team-taught. Can be considered a SCI or SOC distribution requirement, depending on the topic and credit.
Prerequisite: Varies based on topic

4900 (490) Research in Environmental Science
Gartner 1-4 credits

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.

4980 Field Experience Completion
Staff 0 credits

Students must register for Field Experience Completion the term that they plan to complete their field experience.

4990 Senior Thesis Completion
Staff 0 credits

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.

Exercise and Sports Science

Physical Education/Fitness Requirement

All students pursuing graduation are required to participate in and pass two physical education experiences within the Exercise and Sport Science Department. The first is EXS 0010 Concepts of Physical Fitness (1 credit). This is a 7-week lecture/laboratory experience that presents basic knowledge and methods relevant to maintaining and developing good health, fitness, and overall wellness. The P.E. experiences are graded "S/U."

In addition, upon completion of the above course, all students are required to pass one of the following seven-week courses in a lifetime or fitness activity (1 cr.):

- 0020 Walking for Fitness
- 0030 Strength Training
- 0050 Rock Climbing
- 0060 Racquetball
- 0070 Lacrosse
- 0100 Archery
- 0110 Badminton
- 0130 Golf
- 0140 Tennis
- 0150 Canoeing
- 0160 Water Aerobics
- 0170 Conditioning
- 0180 Aerobics
- 0190 Beginning Swimming
- 0200 Lifeguard Training
- 0210 Water Safety Instructor
- 0220 Swimming for Fitness
- 0230 Handball
- 0240 Yoga
- 0250 Martial Arts
- 0260 Recreational Sports
- 0410 Ballet I
- 0420 Ballet II
- 0430 Tap
- 0440 Jazz Dance I
- 0450 Jazz Dance II

Only Concepts of Physical Fitness and one lifetime/fitness activity count toward the 138 credits required for graduation.

A student who participates on an athletic team for an entire season can fulfill the one lifetime/fitness activity requirement (1 credit).

Exercise and Sport Science majors (ATH, PESF and PESF with licensure) are not required to take the EXS 0010 Concepts of Physical Fitness class or a lifetime/fitness activity.

Majors

The Exercise and Sport Science Department offers the following programs:

• College Physical Education/Fitness Requirement
• Major in Physical Education, Sport and Fitness Instruction
• Major in Athletic Training
• Physical Education - K-12 Licensure
• Minor in School Health Education
• Athletic Coaching Certification Program

The Exercise and Sport Science Department offers two majors: (1) Physical Education, Sport, & Fitness instruction, and (2) Athletic Training.

PHYSICAL EDUCATION, SPORT & FITNESS INSTRUCTION MAJOR

43 credits

EXS 1010 Foundations of Exercise & Sport (3 cr.)
EXS 1050 Theory & Practice of Individual Sports (2 cr.)
EXS 1060 Theory & Practice of Team Sports (2 cr.)
EXS 2010 Swimming (WSI certification) (2 cr.)
EXS 2110 First Aid & Safety (1 cr.)
EXS 2180 Prevention and Care of Athletic Injuries (2 cr.)
EXS 2620 Adaptive Aspects of Exercise & Sport (3 cr.)
EXS 2700 Elementary PE/Principles of Movement (4 cr.)
EXS 2750 Theory & Practice of Rhythm, Dance & Gymnastics (4 cr.)
EXS 3010 Tests & Measurements in EXS (4 cr.)
EXS 3070 Kinesiology (4 cr.)
EXS 3900 Organization & Administration of EXS Programs (3 cr.)
Required Education Courses for Physical Education K-12 Licensure:
EDU 1010 Education & Society
EDU 1050 Education of Exceptional Children
EDU 2010 Educational Psychology and Assessment
EDU 2220 Methods and Materials: Portfolio
EDU 3510 Techniques and Strategies for K-12 Schools

EDU 3520 Development & Content Reading
EDU 4200 Methods & Materials of Teaching P.E.
EDU 4900 Student Teaching Seminar

BIO 1040 Human Anatomy & Physiology
HIS 1000 Issues in American History
*Any appropriate physical science
*Any appropriate social science course
*Contact the education department for a list of appropriate courses

Certification 860 Physical Education/ Special Education

Students seeking this certification must complete the coursework for a major in physical education, sport and fitness instruction, including EXS 2620 Adaptive Aspects of Exercise and Sport Science. Additional coursework for the certification includes: EDU 1010, 1050, 2010, 2220, 3510, 3520, EXS 4200, and PSY 2850. These courses must be completed prior to taking EXS 3520 Field Placement in Adaptive Physical Education, the required capstone class.

Health Minor 21 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 and take the Praxis II health exam.

Required courses for the School Health Certification:
EXS 400T Topics: Adolescent Alcohol and Drug Abuse or EXS 400T Topics: Special Issues in Alcohol and Drug Abuse
EXS 1080 Introduction to Health & Wellness Education
EXS 2150 Nutrition Education
EXS 2270 Consumer Health Issues
EXS 3090 Sexuality Education
EXS 3110 Personal & Community Health
EXS 3120 Issues in Emotional and Mental Health
EXS 2500 Comprehensive School Health Programming
EXS 4210 Methods & Materials of Teaching Health

Athletic Coaching Certification Program 21 credits

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. EXS major with an emphasis in Physical Education, K-12 Licensure. Most of the course work is part of the major. If the student receives his/her teaching license, he/she also will receive a coaching certification recognition on their student transcript.

2. Education majors who will be licensed in a subject area. If the student receives his/her teaching license, he/she also will receive a coaching certification recognition on their student transcript.

3. A non-education major or a Physical Education, Sport and Fitness Instruction Major who does not seek a teaching license. 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 course work for coaching certification required by the Wisconsin Department of Public Instruction."

The following course work is required:

BIO 1040 Human Anatomy & Physiology
EXS 3900 Organization & Admin of Exercise and Sport Programs
EXS 3070 Kinesiology
EXS 4050 Physiology of Exercise
EXS 2180 Prevention of Athletic Injuries
EXS 2110 First Aid & Safety
EXS 4010 Theory of Coaching & Athletic Technique
EXS 4030 Practicum in Coaching (Pass/Fail)

Honors in the Major

Please see department chair for details. Basic requirements are listed in the Honors Program section of the catalog.

1010 (101) Foundations of Exercise and Sport

Witt, Domin 3 credits
This course examines the history, philosophy, principles and development of exercise and sport programs. Fall/Spring/

1050 (105) Theory and Practice of Individual Sports

Roehl 2 credits
Through lectures, demonstrations, teaching lessons, and game play, the student will learn the basic rules, skills, tactics, and teaching strategies of individual sports. Spring
1060 (106) Theory and Practice of Team Sports
Schmidt 2 credits
Through lectures, demonstrations, teaching lessons and game play, the student will learn the basic rules, skills, tactics, teaching strategies of team sports.

Fall

1080 (108) Introduction to Health and Wellness Education
Allen 3 credits
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.

200T Topics in Exercise and Sport Science
Staff 1-4 credits
A variable content course that will allow the student an opportunity to study in one of the areas of exercise sport science that is not typically offered.

Fall/Spring

2010 (201) Swimming for EXS Majors
DeLaRosby 2 credits
A two-track course designed to teach students the techniques of the six basic swimming strokes, elementary rescue skills, self-rescue methods, and springboard diving competence and to gain WSI certification. The course will follow the American Red Cross progressions for certification of swim instructors through a mix of classroom sessions and water work, emphasizing teaching skills and practical teaching experience with 'real' students.

Fall/Spring

2110 (211) First Aid and Safety
Staff 1 credit
This class uses the curriculum designed by the American Red Cross. At the completion of this course students are certified in Community First Aid and Safety and in the use of automated external defibrillators (AED). (Pass/Fail)

Fall/Spring/Summer

2150 (215) Nutrition Education
Foster 2 credits
Basic nutrition will be discussed with emphasis on foods, diets, facts, quackery, and consumer education. (Cross-listed in athletic training courses)

Spring

2180 (218) Prevention and Care of Athletic Injuries
Everts 2 credits
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: BIO 1040

Fall

2270 (227) Consumer Health Issues
Staff 2 credits
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.

2350 (235) Sport and Exercise Psychology
Williams 4 credits
This course explores the field of sport and exercise psychology. The focus of the course will be on both the theoretical and practical applications of sport and exercise psychological processes including approaches to increase the effectiveness of coaches, and fitness professionals.

Prerequisite: EXS 1010, COR 1100, COR 1110

2450 (245) Physical Education and Health Methods
Waltke 2 credits
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 learn the latest research linking movement to enhanced learning.

Course fulfills the requirements for EXSS 0010-Concepts of Physical Fitness (1cr.) and one lifetime/fitness activity (1cr.).

Fall/Spring

2500 (407) Comprehensive School Health Programming
Fisher 2 credits
This course is designed to teach students how to plan for and evaluate all the components of an effective school health program. Students will gain practical experience using the "School Health Index" developed by the CDC.

2620 (262) Adaptive Aspects of Exercise and Sport
J. Sedeska 3 credits
A study of special populations and their exercise and sport needs. Emphasis will be placed on in-depth knowledge of specific handicaps, with modifications necessary to enable the pursuit of a healthy and productive lifestyle.

Prerequisite: EXS 1010

Spring

2700 (270) Elementary Physical Education/Principles of Movement
Swensen 4 credits
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.

Fall

2750 (275) Theory and Practice of Rhythm, Dance and Gymnastics
M. Bonn 4 credits
The study and practice of rhythm, dance and gymnastics techniques with an emphasis on teaching, skill analysis, and progressions.

Prerequisite: EXS 1010

Fall

2800 (430) Supervision of Intramurals
Staff 1 credit
An on-campus practical experience for the recreation, sport and fitness management emphasis. The student will assist with the management of the College intramural program.

Prerequisite: EXS 1010 and Sophomore Standing

Fall/Spring

3010 (301) Tests &Measurement in Exercise and Sport
M. Bonn 4 credits
A practical approach to measurement and evaluation activities as they apply to the field of physical education and exercise and sport science.

Prerequisite: EXS 1010

Spring

3070 (307) Kinesiology
Staff 4 credits
An analysis of human movement with an emphasis on the skeletal system and mechanical principles.

Prerequisite: EXS 1010 and BIO 1040

Spring
3090 (309) Sexuality Education
Staff 2 credits
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.

3110 (311) Personal and Community Health
Allen 3 credits
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.

3120 (312) Issues in Emotional and Mental Health
Staff 2 credits
Development of insights into emotional wellness and understanding the body, mind, spirit connection. Students will be expected to develop strategies to effectively teach the principles and skills learned in this class.

3210 (321) Advanced Techniques in Training and Conditioning
Evretts 4 credits
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 4050

3500 (350) Field Placement in Sport & Fitness Instruction
Brittich 4 credits
An off-campus practical experience for the physical education, sport and fitness instruction majors who are not seeking licensure. The student will be placed in a recreation, sport or fitness environment to observe, teach, and manage under a qualified professional in the field. (Pass/Fail)
Prerequisite: Junior Standing and EXS 1010 Fall/J-Term/Spring/Summer

3520 (352) Field Placement in Adaptive Physical Education
Staff 4 credits
An off-campus practical experience for students to work with special populations in a physical education setting. (Pass/Fail)
Prerequisite: EXS 2620, EDU 1010, 1050, 2010, 2220, 3510, 3520, EXS 4200 and PYC 2850

3530 Strength and Conditioning Practicum
Staff 2 credits
The goal of this 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.

3720 General Medical Conditions for the Athletic Trainer
Ruffner 3 credits
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.
Prerequisite: ATH 1020 and ATH 2080
Spring

3900 (390) Organization and Administration of Exercise and Sport Science
Djurickovic 3 credits
A study of the management of exercise and sport programs. Emphasis will be placed on administrative problem solving.
Spring

400T (471) Topics in Exercise and Sport Science
Staff 1-4 credits
A variable content course permitting the well-qualified student an opportunity to study in one of the areas of exercise and sport science not typically offered.
Prerequisite: Senior Standing Fall/Spring/Summer

4101 (401) Theory of Coaching and Athletic Techniques
Roehl 2 credits
A course designed to assist the prospective athletic coach in teaching and coaching an athletic team. Emphasis will be placed on principles of training, learning progressions and practice and game organization.
Prerequisite: EXS 1010, EXS 1030
Fall

4030 (403) Coaching Practicum
Roehl 2 credits
The opportunity to assist and observe an intercollegiate/interscholastic coach and team. (Pass/Fail)
Prerequisite: EXS 1010 and EXS 1060 Fall/Spring

4050 (405) Physiology of Exercise
Allen 4 credits
An analysis of the effects of exercise on the human body, with an emphasis placed on scientific research and the implications for exercise/sport prescription and programming.
Prerequisite: EXS 1010 and BIO 1040 Fall

4200 (420) Methods and Materials of Teaching Physical Education
M. Bonn 4 credits
A course required of students pursuing the emphasis in physical education K-12 Licensure. Emphasizes teaching methods and instructional materials in physical education.
Prerequisite: Prerequisite: EXS 1010, EXS 3010, Admitted to TEP, Junior standing Fall

4210 (421) Methods and Materials of Teaching Health Education
Fisher 3 credits
Students will learn strategies and techniques for teaching health at an age-appropriate level.

General Courses

GNR 0000 College Success Seminar 0 credits
This is Carthage's freshman seminar program. This program intends to help first-year students connect to multiple communities within Carthage in ways that will support and enhance individual confidence and success. The seminar covers topics of academic and extracurricular concerns such as: identity and community, learning and teaching styles, stress management, and academic and career planning. Seminars are led by staff members. S/U only.

GNR 0001 Elements of College Learning for the Adult Education Student 2 credits
This course is designed for the specific academic and adjustment needs of adults who are coming to college for the first time or are returning to college after a long hiatus. The theory, study, and practice of college level study skills including critical reading and thinking, note taking, reading rate and preparation, use of college resources, stress management, and time management are some of the topics that will be included. Students will apply these techniques directly to their coursework as they adjust to their new role of being a bachelor of arts degree seeking student.
Department of Labor has recently identified geospatial analysis as one of the leading areas of employment in the coming years. The diversity of opportunity is, in part, revealed by the course offerings listed below. Because of this breadth of opportunity, geography students’ choices of elective courses outside the major are often as important as their choices within the major. Students majoring in geography are urged to achieve competency in mathematics, statistics, and/or computer studies. The desired level of competency within these disciplines varies with each student's career goals. Prospective geography students are urged to discuss career goals and opportunities with department faculty and to consult Geography as a Professional Field, published by the Association of American Geographers.

**Minor in Geographic Information Science (GIS)**

The Minor in Geographic Information Science (GIS) allows students to create a focus on the techniques and practice of spatial data analysis and its practice within the larger field of information science. This particular emphasis 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. **Students completing the minor will be awarded a certificate in Geographic Information Science.**

To earn the minor and the certificate, students will complete 24 credits in the following areas:

**GIS Core**

- GEO Mapping Your World Introduction to 2600 Geographic Information Science
- GEO Advanced Geographic Information 3600 Science and Analytical Cartography
- GEO Satellite Image and Airphoto Analysis 2700

**Statistics (Select one of three)**

- MTH 1050 Elementary Statistics
- BUS 2340 Business Statistics
- GEO 2900 Population Geography and Statistical Analysis

**Computer Science**

- CSC 1110 Principles of Computer Science I
- Elective (select one from the following list)
  - GEO 3100 Business Geographics
  - GEO 4600 Information Science
  - CSC 3410 Database Design and Management
  - ISS 3450 Information Systems Theory and Practice
  - ISS 4250 Object-Oriented Systems Analysis

**Certificate in Geographic Information Science**

Upon the successful completion of the GIS minor, students will earn a certificate in Geographic Information Science.

**Minor in Climatology and Meteorology**

Climatology and Meteorology Minor is directed toward students who are interested in pursuing atmospheric scholarship and research, focusing specifically on the
atmospheric contributions that the disciplines of Geography and Physics provide.

There are prerequisites to some of the courses for this minor. Students should consult their advisor and seek guidance from the Departments of Geography and Physics.

For a Meteorology and Climatology Minor, students will complete 28 credits, comprising the following list of courses:

**Geography**
- GEO 1700 Introduction to Physical Geography (4 cr.)
- GEO 2550 Meteorology (4 cr.)
- GEO 3700 Climatology (4 cr.)
- GEO/PHY 4100 Science of Global Climate Change (4 cr.)

**Physics**
- PHY 2200 General Physics I (4 cr.)
- PHY 3300 Thermostatistics (4 cr.)
- PHY/GEO 4150 Science of Global Change (4 cr.)

**Honors in the Major**
Please see department chair for details. Honors are awarded at the discretion of the Geography and Earth Science department faculty. Students are eligible for Honors in Geography and Earth 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 Geography and Earth Science department
- Maintained an overall G.P.A. of 3.5 at graduation

**1500 (151) Human Geography: an Introduction**
Murphy, Rivera, Sun 4 credits

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, and research themes.

Fall/Spring

**1600 Earth Revealed**
Staff 4 credits

Earth Revealed examines spatial patterns at varying scales to better understand the underlying processes at work in the atmosphere, hydrosphere, and lithosphere.

**1700 (155) Physical Geography: an introduction**
Mast, Piepenburg, Zorn 4 credits

SCI

An overview of physical geography. Students will be introduced to meteorology, climatology, hydrology, biogeography, soils, geomorphology, and landforms. Lab Sci Fall/Spring/Summer

**200T (271) Topics in Geography**
Mast, Murphy, Rivera, Sun, Zorn 1-4 credits

Course covers dynamic topics in Geography. May be repeated with different topics.

**2100 (206) The Human Landscape**
Murphy, Rivera, Sun 4 credits

SOC

An overview of contemporary themes in cultural/human geography which stresses the changing and changeable relationship between people and the environment. Topics include examination of urban, rural, and suburban landscapes; their functionality; how the human environment describes the culture and its values; the cultural basis for environmental problems; the origin and spread of human culture; human migration and the distribution of population. Listed as Geography 2100 and Sociology 2060.

Fall/Spring

**2200 (220) Conservation**
Mast, Zorn 4 credits

SCI

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. Lecture, laboratory, and field trips.

Fall/Spring

**2300 (215) Economic Geography**
Rivera, Sun 4 credits

SOC

A study of resource location and utilization, population and labor force characteristics, and the production and distribution of goods and service in selected regions of the world and its sustainability.

Fall/Spring

**2400 (225) Environmental Geography: Working with the Earth**
Mast, Zorn 4 credits

SCI

An evaluation of the physical environment with an emphasis upon human-environment interactions. It is an introduction to environmental issues within the scope of physical geography intended to be interdisciplinary through the combination of ideas and information from natural and social sciences. Topics include an overview of global population, scientific principles and concepts (conservation of matter, laws of energy, ecology of natural systems, climate and biosphere), natural resources, and sustainability. Non-Lab.

Fall/Spring/J-Term

**2450 (245) Biogeography**
Mast 4 credits

SCI

This course is designed to provide the fundamentals of biogeography as the geographical study of the spatial distribution of organisms and the factors influencing those distributions, both past and present.

**2500 (229) Natural Disasters**
Mast, Piepenburg, Zorn 4 credits

SCI

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.

Spring

**2550 (255) Meteorology**
Piepenburg, Zorn 4 credits

SCI

A study of atmospheric processes through the analysis of the structure and composition of the atmosphere. Emphasis is placed on dynamic meteorology and understanding the processes responsible for weather.
2600 (239) Mapping Your World: Introduction to Geographic Information Science
Rivera, Sun 4 credits SOC
This course is an entry-level introduction to 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

2700 (240) Satellite Image and Airphoto Analysis
Rivera, Sun 4 credits SCI
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.
Fall/Spring

2800 (285) Geography of East Asia
Sun 4 credits SOC
This course is intended to provide 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.
Fall/Spring/J-Term

2850 Geology of National Parks
Staff 4 credits SCI
Geology of National Parks focuses on physical geology and geography of the U.S. National Parks, highlighting features and developments of national parks formed by igneous activity, mountain building and uplift, glaciation, weathering and erosion, wave action, and ground water. The course includes interactions between rock and landscapes in different climates and how types of soil cover evolve, as well as also how life forms select habitats.

2900 (249) Population Geography and Statistical Analysis
Rivera, Sun 4 credits MTH
This course integrates traditional statistical analysis with issues and themes related to the spatial distribution of the world's population. While examining population change, fertility, mortality, sustainability, migration, immigration, food, health, and environmental concerns students will generate and test hypotheses about population data at different spatial scales. The course will incorporate descriptive and inferential statistics as well as sampling methods, probability, normal and non-normal distributions, linear correlation and goodness of fit tests.
Fall/Spring

2950 (265) Process Geomorphology
Mast, Piepenburg, Zorn 4 credits SCI
A systematic analysis of the physical and spatial characteristics of the earth's terrain. The emphasis of the course is on the identification of the formative processes in geomorphology.
Fall

3100 (305) Business Geographics
Miller, Rivera 4 credits SOC
This course will focus on questions of retail location and will examine this field from several perspectives including location theory and strategy modeling techniques, current trends, and research on specific retail companies and industries. The course will apply spatial analytical techniques to the study of consumers and retailers using real world data, examples, and projects.
Fall

3200 (319) Hydrology
Piepenburg, Zorn 4 credits SCI
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. Lab SCI.
Prerequisite: GEO 1700 or ENV 1600 or consent of instructor
Fall/Spring

3300 (321) Analytical Techniques in Geography
Mast, Piepenburg, Rivera, Sun, Zorn 4 credits
A technical course which develops technical skills used by geographers in both academic and commercial research. The techniques taught under Geography 3300 include remote sensing, cartography, geographic information science, and quantitative methods in geography.
Spring

3400 (329) Forest Ecology
Mast 4 credits SCI
This course is provides an introduction to forest ecology, incorporating the forest's climate, topography, geomorphology, hydrology, soils, and land use history into the development of the plant communities. We will examine the interactions of the physical environment and plant species through time, to include ecological and evolutionary patterns in each. Lab SCI
Prerequisite: GEO 1700 or BIO 1100 or BIO 1010 or ENV 1600 or consent of instructor
Fall/Spring

3450 (373) Urban Geography
Rivera 4 credits SOC
An analysis of the geographic factors affecting urban development and growth; the distribution of urban areas, their function, character, sustainability, and relationship with their surrounding regions as well as the spatial variations of land use; population; and economic activity within cities. Fieldwork required.
Fall
Fall 1001 or ENV 1600 or consent of instructor

Identification. Lab Sci of soils, soil erosion control, and wetland soil management of soils. Topics addressed A study of the formation, classification, and SCI Fall/Spring

Consent of instructor

Prerequisite: GEO 1700, ENV 1600 or

The principles and concepts within the local distribution of climates. Particular emphasis detailed examination of the spatial climatic elements, followed by a more geographical data-gathering and analysis techniques which are applicable to the production and distribution of goods and services.

Fall/Spring

3600 (339) Advanced Geographic Information Science

Rivera, Sun 4 credits

SCi

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 statistical surfaces, geographic pattern analysis, and data quality. Students will apply the course material by performing a variety of analysis on different types of geographic data.

Prerequisite: GEO 2600 or consent of the instructor

Fall

3700 (365) Climatology

Piepenburg, Zorn 4 credits

SCi

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 macro-scale climates of the global continents and climate change, culminating with micro-scale applications of the principles and concepts within the local area. Lab Sci

Prerequisite: GEO 1700, ENV 1600 or consent of instructor

Fall/Spring

3800 (369) Soil Science

Mast, Piepenburg, Zorn 4 credits

SCi

A study of the formation, classification, and management of soils. Topics addressed include the physical and chemical structure of soils, soil erosion control, and wetland soil identification. Lab Sci

Prerequisite: GEO 1700 or BIO 1100 or BIO 1001 or ENV 1600 or consent of instructor

Fall

3900 (399) Methods of Field Research

Mast, Piepenburg, Rivera, Sun, Zorn 4 credits

SCI

Techniques of field study with emphasis on the generation and interpretation of primary data derived in local, social, and physical situations. Fieldwork Required.

Prerequisite: GEO 1700 or BIO 1100 or BIO 1010 or ENV 1600 or consent of instructor

4000 (400) Senior Seminar in Geography

Mast, Piepenburg, Rivera, Sun, Zorn 4 credits

This course emphasizes problem analysis in applied geography through the application of multiple working hypotheses within the framework of inductive and deductive logic. Students will be required to write a major research paper in their major area of emphasis in geography. The paper will follow the framework appropriate to research in the student's major area of interest, and will include the following: statement of problem; multiple working hypotheses; literature review; data analysis; application of hypotheses.

Prerequisite: GEO 2600

Fall

400T (471) Topics in Geography

Mast, Piepenburg, Rivera, Sun, Zorn 4 credits

SOC

Course covers dynamic topics in Geography. May be repeated with different topics.

Fall

4100 (415) The Science of Global Climate Change

Zorn, Crosby 4 credits

SCI

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 OR PHY 2200

Fall/Spring/J-term

4500 (450) Independent Study in Geography

Mast, Piepenburg, Rivera, Sun, Zorn

A student can conduct an independent study in a topic of interest in geography. 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

Fall/Spring/J-term

4600 (411) Applied Projects in Geographic Information Science

Rivera, Sun 4 credits

SOC

This course explores the problems inherent in setting up and managing GIS. Students will be expected to create a significant GIS application using available data to address an actual geographic problem. Other topics include GIS and organizations, social and ethical implications of GIS, and management of a GIS.

Prerequisite: GEO 3600 or consent of the instructor

4900 (490) Research in Geography

Mast, Piepenburg, Rivera, Sun, Zorn

Work on a research 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

Fall/Spring/J-term

4990 Senior Thesis Completion

Staff 0 credits

Students should register for GEO 4990 during the semester that they plan to complete their senior thesis.

Great Ideas: Intellectual Foundations of the West

The Great Ideas curriculum explores the ideas of some of the best minds of Western thought such as Homer, Plato, Virgil, Augustine, Aquinas, Machiavelli, Shakespeare, and Austen. Through careful reading of great literary, philosophical, scientific, and religious texts, students come to grips with the fundamental and immediately relevant questions they raise: What is love? What is justice? What is the best way of life? What is the physical world? What is knowledge and how do we come to know things? What is faith and what does faith demand? What is happiness? In class, students will grapple with the different and often opposing answers the texts contain in order to clarify, reflect upon, and further
History

develop their own understandings. Students will begin to shape their own responses to these and other questions that necessarily occupy responsible and thoughtful human beings and citizens.

The Great Ideas curriculum introduces students to a broad range of texts while also permitting intense study of certain texts over an extended period of time. As they encounter some of the richest and most challenging texts ever written, students will become proficient at analyzing complex ideas and arguments, at comparing the texts to each other, and at writing and speaking about them clearly and effectively.

Major

The major consists of 40 credits. Five courses are required for all majors: GFW 2210, 2220, 2310, 2410, 2420. Two are seminars on the foundations of Western thought (it is suggested that students take these two courses as soon as possible); the remaining three narrow the focus somewhat by concentrating respectively on American, mathematical, and natural scientific thought. (It is suggested that students take the mathematics course before the natural science course.)

In addition, majors take four electives, all of which focus on primary texts of Western thought and at least two of which focus on the close reading of a small number of such texts.

Finally, students write a thesis in a capstone seminar (GFW 4000).

Minor

The minor consists of 20 credits. Two courses will be required for all minors: GFW 2210 and 2220.

One of the following is also required: GFW 2410 or 2420.

The remaining two courses can be selected from among any of the courses taken by Great Ideas majors (including 2310 Foundations of American Thought and the other math or science course and excluding the capstone seminar).

Majors/minors choose electives from among the following courses (or other courses with similar emphases on major primary texts):

- GRK 3010 Advanced Greek I
- LTN 3010 Advanced Latin I
- CLS 3000 The Golden Age of Athens
- CLS 3100 Age of Augustus
- ENG 3110 Shakespeare
- ENG 3150 Special Studies in a Major Author Prior to 1700

ENG 3160 Special Studies in a Major Author After 1700

PHL 2000 Studies in the History of Philosophy

POL 2050 Philosophical Foundations of Political Economy

POL 3250 Classics of Social and Political Thought

POL 3260 Studies in Political Theory

REL 3060 Luther and the Reformation

2210 (221) Foundations of Western Thought: Ancient and Medieval

Staff 4 credits

HUM

One of two seminars on major Western texts and the fundamental questions they raise. This term covers ancient Greece through the Middle Ages. Works to be studied will include Homer's Iliad, Plato's Meno, Aristotle's Nicomachean Ethics, Vergil's Aeneid, Lucretius's On the Nature of Things, Augustine's Confessions, and Beowulf.

Fall

2220 (222) Foundations of Western Thought: Renaissance to Modern

Staff 4 credits

One of two seminars on major Western texts and the fundamental questions that they raise. This term covers the Renaissance to the twentieth century. Works to be studied will include some of these, among others: Dante's Divine Comedy, Machiavelli's The Prince, Luther's On Christian Liberty, Shakespeare's Antony and Cleopatra, Moliere's The Misanthrope, Locke's Second Treatise, Rousseau's Second Discourse, Freud's Civilization and Its Discontents, and Woolf's A Room of One's Own.

2310 (231) Foundations of American Thought

Staff 4 credits

An introduction to major American texts. Works to be studied will include some of these, among others: Benjamin Franklin's Autobiography, the Federalist Papers, Twain's Huckleberry Finn, Du Bois's The Souls of Black Folk, Cather's My Antonia.

2410 (241) Foundations of Natural Sciences

Schwartz 4 credits

SCI

This course examines the development of Western scientific thought from its origins in Greece through the modern era. Special attention will be paid to the development of ideas such as the nature of matter, descriptions of motion, heredity, the relationship between experiment and theory as well as the standards natural scientists themselves hold of scientific truth. Works to be studied include selections from: Plato, Aristotle, Bacon, Copernicus, Galileo, Newton, Harvey, Lavoisier, Dalton, Mendel, Darwin, Einstein, Watson and Crick, and others. Non-Lab

2420 (242) Foundations of Mathematical Thought

Chell 4 credits

This course examines the development of Western mathematical thought from its origins in Ancient Greece through the modern era. Special attention will be paid to the development of ideas such as geometry, logic, coordinate systems and algebra, calculus, non-Euclidean geometry, infinity, and proof theory. Works to be studied include selections from Euclid, Aristotle, Descartes, Newton, Lobachevski, Cantor, Boole, and G'del.

4000 (400) Capstone Course

Staff 4 credits

Under the guidance of Great Ideas faculty, students write a thesis whose primary focus is the interpretation of a major Western text or texts. (Junior standing required; senior standing suggested in most cases.)

4990 Senior Thesis Completion

Staff 0 credits

Student should register for Gfw 4990 during the semester that they plan to complete their senior thesis.

History

The study of history provides the necessary background for a sound understanding of the modern world. Because history is an interdisciplinary enterprise, the history faculty must draw upon both the liberal arts and social sciences to present an accurate and complete view of the human experience.

Few fields of study prepare students more broadly for the future than history. For history, as it is taught at Carthage, is far more than just names and dates. 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. History also provides students with the tools for a lifetime of meaningful work and intellectual endeavor. Critical thinking, effective oral communication, and good writing are the skills that are developed through the study of history. These skills provide the foundation for successful careers in law, business, journalism, government, education, and the ministry.

Major
A major concentration includes 10 courses in the History Department. These must include one course in ancient or European history prior to 1600, one in European history after 1600, Issues in American History, an additional course in American history, one course in Asian history, one course in the history of Latin America, Historical Methods, Historiography, Senior Seminar, and one elective course.

Minor
A minor, including the teaching minor, consists of six courses. These must include one course in ancient or European history prior to 1600, one in European history after 1600, Issues in American History, an additional American history course, a course in Asian history or the history of Latin America, and either Historical Methods, Historiography, or Senior Seminar.

Course Categories:

Europe
- HIS 1110 Issues in European History I
- HIS 1120 Issues in European History II
- HIS 2150 Modern Britain
- HIS 2250 20th Century Europe
- HIS 2310 The Greeks
- HIS 2350 The Romans
- HIS 3100 The Age of Augustus

Non-Western Courses
- HIS 1200 Issues in Asian History
- HIS 1400 Issues in Latin American History: Central America
- HIS 1410 Dictatorship and Democracy: History of South America
- HIS 200T Topics in History
- HIS 3050 History of Mexico
- HIS 3400 Modern China
- HIS 3450 Modern Japan

Research Courses
- HIS 2200 Historical Methods
- HIS 3990 Historiography
- HIS 4000 Seminar

United States
- HIS 1000 Issues in American History
- HIS 2620 America in the 1960's
- HIS 2850 Comparative History: History of Chicago and Milwaukee
- HIS 2900 Twentieth Century U.S. History

Honors in the Major
Please see department chair for details. Basic requirements are listed in the Honors Program section of the catalog.

1000 (100) Issues in American History
- Noer 4 credits
- HUM

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.

1100 (111) Issues in European History I
- Leazer 4 credits
- HUM

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.

1120 (112) Issues in European History II
- Leazer 4 credits
- HUM

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.

1200 (120) Issues in Asian History
- Udry 4 credits
- HUM

A survey of the cultural, social, political, and economic history of Asia from the 15th century to the present.

1400 (140) Issues in Latin American History: Central America
- Mitchell 4 credits
- HUM

A survey of the political, social, and economic history of Central America and the Caribbean, with emphasis on the period from independence to the present. This course views the history of the region through the theme of revolution, with emphasis on US-Latin American relations. Special attention is given to El Salvador, Nicaragua, Guatemala, Haiti, and Cuba.

1410 (141) Dictatorship and Democracy: History of South America
- Mitchell 4 credits
- HUM

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

200T (271) Topics in History
- Staff 4 credits

A study of a particular period of development for which there is no specific, regular course.

2150 (215) Modern Britain
- Leazer 4 credits
- HUM

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.

2200 (220) Historical Methods
- Leazer, Mitchell 4 credits
- HUM

An introduction to historical research, writing, and criticism through concentrated study of a selected topic or period. Recent topics include: Shamanism; Women & Gender in Latin America.

2250 (225) 20th Century Europe
- Leazer 4 credits
- HUM

The study of recent European history with emphasis on political, social, economic, and cultural developments.
2310 (231) The Greeks
Renaud, Heitman, DeSmidt, McAlhany
HUM 4 credits
A survey of Greek culture which 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 and History.

2350 (235) The Romans
Staff 4 credits
HUM
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 and History.

2620 (262) America in the 1960s
Staff 4 credits
HUM
A survey of the major themes, events, and individuals in America in the 1960s.

2850 (285) Comparative History: History of Chicago and Milwaukee
Noer 4 credits
HUM
A comprehensive history of two major Midwestern cities from earliest European settlements to the present. Students will prepare three papers for class presentation and discussion: 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.

2900 (290) Twentieth Century U.S. History
Noer 4 credits
HUM
A study of the major political, economic, diplomatic, and social changes in the United States from 1890 to the present.

3050 (305) History of Mexico
Mitchell 4 credits
HUM
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.

3100 (310) The Age of Augustus
Renaud 4 credits
HUM
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. This course is cross-listed in Classics and History. Prerequisite: Upper division status or consent of instructor.

3400 (340) Modern China
Udry 4 credits
HUM
An in-depth study of Chinese history from the early nineteenth century to the present with special emphasis on the role of Mao Tse-tung in shaping the People's Republic of China. Spring.

3450 (345) Modern Japan
Udry 4 credits
HUM
A study of Japanese history from the early nineteenth 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.

3990 (399) Historiography
Noer 4 credits
HUM
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 and consent of the instructor. Spring.

4000 (400) Seminar
Udry, Mitchell 4 credits
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. Prerequisite: Four courses in history and consent of the instructor. Fall.

Mathematics
Courses in the Department of Mathematics 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 can be chosen to provide a foundation for graduate work, to prepare for the teaching profession, or to prepare the student for a career using problem-solving and analytical skills.

Mathematics Major
The major requires 44 credits, which must include:
- MTH 1120: Calculus I
- MTH 1220: Calculus II
- MTH 1240: Discrete Structures
- MTH 2040: Linear Algebra
- MTH 3040: Abstract Algebra
- MTH 4300: Senior Research (4 cr.)
- MTH 4900: Senior Thesis Completion
- CSC 1110: Principles of Computer Science
- 3 Mathematics electives: Students must take three additional mathematics courses numbered above 2000 (excluding MTH 4500 and MTH 4900). PHY 2200 or PHY 2420 may be substituted for one mathematics elective.

Mathematics Minor
A minor consists of four courses beyond MTH 1220 and CSC 1110. PHY 2200 or PHY 2420 may be used as one of these courses.

Additional Information:
The teaching minor for secondary education
should include MTH 1120, 1220, 2040, 2080, 3050, 3040, and Computer Science 1110. The elementary education major desiring licensure for teaching mathematics should include MTH 1030, 1040, 1050, 1120, 1240, 2080, and CSC 1100 or 1110. The mathematics major planning to attend graduate school should include MTH 2120, 2020, 3220, 3180, and 3140.

The mathematics major planning on secondary teaching should include MTH 2080, 3030, and 3050.

The mathematics major planning a career in actuarial science should include MTH 2120, 2130, 3030, 3050, and contact the chair of the Mathematics Department for additional information on preparing for the actuarial exams. MTH 3050 Theory of Statistics carries VEE credit. 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.

Placement Exam
The Department of Mathematics administers a placement exam upon request. A separate competency exam also is available for students wishing to meet the college quantitative literacy requirement without taking a mathematics course. See the chair of the Mathematics Department for details.

Honors in the Major
Please see department chair for details. All students pursuing Honors in Mathematics must present their work at an undergraduate research conference. Basic requirements are listed in the Honors Program section of the catalog.

1030 (103) Applied Mathematics
All Mathematics Faculty 4 credits
MTH
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. Applications research discusses algorithms for scheduling, planning, and creating networks. Standard statistical measures also are studied and interpreted. This course is designed for any student who does not need the technical vocabulary of trigonometry or analytic geometry. A student may not receive credit for Applied Mathematics after receiving credit for any course numbered 1120 or above.

Prerequisite: Placement via high school performance or satisfactory performance in GNRL 0700 Computational Skills
Fall/Spring/J-Term

1040 (104) Principles of Modern Mathematics
All Mathematics Faculty 4 credits
MTH
An introduction to set theory, problem-solving, geometry, algebra, probability and statistics, with selected applications for each. The course satisfies teacher certification requirements.

Prerequisite: Placement via high school performance
Fall/Spring/J-Term

1050 (106) Elementary Statistics
All Mathematics Faculty 4 credits
MTH
Methods of determining averages, variability, and correlation, and of testing the significance of the statistics, prediction, and distribution-free statistics. A student may not receive credit for Elementary Statistics after receiving credit for any other statistics course.

Prerequisite: Placement via high school performance
Fall/Spring

1060 (107) Finite Mathematics
All Mathematics Faculty 4 credits
MTH
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.

Prerequisite: Placement via high school performance
Fall/Spring

1070 (105) Functions, Graphs, and Analysis
All Mathematics Faculty 4 credits
MTH
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 VEE credit for Functions, Graphs and Analysis after receiving credit for any other course numbered 1120 or above.

Prerequisite: Placement via high school performance
Fall/Spring

1120 (112) Calculus I
Chell, S. Groleau, Snavely, Wheeler, Tou, Trautwein
MTH
An introduction to set theory, problem-solving, geometry, algebra, probability and statistics, with selected applications for each. The course satisfies teacher certification requirements.

Prerequisite: Placement via high school performance
Fall/Spring/J-Term

1220 (113) Calculus II
Chell, S. Groleau, Snavely, Wheeler, Tou, Trautwein
MTH
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: Placement via high school performance or Math 1070
Fall/Spring


**Mathematics**

1240 (121) **Discrete Structures**  
Chell, Snavely, Wheeler, Trautwein, Tou  
MTH 4 credits  
A study of logic, proofs, and sets; graphs, digraphs, trees, colorings, and traversal; permutations and combinations; binomial coefficients; and recurrence relations.  
**Prerequisite:** Math 1120 or departmental approval

200T (271) **Topics in Mathematics**  
All Mathematics Faculty 1-4 credits  
A course of variable content for lower-level students. Recent topic offerings have included logic, problem solving, and actuarial science. Topics will not duplicate material covered in other courses.

2020 (222) **Differential Equations**  
Snively, Wheeler 4 credits  
MTH  
A study of common types of ordinary differential equations, their solutions and applications, singular solutions, and an introduction to mathematical modeling.  
**Prerequisite:** MTH 1220

2040 (200) **Linear Algebra**  
Trautwein 4 credits  
MTH  
An examination of linear equations, matrices, vector spaces, transformations, and eigensystems.  
**Prerequisite:** Math 1220

2080 (205) **Modern Geometry**  
Wheeler, Tou, Trautwein 4 credits  
MTH  
An introduction to the branches of geometry including plane, solid, higher dimensional, fractal, transformational, non-Euclidean, and combinatorial.  
**Prerequisite:** Math 1120

2120 (212) **Multivariate Calculus**  
Tou, Trautwein 4 credits  
MTH  
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:** Math 1220 or departmental approval

2130 (230) **Mathematics of Actuarial Science**  
Snively 4 credits  
Course Description: 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.  
**Prerequisite:** MTH 1220, MTH 1240  
Fall

2470 (307) **Mathematics for Scientists and Engineers**  
Wheeler 4 credits  
MTH  
**Prerequisite:** MTH 1220

2030 (303) **Theory of Probability**  
Wheeler, Snively 4 credits  
MTH  
An introduction to discrete probability including combinations and permutations; conditional probability and independence; random variables; and expectation.  
**Prerequisite:** MTH 1220  
Fall

3050 (304) **Theory of Statistics**  
Klingenberg 4 credits  
MTH  
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 non-parametric statistical tests; time series models and forecasting, linear time series models, moving average and autoregressive models, estimation, data analysis, index numbers, and forecasting with time series models, forecasting errors and confidence intervals, and application of statistics to significant real-world data. This course carries VEE credit for actuaries.  
**Prerequisite:** MTH 1220  
Spring

3120 (309) **Real Analysis**  
Snively 4 credits  
MTH  
Fundamental concepts of analysis, limits, continuity, differentiation, and integration. Major topics include the real number system, sequences, series, the Riemann integral, and the Generalized Riemann integral.  
**Prerequisite:** MTH 2040 or instructor approval  
Spring

3140 (323) **Abstract Algebra II**  
Chell, Klyve, Tou, Trautwein 4 credits  
MTH  
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

3180 (311) **Introduction to Topology**  
Trautwein 4 credits  
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.  
**Prerequisite:** MTH 1220  
Fall
3220 (310) Complex Variables  
Snively  4 credits  
MTH  
This course is an introduction to complex analysis, including the Cauchy-Riemann Equations, Cauchy's Theorem, residue theory, and conformal mapping.  
Prerequisite: Math 2040 or instructor approval  

3240 (330) Number Theory  
Tou  4 credits  
This course will consist of a survey of the elementary arithmetic of the integers, including prime numbers and divisibility, factorization, congruences, diophantine equations, arithmetic functions, and cryptography. The focus will be on understanding and communicating number theoretic concepts through examples and written proofs. Additionally, elementary programming in a number-theoretic programming language (PARI/gp) will be taught and used in the exploration and solving of problems. Attention will also be given to the historical study of important problems.  
Prerequisite: MTH 1220  

400T (471) Topics in Mathematics  
All Mathematics Faculty  1-4 credits  
An examination of topics such as topology, number theory, dynamical systems, game theory, history of mathematics, and logic.  
Prerequisite: Math 1220 and instructor approval  
Fall/Spring/J-term  

4200 (420) Methods and Materials in Teaching Mathematics  
D. King  4 credits  
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. Field work required.  
Prerequisite: Admission to the Teacher Education Program and to be nearly completed with the major  
Spring  

4300 (430) Senior Research  
Snively  4 credits  
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.  
Prerequisite: Math 1220 and junior standing  
Fall  

4500 (450) Independent Study  
All Mathematics Faculty  2-4 credits  
Independent study in a topic of interest in mathematics which does not duplicate any other course in the regular course offerings.  
Prerequisite: Math 1220 and instructor approval  

4900 (490) Research in Mathematics  
All Mathematics Faculty  2-4 credits  
An opportunity to conduct research in mathematics, culminating in a research paper.  
Prerequisite: Math 1220 and instructor approval  

4990 Senior Thesis Completion  
Staff  0 credits  
Students should register for MTH 499 during the semester in which they plan to complete their senior thesis.  

Modern Languages  
Major and minor programs in French, German, Spanish, Chinese and Japanese are offered by the Department of Modern Languages. They are designed to develop students' communication skills in understanding, speaking, reading and writing the language; to introduce significant works of literature; to provide experiences that will sharpen sensitivity to and appreciation of a culture or worldview different from their own.  

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 a particular language; (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 Language  
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, Spanish, Chinese or Japanese in Wisconsin must have a major or minor in the language and complete these four additional requirements before they begin student teaching:  
1. Successfully complete Methods and Materials in Teaching Modern Languages (MLA 4200).  
2. Pass the Praxis II Exam in the language in which they wish to be certified.  
3. Complete at least four weeks of immersion in the target culture (see below).  
4. Achieve an ACTFL proficiency level of "Intermediate High" or better (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, Spanish, Chinese, and Japanese in Wisconsin must take the American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Interview and receive a rating of "Intermediate High" or better prior to beginning their student teaching. Students should contact the Modern Language Department as soon as they have decided to seek certification in French, German, Spanish, Chinese, or Japanese in order to receive information about preparing for the exam. The exam is taken by telephone and is given by examiners who are independent of the College.  

Placement and Proficiency  
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 completing 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.  

Carthage does not administer placement examinations or offer any form of credit by examination in languages not offered at the College. Carthage will recognize the results of proficiency examinations in modern languages administered by other colleges and universities if credit appears on an official transcript. All arrangements for, and costs related to, such examinations are the responsibility of the student.  

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.
Modern Languages

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 (1 cr.) Orientation
3010 Language acquisition (4 cr.)
(During the term in which this course is taken, students will take and be required to pass a written and oral proficiency evaluation. Passing scores on these evaluations is required before student can enroll in courses numbered 3080 or higher.)
3080 The ML-Speaking World: Social, Political and Economic Issues
3090 The ML-Speaking World: Cultural and Intellectual Life
3110 Interpreting Written Texts (4 cr.) in ML
OR
4710 Special Topics in the Language (4 cr.)
3100 may fulfill the Carthage Symposium requirement. (See department chair for details.)
*Students whose special circumstances do not permit an extended stay abroad must consult with the department chair.

An Overview: French, German and Spanish Minors
2010-2020 Language acquisition (8 cr.)
3010 Language acquisition (4 cr.)
(During the term in which this course is taken, students will take and be required to pass a written and oral proficiency evaluation. Passing scores on these evaluations is required before student can enroll in courses numbered 3080 or higher.)
3110 Interpreting Written Texts (4 cr.) in ML
Choice of one from:
3080 The ML-Speaking World: Social, Political and Economic Issues (4 cr.)
3090 The ML-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:
2010 Elementary Chinese/ Japanese I (4 cr.)
2011 Elementary Oral Chinese/Japanese I (1 cr.)
2020 Elementary Chinese/ Japanese II (4 cr.)
2021 Elementary Oral Chinese/Japanese II (1 cr.)
MLA 2200 Cultural Awareness (1 cr.)
Choice of one from:
2070 Calligraphy and Chinese/ Japanese Language (4 cr.)
3070 Chinese/Japanese Culture and Language (4 cr.)

Choice of one from:
HIS 3400 Modern China (4 cr.)
HIS 1200 Issues in Asian History (4 cr.)
RELI 3130 Buddhism (4 cr.)
RELI 3140 East Asian Religions (4 cr.)
ECN 3100 Political Economy of the Pacific Rim (4 cr.)
POL 3390 Asian Politics (4 cr.)

Overview of Chinese and Japanese Minor
2010 Elementary Chinese/ Japanese I (4 cr.)
2011 Elementary Oral Chinese/ Japanese I (1 cr.)
2020 Elementary Chinese/ Japanese II (4 cr.)
2021 Elementary Oral Chinese/ Japanese II (1 cr.)
MLA 2200 Cultural Awareness (1 cr.)
Choice of one from:
3010 Intermediate Chinese/ Japanese I (4 cr.)
3011 Intermediate Oral Chinese/Japanese I (1 cr.)
3020 Intermediate Chinese/ Japanese II (4 cr.)
3021 Intermediate Oral Chinese/Japanese II (1 cr.)

Choice of one from:
3070 Chinese/Japanese Culture and Language (4 cr.)

Honors in the Major
Please see department chair for details.
Basic requirements are listed in the Honors Program section of the catalog.
**Chinese**

**1010 (101) Introductory Chinese I**
Staff 4 credits
MLA
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.

*Fall*

**1020 (102) Introductory Chinese II**
Staff 4 credits
MLA
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*

**2010 (201) Elementary Chinese I**
Staff 4 credits
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 Fall*

**2011 Elementary Oral Chinese I**
Staff 1 credit
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 Fall*

**2020 (202) Elementary Chinese II**
Staff 4 credits
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 an 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, memos among other simple writings.

*Prerequisite: CHN 2010 and CHN 211 or equivalent Corequisite: CHN 2021 Fall*

**2021 Elementary Oral Chinese II**
Staff 1 credit
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.

*Prerequisite: CHN 2010 and CHN 211 or equivalent Corequisite: CHN 2020 Spring*

**2070 Calligraphy and Chinese/Japanese Language**
Yang, Wang 4 credits
This course integrates language and cultural studies through calligraphy—the writing of Chinese Hanzi and Japanese Kanji. It is open to both language and non-language students. This course carries a Global Heritage designation. It is conducted in English.

*Fall or Spring*

**3010 (301) Intermediate Chinese I**
Staff 4 credits
While proceeding with an integrated approach to Hanzi/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.

*Prerequisite: CHN 2020 and CHN 2021 or equivalent Corequisite: CHN 3011 Fall*

**3011 Intermediate Oral Chinese I**
Staff 1 credit
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.

*Prerequisite: CHN 2020 and CHN 2021 or equivalent Corequisite: CHN 3010 Fall*
**3020 (302) Intermediate Chinese II**  
Staff  
4 credits  
In this course students continue to increase Hanzi and decrease Pinyin to attain a more authentic and more-native like language acquisition. While listening, speaking, reading, and writing skills are still developed in an interpretative mode, they progress towards 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).  
Prerequisite: CHN 3010 and CHN 3011 or equivalent Corequisite: CHN 3021

**3021 Intermediate Oral Chinese II**  
Staff  
1 credit  
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.  
Prerequisite: CHN 3010 and CHN 3011 or equivalent Corequisite: CHN 3020  
Spring

**3070 Chinese/Japanese Culture and Language**  
Yang, Wang  
4 credits  
Culture is manifested in language and language verbalizes culture. This course studies how Chinese and Japanese languages and cultures reflect this symbiotic relation. Students are engaged in an intercultural dialogue with a linguistic approach. Open to both language and non-language students, it is conducted in English and carries a Global Heritage designation.  
*Fall or Spring*

**4070 Advanced Chinese**  
Yang  
4 credits  
The course is typically designed for students who have declared their majors (optional for minors) in Chinese. Students are expected to perform advanced-level tasks. The four basic language skills, listening, speaking, reading, and writing are honed in a presentational mode. Cultivating students awareness and appreciation of the richness of the culture of 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).  
Prerequisite: Chinese 3020 and 3021 or Study Abroad  
Fall or Spring

**4010 Senior Project/Thesis**  
Yang, Wang  
2-4 credits  
Students have one of two options to take this course: Senior Project/thesis in the discipline of Chinese language and culture within the Department of Modern Languages or an Interdisciplinary Senior Project/Thesis between the Department of Modern Languages and other Departments/Programs.  
Prerequisite: Study Abroad  
Spring

**1020 (102) Introductory Japanese II**  
Staff  
4 credits  
MLA  
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 expected to learn approximately 80 "kanji" in Japanese.  
Prerequisite: Japanese 1010  
Spring

**2010 (201) Elementary Japanese I**  
Staff  
4 credits  
MLA  
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

**2011 Elementary Oral Japanese I**  
Staff  
1 credit  
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
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Instructor</th>
<th>Prerequisites</th>
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<td>3010</td>
<td>Intermediate Japanese I</td>
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<td>Corequisite: JPN 3010 and JPN 3011</td>
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<td>Intermediate Oral Japanese II</td>
<td>1</td>
<td>Staff</td>
<td>Corequisite: JPN 3020 and JPN 3021</td>
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<td>3070</td>
<td>Chinese/Japanese Culture and Language</td>
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<td>Yang, Wang</td>
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<td>Wang</td>
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<td>Prerequisite: JPN 3010 and JPN 3011</td>
</tr>
</tbody>
</table>

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.

Prerequisite: JPN 2010 and JPN 2011
Corequisite: JPN 2021
Spring

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".

Prerequisite: JPN 2020 and JPN 2021
Corequisite: JPN 3011
Fall

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.

Prerequisite: JPN 2020 and JPN 2021
Corequisite: JPN 3010
Fall

This course integrates language and cultural studies through calligraphy—the writing of Chinese Hanzi and Japanese Kanji. It is open to both language and non-language students. This course carries a Global Heritage designation. It is conducted in English.

Fall or Spring

In this course we further practice in speaking, listening, reading, and writing to attain a more authentic and more native-like language acquisition. While listening, speaking, reading, and writing skills are still developed in an interpretative mode, they progress towards a presentational direction. The communicative context at 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.

Prerequisite: JPN 3010 and JPN 3011
Corequisite: 3021
Spring

Culture is manifested in language and language verbalizes culture. This course studies how Chinese and Japanese languages and cultures reflect this symbiotic relation. Students are engaged in an intercultural dialogue with a linguistic approach. Open to both language and non-language students, it is conducted in English and carries a Global Heritage designation.

Fall or Spring

Students have one of the 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.

Prerequisite: Study Abroad
Spring

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 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.

Prerequisite: Japanese 3020 and 3021 or study abroad
Fall or Spring
# Modern Languages

## Modern Language Courses

*taught in English*

### 1010 (101) Modern Literature in Translation

**Staff** 4 credits  
**HUM**  
Critical reading of modern literary masterpieces translated into English.

### 200T (271) Topics in Language and Culture in Translation

**Staff** 1-4 credits  
This course, given in English, explores selected topics of literature, film, culture, or language with an emphasis on the cultural products of communities where English is not the primary language.

### 2200 (220) Cultural Awareness Orientation

**Staff** 1 credit  
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*

### 3050 (305) Community-based Language Learning

**Staff** 1-4 credits  
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 Language faculty, in order to volunteer as language instructors, translators, tutors, support personnel or other such positions that make use of their language abilities. Students are trained and guided by weekly meetings with the course instructor in order to prepare for their site placement and their volunteer duties. (This course may be repeated for credit.)  
*Prerequisite: Students must have taken or be enrolled in 3010; or instructor's consent*

### 3060 (306) East Asian Civilizations and Cultures

**Staff** 4 credits  
**HUM**  
This course examines the foundation of East Asian civilizations and cultures. It focuses on the philosophical, historical, artistic, and religious underpinnings of East Asian cultures. It entails a careful examination of such phenomena as the unification of China, the construction of the Great Wall, various creation myths, Jomon cultures in Japan, the Shogunate system, and the Meiji Restoration. Taught in English.

### 3100 (310) East Asian Literature in Translation

**Staff** 4 credits  
**HUM**  
This course introduces the important and representative literary works from East Asia, mainly those written in Chinese and Japanese. Students also will become acquainted with East Asian Buddhist literature, Korean epics, and Vietnamese post-war narratives, among other literary topics.

### 3990 (399) Practicum: Teaching Modern Languages

**Staff** 2-8 credits  
Students in this course will consider and apply methods of teaching Modern Languages. Students must concurrently be engaged in modern language teaching at the post-secondary level. Students will consider the classroom application of various theories, methodologies, and activities used to teach modern languages at the college level, as well as apply a variety of evaluation techniques to help assess classroom learning. This course may be repeated and is graded on an S/U basis only. This course may not be used towards the M.Ed. degree.

*Prerequisite: MLA 4200 or concurrent registration with MLA 4200*

### 400T (471) Topics in Language and Culture in Translation

**Staff** 1-4 credits  
This course, given in English, explores selected topics of literature, film, culture, or language with an emphasis on the cultural products of communities where English is not the primary language.

### 4200 (4200) Methods and Materials in Teaching Modern Languages

**Staff** 4 credits  
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. Field work 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*

### French

#### 1010 (101) Elementary French I

**Staff** 4 credits  
**MLA**  
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*

#### 1020 (102) Elementary French II

**Staff** 4 credits  
**MLA**  
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: French 1010 or equivalent*

*Fall/Spring*
2010 (201) Intermediate French I
Staff 4 credits
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: French 1020 or equivalent

2020 (202) Intermediate French II
Staff 4 credits
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: French 2010 or equivalent

3010 (301) Advanced French I
Staff 4 credits
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: French 2020 or equivalent

3030 (303) French Conversation
French Target Language Experts 1 credit
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: French 2020 or equivalency or consent of department chair

3080 (308) The French-Speaking World: Social, Political, and Economic Issues
Staff 4 credits
HUM
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.
Prerequisite: French 3010 or consent of instructor
Alternate Fall Semesters

3090 (309) The French-Speaking World: Cultural and Intellectual Life
Staff 4 credits
HUM
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.
Prerequisite: French 3010 or consent of instructor

3110 (311) Interpreting Written Texts in French
Staff 4 credits
HUM
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.
Prerequisite: French 3010

400T (471) Topics in French
Staff 1-4 credits
Intensive study of specific topics relating to French literature and culture.
Prerequisite: French 3080 or 3090 and 3110 and GNR 3510 or consent of the instructor

4010 (401) Senior Seminar in French
Staff 4 credits
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.
Prerequisite: Senior standing or consent of instructor and GNR 3510

4240 (424) French Theatre
Staff 4 credits
HUM
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.
Prerequisite: French 3080 or 3090 and 3110 and GNR 3510 or consent of instructor

German

1010 (101) Elementary German I
Staff 4 credits
MLA
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

1020 (102) Elementary German II
Staff 4 credits
MLA
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: German 1010 or equivalent
Fall/Spring
Modern Languages

2010 (201) Intermediate German I
Staff 4 credits
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: German 1020 or equivalent Spring Only

2020 (202) Intermediate German II
Staff 4 credits
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: German 2010 or equivalent Fall Only

3010 (301) Advanced German I
Staff 4 credits
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: German 2010 or equivalent Spring Only

3030 (303) German Conversation
German Target Language Experts 1 credit
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: German 2020 or equivalent or consent of department chair Fall/Spring

3080 (308) The German-Speaking World: Social, Political, and Economic Issues
Staff 4 credits
HUM
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. Prerequisite: German 3010 or consent of instructor Alternate Fall Semesters

3090 (309) The German-Speaking World: Cultural and Intellectual Life
Staff 4 credits
HUM
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. Prerequisite: German 3010 or consent of instructor Alternate Fall Semesters

3110 (311) Interpreting Written Texts in German
Staff 4 credits
HUM
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. Prerequisite: German 3010 Spring Only

400T (471) Topics in German
Staff 1-4 credits
Intensive study of specific topics relating to German literature and culture. Prerequisite: German 3080 or 3090 and 3110 and GNR 3510 or consent of the instructor Fall/Spring

4010 (401) Senior Seminar in German
Staff 4 credits
A capstone experience in which the students will study the theoretical foundations of German studies (cultural as well as literary). They will be introduced to the problems of translation. A major component of the course will be the preparation of an independent research paper, the Senior Thesis, which will culminate in a formal oral presentation of the results of the investigation as well as in a major paper written in German. Prerequisite: Senior standing or consent of instructor and GNR 3510 Spring

4240 (424) German Theatre
Staff 4 credits
HUM
Students in the course stage a play in German. Students also read and discuss related texts; these include such topics as other plays which 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. Prerequisite: German 3080 or 3090 and 3110 and GNR 3510 or consent of instructor

Spanish

1010 (101) Elementary Spanish I
Staff 4 credits
MLA
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

1020 (102) Elementary Spanish II
Staff 4 credits
MLA
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: Spanish 1010 or equivalent Fall/Spring
2010 (201) Intermediate Spanish I
Staff 4 credits
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. Pre-requisite: Spanish 1020 or equivalent Fall/Spring

2020 (202) Intermediate Spanish II
Staff 4 credits
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. Pre-requisite: Spanish 2010 or equivalent Fall/Spring

3010 (301) Advanced Spanish I
Staff 4 credits
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. Pre-requisite: Spanish 2020 or equivalent Fall/Spring

3030 (303) Spanish Conversation
Target Language Experts 1 credit
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. Pre-requisite: Spanish 2020 or equivalent Fall/Spring

3040 (304) Spanish Composition
Staff 2 credits
The course will focus on writing as a process. Using the workshop format students will be involved in the different stages of writing from the 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. Pre-requisite: Spanish 3010 Fall/Spring

3050 (305) Intensive Spanish Encounter
Staff 4 credits
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 the larger Hispanic community off campus as well as contextualized in-class course activities will improve overall oral expression and extend awareness of cultural practices. Pre-requisite: Spanish 3010 or equivalent Fall/Spring

3080 (308) The Spanish-Speaking World: Social, Political, and Economic Issues
Staff 4 credits
HUM
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. Pre-requisite: Spanish 3010 or consent of instructor

3090 (309) The Spanish-Speaking World: Cultural and Intellectual Life
Staff 4 credits
HUM
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. Pre-requisite: Spanish 3010 or consent of instructor

3110 (311) Interpreting Written Texts in Spanish
Staff 4 credits
HUM
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. Pre-requisite: Spanish 3010

400T (471) Topics in Spanish
Staff 1-4 credits
Intensive study of specific topics related to Spanish literature and culture. Pre-requisite: Spanish 3080 or 3090 and 3110 and GNR 3510 or consent of instructor

4010 (401) Senior Seminar in Spanish
Staff 4 credits
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. Pre-requisite: Senior standing or consent of instructor and GNR 3510

4240 (424) Hispanic Theatre
Staff 4 credits
HUM
Students stage a play in Spanish. Students also read and discuss related texts; these include such topics as other plays which 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. Pre-requisite: Spanish 3080 or 3090 and 3110 and GNR 3510 or consent of instructor

Music
Goals and Objectives
1. Offer substantial opportunities to the general student, through appropriate courses, performing ensembles, and private lessons, which will develop a love for and understanding of music, the ability to communicate that appreciation and understanding, and the means to continue life-long music experiences.
2. Develop comprehensive musicianship and provide career preparation, a basic mastery of the music discipline, and performance skills for music majors in a particular emphasis (core major, music education, music performance, music theater, piano pedagogy, jazz, and church music).
3. Enhance and enrich the cultural life of the campus community and the community at large through a regular and well-supported program that presents students, faculty, and guest musicians in recitals, concerts, and other musical events.
4. Participate in worship and liturgy and to assist in proclaiming the Gospel to the campus community and to the larger community.

5. Function as a center providing comprehensive opportunities to the surrounding communities for music study and for participation in music performance activities.

To realize these goals and objectives, the department offers academic courses, a variety of performance ensembles, class and private lessons, and on- and off-campus concerts. For those who would specialize in music, the program provides professional training wholly compatible with the College's liberal arts tradition.

An audition before members of the music faculty is required for entrance into the music major. At the end of their sophomore year, all music majors are evaluated for junior standing. They must show they have fulfilled repertoire requirements in their performance area through the sophomore year, and they must satisfactorily perform 15-20 minutes of music from that list. If this junior-standing jury is insufficient in either repertoire or performance, the faculty may admit the student provisionally to junior standing in the major or advise the student to discontinue the music major.

**Major in Music**

A major in music consists of these courses:

- 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
- MUS 0700 Recital Attendance (0 cr., 8 terms)

Total credits: 40

**Minor in Music**

The department offers a minor in music. Its requirements are:

- 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 0700 Recital Attendance (0 cr., 4 terms)
- MUS 2110 Introduction to Western Music History

**Choose One:**

- MUS 3050 Music History I (4 cr.)
- MUS 3060 Music History II (4 cr.)

Applied lessons in the principle performance area (4 cr., 1 cr. each term)

Ensemble participation (0 cr., 4 terms)

(Music minors are placed in an approved ensemble in their principal performing area.)

Total credits: 20

**Emphases in Music**

The previous represents the minimum requirements for a music major or minor. In addition to the basic Bachelor of Arts in Music, emphases in specific areas are available. The emphases in Music Education - Vocal and Instrumental - meet current Wisconsin licensure requirements and they also meet the standards of the National Association of Schools of Music.

For students who seek further depth and skills development, emphases are also available in Vocal Performance, Instrumental Performance, Church Music, Piano Pedagogy, and Jazz Studies. An interdisciplinary major in Music Theatre is also offered by the department.

**Emphases in Music Education**

Carthage offers an emphasis that meets licensure requirements in both vocal and instrumental areas. In addition to the information regarding the emphases listed below, students should also consult the Education Department section of this catalog for information about the Teacher Licensure Program and information about courses required of all special fields licensure candidates.

In addition to the core music major, the following courses are required of students pursuing an emphasis in Vocal Music Education:

- MUS 1180 Introduction to Music Education (2 cr.)
- MUS 2090 Global Music Education (2 cr.)
- MUS 2180 Basic Conducting (2 cr.)
- MUS 3110 Choral Conducting (2 cr.)
- MUS 3140 Learning About Instruments (1 cr.)
- MUS 3200 Field Experience (0 cr.)
- MUS 4210 General Music Methods (4 cr.)
- MUS 4220 Vocal Music Methods (4 cr.)
- Satisfactory half recital (0 cr.)

**Additional Notes:**

If voice is not the principal performing area, at least two credits of applied music must be in voice.

**Total additional credits for an emphasis in Vocal Music Education:** 17

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

- MUS 1180 Introduction to Music Education (2 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 2090 Global Music Education (2 cr.)
- MUS 2180 Basic Conducting (2 cr.)
- MUS 3100 Instrumental Conducting (2 cr.)
- MUS 3200 Field Experience (0 cr.)
- MUS 4210 General Music Methods (4 cr.)
- MUS 4200 Instrumental Music Methods (4 cr.)
- Satisfactory half recital (0 cr.)
- Choral ensemble participation (0 cr., 1 term)

**Total additional credits for an emphasis in Instrumental Music Education:** 20

**Emphasis in Church Music**

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

- MUS 2180 Basic Conducting (2 cr.)
- MUS 3040 Hymnology (2 cr.)
- MUS 3080 Liturgics (2 cr.)
- MUS 3090 Church Music Program (2 cr.)
MUS 3110 Choral Conducting (2 cr.)
MUS 3130 Choral Literature (2 cr.)
MUS 3150 Service Playing and Improvisation I (1 cr.)
MUS 3160 Service Playing and Improvisation II (1 cr.)
MUS 4030 Practicum in Church Music (2 cr.)

Full Senior Recital (Thesis) (0 cr.)

Total additional credits for an emphasis on Church Music: 16

Emphasis in Performance

The Carthage Music Department offers emphases in vocal performance and instrumental performance.

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

MUS 2180 Basic Conducting (2 cr.)
MUS 4710 Vocal Pedagogy (2 cr.)
MUS 2490 Vocal Diction and Literature (4 cr.)
MUS 2210 Opera (4 cr.)
Additional applied lessons in the principle performing area
Satisfactory half recital (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.

Total additional credits for an emphasis in Vocal Performance: 16

Emphasis in Piano Pedagogy

In addition to the core music major, the following courses are required of students pursuing an emphasis in piano pedagogy

MUS 2180 Basic Conducting (2 cr.)
MUS 2510 Piano Pedagogy and Literature I (2 cr.)
MUS 2520 Piano Pedagogy and Literature II (2 cr.)
MUS 3510 Practicum in Piano Pedagogy (2 cr., 1 cr. each term)
MUS 4100 Piano Literature (4 cr.)
Additional applied lessons in principle performing area
Satisfactory full recital (0 cr.)

Total additional credits for an emphasis in Piano Pedagogy: 16

Emphasis in Jazz Studies

In addition to the core music major, the following courses are required of students pursuing an emphasis in jazz studies.

MUS 2180 Basic Conducting (2 cr.)
MUS 6710 Jazz History (4 cr.)
MUS 0080 Jazz Ensemble or Jazz Combo (4 terms)
MUS 3170 Jazz Improvisation I (2 cr.)
MUS 3180 Jazz Improvisation II (2 cr.)
MUS 2130 Jazz Improvisation I (1 cr.)
MUS 2140 Jazz Improvisation II (1 cr.)
Satisfactory full recital (0 cr.)

Total additional credits for an emphasis in jazz studies: 12-16

Music Theatre Major

The Carthage music department houses the music theatre major, which is comprised of courses in music, theatre, and dance. Students that intend to major in music theatre must pass an entrance audition for both the music and theatre departments. The following courses comprise the Bachelor of Arts in music theatre:

MUS 1010 Music Theory I (3 cr.)
MUS 1020 Aural Skills I (1 cr.)
MUS 1030 Music Theory II (3 cr.)
MUS 1040 Aural Skills II (1 cr.)
MUS 2110 Introduction to Western Music History (4 cr.)
MUS/THR 3300 History (4 cr.)
MUS 0250 Private Voice (1 cr. each term, 8 terms)
MUS 0160 Keyboard Skills (1 cr.)
MUS 0170 Keyboard Skills (1 cr.)
MUS 0180 Keyboard Skills (1 cr.)
MUS 0190 Keyboard Skills (1 cr.)

Total credits for a Bachelor of Arts degree in music theatre: 56

Recitals

Applied music students have opportunities nearly every week to participate in regular recitals, either within each studio or in department-wide recitals that feature students from all the performing areas. The department believes these recitals are important in broadening students' experience with live music and in expanding their knowledge of solo literature, and requires all who study applied music to attend them. Students in the performance emphases must perform in studio and departmental recitals and must present two satisfactory solo recitals. Normally, they give a half-hour recital in the junior year and a full-hour recital in the senior year. Students in the church music emphasis give a full recital, traditionally during the senior year. Students in the music education emphasis give one half recital in the junior or senior year. All recitals are presented only with permission of the music faculty, following a pre-recital jury. In order to satisfy the recital requirements of each emphasis, recitals must include an interesting and representative program and demonstrate a high level of performing competency.

Applied Music

The Music Department offers private and class instruction in applied music to music majors and minors, and within limitations of staff, to non-music majors as well. Music majors must take their applied music lessons within the Music Department unless the department approves an exception. Outstanding students, normally music majors completing an emphasis in performance, may

MUS 0010, 0020, 0030, or 0040 ensemble participation for (0-8 cr.)
MUS 0700 Recital (0 cr., 4 terms)
MUS/THR 2620 Music Theatre Workshop (0-8 cr., 4 terms)
THR/EXS Applied dance electives (4 cr., 1 cr. each term)

THR 2110 Acting I (4 cr.)
THR 3110 Acting II (4 cr.)
THR 2900 Play Reading and Analysis (4 cr.)
THR 2910 Play Production I (4 cr.)
THR 2920 Play Production II (4 cr.)

Either:
THR 2260, 2270, History of Theatre (4 cr.) or 2280

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 elect two private lessons per week in one applied area.

**AREAS:**

**Class Lessons**

- **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 0200 Class Voice (1 cr.)**
- **MUS 0210 Class Guitar (1 cr.)**

**Private Lessons** (may be repeated)

- **MUS 0150 Private Piano (1 cr.)**
- **MUS 0250 Private Voice (1 cr.)**
- **MUS 0450 Private Organ (1 cr.)**
- **MUS 0550 Private Instrument (1 cr.)**
- **MUS 0650 Private Conducting (1 cr.)**

*Four private applied lessons in a single area, or one class lesson and three private applied lessons in a single area may count as a course for the fine arts distribution requirement.*

**Honors in the Major**

Please see department chair for details.

**0010 (001) Carthage Choir**

E. Garcia-Novelli 0, 1 or 2 credits

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. 0-2 credits

**0020 (002) Chapel Choir**

D. Shapovalov 0 - 1 credits

The Chapel Choir is a mixed choral ensemble that regularly sings both sacred and secular music in a variety of venues. Membership by individual audition. 0 or 1 credit.

**0030 (003) Lincoln Chamber Singers**

P. Dennee 0 - 1 credits

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. 0 or 1 credit.

**0040 (004) Small Vocal Ensembles**

P. Dennee 0 credits

This experience is geared toward individuals or very small groups in order for them to become acquainted with and perform vocal chamber literature with instruments. Enrollment with consent of instructor.

**0050 (050) Carthage Wind Orchestra**

Ripley 0, 1 or 2 credits

The Carthage 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. 0 - 2 credits.

**0060 (006) Kenosha Symphony**

Staff 0 - 1 credits

The Kenosha Symphony is a municipal orchestra of amateur and professional musicians. Membership by audition only. 0 or 1 credit.

**0070 (007) Carthage String Orchestra**

D. Rivest 0 - 1 credits

The Carthage String Orchestra is a chamber orchestra that performs as a unit and in smaller ensembles. 0 or 1 credit.

**0080 (008) Carthage Jazz Orchestra**

S. Carmichael 0 - 1 credits

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. 0 or 1 credit.

**0090 (009) Small Instrumental Ensembles**

S. Carmichael 0 credits

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. This includes the Carthage Acolytes of Jazz and the Carthage Jazz Crusaders.

**0120 (012) Pep Band**

Saucedo 0 credits

The Pep Band regularly plays at all home football and basketball games. Membership by individual audition.

**0130 (013) Gospel Messengers**

Tillman-Kemp 0 credits


**0150 (015) Private Piano**

Livingston, Shapovalov, Masloski, A. Mark 1 credit

**0160 (016) Keyboard Skills I**

Livingston 1 credit

Introduction to the basic fundamentals of keyboard study including elementary solo repertoire. Pre-requisite: music major status or consent of department. Fall

**0170 (017) Keyboard Skills II**

J. Livingston 1 credit

Accompaniment patterns, transposition and basic improvisation skills through harmonization study. Continued development of keyboard technique through solo and ensemble literature. Pre-requisite: MUSI 0160 or consent of instructor. Fall

**0180 (018) Keyboard Skills III**

J. Livingston 1 credit

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. Pre-requisite: MUSI 0180 or consent of instructor. Fall

**0190 (019) Keyboard Skills IV**

J. Livingston 1 credit

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. Pre-requisite: MUSI 0180 or consent of instructor. Fall

**0200 (020) Class Voice**

Haines 1 credit

Fall

**0210 (021) Class Guitar**

Staff 1 credit

Fall

**0220 (022) Carthage College Masterworks Chorale**

P. Dennee 1 credit

The Carthage College Masterworks Chorale is comprised of students and community performers.

**0240 (024) Carthage Women's Ensemble**

P. Dennee 0 - 1 credits

The Carthage Women's Ensemble regularly sings both sacred and secular music on and off-campus. Membership by individual audition. 0 or 1 credit.
0250 (025) Private Voice  
Berg, K. Georg, Gorke, Haines, Hull, C. Ness, Schwaber  
**Fall**  1 credit

0450 (045) Private Organ  
Hoskins  1 credit  
**Fall**

0550 (055) Private Instrument  
Staff  1 credit  
**A full complement of applied lessons in brass, woodwinds, strings, and percussion.**  
**Fall**

0650 (065) Private Conducting  
Ripley, Staff  1 credit  
**Fall**

0700 (070) Recital Attendance  
C. Ness  0 credits  
**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.**  
**Fall/Spring**

1010 (101) Music Theory I  
M. Petering, W. Hodges  3 credits  
**A historical-analytical approach to the study of theory and harmony. Includes music notation, rhythmic analysis, concepts of key and scale, interval quality and inversion, tertian harmony, chord analysis, and non-harmonic tone analysis.**  
**Prerequisite: Passing grade on Music Literacy Assessment**  
**Fall**

1020 (102) Aural Skills I  
E. Garcia-Novelli, W. Hodges  1 credit  
**The development of aural skills, applied to the musical concepts studied in Music Theory I, through sight-singing, rhythmic reading, and melodic and harmonic dictation.**  
**Prerequisite: Taken concurrently with MUS 1010**  
**Fall**

1030 (103) Music Theory II  
M. Petering, W. Hodges  3 credits  
**A continuation of Music Theory I. Includes tonization and modulation, small melodic forms, binary and ternary forms, and principles of melodic analysis.**  
**Prerequisite: MUS 1010 or consent of the instructor**  
**Spring**

1040 (104) Aural Skills II  
E. Garcia-Novelli, W. Hodges  1 credit  
**A continuation of Aural Skills I, applied to musical concepts studied in Music Theory II.**  
**Prerequisite: MUS 1020 or consent of the instructor**  
**Spring**

1150 (115) Exploring Music  
Berg, Haines, Hodges, Ripley, Dennee, Shapovalov  
**FAR**  4 credits  
**A basic music appreciation course covering a representative body of Western music from the 18th through the 20th centuries. The 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 media of music, and to appreciate different styles of music in their cultural contexts.**  
**Fall/Spring**

1160 (116) Musicianship Skills in Context  
D. Shapovalov  2 credits  
**A course for music majors that works to build facility in musical communication within and aligned with performance. Students will explore stylistic characteristics of Western art music, using that background to develop fundamental skills in music listening, reading, writing and discourse.**  
**(Fall only)**  
**Fall**

1170 (117) Music Technology and Industry  
M. Petering  2 credits  
**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.**  
**(Spring only)**  
**Prerequisite: MUS 1160**  
**Spring**

1180 (118) Introduction to Music Education  
C. Ness  2 credits  
**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.**  
**Prerequisite: MUS 1160 or consent of department**  
**Spring**

2000 (200) A Survey of Symphonic Literature  
Hodges  4 credits  
**FAR**  
**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. A background in music is not assumed, since the course will introduce students to basic music terminology and the families of instruments.**  
**J-Term**

2010 (201) Music Theory III  
M. Petering  3 credits  
**A continuation of Music Theory II. Music Theory III includes a study of the fugue, counterpoint, harmonization, and analysis of larger forms (variation, rondo, sonata).**  
**Prerequisite: MUS 1030 or consent of the instructor**  
**Fall**

2020 (202) Aural Skills III  
E. Garcia-Novelli  1 credit  
**A continuation of Aural Skills II, applied to the musical concepts studied in Music Theory III, with particular emphasis on secondary key areas, modulations, and nineteenth-century harmony.**  
**Prerequisite: MUS 1040 or consent of the instructor**  
**Fall**

2030 (203) Music Theory IV  
M. Petering  3 credits  
**A continuation of Music Theory III. Music Theory IV includes early and late chromaticism, musical form within larger structures, and the extension of traditional tonality with emphasis on 20th century compositional techniques, including serial music, electronic music, and other avant-garde music.**  
**Prerequisite: MUS 2010 or consent of the instructor**  
**Spring**

2040 (204) Aural Skills IV  
E. Garcia-Novelli  1 credit  
**A continuation of Aural Skills III, applied to musical concepts studied in Music Theory IV and with particular focus on 20th century melody, harmony, and rhythm.**  
**Prerequisite: MUS 2020 or consent of the instructor**  
**Spring**
2050 (205) Woodwind Techniques in Schools
Hodges 1 credit
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.
Spring

2060 (206) Brass Techniques in Schools
Ripley 1 credit
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.
Spring

2070 (207) Percussion Techniques in Schools
Ripley 1 credit
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.
Fall

2080 (208) String Techniques in Schools
D. Rivest 1 credit
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.
Fall

2090 (209) Global Music Education
Staff 2 credits
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
Spring

2110 (211) Introduction to Western Music History
Staff 4 credits
This introductory course will survey music from 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.
Spring

2130 (213) Jazz Improvisation I
S. Carmichael 1 credit
Beginning improvisation techniques in a group setting with an emphasis on repertoire, analysis, transcription, and improvisational tools.
Prerequisite: MUS 1020 or consent of instructor
Fall

2140 (214) Jazz Improvisation II
S. Carmichael 1 credit
Continuation of techniques and skills introduced in Jazz Improvisation I. Intermediate techniques in a group setting with an emphasis on repertoire, analysis, transcription, and improvisational tools.
Prerequisite: MUS 2130 or consent of instructor
Spring

2180 (218) Basic Conducting
Staff 2 credits
Basic gestures of conducting and basic procedures for leading a musical ensemble to achieve its musical and technical potential.
Fall

2200 (220) Popular Music in America
J. Ripley, M. Petering 4 credits
FAR
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, 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.
Fall

2210 (221) Opera
Berg 4 credits
FAR
Intended for music majors and non-majors, 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.
Spring

2490 (249) Vocal Diction and Literature
G. Berg 4 credits
Fundamentals of phonetics and sound production as applied to singing in English, Italian, German, and French. Study of representative vocal literature of each language.
Fall

2510 (251) Piano Pedagogy and Literature I
J. Livingston 2 credits
Includes basic knowledge of learning theories and their application to piano teaching; communication skills for private and group teaching; curriculum and lesson planning; teaching of practice skills; the fundamentals of developing piano technique; the fundamentals of style and historical performance practice; elements of student preparation for performance; and an introduction to the business of piano teaching (set-up and operation of a studio, selecting materials and equipment, strategies for marketing and publicity). The focus of pre-collegiate literature in this term is on the beginning piano method.
Spring

2520 (252) Piano Pedagogy and Literature II
J. Livingston 2 credits
Continues development of topics described in Piano Pedagogy and Literature I; also includes the acquisition of bibliographic information and the importance of continuing education and ongoing professional development. The focus of pre-collegiate literature in this term is intermediate and early advanced repertoire.
Fall
This course for the singer-actor provides formal and informal venues to develop Music Theater 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 required

Fall/Spring

3000 (300) Opera Production
G. Berg and M. Boresi 4 credits
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 J-Term

3010 (301) Seminar in Form and Analysis
Hodges, Ripley, Petering 2 credits
Advanced formal and stylistic analysis of selected major works from the Baroque to the present.

Prerequisite: MUS 2010 or consent of the instructor

Fall

3040 (304) Hymnology
Hoskins 2 credits
A study of hymns and psalms in Christian worship from an historical perspective as well as a survey of contemporary hymns and performance practices.

Prerequisite: Consent of the instructor

Fall

3050 (305) Music History I
D. Shapovalov 4 credits
This segment of the two-part music history survey covers the music of the Western classical tradition from chant through Beethoven. 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.

3060 (306) Music History II
D. Shapovalov 4 credits
This segment of the two-part music history survey covers the music of the Western classical and popular traditions from Romanticism 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.

Fall

3080 (308) Liturgics
Hoskins 2 credits
The study of Christian liturgics from an historical perspective as well as an overview of contemporary practice.

Prerequisite: Consent of the instructor

Spring

3090 (309) The Church Music Program
Hoskins 2 credits
The philosophy and materials of music in worship. This includes strategies for implementing good church music programs, planning weekly services, choosing music for liturgical and non-liturgical services, programs and concerts with and without choir, and purchasing and maintaining instruments.

Prerequisite: Consent of instructor

Fall

3100 (310) Instrumental Conducting and Techniques
Ripley 2 credits
Basic gestures of conducting and basic procedures for training an instrumental ensemble to achieve its musical and technical potential.

Prerequisite: MUS 1010 or consent of the instructor

Spring

3110 (311) Choral Conducting and Techniques
E. Garcia-Novelli 2 credits
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

Spring

3120 (312) Orchestration
Ripley, Petering 2 credits
The study of instrumental timbres and idioms. Scoring and arranging for various ensembles with performance whenever possible.

Prerequisite: MUS 1010 and 1020

Spring

3130 (313) Choral Literature
P. Dennee, E. Garcia-Novelli 2 credits
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.

Spring

3140 (314) Learning About Instruments
Ripley 1 credit
A lab course designed for music students in the general and choral music education emphasis 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.

Fall

3150 (315) Service Playing and Improvisation I
Hoskins 1 credit
The first term of a two-term study of service playing techniques, learning to lead the congregation in the music of worship services.

Prerequisite: Two terms of applied organ study

Fall

3160 (316) Service Playing and Improvisation II
Hoskins 1 credit
The second term of a two-term study of service playing techniques, learning to lead the congregation in the music of worship services.

Prerequisite: MUS 3150

Spring

3170 (317) Jazz Arranging I
S. Carmichael 2 credits
Exploration of scoring techniques for jazz and popular ensembles with an emphasis on writing arrangements for smaller ensembles.

Prerequisite: MUS 2020 or consent of instructor

Fall
3180 (318) Jazz Arranging II
S. Carmichael 2 credits
Advanced scoring techniques for jazz and popular ensembles with an emphasis on writing arrangements for larger ensembles. 
Prerequisite: MUS 3170 or consent of instructor

3200 (320) Field Experience
P. Denee and C. Ness 0 credits
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.
J-Term

3400 (340) Music Theater History
C. Ness 4 credits
An exploration of how drama, art, movement, and music combine into the "spectacular" form of Music Theater. 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.
Fall

3510 (351) Practicum in Piano Pedagogy
J. Livingston 1 credit
Includes observation of group and private teaching by experienced teachers, practice teaching lessons with two students (one beginner and one with some prior training) under the supervision of a pedagogy instructor and with peer/teacher evaluation, critique, and commentary of lessons through audio and video taping. May be repeated once.
Fall/Spring

4000 (400) Seminar
Staff 4 credits
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

400T (471) Topics in Music
Staff 1-4 credits
Possible topics include Pedagogy (vocal or instrumental), Piano Plus (chamber music, accompanying, and/or arranged two-piano literature), Entrepreneurship, and Composition (with consent of instructor).

4030 (403) Practicum in Church Music
Staff 2 credits
The Practicum in Church Music in the church music emphasis is comparable to student teaching in the education curriculum. It offers the student an opportunity to experience church music work first-hand, supervised by a member of the music faculty. The student interns at a local church, possibly working with the staff church musician there, or at one of the many churches in the area needing a church musician. The faculty member observes, oversees, and guides the student.
Prerequisite: MUS 3160, MUS 3110, MUS 3040, MUS 3090 or consent of instructor
Fall/Spring

4100 (410) Piano Literature
J. Livingston 4 credits
This course is an historical survey of piano literature from the late Baroque through the twentieth century. It is intended for music majors who are piano students and for any other students who have substantial background and skills in piano performance. Representative literature of each composer and style period will be studied so that students may gain a comprehensive foundation of structural, stylistic, and technical points.
Spring

4200 (420) Instrumental Music Methods
Ripley 4 credits
A survey of methods and materials for teaching instrumental music in the public schools. Course content will include development of instrumental music programs at the elementary and secondary level, including materials, instructional methods, organization, management, and assessment. A significant portion of the course will involve practice microteachings off-campus. Students seeking Wisconsin licensure are required to have a grade of C- or better.
Prerequisite: Junior Standing or consent of department

4210 (421) General Music Methods
C. Ness 4 credits
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: Junior Standing
Fall

4220 (422) Vocal Music Methods
P. Denee 4 credits
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 microteachings off-campus. Students seeking licensure are required to have a grade of C- or better.
Prerequisite: Junior Standing or consent of department

4990 Senior Thesis Completion
C. Ness 0 credits
Students should register for MUS 4990 the semester they intend to complete their senior project.

Neuroscience
Neuroscience is an interdisciplinary field dedicated to the scientific study of the structure and function of the nervous system. It encompasses issues such as the molecular and cellular basis of neuronal function, nervous system structure, neural correlates of behavior, and mechanisms of nervous system disorders.

The Neuroscience major reflects the interdisciplinary focus of the field. Required courses in the areas of biology, psychology, 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 psychology. Students interested in the chemical properties of the nervous system are encouraged to take
electives in chemistry. BIO 1100 is recommended for all students in the major. 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. 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.

Students majoring in Neuroscience must complete the following courses:

- PYC 2100 Introduction to Behavioral Neuroscience
- NEU 2500 Research Methods in Neuroscience
- NEU 3950 Neuroscience II: Electrical and Chemical Properties
- NEU 4100 Neuroscience III: Development and Neuroanatomy
- BIO 2300 Cell and Molecular Biology
- CHM 1010 General Chemistry I
- CHM 1020 General Chemistry II
- SSC 2330 Behavioral Research Statistics
- And four electives from any of the following courses:

NEU 3450 Contemporary Issues in Sex and Gender
SOC 1050

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. Students are encouraged to take a course in statistical applications (SSC 2330 or MTH 1050) prior to enrolling in this course. This course offers Writing Intensive credit. Prerequisite: Grade of 'C' or better in Psychology 2100 or consent of instructor

4990 Senior Thesis Completion

Staff 0 credits

Student should register for NEU 4990 in the semester that they plan to complete their senior thesis.

Physics and Astronomy

The Physics and Astronomy department offers a major in physics that provides students with an opportunity to learn and apply physical principles to a wide variety of applications. An understanding of physics is excellent preparation for a diverse array of careers, including engineering, astronomy, and financial modeling. The major requirements are flexible. Each student, with the help of his or her advisor, may select the courses that best suit his or her interests and abilities.

The Physics Major requires 42 credits, which must include:

- PHY 1200: Fundamental Physics
- PHY 2200: General Physics I
- PHY 2210: General Physics II
- PHY 2300: Modern Physics
- PHY 2470: Mathematics for Scientists & Engineers
- OR
- PHY 3120: Electronics
- OR
- PHY 4120: Experimental Physics
- OR
- PHY 4110: Observational Astrophysics
- PHY 4000: Senior Thesis Seminar (1 credit)
- PHY 4010: Senior Thesis Research (1 cr)
- PHY 4990: Senior Thesis Completion (0 credit)

In addition, physics majors are required to take 16 credits of coursework at the 3000 level or higher (excludes PHY 4900). With approval of the department chair, up to 8 credits may be selected from an approved list of science courses outside the Physics
Department. MTH 1120, 1220, and 2020 also are required. The physics major elective courses may be selected to accommodate various interests and career objectives. In consultation with a faculty advisor, students may elect to concentrate in any of several different areas.

Students electing to pursue a concentration in astrophysics have access to instruments at Yerkes and Steward Observatories, some of the premier astrophysical research observatories in the world. Carthage also owns and maintains a variety of telescopes, CCD cameras, and research equipment, which the student may use. The astrophysics concentration includes PHY 3100, 4100, 4110, (3200 and 4300), or (3300 and 4200).

Students planning to pursue further education in engineering or applied physics should consult a faculty advisor to select course electives appropriate to their intended engineering specialty.

Students intending to pursue advanced degrees in physics should take electives that cover the core material required for admission to graduate school. These include PHY 2470, 3100, 3200, 3300, 4200 4300, and 400T.

The Physics Minor consists of:
PHY 1200*, 2200, 2210, 2300, and two additional 3000 or higher PHY courses (24 credits total).

*With departmental approval, CHM 1020 may substitute PHY 1200.

The Climatology and Meteorology Minor is directed toward students who are interested in pursuing atmospheric scholarship and research, focusing specifically on the atmospheric contributions that the disciplines of geography and physics provide. There are prerequisites to some of the courses for this minor. Students should consult their advisors and seek guidance from the Department of Geography and Earth Science and Physics and Astronomy.

For a Climatology and Meteorology Minor, students will complete 24 credits, comprising the following list of courses:
- Introduction to Physical Geography (GEO 1700)
- Meteorology (GEO 2400)
- Climatology (GEO 3700)
- Science of Global Climate Change (GEO/PHY 4150)
- General Physics I (PHY 2200)
- Thermodynamics (PHY 3300)

Honors in the Major
Honors are awarded at the discretion of the Physics and Astronomy Department. Students are eligible for Honors in Physics if they: maintain an overall GPA above 3.5 and a physics GPA above 3.0 at graduation, undertake scholarly physics research (in addition to the Senior Thesis) that is presented in public or published, earn a rating of "excellent" for the Senior Thesis, and receive the formal recommendation of the Physics Department.

FOR SCIENCE DESIGNATION: CHECK COURSE DESCRIPTIONS TO SEE IF A LABORATORY IS INCLUDED IN ORDER TO FULFILL A LAB SCIENCE REQUIREMENT.

1000 (100) Physics for Future Presidents
Staff 4 credits
SCI
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, counter-terrorism, 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/Spring

1200 Fundamental Physics
Staff 4 credits
SCI
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 1120 or departmental approval
Fall

200T (271) Topics in Physics
Staff 1-4 credits
SCI
A course of variable content on issues not covered in other courses in the department with a focus on issues that are of current interest to the physics community.
Prerequisite: Completion of lab science or permission of the instructor
Fall

2100 (201) Physics I
Burling, Schwartz 4 credits
SCI
An introduction to physics in which no prior training in physics or chemistry is required. The study of mechanics, heat, and sound. Lecture and laboratory.
Prerequisite: High school algebra
Fall

1050 (150) Cosmology: The Big Bang
Quashnock 4 credits
SCI
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, funny energy, and the fate of the universe, current and future space science missions and the search for extra-solar planets and intelligent life.
Prerequisite: High school algebra
Fall/Spring
2110 (202) Physics II
Burling, Schwartz 4 credits
SCI
A study of electricity and magnetism, light and atomic physics. Lecture and laboratory.
Prerequisite: PHY 2100 or departmental approval
Spring

2200 (203) General Physics I
Staff 4 credits
SCI
An introduction to mechanics, heat, and sound, requiring the use of calculus. Lecture and laboratory.
Prerequisite: PHY 1200 or CHM 1020, MTH 1220, and concurrent enrollment in MTH 1220, and CHM 1020, or departmental approval
Fall

2210 (204) General Physics II
Staff 4 credits
SCI
An introduction to electricity, magnetism, light, and modern physics; requires the use of calculus. Lecture and laboratory.
Prerequisite: PHY 2200 and MTH 1220
Fall/Spring

2300 (340) Modern Physics
Quashnock 4 credits
SCI
A study of waves in all their aspects, leading to the development of modern physics in the early 20th century. Topics include vibrations, wave phenomena in media, optics and electromagnetism, relativity, quanta, and wave-particle duality. Quantum mechanics is introduced and applied to atoms and crystalline solids. Nuclear properties and radioactivity may also be also discussed. Mathematical and physical tools essential for upper-level physics courses will be developed.
Prerequisite: PHY 2210 or departmental approval
Fall/Spring

2470 (310) Mathematics for Scientists and Engineers
Crosby, Quashnock, Wheeler 4 credits
SCI
Prerequisite: MTH 1220, Concurrent enrollment in PHY 2210 or departmental approval
Spring

3100 (303) Optics
Arion 4 credits
SCI
Addresses optical phenomena across the electromagnetic spectrum. Topics include propagation of light, lenses and mirrors, and optical systems. Optics suitable for IR, Visible, UV, and X-ray regimes will be considered.
Prerequisite: PHY 2210 and concurrent enrollment in MTH 2020 or departmental approval
Fall

3120 (312) Electronics
Schwartz 4 credits
SCI
Study of the principles of operation of thermionic and solid state devices and their function. Topics from both analog (electronic components, power supplies, amplifiers) and digital circuits (Boolean algebra, logic gates, de-multiplexers, shift registers) will be covered. Lecture and laboratory.
Prerequisite: PHY 2110 or 2210, or departmental approval
Spring

3200 (308) Mechanics
Crosby, Quashnock 4 credits
SCI
Study of particle dynamics in inertial and accelerated reference frames, gravitational potential, motion in a central force field and an introduction to Lagrangian methods.
Prerequisite: PHY 2210, and concurrent enrollment in MTH 2020 or departmental approval
Spring

3300 (360) Thermodynamics
Burling, Crosby 4 credits
SCI
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.
Prerequisite: PHY 2210 and concurrent enrollment in MTH 2020, or departmental approval
Fall

3500 (350) Field Placement
Staff 2-8 credits
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

3550 (355) Internship
Staff 4-12 credits
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

4000 (400) Senior Thesis Seminar
Staff 1 credit
Work on a research topic under the supervision of staff members. Students learn the research techniques and presentation skills necessary to successfully complete a senior thesis in physics. Seminar is required of all senior physics students. Students may not receive credit more than once.
Prerequisite: Senior standing
Fall

400T (471) Topics in Physics
Staff 1-4 credits
A course of variable content on topics not covered in other courses offered by the department. Topics include biophysics, condensed matter physics, nuclear physics, fluid mechanics, and relativity.
Prerequisite: Departmental approval

4010 Senior Thesis Research
Staff 1 credit
Engage in physics research under the supervision of staff members, complete a senior thesis in physics, and present thesis to an audience of faculty and students. This course is required of all senior physics students. Spring Semester.
Prerequisite: PHY 4000 Senior Thesis Seminar
Spring
Philosophy

4100 (407) Astrophysics
Dahlstrom, Quashnock  4 credits
SCI
Covers key elements of the field of astrophysics. Topical areas may include stellar structure and evolution, introduction to general relativity, cosmology, and particle astrophysics.
Prerequisite: PHY 2210 and concurrent enrollment in MTH 2020, or departmental approval
Fall

4110 (408) Observational Astrophysics
Arion  4 credits
SCI
Covers the observational research used by astrophysicists to study the universe. Students will conduct observing projects using equipment at Carthage, Yerkes Observatory, and other facilities. Observational techniques include imaging, image analysis and other methods appropriate to student projects. Lecture and laboratory.
Prerequisite: PHY 4100 or departmental approval
J-Term

4120 (406) Experimental Physics
Schwartz  4 credits
SCI
An advanced laboratory course for senior physics majors. Students are expected to draw heavily upon their previous course work in physics and mathematics, and to apply their acquired skills and knowledge in planning and carrying out significant experimental work in physics. Laboratory, six hours scheduled; additional time will be required.
Prerequisite: Senior standing and successful completion of at least 22 credits in physics
J-Term

4150 (415) Science of Global Climate Change
Crosby, Zorn  4 credits
SCI
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 Geography and Physics.
Prerequisite: GEO 3700 or PHY 2200
Fall/J-Term/Spring

4200 (410) Quantum Mechanics
Crosby, Quashnock  4 credits
SCI
A study of the principles of quantum mechanics. Schroedinger 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.
Prerequisite: PHY 2210, MTH 2020, and concurrent enrollment in PHY 2470, or departmental approval
Spring

4300 (405) Electricity and Magnetism
Arion  4 credits
SCI
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.
Prerequisite: PHY 2210, MTH 2020, and concurrent enrollment in PHY 2470, or departmental approval
Spring

4500 (450) Independent Study
Staff  2 or 4 credits
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
J-Term

4900 (490) Independent Research
Staff  2 or 4 credits
An opportunity for students to conduct original research in physics. Suitable topics are those which require substantial library and/or laboratory research, reading, and in-depth study.
Prerequisite: Permission of the instructor

4990 Senior Thesis Completion
Staff  0 credits
Students should register for PHY 4990 during the semester that they plan to complete their senior thesis.

Philosophy

At the core of any well-rounded life stands the ongoing task of examining, clarifying, and revising, where necessary, one's beliefs and values. The study of philosophy bears directly upon this enterprise. For this reason, all students engaged in liberal education are encouraged to take one or more basic courses in philosophy and even to consider a major or minor in philosophy.

Philosophy, in its broadest sense, is the sustained and thoughtful inquiry into the nature of the universe and the role of human beings within it. To this end, philosophy aims to develop students' capacity for independent, critical thinking and to acquaint them with humankind's efforts to carry out this investigation. The courses offered by the department emphasize both the mastery of the material and the development of skills, such as patient, careful reading; recognition, analysis, and evaluation of arguments; and the clear presentation and justification of one's own beliefs. Students thus become more capable of thinking independently.

Thirty-six credits are required for the major. With the consent of the chairperson of the Department of Philosophy, courses in other departments may be counted for a philosophy major.

A minor in philosophy consists of 24 credit hours in this discipline. With the chairperson's permission, certain courses with substantive philosophical content from other disciplines may count toward the minor.

Award for Philosophical Excellence
A book is presented to the student(s) who has demonstrated outstanding performance in philosophy course work during the academic year. The department faculty will nominate and evaluate student(s) based on outstanding philosophical writing and demonstrated excellence in the classroom. The winner's name will be added to the department's plaque.
### Philosophy

#### 1000 (100) Introduction to Philosophy
**Heitman**  
**HUM**  
The course introduces the student to major problems discussed by key figures in the history of Western philosophy. Problems, such as the proof of God's existence, the nature of reality, and what counts as knowledge, are examined through a careful study of selected writings of Plato, Hume, and others. Basic skills of careful reading, critical analysis, and argumentative writing and discussion are stressed.  
*Fall/Spring*

#### 1100 (110) Contemporary Ethical Issues
**Magurshak**  
**HUM**  
This course introduces the student to methods of ethical thinking by applying them to specific issues such as abortion, human sexuality, nuclear weaponry, and preservation of the environment, among others. The course also examines the nature of morality itself and the central role that moral character plays in making moral decisions.  
*Fall*

#### 1200 (120) The Art of Thinking
**Staff**  
**HUM**  
This course aims at sharpening the critical thinking skills of the student by examining in some depth the nature of inductive reasoning, the fallacies that may be committed, and the nature of certain classical and contemporary forms of deductive argument.  
*Fall/Spring*

#### 1300 (130) Philosophy and Literature
**Magurshak**  
**HUM**  
This course, taught by a philosopher and a member of a language department when possible, examines philosophical concepts, insights, and positions as they emerge from the study of selected literary works. Issues such as the relationship between literary form and philosophical content also will be examined.  
*Fall/Spring*

### 2000 (200) Studies in the History of Philosophy
**Magurshak**  
**HUM**  
This variable content course covers major epochs and figures in the history of philosophy. Courses offered on a periodic, rotating basis include surveys of ancient and medieval philosophy, modern philosophy, recent continental philosophy, and courses on major figures such as Plato, Aristotle, Kierkegaard, and Nietzsche. This course satisfies the Humanities or a second Religion requirement.  
*Prerequisite: 1000-level philosophy course Fall/Spring*

#### 200T (271) Topics in Philosophy
**Magurshak**  
**HUM**  
A variable content course designed to offer special topics in philosophy.  
*Spring*

#### 2100 (210) Topics in Ethics
**Magurshak**  
**HUM**  
This variable content course offers students an opportunity to probe theoretical ethical issues. Offerings include: The Ethics of War and Nuclear Weaponry, Ethics and the Environment, and the Ethics of the Academy.  
*Prerequisite: 1 Ethics course Fall/Spring*

#### 2110 (211) Business Ethics
**Miller, Magurshak**  
**HUM**  
In this course, students explore major ethical issues arising in the practice of business and learn to apply various methods of ethics in solving these problems. Whistle-blowing, inside trading, employees' rights, multinational corporations and other topics are discussed. Course offered as BUS 2110 and PHL 2110.  

#### 2400 (240) Philosophy of Religion
**Magurshak**  
**HUM**  
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.

#### 2750 (275) Research Methods
**Staff**  
**HUM**  
An introduction on how to conduct research through the focus on one topic from the following disciplines: philosophy, religion, or classics. The class will focus on learning how to distinguish and evaluate primary and secondary sources; write a researched paper; recognize different approaches (theoretical) to a given topic; and become familiar with the work of representative classicists/philosophers/theologians/historians.

#### 3400 (340) Homer's Iliad and Odyssey
**R. Heitman**  
**HUM**  
The Iliad and the Odyssey are the earliest texts of the Western tradition. Though everyone recognizes the sophistication of their poetic style and the breadth of their epic vision, too many readers have assumed that Homer composed in an oral tradition that had no conscious interest in philosophy or cultural critique. This course will investigate the philosophy that is embedded, implied, and elaborated in each epic as well as through a comparison of the two. Why is each story told so differently? How do Achilles, Agamemnon, Hector, Helen, compare to Odysseus, Telemachos, and Penelope? We will especially study Penelope for what she reveals about the Homeric view of ethics and epistemology, of what should be done and of what can be known.

#### 3420 (342) Socrates: Then and Now
**R. Heitman**  
**HUM**  
This course will investigate Socrates from three points of view. First, we will investigate the historical Socrates and his profound but vexed relationship to Athenian history in the fifth century. Next, it will look at the philosophical Socrates, concentrating on the innovations that he brought to philosophy before people began to write about him: ethics, elenchus, irony, self-examination, independence, inwardness, and rationality. We will then study what subsequent classical philosophers made of the innovations and to what extent Socrates was eclipsed by their writings. Finally, we will look at the cultural Socrates beginning in the Renaissance rediscovery of him and continuing through the great reinvigoration of his significance for the problems of modernity.
Political Science

3440 (344) *Herodotus and Thucydides*
R. Heitman 4 credits

Unlike previous writers, Herodotus and Thucydides attempted to explain human nature and human institutions through humanistic inquiry, not divine revelation. In this, they earned the claim to be the first historians. But is reading them as though they privileged the reporting of fact over imaginative interpretation to blind ourselves to much of what is best in them? Were they not also artists strongly influenced by the poets who had gone before? Herodotus, who traveled Greece entertaining people with his colorful stories, patterned himself on Homer and the Homeric bards. Thucydides, though scornful of romantic escapism, seems to have been bent on outdoing the tragic dramatists. And both seem to anticipate the philosophical concerns of Plato and Aristotle.

4990 Senior Thesis Completion
Staff 0 credits

Students should register for PHL 4990 during the semester that they intend to complete their senior thesis.

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 pre-law student preparation for professional legal study.

Political Science Major:
A major in political science consists of ten courses. These must include one course from the area of American Government and Politics, one course from the area of Public Law and Judicial Politics, one course from the area of Comparative Government, one course from the area of International Relations, Political Science 3100, two courses from the area of Political Thought and Theory, Political Science 4000, and two additional courses in political science. All majors must take at least three courses in one of the five areas of the discipline.

Students fulfilling their Political Thought and Theory two-course requirement may take any Political Theory course in addition to Political Science 1070: Introduction to Political Theory. For students who select Political Theory as their area of emphasis, Political Science 1070 and 3250 are both required courses in addition to a third Political Theory course.

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.

Although not required for the major, it is strongly recommended that students planning to attend graduate and/or professional school take a course in statistics. Possible courses include Mathematics 1050: Elementary Statistics; Social Science 2330: Behavioral Research Statistics; or Business 2340: Applied Statistics. Recommended supporting areas include courses from other departments in the Social Science Division (Psychology, Sociology, and Economics) and from the Humanities Division (Philosophy, History, and English).

The Department of Political Science also offers a number of J-Term courses and trips 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 Department of Political Science can be found at http://www.carthage.edu/dept/polisci/

American Government and Politics
POL 1040 Introduction to Public Policy
POL 2400 American Government: National, State and Local
POL 3510 Campaigns and Elections
POL 3520 America at War
POL 3530 American Political Institutions
POL 3580 American Foreign Policy

Comparative Politics
POL 1030 Introduction to Comparative Politics
POL 3200 Women and Politics
POL 3350 Human Rights
POL 3370 Russia/East European Politics
POL 3380 West European Politics
POL 3390 Asian Politics
POL 3340 African Transitions

General Courses
POL 2050 Philosophical Foundations of Political Economy
POL 3100 The Logic of Political Inquiry
POL 200T Topics in Political Science
POL 4000 Senior Seminar
POL 4050 Seminar in International Political Economy

International Relations
POL 1050 Introduction to International Relations
POL 3600 International Security
POL 3610 Nuclear Proliferation
POL 3620 Environmental Politics

Political Thought and Theory
POL 1070 Introduction to Political Theory
POL 3250 Classics of Political Thought
POL 3260 Studies in Political Theory

Public Law and Judicial Politics
POL 1900 Constitutional Rights: Freedom of Expression
POL 1910 Law and Society
POL 2900 Constitutional Law I
POL 2910 Constitutional Law II
POL 2920 Judicial Process and Behavior
POL 3900 Comparative Law
POL 3930 Environmental Law

Honors in the Major
Please see department chair for details. Basic requirements are listed in the Honors Program section of the catalog.
1030 (103) Introduction to Comparative Politics
Marshall, Roberg  4 credits
SOC
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, both Third and First World. The readings and assignments do not merely consider governmental institutions but the broader range of political activity, ranging from grassroots organizing to social movements, the role of the church and formal political participation.
Fall

1040 (104) Introduction to Public Policy
Mast  4 credits
SOC
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.

1050 (105) Introduction to International Relations
Roberg  4 credits
SOC
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

1070 (107) Introduction to Political Theory
Kirkland, Lynch, Ulrich  4 credits
SOC
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.

1900 (190) Constitutional Rights: Freedom of Expression
Marshall  4 credits
SOC
The assertion of a right to freedom of expression has come to refer broadly to a variety of rights which 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.

1910 (191) Law and Society
Marshall  4 credits
Law & 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.

200T (271) Topics in Political Science
Staff  1-4 credits
This course covers selected topics such as jurisprudence, international law, women and politics, U.S. foreign policy in Central America, art and politics, politics of developing areas, political socialization, the Presidency, criminal justice and internal security. The course content will determine in which area credit will be given.

2050 (205) Philosophical Foundations of Political Economy
Cyr  4 credits
SOC
An introduction to the philosophical foundations of political economy from classical times through the Enlightenment and 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

2400 (240) American Government: National, State and Local
Staff  4 credits
SOC
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, thereby, attempt to broaden and deepen insight into the processes of policy-making and implementation.
Prerequisite: Sophomore standing
Fall/Spring

2900 (290) Constitutional Law I: Separation of Powers
Marshall  4 credits
SOC
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
Fall

2910 (291) Constitutional Law II: Civil Rights and Civil Liberties
Marshall  4 credits
SOC
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
Spring
2920 (292) Judicial Process and Behavior
Staff 4 credits
SOC
This course provides a critical examination of what is referred to as the judicial process. Thus, this course focuses on the background of judges, the role of pressure groups in the judicial process, amicus curiae briefs, the selection of judges, legal reasoning, the issue of judicial policy making, legalism in Constitutional decision making, etc. The course presumes that the student has had exposure to case law.
Prerequisite: POL 2900 or 2910 or instructor's consent
Spring

3030 Women of Africa
Hauser 4 credits
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; women's participation in the public spheres of their countries.

3100 (310) The Logic of Political Inquiry
Mast 4 credits
SOC
This class is an introduction to the research process in political science. Questions about the history and structure of the discipline, how inquiry is framed by philosophical assumptions, and the role of observation and experimental design are all examined. Students will use their understanding of these issues to plan a research project, collect and analyze data, and effectively present their findings. This class is a direct link to the Senior Seminar/Senior Thesis.
Prerequisite: Junior Standing
Spring

3200 (320) Women and Politics
Hauser 4 credits
SOC
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".
Fall

3250 (325) Classics of Political Thought
Lynch, Ulrich 4 credits
SOC
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

3260 (326) Studies in Political Theory
Lynch, Ulrich 4 credits
SOC
This course covers a major figure or epoch in the history of political philosophy; on a rotating basis this will include individual authors such as Plato, Augustine, Machiavelli or Tocqueville, or specific periods of political philosophy and thought such as ancient, medieval, early modern American, or contemporary.
Prerequisite: POL 1070 or consent of instructor

3350 (335) Human Rights
Roberg 4 credits
SOC
This course examines the origins and development of Latin American political institutions by exploring developments in human rights and international legal norms in Latin American. This course will also explore the human rights movement in Latin America.
Prerequisite: POL 1030 or 1050 or instructor's consent

3360 (336) Latin American Politics
Roberg 4 credits
SOC
This course examines the origins and development of Latin American political institutions by exploring developments in human rights and international legal norms in Latin America. This course will also explore the human rights movement in Latin America.
Prerequisite: POL 1030 or 1050 or instructor's consent

3370 (337) Russia/East European Politics
Cyr 4 credits
SOC
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.
Prerequisite: POL 1030 or 1050 or instructor's consent

3380 (338) West European Politics
Cyr 4 credits
SOC
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.
Prerequisite: POL 1030 or instructor's consent
3390 (339) Politics of Rapid Growth East Asia
Marshall 4 credits
SOC
Politics of Rapid Growth introduces theoretical approaches to economic development and investigates the role of the state in economic development in Japan, South Korea, and Taiwan. Students will also investigate democratization in Taiwan and Korea and the consequences of the changing global economy for domestic politics in the three countries. Finally, students will examine the environmental and social costs of rapid growth.
Prerequisite: POL 1030, HIS 1200 or instructor's consent

3400 Chinese Politics
Staff 4 credits
SOC
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.
Prerequisite: POL 1030, HIS 1200, or permission of the instructor

3440 African Transitions
Staff 4 credits
SOC
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 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.

3450 (345) Global Poverty
Hauser 4 credits
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.

3510 (351) Campaigns and Elections
Roberg 4 credits
SOC
This course focuses on three institutions of American politics that serve as the linkage between the average citizen and the government. We will examine the role of political parties, interest groups, and elections in the American political system. Specifically, we will examine how a political campaign is conducted during election season.
Prerequisite: POL 2400 or instructor's consent

3520 (352) America at War
Lynch 4 credits
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 U.S. 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.

3530 (353) American Political Institutions
Mast 4 credits
SOC
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.

3580 (358) American Foreign Policy
Cyr 4 credits
SOC
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.

3600 (360) International Security
Roberg 4 credits
SOC
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.
Prerequisite: POL 1050 or instructor's consent
Spring

3610 (361) Nuclear Proliferation
Roberg 4 credits
SOC
Is it important for a country to acquire nuclear weapons? This is the question with which countries both with and without nuclear weapons currently 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?
Prerequisite: POL 1650 or instructor's consent
Environmental Politics
3620 (362) Environmental Politics
Mast, Roberg 4 credits
SOC
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: a) framing environmental issues within various theories of political science; b) introducing prominent actors, institutions and issues; and c) 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, when taught by Dr. Mast there is an emphasis on domestic issues; when taught by Dr. Roberg, the emphasis is on international issues.

Comparative Law
3900 (390) Comparative Law
Marshall 4 credits
Comparative Law examines the role of written constitutions, legal institutions, and legal traditions across countries. Special attention will be given to the role of constitutional courts and judicial organization. While the course will focus on the Anglo-American and Civil Law traditions, students will also read on Islamic and other legal systems. Prerequisite: POL 1910, 2900 or 2910

Environmental Law
3930 (393) Environmental Law
Mast 4 credits
SOC
This course provides an introduction to the field of environmental law, 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.

Environmental Politics
4000 (400) Senior Seminar
Roberg 4 credits
SOC
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. Prerequisite: Senior Standing Fall

International Political Economy
4050 (405) Seminar in International Political Economy
Cyr 4 credits
SOC
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

Senior Thesis Completion
4990 Senior Thesis Completion
Staff 0 credits
Students should register for POL 4990 during the semester that they intend to complete their senior thesis.

Psychology
Courses in psychology provide a background for a better understanding of the modern world, other academic fields, and one's self. Classes can be taken as courses for a major or minor concentration in psychology, as supporting courses for other majors, or because of general interest.

The major concentration in psychology is designed to encourage an understanding of human behavior from a broad perspective, to prepare students for graduate study in psychology, for employment in a psychology-related field, or for further education or career training in a variety of other fields.

Psychology Major (48 credits):
Four courses are required of all psychology majors:
PYC 150 Introduction to Psychology
SSC 2330 Social Science Behavioral Research Statistics
PYC 2900 Experimental Psychology
PYC 3700 Thesis Development

In addition, majors are required to take at least four breadth courses from the following five breadth courses:
PYC 2100 Introduction to Behavioral Neuroscience
PYC 2200 Social Psychology
PYC 2300 Cognition
PYC 2450 Abnormal Psychology
PYC 2850 Child and Adolescent Development

Majors also are required to take three depth courses after they have met the prerequisites for the respective depth course. These depth courses include:
PYC 3150 Sensation and Perception
PYC 3350 Tests and Measurements
PYC 3450 Contemporary Issues in Sex and Gender
PYC 3650 Childhood Psychopathology
PYC 3750 Personality
PYC 3950 Neuroscience II
PYC 400T Topics

Finally, students may take one or more electives from the following:
PYC 200T Topics
PYC 4000 Senior Seminar
PYC 4700 Field Work
PYC 4990 Senior Thesis Completion

All majors are required to complete a thesis. Thesis projects are begun in the course titled Thesis Development 3700.

Psychology Minor (24 credits):
PYC 1500 Introduction to Psychology
PYC 2900 Experimental Psychology
SSC 2330 Social Science Behavioral Research Statistics

and any three additional courses from the listing of the department.

Independent Study and Field Work
Students desiring to enroll in Independent Study or Field Work in psychology must consult the fieldwork instructor regarding deadlines and other procedural details. Students involved in an overseas language experience should consult with the chair of the psychology department about the completion of their Senior Thesis in Senior Seminar 4000.

Students with a broad field Social Science major with a concentration in psychology should complete a minor in Psychology and a Senior Thesis in psychology; they should be enrolled in Thesis Development 3700 or Senior Seminar 4000 as one of their three additional courses.

Honors in the Major
Please see department chair for details. Basic
requirements are listed in the Honors Program section of the catalog.

1500 (150) Introduction to Psychology
Seymour, Cameron 4 credits
SOC
An introduction to the methods and principles of psychology.  
Fall/Spring/Summer

2100 (210) Introduction to Behavioral Neuroscience
Miller, Seymour 4 credits
SCI
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 1100
Fall/Spring

2200 (220) Social Psychology
Tiegel 4 credits
SOC
A study of the ways in which people think about, influence, and relate to one another. Topics include conformity, attitudes, gender roles, interpersonal attraction, competition, aggression, prejudice, and the social construction of beliefs about the self and world amongst others.  
Fall

2300 (230) Cognition: Theories and Applications
Cameron 4 credits
SOC
A study of both the theories which attempt to explain human thought processes and the applications of these theories to practical concerns such as critical thinking and problem-solving.  
Prerequisite: PYC 1500
Fall, Spring

2450 (245) Abnormal Psychology
Staff 4 credits
SOC
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.  
Prerequisite: Psychology 1500
Fall

2850 (285) Child and Adolescent Development
Tiegel, Staff 4 credits
SOC
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 socio-emotional changes will be considered with specific emphasis on the practical significance of these changes for educators and others.  
Fall/Spring

2900 (290) Experimental Psychology
Maleske 4 credits
SOC
An introduction to research methods in psychology, including the designing and conducting of experiments and the interpretation of results.  
Prerequisite: PYC 1500 and SSC 2330 with a grade of "C" or better
Fall/Spring

3150 (315) Sensation and Perception
Cameron 4 credits
SOC
This class tackles the basic, but very 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.  
Prerequisite: PYC 1500; PYC 2100 or PYC 2300

3350 (335) Tests and Measurements
Staff 4 credits
SOC
A detailed examination of test construction and standardization and the uses of tests in educational, industrial, clinical, and research settings.  
Prerequisite: PYC 1500 and SSC 2330
variable

3450 (345) Contemporary Issues in Sex and Gender
Seymour 4 credits
SOC
This course is an examination of the interaction of the endocrine system and nervous system and the resultant effect on behavior. Gender and sex-related differences are studied from a biological and an environmental perspective. Cross-listed as Neu 3450.  
Prerequisite: PYC 1500, PYC 2100 or consent of instructor
Fall

3650 (365) Childhood Psychopathology
Tiegel 4 credits
SOC
This course concerns the diagnosis, assessment, 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.  
Prerequisite: PYC 1500 and PYC 2450 or PYC 2850
Fall

3700 (370) Thesis Development
Maleske 4 credits
An exploration of empirical questions in psychology driven by student interests within the context of identifying theoretical perspectives and designing research strategies to test explicit hypotheses. A main objective is to facilitate the student's development of a Senior Thesis proposal.  
Prerequisite: PYC 1500, SSC 2330 (with grade of 'C' or better), NEU 2500 (with grade of 'C' or better), and PYC 2900 (with grade of 'C' or better) Junior standing  
Spring

3750 (375) Psychology of Personality
Tiegel 4 credits
SOC
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 which are shared by some people, and the specific ways in which individuals are unique?  
Prerequisite: PYC 1500 and PYC 2200 or PYC 2450
Spring

3950 (395) Neuroscience II: Electrical and Chemical Properties
Miller 4 credits
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. Cross-listed in Neuroscience and Psychology.  
Prerequisite: Grade of 'C' or better in PYC 2100 or consent of instructor
Fall
4000 (400) Senior Seminar
Maleske
Fall/Spring
Students conduct the research portion of their Senior Thesis project, analyze the data they've collected, and complete the writing of their thesis. An poster presentation of their thesis is required to complete the process. The classroom portion of the seminar provides instruction and guidance in completing the research project and in preparing a publication-quality document written in the official format of the American Psychological Association.
Prerequisite: PYC 1500, SSC 2330 (with grade of 'C' or better), PYC 2900 (with grade of 'C' or better), senior status

400T (471) Topics in Psychology
Staff
Fall
A variable content course permitting advanced students the opportunity to study a specific topic in psychology in depth. The course will offer the opportunity for students to specialize in a topic normally given only cursory attention or not covered in other courses.
Prerequisite: PYC 1500 or consent of the instructor

4700 (470) Field Work in Psychology
Tiegel
Fall/Spring
Seminar class with psychology instructor combined with field experience under the supervision of psychologists and other professionals in various selected agencies in the community. Must receive approval from the fieldwork instructor before student can register. Graded: A-F.
Prerequisite: Permission of the chair of the department of psychology, senior standing, and Psychology 1500

4990 Senior Thesis Completion
Staff
Fall/Spring
Students should register for PYC 4990 during the semester that they intend to complete their senior thesis.

Religion
The Department of Religion aims to provide all students with an introduction to the academic 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 that religion is a fundamental dimension of human experience.
For graduation, all students must successfully complete Religion 1000: Understandings of Religion (preferably in their freshman or sophomore year), and any one of the following courses: Religion 2000, 2010, 2020, 2030, 2040, 2070, 2200, 2300, 3010, 3020, 3030, 3040, 3050, 3060, 3070, 3090, 3100, 3110, 3120, 3130, 3140, 3310, 3320, 3350, 3360, 3400, 3700, SOC 2040 or PHL 2400. Certain topics courses (REL 200T or 400T) and some courses offered by other departments may also be approved to fulfill the second course requirement.

Religion Major (40 credits)
REL 1000: Understandings of Religion
REL 2750: Research Methods
REL 4000: Senior Seminar
Two courses from each of areas I, II, and III below
One course from area IV below
(Any course listed in more than one category may only count once)

Religion Minor (24 credits)
REL 1000: Understandings of Religion
Five other courses
(At least one course must be taken from each of the following four categories. Any course listed in more than one category may only count once.)

I. Biblical
REL 2010 Jewish Bible/Old Testament
REL 2020 The Gospels
REL 2030 Letters of the New Testament
REL 3010 Post-Exilic Judaism
REL 3020 Women and the Bible
REL 3030 Creation and Apocalypse
REL 3400 Biblical Images of Christ
REL 3700 The Dead Sea Scrolls

II. Church History/Christian Theology
REL 2000 History of Christian Thought
REL 2040 Christian Spirituality
REL 3040 Church History
REL 3060 Luther and the Reformation
REL 3070 Religion in America
REL 3090 African-American Religion
REL 4140 Religious Thinkers of Modern Times

III. World Religion
REL 3100 Judaism
REL 3110 Hinduism
REL 3120 Islam
REL 3130 Buddhism
REL 3140 East Asian Religions
REL 3310 Greek Religions
REL 3320 Roman Religions
REL 3360 Religion and Society in Modern India
REL 3700 Dead Sea Scrolls

IV. Religion and Society
REL 2070 Understandings of Love
REL 2200 Faith, Love and Ethics
REL 2300 Issues in Living and Dying
REL 3020 Women and the Bible
REL 3030 Creation and Apocalypse
REL 3050 Images of Aging and Spirituality
REL 3070 Religion in America
REL 3080 Parish Service
REL 3350 Religion and Society
REL 3360 Religion and Society in Modern India
SOC 2040 Sociology of Religion

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

1000 (100) Understandings of Religion
Bisciglia, Lochtefeld, Long, Maczka, Mermer, Musa, Schowalter, von Dehsen
REL 1000: Understandings of Religion
Fall/Spring
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.

2000 (200) History of Christian Thought
Long, Maczka
REL 1000: Understandings of Religion
Fall/Spring
Students will concentrate on major Christian issues, such as dogma, canon, creed, Christology, justification, salvation, Word and sacraments and church unity, from an historical and ecumenical point of view. Special attention will be given to the ways history and cultures have influenced and shaped Christian thought.

200T (271) Topics in Religion
Staff
A study in a major area or subject of current concern which will build upon courses now offered or move into areas beyond the scope of present courses.
2010 (201) Jewish Bible/Old Testament
Schowalter, Von Dehsen, Bisciglia 4 credits
RELI
Concentrating on 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.

2020 (202) The Gospels
Schowalter, Von Dehsen, Larson 4 credits
RELI
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.

2030 (203) The Letters of the New Testament
Larson, Schowalter, Von Dehsen 4 credits
RELI
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.

2040 (204) Christian Spirituality
Maczka 4 credits
RELI
An in-depth exploration of Christian spirituality, or how ardent Christians throughout history have variously understood and sought 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.

2070 (207) Understandings of Love
Maczka 4 credits
RELI
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.

2200 (220) Faith, Love, and Ethics
Staff 4 credits
RELI
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.

2300 (230) Issues in Living and Dying
Tracy 4 credits
RELI
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 understandings and to help students arrive at their own positions.

2750 (275) Research Methods
Staff 4 credits
RELI
An introduction on how to conduct research through the focus on one topic from the following disciplines: philosophy, religion, or classics. The class will focus on learning how to distinguish and evaluate primary and secondary sources; write a researched paper; to recognize different approaches (theoretical) to a given topic; and become familiar with the work of representative classicists/philosophers/ theologians/historians. Spring
3050 (305) Images of Aging and Spirituality
Larson 4 credits
RELI
Readings in Western Literature from ancient to modern times will probe both the readers and the authors religious and spiritual foundations for attitudes toward aging. A Gerontological analysis of contemporary social stereotypes will challenge students to identify the sources and define the effects of those stereotypes on both our environment and ourselves. Students will gain skill in discovering and refining their own attitudes toward aging, their relationship toward aging people, and an awareness of the influence of culture on common attitudes. Students will seek to understand the phenomenon of spirituality, both within and aside from major religions, and to understand attitudes toward spirituality as they relate to self-described successful aging.
Prerequisite: REL 1000 or consent of instructor

3060 (306) Luther and the Reformation
Long, Maczka 4 credits
RELI
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 sixteenth century.

3070 (307) Religion in America
Musa 4 credits
RELI
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.

3080 (308) Parish Service
Staff 2 or 4 credits
The student is assigned to a congregation or other church organization in order to practice leadership in several self-chosen areas of church life. Students will meet regularly with their placement supervisor, will participate in classroom conferences with the professor, submit complete reports of plans and activities, and complete supplemental readings.

3090 (309) African-American Religion
Musa 4 credits
RELI
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.

3100 (310) Judaism
Biscigia 4 credits
RELI
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 which shaped 20th century Judaism, including the creation of the State of Israel, the Holocaust, and modern American Jewish movements.

3110 (311) Hinduism
Lochtelfeld 4 credits
RELI
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.

3120 (312) Islam
Lochtelfeld, Mermer 4 credits
RELI
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 revitalism has shaped and continues to shape the world in which we live.

3130 (313) Buddhism
Lochtelfeld 4 credits
RELI
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.

3140 (314) East Asian Religion
Lochtelfeld 4 credits
RELI
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.
3310 (331) Greek Religions
Renaud, Schowalter 4 credits
RELI
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 and the rich body of Greek myth. Prerequisite: Understandings of Religion 1000 or consent of instructor

3320 (332) Roman Religions
Renaud, Schowalter 4 credits
RELI
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: Understandings of Religion 1000; Core 1100; or consent of instructor

3350 (335) Religion and Society
Musa 4 credits
RELI
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; counter-cultural religious movements; and the religious principles which 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.

3360 (336) Religion and Society in Modern India
Lochtefeld 4 credits
RELI
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.

3400 (340) Biblical Images of Christ
von Dehsen 4 credits
RELI
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 (e.g., Moses, Wisdom).

3700 (370) The Dead Sea Scrolls
von Dehsen 4 credits
RELI
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. Prerequisite: Understandings of Religion 1000; Core 1100; or consent of instructor

4000 (400) Senior Seminar
Staff 4 credits
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. Fall

400T (471) Topics in Religion
Staff 1-4 credits
A course of variable content for upper-level students. Topics will not duplicate material covered in other courses.

4140 (414) Religious Thinkers of Modern Times
Maczka 4 credits
RELI
A seminar dedicated to nineteenth and twentieth century development in religious thought. While some focused attention falls on specifically Christian developments such as distinctions among the liberal, neoorthodox, and conservative orthodox theological currents, some modern thought in Hindu, Muslim, Jewish, and Buddhist traditions also is explored. Emphasis falls upon free analysis and evaluation of particular writers whose works are especially provocative and relevant to daily life.

Social Science
The student who wishes to major in broad-based Social Science without a concentration in one discipline may elect a general Social Science major.

Social Science Major (56 credits):
24 credits in the core subject restricted to following departments: Geography, History, Political Science, Sociology, Economics, or Psychology. See specific department for its specific requirements to meet the core.

Any combination of 32 credits restricted to the following departments not covered by the core: Geography, History, Political Science, Psychology, Sociology or Economics. No more than eight credits should be from any one department to fulfill minimum requirements. Those seeking Broad field social studies certification must have one course from each of the above areas.

An upper division seminar, colloquium, theory, and/or research course in the core subject, or in one of the other departments listed above.

Senior Thesis required in core. See appropriate department for requirements.

More specific details can be obtained from the social science program director or the specific departmental advisor for the concentration. Prospective social science teachers need to consult with the education faculty advisor regarding certification requirements.

Please note that there is no teaching minor for broad fields social science. Students wishing teacher certification need to minor in Secondary Education.
Social Work

2330 (233) Behavioral Research
Statistics
Maleske 4 credits
A beginning course in statistical concepts and procedures needed for critically evaluating and conducting research in psychology, sociology, political science and other behavioral sciences.
Prerequisite: PYC 1500 or permission of instructor
Fall/Spring

4200 (420) Teaching of Social Science
Staff 4 credits
A survey of current literature, curricular trends, and developments in methods of teaching junior and senior high school social studies. Required for teaching certification in any of the social sciences, or for the Wisconsin Social Studies Broad Field Teaching major. Special schedule.

Social Work
The undergraduate major in social work prepares students for beginning professional social work practice and is fully accredited by the Council on Social Work Education.

Social Work Major
The social work major consists of eleven core courses: Introduction to Social Work 2000; History of Social Welfare Policy and Programs 2100; Human Behavior in the Social Environment 2400; Social Welfare Research 3000; Social Welfare Policy Analysis 3100; Social Work Practice I 3200; Social Work Practice II 3300; Social Work Practice III 4200; Integrative Seminar in Social Work 4300; and Field Placement in Social Work 4610 and 4620. In addition, four supporting courses are required: SOC 1000, PYC 1500, SSC 2330, EGN 3240, or EGN 3250.

Recommended:
To meet CSWE guidelines, BIO 1040 Human Anatomy or PYC 3100 Introduction to Behavioral Neuroscience can fulfill Natural Science distributional requirements. CSWE further recommends POL 2400 American Government to meet Social Science distributional requirements.

Senior Thesis
4990 Senior Project Completion: All students will complete a senior project in SWK 4300. Students should register for both courses concurrently.

Admission to Social Work Program
Students may apply for admission after completion of SWK 2000 with a grade of "B" or better and should submit the Social Work Admission Form and three references to department chair Ruth Fangmeier. All forms are found in the Student Social Work Handbook. Students must maintain a cumulative G.P.A. of 2.50 on a 4.0 scale at the time of admission and throughout their academic career. In addition, they must obtain grades no lower than "C-" in required courses for the social work major.

Students must complete a declaration of major form (from the Registrar's office) and be assigned to a social work department faculty advisor; obtain a copy of current transcript (unofficial copy is available at no charge in the Registrar's Office); complete the Writing Skills Assessment administered by the Writing Center; and schedule an admissions interview with a committee of the social work faculty.

Prior to acceptance into senior level courses, faculty will review students' evaluations and commitment to pursue Senior Field Placement. To enroll in senior classes, students must demonstrate social work skills, values, and ethics in supervisory practice and academic settings. Academic and non-academic performance requirements are defined in the Student Social Work Handbook. Non-academic 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 professional conduct and behavior consistent with the values and ethics of the profession. However, knowledge, skill, and value expectations are all academic in a professional program.

**It is very important that all transfer students see the department chair immediately upon acceptance to Carthage.

Social Work Major Requirements
The social work major consists of 11 social work courses and 4 supporting courses:

SWK 2000 Introduction to Social Work 2 cr.
SWK 2100 History of Social Welfare Policy and Programs 2 cr.
SWK 2400 Human Behavior in the Social Environment 4 cr.
SWK 3000 Social Welfare Research 4 cr.
SWK 3100 Social Welfare Policy Analysis 4 cr.
SWK 3200 Social Work Practice I 4 cr.
SWK 3300 Social Work Practice II 4 cr.
SWK 4200 Social Work Practice III 4 cr.
SWK 4300 Integrative Seminar 4 cr.
SWK 4610 Field Placement in Social Work 4 cr.
SWK 4620 Field Placement in Social Work 4 cr.
SWK 4990 Senior Thesis Completion 0 cr.

Four Supporting Courses (Required)
SOC 1000 Principles of Sociology 4 cr.
PYC 1500 Intro to Psychology 4 cr.
SSC 2330 Behavioral Research Statistics 4 cr.

Choice of one:
ECN 3240 Public Finance 4 cr.
ECN 3250 Economics of Poverty and Inequality

Honors in the Major
Please see department chair for details. Basic requirements are listed in the Honors Program section of the catalog.

2000 (200) Introduction to Social Work
Noer 2 credits
Introduces the student to the profession of social work within the context of the social welfare system. Students spend 32 hours in volunteer work. The course enables students to examine their suitability for social work.
Prerequisite: SOC 1000
Fall/Spring

2100 (210) History of Social Welfare Policy and Programs
Noer 2 credits
An introduction to the modern welfare state and the historical, political, and economic roots of social welfare.
Prerequisite: Social Work 2000
Fall/Spring

2200 (220) Child Welfare Policy and Practice
Geary 4 credits
Examination of the economic, social, and political responses to children's policies and the American welfare system from private, voluntary, and government agencies.

2210 (221) Family Violence
Geary 4 credits
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.
Prerequisite: SOC 1000 and PYC 1500
Spring
2250 Communicating with Hispanic Client Systems
Kaufman 4 credits
The focus of this course is on the development of ethical and effective communication with client systems in a manner which addresses the complexities of cultural and individual identity, religious and spiritual beliefs, as well as the differences related to age, economic class, geographical and national origin, gender, sexual orientation and levels of disability. Prerequisite: SPN 202 and acceptance into the SWK program

2400 (240) Human Behavior in the Social Environment
Noer 4 credits
SOC
An integrating course designed to provide a systems framework for analysis of human biological needs within diverse social and cultural environments. Examines human diversity variables through literary case analysis and review. Prerequisite: Psychology 1500 Fall/Spring

3000 (300) Social Welfare Research
Geary 4 credits
SOC
An introduction to the methods of social science research. Emphasis on research consumership and on practical experience in gathering, organizing, and analyzing data. Prerequisite: Social Science 2330: Behavioral Research Statistics Fall/Spring

3100 (310) Social Welfare Policy Analysis
Geary 4 credits
SOC
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. Prerequisite: Social Work 2100 Fall/Spring

3200 (320) Social Work Practice I
Staff 4 credits
Beginning study of the generalist method of social work intervention with emphasis on the acquisition of professional practice skills in engagement, data collection, assessment, intervention, evaluation, and termination. Students spend 52 hours in volunteer work. Prerequisite: Social Work 2000, 2100, and 2400 Fall/Spring

3300 (330) Social Work Practice II
Noer 4 credits
Continued study of the generalist method of social work intervention with emphasis on systems theory for problem-solving with small groups and families. Students spend 52 hours in volunteer work. Prerequisite: Social Work 3200 Fall/Spring

400T (471) Topics in Social Work
Staff 1-4 credits
Advanced, variable content course permitting study in a specific topic of social welfare policy or social work practice such as aging, family, violence, and women.

4200 (420) Social Work Practice III
Fangmeier 4 credits
Advanced study of generalist social work intervention with agencies and community systems with emphasis on the acquisition of values, knowledge, and practice skills. Requires 52 hours volunteer field experience. Prerequisite: Social Work 3300 Fall

4300 (430) Integrative Seminar
Fangmeier 4 credits
Weekly seminar to integrate and synthesize social work theory and practice through a critical review of professional ethics. Students will complete their Senior Project in this course. Prerequisite: SWK 4200 and concurrent enrollment in SWK 4610 and 4990 Spring

4610 (461) Field Placement in Social Work
Fangmeier 4 credits
Field instruction under the supervision of an MSW in a social service agency for 250 hours. Application of generalist skills to provide services to individuals, groups, families, and communities. Prerequisite: Social Work 3000, Social Work 3100, Social Work 4200 and concurrent enrollment in Social Work 4300 Spring

4620 (462) Field Placement in Social Work
Fangmeier 4 credits
Field instruction under the supervision of an MSW in a social service agency for 250 hours. Application of generalist skills to provide services to individuals, groups, families, and communities. Prerequisite: Social Work 3000, Social Work 3100, Social Work 4200 and concurrent enrollment in Social Work 4300 Spring

4990 Senior Project Completion
Staff 0 credits
Students should register for SWK 4990 during the semester that they intend to complete their senior project. Prerequisite: Concurrent enrollment in SWK 2300

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 (44 credits)
The Sociology major consists of 44 credit hours including a 4-hour senior seminar and one additional course outside the major (see below for approved courses). A total of six courses consisting of 24 credits constitute the core. These courses include the following:
SOC 1000 Introduction to Sociology
SOC 3240 Logic of Sociological Inquiry
SOC 3020 Sociological Research
SOC 3900 Data Analysis
SOC 4010 Social Theory Seminar
SOC 4990 Senior Seminar
An additional 16 hours of sociology electives are required for the major. Any course offered in Sociology with a 2000 or higher designation that is not required for the core may be used to meet this requirement. Frequently offered courses include the following:
**Sociology**

**1000 (141) Introduction to Sociology**  
E. Hauser, S. Lyng, R. Matthews, W. Miller, W. Thompson  
SOC 4 credits  
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/Summer*

**1010 (142) Social Problems**  
E. Hauser, R. Matthews, W. Miller, E. Mottinger, C. Shoen  
SOC 4 credits  
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/Summer/J-Term*

**1020 (143) Cultural Anthropology**  
M. Somlai 4 credits  
SOC 4 credits  
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 anthropologies in making sense of human difference, experience and complexity.  
*Fall/Spring*

**2040 (204) Sociology of Religion**  
Thompson 4 credits  
RELI 4 credits  
This course explores sociological perspectives and research on religion. The course is focused upon 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.

**2100 (206) The Human Landscape**  
Murphy, Rivera, Sun 4 credits  
SOC 4 credits  
An overview of contemporary themes in cultural/human geography which stresses the changing and changeable relationship between people and the environment. Topics include examination of urban, rural, and suburban landscapes; their functionality; how the human environment describes the culture and its values; the cultural basis for environmental problems; the origin and spread of human culture; human migration and the distribution of population. Listed as Geography 2100 and Sociology 2060.  
*Fall/Spring*

**2270 (227) Juvenile Delinquency**  
R. Matthews, W. Miller 4 credits  
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: Sociology 1000*  
*Fall*

**2520 (252) Marriage and Family**  
Staff 4 credits  
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: Sociology 1000*
2530 (253) Racial and Cultural Minorities
W. Thompson 4 credits
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: Sociology 1000 or permission of the instructor
Fall/Spring

3020 (302) Sociological Research I
Thompson 4 credits SOC
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: Sociology 1000 and junior standing
Fall

3030 Women of Africa
Hauser 4 credits
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; women's participation in the public spheres of their countries.

3110 (311) Deviance
Thompson 4 credits
This course examines deviance as a sociological concept. Students will gain a theoretical understanding of the ways in which has been defined historically, as well as contemporary definitions. Societal reactions, ranging from informal social control to formal control are also examined.
Prerequisite: SOC 1000 or permission from instructor

3120 (312) Elite Deviance
Matthews 4 credits
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 permission from instructor

3240 (324) Logic of Sociological Inquiry
Matthews, Miller, Lyng, Thompson 4 credits
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?).
Prerequisite: Prerequisites: SOC 1000, sophomore or higher standing
Fall

3310 (331) Meditations on the Holocaust
Matthews 4 credits
A broad overview and understanding of the Holocaust from a sociological perspective, this course begins by introducing students to the history of Jews in Europe. Subsequent topics include the following: The Weimar Republic and the rise of fascism in Germany, the political ideology of the Nazis, an overview of the means by which the Holocaust was carried out, and an exploration of selected literature written by Holocaust survivors.

3440 (344) Sociology of Health and Illness
Lyng 4 credits
This course surveys a broad range of issues and topics examined by various health-related fields of study, including medical anthropology, epidemiology, health psychology, and health-care policy analysis. In general terms, the course deals with the study of social factors affecting health and health care systems.
Prerequisite: Prerequisites: Introduction to Sociology (SOC 1000) or consent of instructor

3450 (345) Global Poverty
Hauser 4 credits
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: SOC 1000

3900 (390) Data Analysis
Thompson 4 credits
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 3250, Sociological Inquiry

400T (471) Topics in Sociology
Staff 1-4 credits
A variable content course for advanced students who will study in depth such specific topics as the news media, religion, sociological social psychology, social stratification, social movements, and complex organizations.
Prerequisite: Sociology 1000 or permission of the instructor
Fall/Spring
Mission Statement

The Mission of Carthage College Theatre is to guide, encourage, and cultivate 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. Vital to the liberal arts tradition, a Carthage theatre education enables students to contribute meaningfully to both the world of theatre and the world at-large.

The Carthage Theatre student will:

Examine and present truths pleasant and unpleasant concerning the human condition through theatre.
Recognize and responsibly wield theatre's powers vitality, rooted in the fact that all men and women are inexorably linked through humanity's story;
Engage and master a significant body of knowledge connected to theatre practice performance theory and technique, dramatic literature, stagecraft, and theatre history;
Communicate effectively on-, off-, and backstage, ably engaging texts and people critically and compassionately;
Embrace theatre artistry as a lifelong pursuit rooted in a love of learning and an openness to diverse ideas;
Shape and cultivate his/her faith, values, and philosophy, utilizing theatre as a vehicle for exploration and growth;
Act as an informed and responsive citizen, deploying theatre to seek solutions to problems in the community, the nation, and the world.

Enter the world of theatre, education, or a related field (i.e. any field) as free men and women, committed to and equipped for service and continued growth.

Act as an informed and responsive citizen, deploying theatre to seek solutions to problems in the community, the nation, and the world.

Theatre Major

Core credits

THR 2110 Acting I: Fundamentals of Acting
THR 2900 Play Reading and Analysis
THR 2910 Play Production I: Stagecraft
THR 2920 Play Production II: Costumes and Make-Up

THR 4000 Senior Seminar
THR 4990 Senior Thesis Completion
24 Additional credits:
Eight credits from the following three courses:
THR 2260 History of Pre-Modern Theatre
THR 2270 History of Classical Theatre
THR 2280 History of Modern Theatre
34 additional credits:
THR 0300 Applied Acting and Directing (two 1 credit)

THR 2280 History of Modern Theatre
THR 3100 Voice for the Stage
Dance Minor
CDM/ART Approved CDM or ART topics
CDM 2700 Digital Cinema Production
Four credits of the following:
MUS 0200 Voice (1 cr. repeatable)
MUS 2620 Music Theatre
Two credits of the following:
Total 54 credits
THR 0430 Tap I
THR 0420 Ballet II
THR 0410 Ballet I
Dance Techniques (6 cr.)
Total 52 credits
THR 0440 Jazz I
THR 0450 Jazz II
THR 0460 Ballroom
THR 0480 Advanced Ballet
THR 0047 Modern Dance
THR 0050 Pilates
Foundation credits (10 cr.)
THR 1120 Introduction to Dance & Improvisation
THR 2050 Dance History
THR 2060 Dance Theory and Composition I
THR 2070 Dance Choreography and Repertory
8 Additional Credits Required from the following:
THR 0200 Theatre Lab (repeatable)
THR 200T Topics in Theatre: Dance
BIO 1040 Anatomy and Physiology
MUS 1150 Exploring Music or (MUS 211)
THR 2930 Lighting and Sound
THR 2920 Costume and Make-up
THR/MUS 262 Music Theatre Workshop
Total: 24 credits
Honors in the Major
Please see department chair for details. Basic requirements are listed in the Honors Program section of the catalog
0020 (020) Applied Tech. Production
Staff 1 credit
Students may receive one credit hour for assuming significant responsibility as stage manager, designer, crew chief, assistant director, publicity director or dramaturg of a production. Lab may be repeated if a student has successfully completed one production/design course. Limit: one credit hour per semester or January term. Students will write an outline of goals for the experience and upon completion will write a short self-assessment paper.
Prerequisite: Consent of instructor
Fall/Spring
0030 (030) Applied Acting & Directing
Staff 1 credit
Students may receive one credit hour for assuming significant responsibility for a sizable role in a pre-approved theatre production, or by directing a one-act or full length play for public performance. The actor or director will keep an ongoing log documenting the learning experience and upon completion will write a short self-assessment paper.
Prerequisite: Consent of instructor
Fall/Spring
0041 (041) Applied Dance: Ballet I
A. Hackett 1 credit
Beginning ballet instruction in fundamental movement: positions, barre, ad and floor exercises. Open to all students. Fulfills general education requirement for Exercise & Sports Science experience and is a graded course.
0042 (042) Applied Dance: Ballet II
A. Hackett 1 credit
Continued ballet instruction in floor combinations and beginning allegro and adagio. Fulfills general education requirement for Exercise & Sports Science experience and is a graded course.
0043 (043) Applied Dance: Tap
Staff 1 credit
Beginning tap dance skill in steps at the barre and on the floor. Open to all students. Fulfills general education requirement for Exercise & Sports Science experience and is a graded course.
0044 (044) Applied Dance: Jazz I
Pottinger 1 credit
Beginning jazz dance instruction in a variety of steps and combinations. Develops dance experience for the stage. Open to all students. Fulfills general education requirement for Exercise & Sports Science experience and is a graded course.
0045 (045) Applied Dance: Jazz II
Pottinger 1 credit
Continued jazz dance instruction in a variety of steps and combinations including floor combinations and stylized dances. Fulfills general education requirement for Exercise & Sports Science experience and is a graded course.
Prerequisite: Jazz I or consent of instructor
0046 (046) Applied Dance: Ballroom
F. Mitchell 1 credit
Beginning ballroom dance instruction in swing, waltz, and Latin styles. Open to all students. Fulfills general education requirement for Exercise & Sports Science experience and is a graded course.
0047 (047) Applied Dance: Modern
Pottinger 1 credit
This course offers a form of contemporary theatrical and concert dance employing a special technique for developing the use of the entire body in movements expressive of abstract ideas. Each class begins with a structured warm-up designed to prepare the entire body for full-out moving. Center combinations, turning, partnering, small jumps and leaps, as well as traveling across the floor develop a strong foundation for future study.
Prerequisite: THR 1120 or consent of the instructor

0048 (048) Advanced Ballet
Hackett 1 credit
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
Prerequisite: Ballet II or consent of Instructor

0049 (049) International Dance (Folk Dance)
Ottmann 1 credit
International dance combines the elements of diversity, movement, sound and athletic conditioning. There is an emphasis on muscle conditioning, definition, flexibility, movement and balance. This exercise program is designed to accommodate all fitness levels and encourage even those with little or no dance experience to discover the benefits of international dance.

1100 (112) Introduction to Dance and Improvisation
Pottinger 2 credits
This introductory course surveys the many forms of concert dance in America from vaudeville to today. Through readings and practice, students will discuss and physically experience each genre of dance as well as discuss the cultural context in which it emerged.
Fall

1150 (115) Introduction to Theatre
K. Instenes 4 credits
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

200T (271) Theatre Topics
Staff 1-4 credits
Intensive study of a selected topic, movement, or figure in theatre. Oral and written presentations required.
Prerequisite: THR 1120 or consent of instructor

2010 (201) Oral Interpretation of Literature
Maclay 4 credits
FAR
A study of, and participation in, the techniques employed in translating print narrative into oral communication.
J-Term

2050 (205) Dance History
Pottinger 4 credits
This class will explore American concert dance from the early 1900s until today. By examining key figures in early modern dance through current choreographers, we will discuss socety's impact on the development of American concert dance and the impact of American concert dance on society.
Readings, group discussions, videos, movement exploration, performances, and journaling will be used to reflect upon additional issues associated with American concert dance.
Prerequisite: THR 1120 or consent of Instructor
Spring

2060 (206) Dance Theory and Composition
Pottinger 2 credits
Dance Theory and Composition I is designed to explore the fundamentals of tools and ideas in dance-making. Students will explore a variety of traditional composition tools in dance as well as other art forms and will discuss the fundamentals of reviewing and assessing compositions in performance.
Prerequisite: THR 1120 or consent of the instructor
Spring

2070 (207) Dance Choreography and Repertory
Hackett 2 credits
The class will produce a dance concert to be performed by the class with original work choreographed by each student. Students will document on paper and by video, the entire show concept, personal piece concept, rehearsal process, development, production process, and final performance of an original work.
Prerequisite: THR 1120 or consent of instructor
Spring

2110 (211) Acting I: Fundamentals of Acting
M. McClendon, Maclay 4 credits
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
Fall

2180 (218) Theatre for Children
Maclay 4 credits
FAR
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.
Spring
2260 (226) History of Pre-Modern Theatre
N. Scharnick  4 credits
FAR
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.

2270 (227) History of Classical Theatre
N. Scharnick, M. Carrig  4 credits
FAR
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.

2280 (228) History of Modern Theatre
N. Scharnick  4 credits
FAR
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-nineteenth and twentieth 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.

2620 (262) Music Theater Workshop
C. Ness  0,1 or 2 credits
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. 1 or 2 credits.

2900 (290) Play Reading and Analysis
Scharnick  4 credits
The course will include a critical examination of dramatic literature for the purposes 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: THR 2910 Fall

2910 (291) Play Production I: Stagecrafts
Newcomb  4 credits
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. Fall and Spring

2920 (292) Play Production II: Costuming and Makeup
K. Instenes  4 credits
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. Fall and Spring

2930 (293) Play Production III: Stage Lighting
M. McClendon  2 credits
This course introduces students to the basic technology of theatrical stage lighting. Students will learn the fundamentals of lighting instrument identification and use, as well as how to hang, focus, and operate the theatre lighting system. Students will be involved directly with Carthage theatre productions. Lecture and laboratory. Prerequisite: THR 2910

2940 (294) Play Production IV: Scenic Painting
M. McClendon  2 credits
An introductory scenic painting course introducing 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. Lecture and laboratory. Prerequisite: THR 2910

3000 (300) Playwriting
L. Jacqmin  4 credits
In this workshop, students examine great plays of the twentieth century in order to develop a deeper understanding of the playwrights craft. Students then develop their own writing skills by creating an original dramatic work. Prerequisite: Junior or Senior Standing Every other Spring

3100 (310) Voice for the Stage
Maclay  4 credits
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. Offered every other year. Prerequisite: THR 2110 or instructor consent

3110 (311) Acting II: Character and Scene Study
H. Kruger  4 credits
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 Spring
3400 (340) Music Theater History
C. Ness 4 credits
An exploration of how drama, art, movement, and music combine into the "spectacular" form of Music Theater. Students survey and study a variety of works from Music Theater's operatic beginnings through present day "patchwork" rock shows. We will attend at least four live productions. Ticket fee.
Fall

400T (471) Theatre Topics
Staff 4 credits
Intensive study of a selected topic, movement, or figure in theatre. Oral and written presentations required.

4010 (401) Senior Seminar in Theatre
N. Scharnick 4 credits
A guided preparation and revision process for the completion of a Senior Thesis or Senior Project.

4110 (411) Acting III: Periods and Styles
L. Gordon 4 credits
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.
Prerequisite: THR 3110
Fall

4200 (420) Methods and Materials in Teaching Theatre
Skonzert 4 credits
A study of theatre teaching methods and instructional materials. Special attention is given to the selection and organization of subject matter and learning activities. Field work required.

4550 (455) Directing
H. Kruger 4 credits
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, 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

4990 Senior Thesis Completion
Staff 0 credits
Students should register for THR 4990 during the semester they intend to complete their senior thesis.

50 Pilates
Mitchell 1 credit
In this course students will be given instruction in fundamental Pilates Mat exercises focusing on coordination, posture, body awareness, and strength. The specific approach designed for this course will emphasize neutral spine and proper pelvic alignment to improve core stability and overall health. Open to all students.

Women's and Gender Studies
A minor in Women's and Gender Studies is a cross-disciplinary course of study that addresses the way gender functions in society. At the same time it seeks to fill gaps in all of the traditional disciplines where women have been omitted.

The minor in Women's and Gender Studies Studies at Carthage introduces students at the undergraduate level to some of the most important ways in which the study of gender has been transforming knowledge across academic disciplines. It also seeks to address the imbalance in research that has prejudiced our understanding of humanity, assuming men to be the only protagonists in our human story, and neglecting the study of women.

The program presents students with new knowledge that enlivens, challenges, and contributes to all academic disciplines as well as to the personal growth of each individual. It promotes critical thinking, a love of learning, and effective communication skills. A minor in Women's and Gender Studies is a strong selling point in an age where companies increasingly require their employees to be conversant on issues relating to diversity and tolerance and for any career demanding synthetic and creative critical thinking skills.

The minor consists of five courses (18 credits): three required (WMG 1100, WMG 3110, WMG 4090) and two electives.

1100 (110) Introduction to Women's &Gender Studies
Staff 4 credits
This course will begin by drawing a distinction between biology (the body) and current theories of gender (culture and biology). Leaving the definition of sexuality unresolved (because irresolvable), the course, using a variety of disciplinary approaches, concentrates on Western cultures interpretations of Woman and Man as cultural symbols.
Fall

200T (271) Topics in Women's Gender Studies
Staff 1-4 credits
Course Descriptions will vary according to the topic. Courses prepare students to wrestle with the nature of truth by allowing for examination of the role of women's experience or gender within that exploration. They encourage gender-related questioning of canonical knowledge, and equip students to re-examine assumptions of the discipline or broader culture through such lenses as race, ethnicity, sexual orientation, class, and age.

3110 (311) Women's and Gender Studies Theory
Staff 4 credits
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). We 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.
Prerequisite: There are no prerequisites for this course. However, for minors, it is recommended that students first take Introduction to Women's and Gender Studies, then their elective credits, then this course.
400T Topic in Women's & Gender Studies
Staff 1-4 credits
Course Descriptions will vary according to the topic. Courses prepare students to wrestle with the nature of truth by allowing for examination of the role of women's experience or gender within that exploration. They encourage gender-related questioning of canonical knowledge, and equip students to re-examine assumptions of the discipline or broader culture through such lenses as race, ethnicity, sexual orientation, class, and age.

4010 Senior Seminar
Staff 4 credits
A member of those who teach in Women's and Gender Studies will teach and direct student thesis/projects, with the assistance of others who teach in WMG. The seminar will lead the student toward the completion of the Senior Thesis/Project, the topic of which will be determined by the student and directing professor.

4090 (409) Capstone Course
Staff 2 credits
The WMG Capstone course is a two-credit experience, in which the students may choose to pursue any field related to issues addressed in any of the four previous courses they have taken and pursue the learning experience a step further. The student may choose to express this advanced stage of learning in a variety of ways, including a research project, practicum, internships, or other method proposed by the student. Capstone projects will be arranged as independent studies or as scheduled courses, depending on demand.
Graduate Academic Program of Study

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. All courses meet Wisconsin teacher licensure requirements in selected areas and carry Wisconsin Department of Public Instruction (DPI) program approval.

After admission to the graduate school, an individualized program of study will be developed by the student and advisor. A Program of Studies (POS) form must be completed and submitted to the graduate school. The program consists of 36 credits of course work. Master's Thesis EDU 550 or EDU 531, 532 or EDU 549 Integrative Seminar may be included in the 36 credits of course work. Individuals are required to enroll in courses at the 300 level or above. No continuing education credits will be counted toward a Master's Degree. The graduate program will accept no more than 12 transfer credits earned at Carthage within the past 5 years prior to the filing of a program of study.

Master of Education Core classes

Required courses for all areas of concentration

EDU 5060 Foundations of Education 2 cr.
EDU 5240 Qualitative Research 3 cr.
EDU 5250 Quantitative Research 3 cr.
EDU 5490 Integrative Project 4 cr.
OR
EDU 5500 Master's Thesis 4 cr.

Track Options

Carthage offers three track options that lead to licensure as well as a track option designed to help teachers enhance their skills.

Track I: Contemporary Issues in the Classroom

Required Courses

EDU 4020G Guidance and Counseling 4 cr.
EDU 5060 Foundations of Education 2 cr.
EDU 5240 Qualitative Methods in Educational Research 3 cr.
EDU 5250 Quantitative Methods in Educational Research 3 cr.

Suggested Courses

EDU 5180 Mental Hygiene 4 cr.
EDU 5210 Sex Education 4 cr.
EDU 5170 Ethics in Teaching 4 cr.

SWK 4250 Topics: Family Dysfunction: The Child 2 cr.
SWK 3400 Topics: Fundamental Aspects of AODA 2 cr.
SWK 3400 Topics: Special Issues in AODA 2 cr.

Required Culminating Experience

EDU 5500 Master's Thesis 4 cr.
OR
EDU 5490 Integrative Graduate Project 4 cr.

Track II: Classroom Management

Required Courses

EDU 4020G Guidance and Counseling 4 cr.
EDU 5060 Foundations of Education 2 cr.
EDU 5240 Qualitative Methods in Educational Research 3 cr.
EDU 5250 Quantitative Methods in Educational Research 3 cr.

Suggested Courses

EDU 5080 Behavior Management for Classroom 4 cr.
EDU 5170 Ethics in Teaching 4 cr.
EDU 5180 Mental Hygiene 4 cr.
EDU 5190 Teaching in a Multi-Cultural Classroom 4 cr.
EDU 5220 Teachers Helping Troubled Youth 4 cr.
PYC 3500 Counseling and Psychotherapy 4 cr.

Required Culminating Experience

EDU 5500 Master's Thesis 4 cr.
OR
EDU 5490 Integrative Graduate Project 4 cr.

Education Administration Program

Developed by a team of administrators from Kenosha Unified School District and Racine Unified School District and the Carthage education department, the administration concentration prepares educators for leadership roles as building principals in the K-12 setting. The course work focuses on site-based management, school law, school finance and leadership development. Eligible candidates must hold a valid education license or be licensed as a school counselor, school psychologist or a school social worker and have at least three years and 540 hours of successful experience in these areas. The programs capstone course is the seminar and practicum in field experience as a principal, which will be the foundation for the master's thesis. The program can be completed in two years by taking two courses per term. Students who already possess a master's degree and who wish to gain the Wisconsin Principal #51 license will need to complete the required courses only. No culmination experience or research courses will be required.

Required Courses (Department of Public Instruction approved curriculum)

EDU 5000 School Law 4 cr.
EDU 5010 Organizational Management 4 cr.
in Education
EDU 5020 School Finance 4 cr.
EDU 5030 Evidence-Based Decision Making 4 cr.
EDU 5040 School Principalship Practicum 4 cr.
EDU 5110 Curricular Issues 4 cr.
EDU 5160 Professionalism and Leadership 4 cr.

Required Courses to complete a Master's Degree

EDU 5060 Foundations of Education 2 cr.
EDU 5240 Qualitative Methods in Educational Research 3 cr.
EDU 5250 Quantitative Methods in Educational Research 3 cr.
EDU 5500 Master's Thesis 4 cr.
OR
EDU 5490 Integrative Graduate Project 4 cr.

Gifted and Talented Program

The Carthage gifted and talented concentration prepares teachers to satisfy the needs of the gifted and talented students in their regular classrooms. The course concentration explores learning strategies and curriculum modification for the gifted child. Additionally, teachers may acquire depth of study in an academic discipline. Offered during the summer months, the program is designed to accommodate the professional educator's schedule. The program exceeds Illinois endorsement requirements, and is the only one of its kind in southeastern Wisconsin and northern Illinois.

Required Courses

EDU 5060 Foundations of Education 2 cr.
EDU 5240 Qualitative Methods in Educational Research 3 cr.
EDU 5250 Quantitative Methods in Educational Research 3 cr.
EDU 5260 Problem Solving and Creativity 4 cr.
EDU 5270 Instructional Strategies 4 cr.
EDU 5460 Curriculum Modification for Gifted & Talented Children 4 cr.
EDU 5470 Practicum for Teachers of Gifted & Talented Children 4 cr.
EDU 5480 Seminar in Gifted and Talented Education 4 cr.
## Required Courses

- EDU 5060 Foundations of Education 2 cr.
- EDU 5240 Qualitative Methods in Educational Research 3 cr.
- EDU 5250 Quantitative Methods 3 cr.
- EDU 3540 Language Arts in Middle/Secondary School 4 cr.
- EDU 5230 Readings & Research in Childrens and Young Adult Literature 4 cr.
- EDU 5410 Curriculum & Instruction in Reading K-12 4 cr.
- 3 courses from the following:
  - ENG 3040 Advanced Writing 4 cr.
  - ENG 3070 Film and Literature 4 cr.
  - ENG 3090 Literatures of Diversity 4 cr.
  - ENG 3100 Literature and Gender 4 cr.
  - ENG 3140 Literary Genres 4 cr.
  - ENG 3750 History & Structure of English Language 4 cr.
  - ENG 4400 Independent Study 4 cr.
- EDU 5500 Master's Thesis 4 cr.
- OR
  - EDU 5490 Integrative Graduate Project 4 cr.

## Leadership in Teaching

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 course work on curriculum issues, assessment, professionalism and action research enables teacher to develop professionally as the educational environment continues to change. Participants can complete the leadership in teaching program in two years by taking two courses per term. The programs elective course options allow teachers to complete course work for an additional license or further professional development.

### Required Courses

- EDU 5060 Foundations of Education 2 cr.
- EDU 5110 Curricular Issues 4 cr.
- EDU 5240 Qualitative Methods in Educational Research 3 cr.
- EDU 5250 Quantitative Methods in Educational Research 3 cr.

### Suggested Elective Courses

- EDU 5120 Urban Issues in Education 4 cr.
- EDU 5130 Methods & Materials in Urban Education 4 cr.
- EDU 5140 Development of Curricula 4 cr.
- EDU 5150 Student Achievement & Learning 4 cr.
- EDU 5160 Professionalism & Leadership in Today's Schools 4 cr.

### Required Culminating Experience

- EDU 5500 Master's Thesis 4 cr.
- OR
  - EDU 5490 Integrative Graduate Project 4 cr.

## Wisconsin Reading Teacher Licensure K-12 (#316)

To earn the #316 Reading Teacher license, the student must receive the institutional endorsement for the license and meet all the following requirements:

1. Students must be eligible to hold a Wisconsin license to teach or complete an approved teacher education program.
2. Have two years of successful regular classroom teaching experience.
3. Complete four courses, with at least 12 credits earned, beyond the bachelor's degree. The four courses shall include a practicum in teaching reading at the elementary level and at the middle/secondary level.

In addition, students must complete and maintain a high standard of performance in all course work and program requirements in the following areas:

- Development reading K-12
- Assessment and instructional techniques for readers with special needs
- Language development
- Content area reading
- Literature for children or adolescents

To achieve the required 18 credits for this licensing program, students may apply up to six credits in the study of reading at the undergraduate level. The program requires all teachers seeking #316 licensure to apply to the graduate program and to schedule an appointment with the Director of the Reading Program at the beginning of the course work. Completion of the Miller Analogies Test is not required for #316 licenses candidates unless they also are pursuing a masters degree.

## Wisconsin Reading Specialist Licensure K-12 (#317)

To earn the Reading Specialist license, a student must complete an approved program, receive the institutional endorsement and meet all of the following requirements:

1. Be eligible to hold a Wisconsin Reading Teacher license #316.
2. Maintain a high standard of performance in all course work and program requirements
3. Have a master's degree with an emphasis in reading with a minimum of 15 graduate-semester credits, including course work in:
   - Guiding and directing the K-12 reading programs
   - Field experience in guiding and directing K-12 reading programs
   - Research relating to reading
Required Courses

Content area reading for the reading specialist Wisconsin D.P.I. Approved #316 Curriculum

EDU 5230  
Readings and Research in Children's and Young Adult Literature 4 cr.

EDU 5410  
Curriculum and Instruction in Reading K-12 4 cr.

EDU 5420  
Diagnostic and Remediation Techniques for Reading Disabilities K-12 4 cr.

EDU 5430  
Practicum in Reading Disabilities K-12 4 cr.

Wisconsin D.P.I. Approved #317 Curriculum

Students must complete all #316 requirements as well as all master's degree requirements. In addition, students must complete the following required courses:

Required Courses

EDU 5340 Psycholinguistics and Developing Effective Readers in Content Areas K-12 4 cr.

EDU 5350 Seminar in Reading Research 4 cr.

EDU 5360 Supervision, Administration, Guiding, and Directing Reading Programs K-12 4 cr.

EDU 5370 Field Experience in Supervision 2 cr.

Accelerated Certification for Teachers and Masters Program

Accelerated Certification for Teachers offers programs leading to certification in areas such as: Cross-Categorical Special Education and a full range of Secondary Education areas; Math, Science, History, Music, Physical Education, Biology, Chemistry, Business Education, Economics, English, French, Geography, Political Science, Sociology, Spanish, Speech Communications, and Theater.

Upon completion of the Accelerated Certification for Teachers program, participants are approximately 12 credits away from earning a master of education.

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 Adult Education Office or Education Department.
- 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. 3.0 G.P.A. in all courses taken.
  2. A record demonstrating the completion of a bachelor's or advanced degree from an accredited institution.
  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.

Secondary Teachers

First Summer Session

EDU 5130 Methods and Materials in Urban Education 4 cr.
EDU 5520 Learning and Reading in Secondary Schools 4 cr.
EDU 3570 Classroom Management for Secondary Teachers 4 cr.

Fall and Spring

Clinical Experience at the Sponsoring School
EDU 3560 Field Placement Fall & Spring 8 cr.
EDU 4100 Methods for Teaching Mildly Cognitive Disabled 3 cr.
EDU 400T TP: Seminar/Portfolio Fall & Spring 4 cr.

Second Summer Session

EDU 4450 Methods for Teaching Emotionally Disturbed Children 3 cr.
EDU 5190 Teaching in a Multi-Cultural Classroom 4 cr.
EDU 5090 Conflict Resolution 4 cr.
Total: 37 cr.

Carthage Master's Program

Special Education Teachers

First Summer Session

EDU 5130 Methods and Materials in Urban Education 4 cr.
EDU 5520 Learning and Reading in Secondary School 4 cr.
EDU 4330 Methods of Teaching Learning-Disabled Children 3 cr.

Fall and Spring

Clinical Experience at the Sponsoring School
EDU 3560 Field Placement Fall & Spring 8 cr.
EDU 4100 Methods for Teaching Mildly Cognitive Disabled 3 cr.
EDU 400T TP: Seminar/Portfolio Fall & Spring 4 cr.

Second Summer Session

EDU 5150 Student Achievement and Learning 4 cr.
EDU 5190 Teaching in a Multi-Cultural Classroom 4 cr.
EDU 5090 Conflict Resolution 4 cr.
Total: 40 credits

OR

Graduate Academic Program of Study

3650 (365) Field Placement
Staff 4 credits
This course provides students an opportunity to practice and refine their skills in a naturalistic setting. Faculty will provide class supervision and ongoing feedback.

4020 (402) Guidance and Counseling
Staff 4 credits
This course introduces students to the role and function of the counselor. It explains the purpose and nature of counseling in a variety of professional settings.

4330 (433) Methods of Teaching Learning-Disabled Children
Staff 3 credits
A study of methods and materials for teaching learning disabled children in the elementary schools. Emphasis will be placed on evaluating materials and teaching methodologies; operating self-contained classrooms, resource rooms and mainstreamed classrooms; consulting teaching models; and working with parents, schools and community personnel. Field work is required.

4410 (441) Methods of Teaching Mildly Cognitively Disabled
Staff 3 credits

4450 (445) Methods and Technology for Teaching Emotionally Disturbed Adolescents
Staff 3 credits
Students will develop coordinated materials, procedures and assessment tactics for teaching B/ED adolescents at all levels. These procedures and tactics will include computer-assisted programs (e.g., CAI, enrichment programs for reinforcement). Also, IEPs and lesson plans will be developed that include behavior analysis, teaching procedures, assessment tactics and data collection procedures so that empirical evaluations of teaching efficacy can be made.

5000 (500) School Law
Staff 4 credits
A review of laws which 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.

5010 (501) Organizational Management in Educational Settings
Staff 4 credits
The analysis of human behavior in organizations in terms of the individual, small group, inter-group relationships, and the total organization. Includes change management process and interventions.

5020 (502) School Finance
Staff 4 credits
Financing and reporting from a budgeting and managerial decision-making perspective.

5030 (503) Evidenced-Based Decision-Making
Staff 4 credits
Data analysis, statistical models, estimation, tests or hypotheses, review of qualitative and quantitative data, score comparisons and analyses including item analyses, processes of building achievable goals related to data, 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.

5040 (504) School Principalship
Staff 4 credits
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 masters 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.

5060 (506) Foundations in Education
Staff 2 credits
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 the course is to provide teachers with the background needed to understand confronting the U.S. educational system.

5080 (508) Behavior Management for Classroom Teachers
Staff 4 credits
A study of the methods and techniques involved in organized behavior management program in school settings. Emphasis is placed on the role of the teacher in relationship to children with special needs.

5090 (509) Conflict Resolution
Staff 4 credits
Learn to use various forms of conflict resolution in association with students, parents and colleagues. The course assists in training student mediators in methods of resolving conflict between other students.

5110 (511) Curricular Issues
Staff 4 credits
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.

5120 (512) Urban Issues in Education
Staff 4 credits
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 illegal aliens, living conditions in urban settings and how it might impact education, parental and community support and empowering students from urban settings.

5130 (513) Methods and Materials in Urban Education
Staff 4 credits
This practical approach to education in urban settings will include the use of methods and materials and pedagogical strategies designed for instructing culturally diverse groups 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.
5140 (514) Development of Curricula
Staff 4 credits
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. 
Prerequisite: EDU 5110

5150 (515) Student Achievement and Learning
Staff 4 credits
This study of the cognitive strategies students employ while learning gives attention to current trends, such as the role of multiple intelligences, brain adaptations and development of high-level thinking skills. Special emphasis is placed on development of practical classroom techniques employing a peer coaching model.

5160 (516) Professionalism and Leadership in Today's Schools
Staff 4 credits
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.

5170 (517) Ethics in Teaching
Staff 4 credits
An exploration of the role of ethics in making professional decisions. Participants are introduced to concepts of ethical decision-making, different normative points of view and the application of ethical decision-making in elementary, secondary and post-secondary settings.

5180 (518) Mental Hygiene
Staff 4 credits
A course designed to promote understanding, awareness and acceptance of both yourself and others. The course borrows mainly from cognitive therapy. Material discussed is useful in dealing with daily problems and stress. The format primarily is reading, discussion and group activities.

5190 (519) Teaching in a Multi-Cultural Classroom
Staff 4 credits
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.

5200 (520) Sex Education
Staff 4 credits
A study of the biology, physiology of sex, sexuality and human behavior. Additional emphasis is placed upon broadening understanding and acceptance of the varieties of forms of sexual expression that exist among and between people.

5210 (521) Sex Education
Staff 4 credits
A study of the biology, physiology of sex, sexuality and human behavior. Additional emphasis is placed upon broadening understanding and acceptance of the varieties of forms of sexual expression that exist among and between people.

5220 (522) Teachers Helping Troubled Youth
Staff 4 credits
A study of the methods and techniques involved in organized behavioral management programs in school settings. Emphasis is placed on the role of the teacher in relationship to children with special needs. In addition, the procedures learned in the class will enhance one's everyday living skills for a more positive well-being.

5230 (523) Readings and Research in Children's and Young Adult Literature
Staff 4 credits
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, trends in children's and young adult literature as a part of the total body of literature and as an educational force and current research in the field.

5240 (524) Qualitative Methods in Educational Research
Staff 3 credits
This 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.

5250 (525) Quantitative Methods in Educational Research
Staff 3 credits
This 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.

5260 (526) Problem Solving and Creativity
Staff 4 credits
This course provides teachers with theories and definitions of creativity, creative problem-solving strategies, questioning skills, and activities that challenge students to interact with the world in new, unusual and mind-opening ways.

5270 (527) Instructional Strategies
Staff 4 credits
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.

5310 (531) Introduction to Action Research
Staff 2 credits
The proposal that was developed in the research course is expanded into the development of a classroom action research project. Data collection techniques that can be applied in an authentic classroom are studied and practiced. Students write the introduction and methods sections for their classroom action research projects. Opportunities for peer editing and coaching are provided. 
Prerequisite: EDU5300

5320 (532) Action Research and Assessment
Staff 2 credits
Students conduct their classroom action research project, collect and analyze data, and continue the literature review. Opportunities for peer editing and interpretation of results are available. 
Prerequisite: EDU 5300
5340 (340) Psycholinguistics and Developing Effective Readers in Content
Staff 4 credits
This course focuses on research in psycholinguistics, metacognition, interactive model theories, language learning and their application to the reading curricula in elementary and junior/middle/high schools. 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.

5350 (350) Seminar in Reading Research
Staff 4 credits
A critical analysis of recent research and professional literature relevant to 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.

5360 (356) Supervision, Administration, Guiding, and Directing Reading Programs K-12
Staff 4 credits
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 programs. Students will examine the responsibilities of staff development leader, researcher, diagnostician, and facilitator of individual needs programs. Prerequisite: 10-14 credits in graduate reading courses

5370 (357) Field Experience in Supervision, Administration, Guiding K-12, and Directing Reading Programs
Staff 4 credits
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, scope and sequence of reading skills in EDU 5360. Prerequisite: EDU 5360

5410 (410) Curriculum and Instruction in Reading K-12
Staff 4 credits
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. Analyses of recent trends and theories in reading instruction are included, such as interactive models, cognitive processes, development of word recognition competence, improvement in reading comprehension, and content area reading instruction. Prerequisite: Undergraduate reading methods classes

5420 (542) Diagnostic and Remediation Techniques for Reading Disabilities K-12
Staff 4 credits
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.

5430 (430) Practicum A &B in Reading Disabilities K-12
Staff 4 credits
This course provides college-supervised clinical or laboratory practicum, including experience at the elementary level and at 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. Prerequisite: EDU 5420

5460 (546) Curriculum Modification for Gifted and Talented Children
Staff 4 credits
This course provides an overview of the historical development and current trends in providing programs and learning materials for gifted pupils in K-12. Field work required.

5470 (547) Practicum for Teachers of Gifted and Talented Children
Staff 4 credits
Students learn to plan, promote and implement a two-week summer school program for gifted and talented children. Participants build community awareness by presenting the program to various local groups. This is a culmination course taken at the end of the graduate program.

5480 (548) Seminar in Gifted and Talented Education
Staff 4 credits
Students discuss current issues and areas of concern in gifted education, review current literature and evaluate program models in gifted and talented education. It requires methods for implementing these models into the participant's classroom. Prerequisite: Acceptance into the Master of Education program

5490 (549) Integrative Graduate Project
Staff 4 credits
This capstone seminar guides and supports students in completing an Integrative Graduate Project that exhibits their ability to conceptualize a problem in education, engage in a thorough literature review and construct conclusions and implications that extend the knowledge base.

5500 (550) Master's Thesis
Staff 4 credits
This course is taken by thesis writers to aid in the development and execution of this major research paper. Graduate candidates arrange this course with their advisor.
Admissions

Application Procedures for Part-time Students

Admission to Carthage

Freshman Entrance Requirements

Early Review/Early Notification (EREN) Program

Early Admission

Advanced Placement

GED Applicants

International Students

Transfer Students

Admission to the Graduate Program

Application Procedures for Part-time Students

Prospective students considering part-time study (less than 12 credits) may choose from a variety of day or evening courses. Full-time students apply through the Office of Admissions. Part-time students apply through Adult Education.

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, a non-refundable $10 application fee, and official college transcripts of all prior college coursework. Students who have never attended college must submit official high school transcripts.

Non-Degree Seeking: Applicants who do not plan to earn a degree, but wish to take courses for personal or professional enrichment should apply for non-degree status. To apply for non-degree status, submit an application and the non-refundable $10 application fee. High school/college transcripts are not required.

Admission to Carthage

Carthage offers educational opportunities for full-time or part-time students in both undergraduate and graduate programs. Complete information and applications may be obtained by calling the Office of Admissions at 262-551-6000 or 800-351-4058, or by contacting the office in person or by mail:

Office of Admissions
Carthage
2001 Alford Park Drive
Kenosha, Wis. 53140-1994

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 pre-arranged, 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 immediately reviewed upon completion. High school seniors who wish to enter Carthage during the Fall Term are strongly encouraged to apply by December of their senior year. A nonrefundable application fee of $35 must accompany the application. A waiver of this fee is possible if the applicant demonstrates financial limitation and submits the College Board application fee waiver, usually sent by the student's high school guidance office. The application fee also is waived for children and grandchildren of Carthage alumni.

Freshman Entrance Requirements

During the evaluation process, admissions representatives consider all aspects of a student's academic background. Primary emphasis focuses on the secondary school record, including the number and nature of courses completed, grade point average in academic courses, rank in class, and scores from the ACT (American College Testing program) or the SAT I (Scholastic Assessment Testing program). Carthage will accept these scores from your official high school transcript.

Students graduating from an accredited secondary school with a strong college preparatory background are best prepared for academics at Carthage. The College strongly recommends that students complete a minimum of 16 academic units in high school, including English, foreign language, science, mathematics, and social studies.

High school students should submit the following when applying for admission: (1) a completed application; (2) an official high school transcript; (3) official results from the SAT or ACT Program; and (4) a $35 application fee.

All freshman applicants are encouraged to apply by December 3 of their senior year in high school.

Early Review/Early Notification (EREN) Program

Students who have completed three years of high school may apply early for admission under the EREN program. Applications must be received by mid-July and students are notified of their admission status in late September.

Applications, transcripts, and other credentials become part of the permanent file of the College and may not be returned or forwarded.

Once a student has been admitted to Carthage, an advance payment of $300 is requested to hold a place in the entering class. For students starting in the Fall Term, this deposit is completely refundable up to May 1 of the initial year of attendance. The deposit is non-refundable 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 Registrar's Office.

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.

**Art History**: 4 credits in ART 1700 (Introduction to Art History).

**Biology**: 4 credits in BIO 11010 (Concepts in Biology).

**Calculus AB** (subgrade): 4 credits in MTH 1120 (Calculus I).

**Calculus AB**: 4 credits in MTH 1120 (Calculus I) with score of 3 or 4. (See department for score of 5).

**Calculus BC**: 8 credits in MTH 1120 and 1130 (Calculus I and II) with score of 5.

4 credits in MTH 1120 (Calculus I) with score of 3 or 4. (See department for scores of 4).

**Chemistry**: 4 credits in CHM 1010 (General Chemistry).

**Computer Science A**: Submit scores and booklet for departmental review.

**Computer Science AB**: Submit scores and booklet for departmental review.

**Macroeconomics**: 4 credits in ECN 1020 (Principles of Macroeconomics).

**Microeconomics**: 4 credits in ECN 1010 (Principles of Microeconomics).

**English Language**: 4 credits in English (elective).

**English Literature**: 4 credits in ENG 1060 (Interpreting Literature).

**Environmental Science**: 4 credits in GEO 2400 (Environmental Geog: Working with the Earth).

**European History**: 4 credits in HIS 1120 (Issues in European History II).

**French Language/Literature**: Placement indicator at Carthage College required.

**German Language**: Placement indicator at Carthage College required.


**Government & Politics**: Comparative: 4 credits in POL 1030 (Introduction to Comparative Politics).

Human Geography: 4 credits in GEO 1500 (Introduction to Geography).

Latin: Placement indicator at Carthage College required.

**Music Theory** (Aural): 1 credit in MUS 1020 (Aural Skills I).

**Music Theory** (Non-Aural): 3 credits in MUS 1010 (Music Theory I).

**Physics B**: Submit scores and booklet for departmental review. Score of 4 or 5 required.

**Physics C (Electricity/Magnetism)**: Submit scores and booklet for departmental review. Score of 4 or 5 required.

**Physics C (Mechanics)**: Submit scores and booklet for departmental review. Score of 4 or 5 required.

**Psychology**: 4 credits in PYC 1500 (Introduction to Psychology) with score of 4 or 5.

**Spanish Language/Literature**: Placement indicator at Carthage College required.

**Statistics**: 4 credits in MTH 1050 (Elementary Statistics).

**Studio Art/Drawing**: Submit scores and booklet for departmental review.

**U.S. History**: 4 credits in HIS 1000 (Issues in American History).

**World History**: 4 elective credits in Asian History.

**International Baccalaureate**

The International Baccalaureate (IB) is an internationally-recognized program that enables students to follow a special curriculum and take specific examinations to fulfill secondary school graduation requirements. The IB diploma program is recognized by Carthage for purposes of admission, course credit, and advanced standing or placement. These examinations are given in high schools that have the IB program. Credit is based on a review of the candidate's IB program. Credit may be given for scores of 4 or higher in selected Higher Level examinations.

**GED Applicants**

Students having completed the 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 secondary school transcript, international students must demonstrate proficiency in the English language, as indicated by the TOEFL (Test of English as a Foreign Language). Preference is given to international students who score at least 500 on the TOEFL, or have completed Level 109 at an ELS Language Center. For secondary school transcripts in a language other than English, English translations are required. A non-refundable fee of $40 must accompany the application. The I-20 form is issued once a student has been admitted to the College. 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 Educational Credential Evaluators, Inc. (ECE). The College will use the evaluation to make an admission decision.

**Transfer Students**

A student who has completed course work at other collegiate institutions is welcome to transfer to Carthage. Students wishing to transfer college credits to Carthage may do so by contacting the appropriate office. Students wishing to take 12 or more credits in the term, should contact the Office of Admissions. Students wishing to take 11 or fewer credits in the term, should contact Adult Education. After admission and acceptance to the College, official evaluations will be completed by the Registrar's Office only when official transcripts from all previously attended collegiate institutions are received.

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 course work and each previously attended college/university; and (4) the $35 application fee.

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.

Credits from a junior college cannot be transferred if earned after a student has accumulated half of the number of credits needed for a bachelor's degree at Carthage (69 credits). Students holding an Associate of Arts degree from an accredited junior
college receive automatic junior class standing when they transfer to Carthage.

Credits will be transferred 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.

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, the results of a recent Miller Analogies Test, three letters of recommendation, and have an interview with the director of the Graduate Program. A nonrefundable application fee of $25 must accompany the application.
Tuition and Fees

Carthage Student Fees
Advance Payments
Billing Procedures

2010-2011 Undergraduate Tuition and Fees
Late Payment Fees
2010-2011 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 17 credit hours during each of the Fall and Spring Terms and up to four (4) credit hours during the January Term; and charges for a double room and standard meal board plan for resident students. For the 2010 - 2011 academic year, the comprehensive fee is $29,750 for commuting students and $37,900 for resident students.

All full-time students who are not living at home must reside in a College residence hall and eat their meals at the College dining hall, unless other arrangements have been made specifically with the College administration.

Advance Payments
Carthage requires all new, full-time students to make a $300 advance payment to confirm their enrollment at the College. This advance payment is fully refundable through the Office of Admissions, if requested in writing on or before May 1. After May 1, this advance payment will be credited to a student's account but will be forfeited to the College by any student who fails to register for the Fall Term.

Returning students will have an opportunity to register for the Fall Term during the prior Spring Term. This registration process gives returning students preference in the selection of classes, as registration for new students does not begin until the close of this registration period. Commuting and resident students must submit a $300 advance payment to complete the registration process. These fees are fully refundable until June 1, and refund requests must be made in writing through the Business Office. After June 1, this advance payment will be credited to the student's account, but will be forfeited to the College by any student who fails to complete registration for the Fall Term.

Returning students electing not to sign up for classes or a room assignment during the appropriate period in the spring will be allowed to register for classes and/or a room at any time until mid-August with the appropriate registration payment. However, the selection of classes, rooms, or roommates may be severely limited.

Billing Procedures
College policy requires payment of all charges to be received prior to the start of classes, unless arrangements for a budget payment plan have been completed. In May, all returning and newly admitted students are billed for tuition plus room and board, where applicable, for a full academic year. No payment is required immediately, but each student may select a payment program with as many as 11 or as few as one scheduled payments during the academic year.

Financial aid will be applied to student accounts in essentially equal amounts during the Fall and Spring Terms.

Students registering for only one term will be responsible for the advance payment plus the appropriate charge for the term attended.

2010-2011 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 2010-2011 academic year:

<table>
<thead>
<tr>
<th>Description</th>
<th>Annual Per Fee Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time Tuition (12-17 credits per semester plus J-Term)</td>
<td>$29,750 / $15,800</td>
</tr>
<tr>
<td>Residence Fee (Double Room and 10 meals per week plus 65 flexible meals)</td>
<td>$8,150 / $4,300</td>
</tr>
<tr>
<td>Total fee</td>
<td>$37,900 / $20,100</td>
</tr>
</tbody>
</table>

Late Payment Fees
A $150 late registration fee will be assessed to any full-time student failing to complete the registration process during the scheduled period. Regardless of the date of registration, the $300 advance payment will be required to complete the registration process.

Carthage does not charge interest on student accounts if payments are received as scheduled. However, the College will charge a fee for late receipt of a scheduled payment. The late fee is equal to 1% per month of the past due balance.

2010-2011 Graduate Tuition and Fees
Tuition: Full-time per term (12 to 17 credits, excludes J-Term) $14,875
Tuition: Summer Session (per credit hour) $420
Tuition: Part-time (per credit hour) $420
Application fee (full-time) $35
Master's degree graduation fee $20

Carthage reserves the right to change the amount charged for tuition or related fees at any time without prior notification.

Fees for Optional Services
Overload fee (per credit hour) $420
Tuition: Part-time day students (per credit hour) $420
Tuition: Part-time evening students (per credit hour, maximum 11 credit hours) $420
Tuition: Accelerated Program (per credit hour) $375

Resident student parking permit $55 - 900 per academic year
Full-time Summer Session (7 weeks) 12 credits $5,300
Summer Session Residence fee (100 meals) $2,300
Summer day school tuition (part-time per credit hour) $420
Summer evening school tuition (per credit hour) $420
Summer Pre-Session (Day) tuition (per credit hour) $420

Carthage 2010-2011 Catalog 127
Refund Schedule

2010-2011 Academic Year refunds 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 the Dean of Students, the Office of the Registrar, or the Business Office. The official date of withdrawal will be earliest of: the date the student appears in person at the Program Director's office 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 sixty percent (60%) of the entire program. After 60% of the program has elapsed, no program tuition will be refunded and one hundred percent (100%) of the scholarship and loan awards will be credited to the student account.

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 $18.23 per day multiplied by the number of board days remaining between the official withdrawal date, and the last day of the final examination period.

Tuition and Audit Fee Refunds

Refunds are based upon the percentage of the term which 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 SIXTY PERCENT (60) 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 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 2010-2011 cohort is $14,600, 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 director, Paul Zavada. The official date of withdrawal will be the earliest of: the date the student appears in person at the Program Director's office 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 sixty percent (60%) of the entire program. After 60% of the program has elapsed, no program tuition will be refunded and one hundred percent (100%) of the scholarship and loan awards will be credited to the student account.

The percentage of the program 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 entire cohort program.

Veterans Administration Educational Program

Students who plan to attend Carthage under the Veterans Administration Educational Program are urged to promptly apply to the appropriate V.A. agency for necessary authorization well in advance of their registration date. The proper authorization should be presented to the Registrar's Office 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.

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.
Students opting for the installment payment plan must submit a form signed by the student and the parent or guardian for the amount to be financed. Payment plans covering either a specific term or the full academic year are available. There is an administrative charge of one (1) percent of the amount deferred or a minimum of $50 for the use of the monthly payment alternative.
Financial Aid Recipients Have the Right
Responsibility

Financial Aid Rights and
Responsibility

Carthage Scholarship/Grant
Program

Federal Programs
Wisconsin State Programs
Institutional Grant Programs
Applying Aid to Student
Accounts
Refunds
Applying for Need-Based
Financial Aid
Satisfactory Academic
Progress Policy
Endowed Scholarships
Annually Funded
Scholarships

Carthage believes that cost should not be a barrier to a student's education. All students are eligible to receive some type of financial assistance through scholarships, grants, loans, or part-time employment.

Financial Aid Rights and
Responsibility

Financial Aid Recipients 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.

Financial Aid Recipients Have the Responsibility To:

- Check your Carthage e-mail account regularly. College assigned e-mail 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) to cover college costs.
- 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 attend school.
- Check your financial aid awards disbursed against your Financial Aid Award Letter each semester on your bill from the Business Office.
- 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 which exceeds your calculated need, you must repay the excess.
- Notify the Office of Student Financial Planning if you drop below half-time enrollment (less 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 (G.P.A.) at the end of each Spring Term as indicated below:

<table>
<thead>
<tr>
<th>Scholarship/Grant</th>
<th>Minimum G.P.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Honors</td>
<td>2.75</td>
</tr>
<tr>
<td>Scholarship</td>
<td></td>
</tr>
<tr>
<td>Alumni Grant</td>
<td>2.00</td>
</tr>
<tr>
<td>Badger Boys/Girls State</td>
<td>2.50</td>
</tr>
<tr>
<td>Scholarship</td>
<td></td>
</tr>
<tr>
<td>Bridges Scholarship</td>
<td>2.25</td>
</tr>
<tr>
<td>Carthage Grant</td>
<td>2.00</td>
</tr>
<tr>
<td>Clausen Scholarship</td>
<td>3.25</td>
</tr>
<tr>
<td>Dean's Scholarship</td>
<td>2.50</td>
</tr>
<tr>
<td>ELCA Grant</td>
<td>2.00</td>
</tr>
<tr>
<td>Faculty Scholarship</td>
<td>2.50</td>
</tr>
<tr>
<td>Kenosha Police and Fire</td>
<td>2.00</td>
</tr>
<tr>
<td>Scholarship</td>
<td></td>
</tr>
<tr>
<td>Kenosha Scholarship</td>
<td>2.75</td>
</tr>
<tr>
<td>Lincoln Scholarship</td>
<td>3.25</td>
</tr>
<tr>
<td>Math/Science Scholarship</td>
<td>3.00</td>
</tr>
<tr>
<td>Ministerial Grant</td>
<td>2.00</td>
</tr>
<tr>
<td>Modern Language Scholarship</td>
<td>3.00</td>
</tr>
<tr>
<td>Multicultural Scholarship</td>
<td>2.00</td>
</tr>
<tr>
<td>Music Scholarship</td>
<td>2.00</td>
</tr>
<tr>
<td>Phi Theta Kappa Scholarship</td>
<td>2.75</td>
</tr>
<tr>
<td>Presidential Scholarship</td>
<td>2.75</td>
</tr>
<tr>
<td>Ruud Scholarship</td>
<td>3.25</td>
</tr>
<tr>
<td>Sibling Grant</td>
<td>2.00</td>
</tr>
<tr>
<td>Spring Scholarship</td>
<td>3.00</td>
</tr>
<tr>
<td>Theatre Scholarship</td>
<td>2.00</td>
</tr>
<tr>
<td>Transfer Scholarship</td>
<td>3.00</td>
</tr>
<tr>
<td>Tri-County Grant</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Each year, at the end of the Fall Term, the cumulative grade point average (G.P.A.) is reviewed for continued scholarship eligibility. Students wishing to use J-Term
grades toward their cumulative G.P.A. 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 G.P.A. is reviewed to determine renewal of scholarship(s).

If the student's cumulative G.P.A. leads to the termination of the scholarship, the student may submit a written appeal to the Director of Student Financial Planning and/or enroll in summer classes at Carthage. Reinstatement of the financial aid depends upon the outcome of the appeal.

The College offers continuing students an opportunity to compete for merit awards, such as Heritage Scholarships, departmental honors, and selected endowed scholarships. These require faculty recommendation, and may have additional stipulations as developed by the department or donor. The Office of Student Financial Planning can provide more details.

Verification
Each year the Federal Government randomly selects students to complete a process called verification. This process requires the College to verify information submitted on your Free Application for Federal Student Aid (FAFSA). If you have been selected, you will receive notification from the Carthage Office of Financial Planning asking you to complete our Verification Worksheet and submit signed federal income tax returns as soon as possible.

Financial aid awards calculated prior to completing the verification process are considered estimates until we have verified your information. If necessary, we will make corrections with the federal FAFSA processor and then confirm the level of financial assistance for which 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).

Federal Programs
Federal Pell Grant
This program provides students with grants of up to $5,550 in 2010-2011. The amount is determined by a federally mandated formula.

Federal Supplemental Education Opportunity Grant (FSEOG)
Grants range from $250 - $1,000 per year. Awards are made only to students who apply early and demonstrate exceptional financial need.

Federal Work-Study (FWS)
The Federal Work-Study program extends part-time employment opportunities to students who apply early and need financial assistance/earnings from part-time employment to help meet their education costs.

Students given FWS allotment will be eligible to work an average of ten hours per week. Work hours will be determined between the student and her/his supervisor. Students may not work more than 20 hours per week during the academic year school year. The value of the work-study award is not deducted from the student's account at the time of billing.

Students are paid monthly based upon the number of hours worked during the preceding pay period. The student may deposit these checks into his or her account by completing a form available in the Business Office.

Federal Perkins Loan Program
This loan is available to students who apply early and demonstrate exceptional financial need.

Carthage students may be awarded as much as $1,000 each academic year, depending upon availability of funds. The repayment period and the interest charge (5 percent) do not begin until nine months after students end their studies.

When a student ceases to attend Carthage, the student borrower must make arrangements with the College business office for repayment, deferment, or cancellation of this loan. Students will participate in an exit interview, during which these options will be explained in more detail.

Federal Stafford Student Loan Program
These programs allow undergraduate dependent students to borrow up to $5,500 during their freshman year, $6,500 during their sophomore year, and $7,500 in each of their junior and senior years. Independent undergraduate students may be eligible to borrow an additional unsubsidized Stafford loan up to $4000 (freshman/sophomores) or $5000 (juniors/seniors). Graduate students may borrow up to $20,500 per year. The type of Stafford loan (subsidized or unsubsidized) that students are eligible to receive is determined by completing the FAFSA. Interest is paid by the government during enrollment and gross period for a subsidized Stafford loan. Interest accrues on an unsubsidized Stafford loan and can either be paid monthly by the student or allowed to accrue and add into the principal loan amount upon prepayment.

Loan repayment begins six months after termination of at least half-time enrollment. The interest rate is fixed, but capped at 8.25 percent. For 2010-2011, interest on unsubsidized Stafford loans is 6.8% fixed. Upon repayment, subsidized Stafford loans will accumulate interest at 4.5% fixed.

Generally, loan applications will be processed electronically unless the student indicates otherwise. The student's initial award letter packet will provide more information.

In order to receive any Title IV monies (e.g., Pell, FSEOG, FWS, Perkins, Stafford Student Loan), the student must submit all necessary, requested documents to the Office of Student Financial Planning in a timely manner. The student must not be in default or owe a refund on any Title IV program, and must maintain satisfactory academic progress according to the guidelines established by the U.S. Department of Education and Carthage.

Individuals must be enrolled as degree-seeking students in order to receive Title IV funding or enrolled in an eligible certification program.

Federal Parent Loan for Undergraduate Students (PLUS)
This loan program allows parents of dependent students to borrow an amount up to their entire out-of-pocket cost.

Applications can be processed electronically, or obtained from the Office of Student Financial Planning.

Alternative Loans
These are designed to provide students with a loan beyond what federal programs can offer to help meet out-of-pocket expenses. In most cases, a qualified co-signer is required. Students may borrow the entire out-of-pocket expense with a credit-worthy co-signer.

Teacher Education Assistance for College and Higher Education Grant (TEACH)
The Teacher Education Assistance for College and Higher Education (TEACH)
Grant of up to $4,000 per year is awarded to students who are considering, or intending to complete, coursework to begin a career in teaching and who agree to serve for a minimum of four years as a full-time, highly qualified, high-need field teacher in a low-income school.

**National Science and Mathematics Access to Retain Talent Grant (SMART)**
The National SMART Grant provides up to $4,000 for each of the third and fourth years of undergraduate study for qualified students. The National SMART Grant award is in addition to the student's Pell Grant award.

**Academic Competitiveness Grant (ACG)**
The Academic Competitiveness Grant provides up to $750 for the first year of undergraduate study and up to $1,300 for the second year of undergraduate study for qualified students. The program became available for the first time for the 2006-07 school year for first year students who graduated from high school after January 1, 2006 and for second year students who graduated from high school after January 1, 2005. The Academic Competitiveness Grant award is in addition to the student's Pell Grant award.

**Wisconsin State Programs**

**Wisconsin Tuition Grant (WTG)**
The state provides a grant program for Wisconsin residents attending a private college within the state. Students must submit the FAFSA to be considered for the grant. The WTG is based upon need and varies up to $2,900. Students are encouraged to file early in order to qualify.

**Talent Incentive Program Grant (TIP)**
This state program provides grants to students who demonstrate exceptional need. Students who qualify may be nominated throughout Carthage to the state agency or can make application for this program at their Wisconsin Educational Opportunity Program (WEOP) Office. The FAFSA also must be filed to be considered for the grant.

**Minority Undergraduate Retention Grant**
The grant program provides limited funds to selected minority students with exceptional financial need. Available to sophomores, juniors, and seniors only.

**Minority Teacher Loan**
The state offers a forgivable loan to any full-time, eligible junior or senior who carries a minimum G.P.A. of 2.50 in a Teacher Certification Program. The value of the loan varies up to $2,500 per year for maximum of two years. For each year spent teaching in an eligible school, 25 percent of the loan is forgiven. The Office of Student Financial Planning will nominate students who apply early and demonstrate exceptional financial need.

**Hearing and Visually Handicapped Student Grant**
The state offers funding to Wisconsin residents who demonstrate financial need and have severe or profound hearing or visual impairment. Students are eligible to receive up to $1,800 per year for up to five years. In order to qualify for the grant, the FAFSA must be filed and the student must be enrolled at least half-time.

**Indian Student Assistance Grant**
The state offers up to $1,100 per year to any Wisconsin resident who is at least 25 percent Native American and is enrolled in an undergraduate or graduate degree or certificate program for up to ten terms. The Office of Student Financial Planning will nominate students who apply early and demonstrate exceptional financial need.

**Wisconsin Army National Guard Tuition Grant**
The Wisconsin Army National Guard tuition grant offers tuition benefits to student soldiers. All Wisconsin Army National Guard enlisted members and warrant officers who do not possess a bachelor's degree are eligible. The tuition grant is based on 100 percent of the resident, undergraduate tuition charged by the University of Wisconsin at Madison. The grant can be used at any school with a Title IV school code. This tax-free tuition grant is paid as a reimbursement to the student after completing a class or term of school. Contact your local unit or recruiter for details.

**Academic Competitiveness Grant (ACG)**
The Academic Competitiveness Grant provides up to $750 for the first year of undergraduate study and up to $1,300 for the second year of undergraduate study. The program became available for the first time for the 2006-07 school year for first year students who graduated from high school after January 1, 2006 and for second year students who graduated from high school after January 1, 2005. The Academic Competitiveness Grant award is in addition to the student's Pell Grant award.

**Academic Excellence Scholarship**
Academic Excellence Scholarships are awarded to Wisconsin high school seniors who have the highest grade point average in each public and private high school throughout the State of Wisconsin. The value of the scholarship is $2,250 per year to be applied toward tuition. Half of the scholarship is funded by the state while the other half is matched by the institution.

**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 source - 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. Anytime Carthage receives a check requiring a student's endorsement, the student will be asked to visit the Business Office 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 are applied to their student account with the Business Office. The bills that students receive from the Business Office 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, then 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, page 126). If the student received financial assistance from outside of the family, then 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 Registrar's Office. The student officially has begun the withdrawal process when this form is completed and returned to 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 as is used for Title IV aid, whether or not the student received Title IV aid. If a student withdraws without notifying Carthage, then 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, then 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 non-federal 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 September 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 January 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 non-credit 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:

<table>
<thead>
<tr>
<th>1. Full-time Students</th>
<th>Min. number of cumulative credit hours completed at the end of that year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>78</td>
</tr>
<tr>
<td>4</td>
<td>108</td>
</tr>
<tr>
<td>5</td>
<td>138</td>
</tr>
</tbody>
</table>

#### Part-time Students

<table>
<thead>
<tr>
<th>2. Min. number of cumulative credit hours completed at the end of that year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
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<tr>
<td>5</td>
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<td>6</td>
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<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
</tbody>
</table>

2. Graduate students shall have a four-year period as defined by the Master's program, completing a total of 8 credits per academic year.

3. **G.P.A. and Completion Standards**

   Students must maintain at least a 2.0 cumulative G.P.A. Students who do not maintain the required G.P.A. will have their academic standing evaluated on the basis of the chart under Academic Standards. In addition to the G.P.A. requirement a student must also complete a minimum of 67% of coursework attempted.

4. **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 G.P.A. requirement is met.

5. **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.

6. **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.
7. **Less Than Full-Time Enrollment**
Students enrolled with less 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, ACG, SMART, 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.

8. **Housing Status**
Students who change their living status from resident to commuter, or vice versa, may see changes in their financial aid awards. To make sure these changes will fit within your financial budget, discuss any residence changes with a financial aid representative before committing to a new residence.

**Endowed Scholarships**
The College gratefully acknowledges the following endowed scholarship funds that provide permanent scholarship opportunities in support of deserving full-time undergraduate students:

- Wilbur M. and Mabel M. Allen Scholarship
- Anton B. & Adele R. Altera Scholarship
- Alan & Irma (Niekamp) Anderson Scholarship
- Clarence Anderson Scholarship
- Joseph F. Andrea Scholarship
- Arnesson Family Scholarship
- Thomas R. Beau Memorial Scholarship
- Ella Sue Beck & Mildred Beck Scholarship
- Edgar W. Belter Scholarship
- Carthage Benefactor's Scholarship
- Donald O. Sr. & Anne C. Benson Scholarship
- Samuel H. & Helen E. Bess Scholarship
- Rev. James P. Bishop Scholarship
- Dexter & Nancy Black Scholarship
- Frank J. Borsh Scholarship
- Hazel Bothe Memorial Scholarship
- Merle & Eunice Boyer Scholarship
- Patricia & Harold Brainard Scholarship
- Melissa Brannon Memorial Scholarship
- Muriel N. & Jerald C. Brauer Scholarship
- Russell H. Brauer Scholarship
- Walter H. & Irene B. Brinkman Scholarship
- David & Lyn Brunn Scholarship
- Brunswick Corporation / Niemann Scholarship
- Edith J. & William H. Bullamore Scholarship
- Dwight W. Byram Scholarship
- Wilbur D. & Martha S. Capps Scholarship
- Harry F. & Elizabeth Lesher Carlson Scholarship
- Carthage College Women's Club Scholarship
- Blake R. & Marie E. Children Scholarship
- Class of ’25 Scholarship
- Class of ’27 Scholarship
- Class of ’28 Scholarship
- Class of ’30 Scholarship
- Class of ’35 Scholarship
- Class of ’40 Scholarship
- Class of ’42 Scholarship
- Class of ’51 Scholarship
- Class of ’64 Scholarship
- Class of ’65 Scholarship
- A.W. Clausen & Joyceelynn Clausen Student Scholarship
- George & Valborg Crossland Scholarship
- Rev. J. E. & Mary A. Dale Scholarship
- W. Howard Dawe Scholarship
- Jacob & Sara Diehl Scholarship
- William A. & June M. Diehl Scholarship
- Diskerud-Eller Scholarship
- Robert & Lois Dittus Scholarship
- Ronald J. & Wilma G. Dopp Scholarship
- David J. Dorak Memorial Scholarship
- Downing/Michie Scholarship
- Stephen B. Dozier Scholarship
- Karl & Lydia (Engelman) Enderby Scholarship
- David and Doris Ehlert Scholarship
- James C. and Mary Ellis Scholarship
- Rev. Dr. Ellsworth & Kay Freyer Scholarship
- John and Judith Fritsch Scholarship
- Emmert & Leola Fritsch Memorial Scholarship
- Dr. Pearl E. Goeller & Family Scholarship
- Herbert H. Goodman Scholarship
- Kenneth F. & Edna L. Gross Scholarship
- Gutkind-Kraemer Scholarship
- Fred O. Haas Scholarship
- Richard and Diane Halom Scholarship
- Kenneth & Janice (Van Zile) Hamm Scholarship
- Nancy Ross Hanisch Memorial Scholarship
- Elmer & Eudora Hanke Scholarship
- Burdette Harris Scholarship
- Mae & Jack Harris Scholarship
- Verna Hey & William J. Harshman Scholarship
- Christen P. & Anna J. Heide Scholarship
- Janet L. & Steen W. Heimke Scholarship
- Walter O. & Adele E. Helwig Scholarship
- Donald Hensley Scholarship
- T. Shandy Holland Scholarship
- Anna, Stefan and Suzannne Hrajnoha Scholarship
- Charles Melvin & Harriet Howe Hurd Scholarship
- Edna M. Johnson Scholarship
- John & Elizabeth Johnson Scholarship
- Kaelber Scholarship
- Rev. Oscar C. & Victoria Kaitschuk Scholarship
- Kappa Phi Eta Scholarship
Kaye/Morin Scholarship
Arthur T. Keller Scholarship
Mary Katherine Kent-Rohan Scholarship
Harriet & Joseph Kern Scholarship
Clayton & Pearl Kesselring Scholarship
Merton Elihu Knisely Scholarship
David B. Knowles Memorial Scholarship
William C. Krauss Scholarship
Conrad Kuhl Scholarship
Henry & Vera Kuhn Scholarship
Herbert C. Kurth Scholarship
Flora Testa Lalli Classics Scholarship
Anna K. Larsen Memorial Scholarship
Lester O. Leenerts Scholarship
Eleanor & Harold Lentz Scholarship
Thomas W. Lentz Scholarship
Lukas Family Scholarship
Lutheran Brotherhood Scholarship
Lutz Memorial Scholarship
Gladys D. Lynch Scholarship
Joseph F. & Shirley M. Madrigrano Scholarship
Thomasina & Aldo Madrigrano Family Scholarship
Elizabeth Mancuso Memorial Scholarship
Frederick and Jewel Marks Scholarship
Edith B. & Frank C. Matthies Scholarship
Mr. & Mrs. William McFetridge & Barbara McFetridge Scholarship
LTC Jack M. Meiss, Barbara J. (Meiss) Welling, & Dr. Guy T. Meiss Scholarship
R. William Miller Scholarship
Melvin and Linda Miritz Scholarship
Erva Moody Memorial Scholarship
Martin Mortensen Scholarship
Neergaard-Arhelger Scholarship
Pastor Carl O. & Edith W. Nelson Scholarship
Carl Wilbur Nelson Scholarship
Ernest & Edna Newhouse Scholarship
Theodore & Mildred Nicholson Scholarship
William L. Niemann Scholarship
The Rev. Jack and Marian Nitz Scholarship
Duane M. Olson Scholarship
Eric H. Olson & Anna Olson-Thom Scholarship
George & Hazel Osborn Scholarship
Dr. Clifton E. Peterson Scholarship
The Petretti Family Scholarship
Susan (Worley) Pietrowski Memorial Scholarship
The Pi Theta Scholarship
Mary Etta & Dr. Richard A. Powell Scholarship
Albert & Marion Pufahl Memorial Scholarship
Raymond J. Pugesek, Jr. Scholarship
Henry Queckenstedt Family Scholarship
Rhone & Unglaube Scholarship
Nelson Peter Ross Memorial Scholarship
Alice Mack & Neill O. Rowe Scholarship
Russell & Marion Rutter Scholarship
Alan J. Ruud & Susan B. Stover Scholarship
Ruud Academic Excellence Scholarship
Glenn A. & Eleanor S. Sather Scholarship
Grace C. Scheel Scholarship
Lois A. Schmidt Scholarship
Gwendolyn (Braun) Schmiedeskamp Scholarship
Ceola Erlsten Yeager Schoenig Scholarship
Martha Shippert Scholarship
Schumacher/Broderdorf Scholarship
Marie & John Sladek Fine Arts/Nat. Science Scholarship
Louis W. Smith, Jr. Scholarship
Karl L. Solum Memorial Scholarship
Wilfred J. & Marie Sonntag Scholarship
Lili Sorokin Scholarship
Special Opportunities Scholarship
Fred and Margaret Spangler Scholarship
John R. & Margaret O. Spangler Scholarship
W. Carl & Esther C. Spielman Scholarship
Grace C. Staber Scholarship
Ronald and Barbara Stamer Scholarship
The Irene Kraemer Starting Over Scholarship
Donna Wolf Steigerwaldt/Jockey International Scholarship
John & Evelyn Susina/Barbara Susina Stewart Scholarship
Thorberg Swenson Scholarship
J. Bannen Swope Scholarship
Tarble Family California Scholarship
Tau Delta Psi Foreign Student Scholarship
Alois H. Tenessen Scholarship
Ralph J. & Margaret A. Tenuta Scholarship
Dorothy Myhre Tolleson Memorial Scholarship
Joy Valentine Scholarship
Veteran's Scholarship
Frank & Ruth E. (Wuerzberger) Vorpahl Scholarship
Wagner Brothers Scholarship
Walker Manufacturing Scholarship
Georgene L. Wall Scholarship
Mildred & Delferd Walser Scholarship
Albert & Mary Kimbrough Webb Memorial Scholarship
Weightman Memorial Scholarship
Robert D. Wolff Scholarship
Kathy Harris Scholarship
Business and Professional Coalition Scholarship
Class of '57 Scholarship
William and Amanda Eller Scholarship
Paul G. Goerner Scholarship
Ralph S. Leonard Scholarship
John H. and Mary L. (Hall) Meiss and Olive C. (Meiss) Padre Scholarship
Evelyn A. Rodgers Scholarship
Lentz Presidential Scholarship
Anderson Presidential Scholarship
Dahl Presidential Scholarship
Annually Funded Scholarships

- Alumni Association Scholarship
- Judith Law Anderson Scholarship
- Donald and Barbara Boe Scholarship
- Delta Upsilon Scholarship
- Kathy Harris Scholarship
- Semler Family Scholarship
- Ware's Grove Church Scholarship
- Jessie C. and Ward Cropley Scholarship
- E. David Matthaidess III Scholarship
- Robert J. and Dawn C. Smick Scholarship
to provide opportunities for educational, social, emotional, physical, recreational, and cultural growth.

Residence halls are closed during Thanksgiving, Christmas, and spring recesses. Students who cannot leave must be granted permission to stay by the Dean of Students' Office. Carthage assumes no responsibility for students during these periods, or for personal property left in residence hall rooms. Reasonable precautions are taken, however, to safeguard the buildings.

All returning residential students must complete an online housing contract for the following academic year and make an advance payment with Carthage by the deadline date. An advance payment of $300 is required before a student is able to register for housing. Residential students desiring entry at the second term must also complete a housing contract and make an advance payment when they are admitted to the College. Advance payments made for the autumn (by current students) are not refundable after June 1. Advance payments made by new students for the Fall Term are non-refundable after May 1. Advance payments made for January or February (by new students) are not refundable after Nov. 1.

Advance payments are necessary for eligibility for Carthage housing, but do not guarantee a housing assignment. For a full list of requirements to live in housing, and an update on the availability of housing, please contact the Dean of Students Office. All housing assignments are made by the Dean of Students Office.

**Student Organizational Development**

Carthage strongly believes that through involvement in organizations and activities, a student truly completes the circle of education that a residential liberal arts college strives to create. For that reason, the Dean of Students Office promotes the development of student organizations. Assistance on a wide range of subjects is available pertaining to student organizations including activities, programs, and constitution development. In addition, student organizations are encouraged to utilize the facilities of the Todd Wehr Center. Organizations may promote their activities through the Carthage calendar maintained by the Director of Student Activities.

**General Regulations**

Regulations and standards pertaining to student conduct are presented in detail in the Carthage Community Code which is available on the Carthage website. A paper version is available from the Dean of Students Office. Students are expected to know and adhere to the rules and standards. Carthage reserves the right to discipline those who ignore established rules, practices, and procedures as well as those whose conduct is in violation of the Community Code, or is otherwise contrary to the best interests of the individual, fellow students, or Carthage.

**Motor Vehicle Regulations**

While enrolled at Carthage, all students who possess an automobile, motor scooter, motorbike, or motorcycle must register the vehicle(s) with Carthage. Parking permits are limited and must be purchased by any resident student wishing to have a car on campus. Free parking permits are issued to commuting students who need them. Complete information concerning this regulation is provided at registration. Further information is available from the Business Office or the Public Safety Office.

**Health and Counseling Services**

The Health and Counseling Center, located in the N. E. Tarble Athletic and Recreation Center, is staffed by a registered nurse and counselor. The resources of the Health and Counseling Center are available to students through the nurse. Students also may choose other local physicians for consultation and treatment. Expenditures for treatment outside the Health and Counseling Center are assumed by the student, whether the physician is called by the student, by a friend, or by a Carthage staff member. Students under 18 years of age must have a signed parental consent form in order to receive treatment in the Health and Counseling Center. The Center is open Monday through Friday, 9 a.m. - 1 p.m., and 2 - 5 p.m. during the academic year, excluding official Carthage breaks.

Carthage normally reserves the right to admit a student to a local hospital under the care of a physician when deemed necessary. Any parent or guardian who refuses to grant Carthage such permission must indicate this in writing before the student is enrolled. Certified psychological counseling also is available. Further information on this service is available from the Dean of Students Office or the Health and Counseling Center.

Carthage requires each full-time student to subscribe to a qualified medical insurance plan. More detailed information is available upon request from the Business Office.
Carthage also requires a statement of health (physical) from a physician in order for the student to participate in intercollegiate sports or spirit team.

Organizations and Activities
For many students, the academic side of college is enhanced by another phase of campus life—participation in the many extracurricular activities that Carthage offers. Students benefit greatly from their associations with these groups, deriving both enjoyment and valuable learning experiences. Please see the Carthage website for a listing of student organizations.

Honorary and Professional Organizations
Alpha Chi
Students having met rigid standards of Liberal Arts scholarship after the example of Phi Beta Kappa
Alpha Lambda Delta
Freshman honorary
Alpha Mu Gamma
Foreign language honorary
Alpha Psi Omega
Honorary dramatics fraternity
Beta Beta Beta
Biology honorary
Business Honors Society
Business honorary
Gamma Theta Upsilon
Honorary geographic society
Honors Council
Council of honorary organizations
Lambda Kappa
Honorary music society
Omicron Delta Epsilon
International honorary society in economics
Omicron Delta Kappa
National leadership honor society for juniors and seniors
Phi Alpha Theta
History honor society
Pi Kappa Delta
Honorary forensic fraternity
Pi Mu Epsilon
Honorary mathematics fraternity
Pi Sigma Epsilon
Honorary sales and marketing fraternity
Psi Chi
Honorary psychology club
Sigma Tau Delta
Honorary English fraternity
Sigma Chi
International science research society
Sigma Pi Sigma
Physics honor society
Theta Chi Delta
Honorary chemistry fraternity

Service Organizations
Amnesty International
A non-political and non-partisan organization that helps ensure human rights for people throughout the world.
Circle K International
An international co-ed service organization affiliated with Kiwanis International.
Habitat For Humanity
This group works with the surrounding communities to refurbish homes in the area for the disadvantaged.
Pals N' Partners
This group works with at-risk children from the local community.
Pi Delta Chi
Women's service sorority.

Government Associations
Carthage Activities Board
A student group responsible for planning and production of social, cultural, and recreational programs for the education and entertainment of the campus community. Events include Homecoming and May Madness Festivals, as well as the presentation of comedians, musicians, films, speakers, and concerts.
Residence Life Council
A residence life advisory board consisting of representatives from each floor in the halls. The Residence Life Council provides students with a voice in the management of the residence halls.
Student Government
Includes legislative, executive, and judicial branches to govern student affairs.

Social Fraternities
Interfraternity Council
Governing body of the five local social fraternities: Beta Phi Epsilon, Delta Omega Nu, Tau Delta Psi, Tau Sigma Chi, Tau Sigma Phi and three national social fraternities: Delta Upsilon, Phi Kappa Sigma, Tau Kappa Epsilon.
Panhellenic Council
Governing body of the five local social sororities: Delta Sigma Theta, Kappa Phi Eta, Pi Theta, Sigma Alpha Chi, and Sigma Omega Sigma, and two national sororities: Alpha Chi Omega and Chi Omega.

Publications/Media
Centrique
Student publication of poetry, literature, and art.
The Current
Student newspaper.
Driftwood
Student yearbook.
The Wave
Student-run radio station.

Departmental and Interest Organizations
10 % Society
A confidential group of gay, lesbian, bisexual and trans-gendered students, faculty, and staff who gather regularly to share experiences and to provide support for each other in a safe and open context.
Ally
A group of students, faculty, and staff of all sexual orientations working together to make Carthage a more accepting and understanding institution.
Black Student Union
For students interested in black culture.
Carthage Accounting Association
For students who work to develop valuable community contacts, and to enhance the education of accounting majors outside of the classroom.
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Christian Ministry Council
A coordinating body for all campus religious organizations.

Commuter Association
Commuter student organization.

Council for Exceptional Children
This organization is open to all students and faculty who are interested in the education and treatment of school-aged children with exceptional abilities.

CUMBYA Ministries
CUMBYA (Carthage Undergrads Making Big Youth Activities) enlists students who want to improve themselves and their community through serving the youth of the area and gaining experience in becoming leaders and resource people for congregational youth ministry.

Fellowship of Christian Athletes
Organization for athletes and students that focuses on growing and pursuing an ongoing relationship with Jesus Christ.

The Gospel Messengers
This singing body of students represents Carthage at various off-campus events. Their charismatic style and presentation brings a new twist in delivering the message.

International Friendship Society
Brings American and international students together to share their cultures as well as world experiences.

Intervarsity Christian Fellowship
For students interested in Bible study, prayer, and Christian fellowship.

Intramurals
Various sports activities organized for general student participation.

Merely Players
This group performs both on campus and off-campus as an improvisational comedy troupe.

Model UN
Model UN participates in the study of other countries through a unique combination of public outreach, policy analysis, and international dialogue.

Phi Alpha Delta
This organization helps pre-Law majors prepare for a career in the legal field. It also provides support for law school entrance exams.

Phi Epsilon Kappa
Serves as the organization bringing together athletic training, exercise and sport science, and recreation management majors.

Social Work Club
For students interested in social work.

Society of Physics Students
A professional association explicitly designed for physics students.

United Women of Color
A support group for minority women.

Carthage Democrats
Group that provides a forum for the discussion and growth of the Democratic Party.

Student Awards
College Scholarship Award
The highest academic honor at the College, this award is given to the graduating senior who has achieved a G.P.A. of 3.6 or better, written an outstanding essay on the integrative approach to learning, and satisfactorily discussed personal intellectual growth.

Distinguished Adult Learner Award
The highest academic honor for a nontraditional student, this award is given to the graduating senior who has achieved a G.P.A. of 3.6 or better, who has completed at least 3/4 of the credits in the evening school program and is over 30 years of age. A written essay is required.

College Leadership Award
An award presented to the graduating senior who is chosen by the faculty for outstanding service to the College, participation in College activities, a demonstration of leadership qualities, and high academic achievement.

Awards for Research and Creativity
A cash award (which may be divided) for outstanding research or creativity. Projects may be in the form of a paper, original experiment, artistic creation, musical composition, or computer program.

Senior Academic Award for Accounting
This award is given annually to recognize cumulative grade point average and academic achievements within the accounting major.

Alpha Psi Omega Award
This award is given to a member of the senior class for outstanding work in dramatics.

Freshman Chemistry Achievement Award
This award is given to the general chemistry student with the best over-all grade point average in chemistry.

The Coblentz Award
This award is given to the senior chemistry major who has made the greatest contribution to the field of spectroscopy. The award is named for Dr. W. W. Coblentz, whose work did much to demonstrate the potential application of infrared spectroscopy to the field of chemistry.

Outstanding Senior Chemistry Award
This award is sponsored by the American Chemical Society. It is given to a senior chemistry major to honor outstanding work in the chemical professions on the basis of a student's demonstrated record of leadership, ability, character, and scholastic achievement.

Outstanding Senior Chemistry Award
This award is sponsored by the Division of Analytical Chemistry of the American Chemical Society. It is given to a senior chemistry major who has indicated an outstanding aptitude in analytical chemistry.

Academic Excellence Award in Economics
This award is presented to a senior chosen by the faculty of the Department of Economics for outstanding achievement in economics.

Ralph Hansen Award
This award is given by the history department to a student who has been of outstanding service to the department. The award is in honor of Ralph Hansen, former chair of the history department.

The Christine D. Hogin Scholarship Award
Established by a former associate dean of students to be awarded to the social sorority that has established the highest grade point average for the previous year. The name of that sorority is inscribed on an appropriate plaque.
The Hylon Memorial Scholarship Award
An award established by Percy Hylton in memory of his parents. It is awarded to the social fraternity that has established the highest grade point average for the previous year. The name of that fraternity is inscribed on an appropriate plaque.

The Emma Johnson Memorial Award
Established by the Emma Johnson Missionary Society of Trinity Lutheran Church, Rockford, Ill. The award is given annually to the graduating religion major with the highest cumulative grade point average.

The Martin Monson Student Teacher Award
Established as a memorial to Professor Monson by his family and friends. The award is given to two outstanding student teachers, one in the elementary level of student teaching and one in the secondary level of student teaching.

The Elizabeth A. Mancuso Scholarship Award
In 1930, this fund was started by students in memory of a fellow student, a prospective medical technologist, who died of leukemia shortly before the end of her sophomore year at Carthage.

The Lambda Kappa Leadership and Service Award
This is a cash award given annually to any member of the Lambda Kappa music fraternity for outstanding service and leadership to the fraternity and to the music department.

The Seal Awards (Students Excelling in Activities and Leadership Awards)
These awards are given to individual students and student organizations that excel in various co-curricular activities at Carthage.

The Lambda Kappa Scholarship Award
This is a cash award given annually to a junior or senior music major who is a member of the Lambda Kappa music fraternity for musical and academic excellence.

The Earl Lambert Award
This award is given to the graduating senior member of Beta Beta Beta recognized by the biology faculty to have contributed the most time and energy to the department during the student's college career. The award was created as a memorial to Earl L. Lambert who, with Alice Kibbe, was instrumental in obtaining this national honorary for Carthage in 1930.

The Elizabeth A. Mancuso Scholarship Award
This award is given each year to a prospective medical technologist chosen by the faculty of the Natural Sciences Division.

The Senior Music Award
This award is presented annually to a senior music major whose musicianship, scholarship, and leadership in the department have been outstanding.

Political Science Senior Recognition Award
This award is presented by the political science department to a senior political science major who has contributed most to the department in scholarship, campus activities, and service.

Nelson Peter Ross Scholarship
This award is given by the history department to an outstanding junior history major in memory of the late Nelson Peter Ross, former chair of the history department. The award is based on the earnings of a special endowment contributed by the parents, friends, and students of Professor Ross.

Sociology Award
This award is presented to the upper class student who has the best overall record in sociology in the judgment of the departmental faculty.

Senior Award for Outstanding Achievement in Social Work
This is a cash award presented to a senior for superior academic scholarship, field placement performance, and service to the social work program.

The W. Carl and Esther Carlson Spielman Award
Presented to a student in the Social Science Division who exhibits outstanding scholarship, leadership, and character.

The Dorothy Tolleson Memorial Award
Established by Mary Katherine Kent-Rohan for non-fiction writing, this award is given to a freshman or sophomore Carthage student who has demonstrated outstanding promise in the rhetoric of the written word. The wife of former Carthage English department chair Floyd Tolleson, Dorothy was a teacher dedicated to helping students improve their writing skills as a way of bettering their lives.

The Lloyd N. Yepsen Memorial Psychology Award
This award is presented to the outstanding senior psychology student.

The Vera K. Preis Award
As a memorial to Vera K. Preis, a book is given annually to the graduating senior who has contributed most to the Department of English. The name of this student is inscribed on an appropriate plaque.

The Wall Street Journal Achievement Award
This award, given annually to a business administration student, is based upon overall academic performance plus significant involvement and leadership in extra-curricular activities, including the professional business fraternity, Pi Sigma Epsilon.
Mr. Campbell came to Carthage from The University of Chicago, where he had been special assistant to the president, secretary of the Board of Trustees, and senior lecturer. In addition to his 16 years in Chicago, Mr. Campbell held administrative and/or faculty positions at Yale University and the University of Wisconsin-Milwaukee.

He received his bachelor's degree from Baylor University, his master's from Emory University, and his doctorate from Yale. He has done additional study and research at Philipps-Universität in Marburg/Lahn, Germany; at Charles University and the Czechoslovak Academy of Sciences in Prague, Czechoslovakia; and at the Institute for Educational Management at Harvard University.

As a historian, he specialized in international relations and Central European history. He was awarded two Fulbright grants, a Woodrow Wilson Fellowship, and a Lewis-Farmington Fellowship at Yale.

Mr. Campbell retains an enthusiasm for adventure travel. Since the 1990s, he has climbed Africa's Mount Kilimanjaro, hiked Inca trails to Machu Picchu in Peru, trekked the circuit around Mont Blanc in the Alps, and twice reached the base camp at Mount Everest. He and his wife, Barbara Kuhn Campbell, have three adult sons: Fenton, Matthew and Charles.

Seemee Ali
Assistant Professor of Great Ideas and English, joined the Carthage faculty in 2008, coming from Loyola College (Md.), where she had been a visiting assistant professor teaching courses in literature. She is a 1989 graduate of Austin College, where she earned a B.A. in political science. She earned a master's degree and Ph.D. in literature, both from the University of Dallas, and was a post-doctoral fellow in the Core Humanities Seminar Program at Villanova University.

Cynthia Allen
Program Director of Physical Education/Health, teaches in the Exercise and Sport Science Department at Carthage. She advises students who are studying to be physical education and health teachers. A native of Utah, she joined the Carthage faculty in 2004. She earned her Ph.D. in human nutrition from Kansas State University, M.S. in exercise and sport science from Colorado State University, and B.S. in physical education from Utah State University. While studying human nutrition at Kansas State, she was awarded a $25,000 grant from the American Egg Board to research the potential association between lutein intake and decreased incidence of age-related macular degeneration. Prior to completing her Ph.D., she spent four years working in the community as a health educator. She is writing a textbook titled Secondary School Health: Teaching for Maximum Impact, which will be published by Jones & Bartlett in January 2012.

John Antaramian
Visiting Professor of Government and Counselor for Community Partnerships, was the 34th mayor of the City of Kenosha, retiring in 2008 after 16 years, the longest service of any Kenosha mayor. Highlights of his tenure included redevelopment of major brownfield sites, reduced crime, development of three museums, and updates to the city's budget and financial processes. He earned a B.S. in economics and business management from the University of Wisconsin-Parkside in 1977. Before he was elected mayor, he was state representative for Kenosha's 65th Assembly District for 10 years. He joined the Carthage faculty in 2008.

Douglas Arion
Distinguished Professor of Entrepreneurial Studies in the Natural Sciences (ESNS); Director of the ScienceWorks Program; Professor of Physics and Astronomy, joined the Carthage faculty in 1994 after a long career at Science Applications International Corporation, where he served as assistant vice president and head of the applied physics and engineering division. He brings his experience as a physics researcher and corporate executive to Carthage's innovative ScienceWorks program, the nation's first and longest-standing technology entrepreneurship program for undergraduates. In addition to directing ScienceWorks, he teaches courses in physics and astronomy, conducts research with students at major observatories around the country, and develops scientific instrumentation for many different fields. In 2009, he spearheaded the Galileoscope Project, a cornerstone project of the International Year of Astronomy. The Galileoscope Project involved the design, production and shipment of more than 200,000 low-cost telescope kits to more than 96 countries, including 6,000 donated to developing nations.

Professor Arion developed the business plan for the Center for Advanced Technology and Innovation, a technology business development center in Racine, Wis. As senior program advisor for CATI, he provides strategic planning and technology evaluation for companies in the region. He is also involved in technology business development through academic partnerships with the National Collegiate Innovators and Inventors Alliance, and supports the Milwaukee School of Engineering in the creation of its technology incubator and entrepreneurship curriculum. He is active in business development and serves as an advisor to a number of small businesses, including 3-D Molecular Designs LLC and Fleuchaus Chiropractic, S.C. He is listed in Who's Who in the West, American Men and Women of Science, and Who's Who of Business Leaders. He earned his A.B. in physics from Dartmouth College, and his
M.S. and Ph.D. in physics from the University of Maryland.

He is an elected member of the International Astronomical Union, as well as a member of the American Physical Society, the American Astronomical Society, Sigma Xi, Sigma Pi Sigma physics honorary fraternity, and the International Dark Sky Association. His interests include designing and building telescopes, and competing in telescope-making contests. He is a competitive cyclist, and attended a U.S. Olympic cycling training camp in 1985. He also enjoys ice hockey and serves as the head coach of the Carthage ice hockey program. He is a lifelong member of the Appalachian Trail Conference and the Appalachian Mountain Club.

**Gregory Baer**  
**Director of Faculty Development, Associate Professor of Modern Languages**, joined the Carthage faculty in 1996. His teaching and research interests include 20th century German literature and culture, with a focus on East Germany and the Holocaust, and foreign language pedagogy, where the focus of his scholarship is vocabulary acquisition. He has presented the results of his scholarly work in the GDR Bulletin and the Reference Guide to Holocaust Literature and has presented at regional and national conferences. A recipient of grants from the German Academic Exchange Service and a two-time Fulbright Fellow, he has mentored student researchers who have won grants from those organizations. Professor Baer has studied and done archival research in Munich and Berlin, and has lived in Germany for more than 12 years. He earned his B.A. from Lewis and Clark College, and his M.A. and Ph.D. in Germanic Languages and Literatures from Washington University in St. Louis.

**Roger Bass**  
**Associate Professor of Education**, received his Ph.D. from the University of Wisconsin-Madison and holds degrees in education and psychology. He recently earned his BCBA-D (Board Certified Behavior Analyst-Doctoral), the highest level of certification in behavior analysis, making him eligible for licensure as a Behavior Analyst with the State of Wisconsin. He is one of only seven individuals holding the BCBA-D Wisconsin. He published *Amy's Game: The Concealed Structure of Education* in an attempt to awaken students and the general public to the lamentable state of education in America and what we can do about it. He is the senior member of the Education Program. Professor Bass teaches courses in special education, psychological measurement and assessment, general education, and quantitative research design. He has been actively involved in education and psychology for more than 35 years. His interests include but are not limited to: human behavior; behavior analysis, especially as it is applied to education; psychotherapy; and legislation that advances effective instructional methods.

Professor Bass emphasizes well-researched methodologies such as direct instruction, personalized systems of instruction, and a wide range of behavioral education tactics in instructional design and classroom management. He has done computer-based studies on research methods. He has developed an experimental program for training teachers on emergency licenses and in the process created computer-assisted instruction and field-based tactics for teaching teachers on-site. His current research involves the effects of changed contingencies on rule-governed behavior. His recent publications deal with observational technology, interactive video in teacher education, and Zen. He is currently working on a theoretical paper involving motivating operations.

Since 1990, he has been active in the Association for Behavior Analysis (ABA) and has sponsored a number of student presenters. He has served on the ABA committees BALANCE (committed to identifying and correcting the many misrepresentations of behavior analysis) and Teaching Behavior Analysis or TBA (coordinated recent research on teaching behavior analysis in all areas). He has also served on the ABA's committee for evaluating psychology departments. He has taught research methods to music educators, presented at Suzuki Music Conventions, and presented at symposia with music educators interested in well-researched procedures for improving student performance. His work in education parallels these activities within psychology. His personal interests include bike touring, Zen Buddhism and violin. He joined the Carthage faculty in 1988.

**Greg Berg**  
**Assistant Professor of Music**, teaches private voice at Carthage, and helps to direct the opera program in cooperation with music theater coordinator Corinne Ness.

He also teaches Vocal Diction & Literature and Opera History, and in the past has also taught Exploring Music, Popular Music in America, and Oral Skills. He enjoys serving as principal accompanist for the Carthage Choir as well as for students in many of their recitals, juries, and departmental performances. He received his bachelor's degree from Luther College (Decorah, Iowa) in 1982 and was named by the faculty as outstanding music major of his class. He went on to earn a master's degree in vocal performance at the University of Nebraska-Lincoln. From there he was privileged to be a singer with the prestigious Lyric Opera Center for American Artists in 1985-86. His awards as a singer include four first-place finishes in state and/or regional NATS competitions, and he was a district winner of the 1984 Metropolitan Opera Auditions.

With orchestra he has performed such operatic roles as Count Almaviva (*Le Nozze di Figaro*), Michel (*Il Tabarro*), Ottone (*The Coronation of Poppea*), Schaunard (*La Boheme*), Ko-Ko (*The Mikado*), and Sam (*Trouble in Tahiti*). His solo performances with orchestra also include such works as Hodie, Mystical Songs, and *The Songs of Travel* (*Vaughan Williams*), *Magnificat* and *St. John's Passion* (*J.S. Bach*), St. Nikolai Mass (Haydn), *Te Deum* (*Dvorak*), Mass for the Children (*Rutter*), and Old American Songs (*Copland*). He has served as CD/DVD reviewer for the *Journal of Singing*, the official scholarly publication of NATS (the National Association of Teachers of Singing) since 2001.

Professor Berg is a familiar voice to many people in southeastern Wisconsin because of his on-air work with WGTD FM 91.1, the local NPR affiliate, for whom he hosts a daily interview program called *The Morning Show*. His list of noteworthy guests includes Jimmy Carter, Alan Alda, Bill Moyers and Tim Russert, plus such notable musical guests as Thomas Hampson, Dimitri Hvorostovsky, Eileen Farrell, Shirley Verrett, and Metropolitan Opera general manager Peter Gelb. He also serves as minister of music at Holy Communion Lutheran Church in Racine, Wis. He is the composer of three liturgies, four commissioned hymns, and numerous choral anthems. He is married to a Carthage graduate, Kathy (Gall) Berg, '84,
who is a highly regarded music teacher in the Racine Unified School District.

**Timothy Bernero**  
*Head Women's Basketball Coach; Lecturer, Exercise and Sport Science,* earned his M.B.A. from North Park College and his B.S. from Lake Forest College. He joined the Carthage faculty in 1996.

**Sandra Bisciglia**  
*Assistant Professor of Religion,* is a 1994 graduate of Carthage College. She received the very first Carthage Distinguished Adult Learner Award and the Carthage Religion Department's Emma Johnson Award. She worked in Roman Catholic religious education for nearly 20 years and is interested in Jewish-Christian dialogue. Professor Bisciglia is currently researching the native Italian Jews, known as the "Italyanim," as well as the relationship between Italian Jewish scholars and their secular and Christian counterparts in the early Modern period. She is investigating the history of Jewish communities in the city of Venice and other Adriatic coastal cities from northern to central Italy. The ancient and still extant Jewish ghettos of southern Italy are also of interest. Her course offerings include Post-Exilic Judaism, Judaism, Jewish Bible, and Women and the Bible. She is in the process of completing a Master of Science and Doctor of Science in Jewish Studies at Spertus Institute of Jewish Studies in Chicago. She joined the Carthage faculty in 2002. She earned her master's degree from Sacred Heart School of Theology.

**Christine Blaine**  
*Chair, Chemistry Department; Associate Professor of Chemistry,* teaches analytical, inorganic and general chemistry. Her research involves the impact of road salting on the Pike River Watershed. Her research specifically examines chloride concentrations in water and soil samples due to water runoff from roadways and sidewalks. Research results have been presented at the Midstates Consortium and regional and national American Chemistry Society meetings. Professor Blaine also has extensive experience in writing and designing new laboratories for the general, analytical and inorganic curriculum. In addition to her research and laboratory interests, she is involved in doing science experiments with elementary and high school students in the Kenosha area. In 2010, she won the Distinguished Teaching Award at Carthage. Before coming to Carthage, she was a visiting assistant professor of chemistry at Bowdoin College in Brunswick, Maine. Professor Blaine is a member of the American Chemical Society; Iota Sigma Pi, an honor society for women in chemistry; and Sigma Xi. She earned her B.A. degree from the College of St. Benedict and a Ph.D. in inorganic chemistry from the University of Minnesota. She joined the Carthage faculty in 1995.

**Michele Bonn**  
*Senior Lecturer, Exercise and Sport Science,* taught and coached at Pacific University in Oregon prior to coming to Carthage. She started teaching part time at Carthage in the fall of 1992. After serving as the Director of Advising Services and then as Registrar, she currently teaches and advises full time for the Exercise and Sport Science Department.

**Robert Bonn**  
*Chair, Exercise & Sport Science Department; Director of Athletics,* came to Carthage in 1992. Since 1975 he has taught, coached and directed at the high school and college level. He earned his B.S. in physical education from the University of Connecticut, M.Ed. from Springfield College, and Ed.D. from Boston University.

**Matthew Borden**  
*Assistant Professor of Modern Languages,* came to Carthage in 2003 from Marquette University, where he served as assistant professor of Spanish since 1999. At that post, he earned a Faculty Development Award and was listed in *Who's Who Among America's Teachers.* Prior to teaching at Marquette, he served as a teaching assistant and assistant instructor of Spanish at the University of Texas at Austin. Among his many honors, he received a Mellon Grant in 2001-02. Professor Borden earned his B.A. from the University of Wisconsin-Madison, and his M.A. and Ph.D. from the University of Texas at Austin.

**Glen Britich**  
*Assistant Football Coach; Lecturer in Exercise and Sport Science,* joined Carthage in 2006. He earned his M.A. from Adams State College and B.A. from Albion College.

**Lynn Brownson**  
*Associate Professor of Communication and Digital Media,* is a Chicago-area native who earned her bachelor's and master's degrees in communication studies from Northern Illinois University. She taught at Southeastern Louisiana University while earning her Ph.D. in speech communication at Louisiana State University. She began her teaching career at SLU as an instructor in 1987, and was promoted to assistant professor in 1994 and associate professor in 2000. She moved to Wisconsin in 2001, where she taught at UW-Whitewater until 2008. She is a certified corporate trainer (from UW-Milwaukee), and also has been an independent media/communication consultant in Illinois, Louisiana, and Wisconsin. Professor Brownson joined the Carthage faculty in 2008, and is faculty advisor to the Carthage chapter of Lambda Pi Eta, a national communication honor society.

**Jonathan Bruning**  
*Associate Professor of Communication and Digital Media,* received his B.A. from Gustavus Adolphus College, M.A. in American Culture Studies from Bowling Green State University, and Ph.D. in Communication Studies from the University of Kansas. He previously taught at the University of Kansas, as well as Washburn University. In addition to teaching, Professor Bruning previously worked in television news and sports, both as a producer and production assistant. He has presented papers at several national conferences, including the National Communication Association and the Popular Culture Association.

His research and teaching interests include media, new technology, sports journalism, and political and intercultural communication. He has led J-Term study tours to Spain, France, Italy, Holland and England, as well as the Oxford University semester abroad. He joined the Carthage faculty in 1999.
David Brunn
Rogers Palmer
Distinguished Professor of Business Administration; Professor of Business Administration and Accounting, has three decades of experience at Arthur Andersen & Co. He was a partner with Andersen Consulting, where he developed financial and manufacturing systems for clients of all sizes. He was the global head of Andersen Consulting’s Cost Management practice for several years. He is a CPA, a CMA, and a CPIM. During his last five years with the firm, he managed several of the largest projects for the firm’s Tax Technology Group. He earned his B.S. from the University of Pennsylvania, and M.B.A. from Northwestern University. Previously he was an adjunct professor at the Lake Forest Graduate School of Management, where he taught both financial accounting and corporate finance.

Professor Brunn joined the Carthage faculty in 1993, and was named the Carthage Distinguished Teacher of the Year in 1999. He is a past chair of the Faculty Executive Committee. He chaired the task force that conceived and implemented the Carthage Symposium component of the curriculum. He has devoted himself to improving the career opportunities available to Carthage graduates. He lives with his wife, Lyn, in Wilmette, Ill. They have two grown daughters and two granddaughters. He enjoys sailing on Lake Geneva.

Temple Burling
Associate Professor of Physics and Astronomy, Biology, and Great Ideas, came to Carthage from the Department of Biochemistry at Weill Medical College of Cornell University, where he served as an assistant professor and director of the X-ray Crystallography Core Facility. Before his work at Cornell, he was a postdoctoral fellow in the Department of Molecular Biophysics and Biochemistry at Yale University, where he examined problems in computational crystallography, protein dynamics, and high-resolution macromolecular structure determination by multi-wavelength anomalous dispersion. His teaching and research interests focus on the overlap of physics and biology. He has co-authored several articles that have appeared in science publications such as Acta Cryst and Science. He earned his B.A. from Grinnell College, M.S. in physics from Iowa State University, and his M.S. in biophysics and Ph.D. from the University of Rochester. He joined Carthage in 2002.

Deanna Byrnes
Assistant Professor of Biology, received her B.S. in biology from Cornell University with an emphasis in ecology, evolution and systematics. After working at Abbott Laboratories for six years, she returned to her interests in mammal evolution and tropical ecology and earned her Ph.D. from the University of Wisconsin in Madison in 2005. Her dissertation reconstructs the evolutionary relationships among the species of bare-backed fruit bats using molecular data, and maps the pattern of morphological and ecological differences among the species to try to understand the processes of natural selection responsible for the radiation of these unique bats across the islands of Indonesia and Melanesia. Her research continues to employ both field and laboratory methods to study the ecology and evolution of bats both local and tropical. Most recently she has begun a local long-term project in which students gather and share data with the Wisconsin Department of Natural Resources as part of a citizen monitoring program to help define the ecological needs of Wisconsin’s bat species. Her work has taken her to Costa Rica, Puerto Rico, Belize, and remote regions of Sulawesi and Papua New Guinea. She enjoys mentoring students through scientific inquiry and exploration of the outdoor natural environment. She is a rural Wisconsin native, and joined the Carthage faculty in fall 2007, after teaching and researching as a Lawrence University Postdoctoral Fellow in Appleton, Wis.

Leslie Cameron
Associate Professor of Psychology, earned her B.A. with distinction from McGill University, Montreal, her M.A. and Ph.D. from the University of Rochester, and her Certificat Supérieur et Diplôme de Phonétiques Appliquée à la Langue Française from the Université de la Sorbonne Nouvell, Paris. Prior to her Carthage appointment, she was research associate and adjunct professor at New York University. She was awarded a National Research Service Award Postdoctoral Fellowship and a National Institutes of Health Postdoctoral Fellowship at NYU. Professor Cameron was a member of research teams that have had papers published in a number of journals, including Vision Research, Spatial Vision, and Behavioral and Brain Sciences. She has presented at the Optical Society of America annual meeting and at colleges and universities. Her research goals include studying the effects of attention on early visual processing, human eye movements, and language processing as it correlates to vision and attention. She plays squash competitively, is a certified referee and referee instructor, and was awarded the Wedgewood Award and the Peter Lyman Award for contribution to the game of squash, sportsmanship, and excellence in play. She joined Carthage in 2002.

Thomas Carr
Senior Scientific Advisor of the Dinosaur Discovery Museum; Associate Professor of Biology. Thomas Carr’s research interests include the integration of ontogenetic and phylogenetic data in paleontology, phylogeny and historical biogeography of Laurasian dinosaurs, and the craniofacial anatomy of archosaurs. He has named four new dinosaur species in peer-reviewed publications such as Journal of Vertebrate Paleontology and Proceedings of the National Academy of Sciences. He is eagerly awaiting the Fall 2010 publication of his major review article on Albertosaurus sarcophagus, and he presently has three projects in progress that examine various aspects of the biology of Tyrannosaurus rex.

He has appeared in the National Geographic Channel documentaries T. rex Walks Again and Dinosaurs Decoded that featured his scholarship and fieldwork on T. rex. He has written articles for popular publications such as Rotunda and Dinosaur World. He is currently working on The Tyrant Lizards: The Reference Volume of Tyrannosauridae, an exclusive textbook for graduate students and vertebrate paleontologist. His degrees are Ph.D. Vertebrate Paleontology, Department of Zoology, University of Toronto; M.Sc. University of Toronto; B.A. York University (York, Ontario). He joined the Carthage faculty in 2004.

Maria Carrig
Associate Professor of English, Theatre and Great Ideas, earned her B.A. in English literature and Greek from Bryn Mawr College, and her M.A. and Ph.D. in English literature
from Yale University. She also studied Latin and Italian in Italy, earning a certificate from the Università per stranieri in Siena. Her teaching and research focus on Shakespeare and Renaissance drama, as well as the religion and magic beliefs of the early modern period. Before coming to Carthage, Professor Carrig was a teaching fellow at Yale University and an assistant professor of English at Loyola University Chicago, where she helped start a Great Books program. She is currently working on a long-term project on Renaissance comic theory and its relation to theatrical practice in Shakespeare, Jonson and Middleton. Outside the library, she loves to take students to theater in Chicago and Milwaukee, and on Carthage's annual trip to the Stratford Shakespeare Festival in Ontario. She recently completed an article on contemporary revivals of Renaissance comedies. She joined the Carthage faculty in 2002.

Anne Cassidy
Associate Professor of Art,
teaches non-western and western art history, printmaking, and Heritage. A specialist in the arts of the Americas, her current research involves ritual calendar manuscripts of pre-Hispanic Mexico. Before coming to Carthage, she taught at Columbia University in New York, Pratt Institute in Brooklyn, and Grossmont College in San Diego. She brings to her teaching a strong belief that works of art should be studied as primary sources whose interrogation allows the student to access fundamental concepts and questions. Professor Cassidy's long and varied experience in the study and practice of art informs her work as an art historian. After majoring in studio art as an undergraduate, she worked as a scenic artist in and around New York City, on sets for theater, film, and television. During this time, she was an artist member of the Center for Book Arts in New York, where she showed and sold her prints and book art.

After graduate study at Columbia University, Professor Cassidy became deeply involved in the repatriation of American Indian art and ritual objects. On behalf of the American Indian Ritual Object Repatriation Foundation in New York, she worked closely with collectors and tribes throughout the United States, facilitating repatriations and advocating for tribes. This experience afforded an opportunity to learn about American Indian art and history from American Indians, but also offered a deeper understanding of the power and universality of aesthetic activity itself. She has been studying and researching central Mexican manuscripts for the last 14 years. Mesoamerican manuscript research has taken her to Mexico and a number of European libraries. She is currently working on a manuscript about the Borgia Group ritual calendars. She has earned her Ph.D., M. Phil., and M.A. at Columbia University; and her B.A. from Rutgers University.

Charlotte Chell
Professor of Mathematics,
Computer Science and Great Ideas, teaches courses in the Computer Science and Mathematics Departments, as well as in the Great Ideas Program.

Her specialty is mathematical logic, which provides a theoretical basis for her work in computer science and gives her a special interest in the courses of discrete mathematics, abstract algebra, and computer organization. Among her research interests are computational abstract algebra and symbolic computation. Her long-standing education interest is the pedagogy of Quantitative Literacy, the movement to insure that every college graduate has skills for managing everyday quantitative topics in the popular press, personal finance, and civic affairs.

She has been honored with the Carthage Distinguished Teaching Award. She served as chairperson, then as the first woman governor of the Wisconsin section of the Mathematical Association of America. In 2000, she was also the first woman to be awarded the Distinguished College and University Professor of Mathematics by the Wisconsin MAA. She was formerly a consultant and reader for Advanced Placement (Computer Science) of ETS, is currently a consultant to the NEXT program of the MAA, and has served as member and chairperson of the national membership committee of the MAA.

In 2010, she was honored with the Carthage Flame Award only the second active member of the faculty to be presented with the College's highest award. The Carthage Flame recognizes outstanding service to the College and the community. At Carthage Professor Chell has special responsibility for the production of the annual Carthage Christmas Festival and her community service has included positions on the Board of Attorneys' Professional Responsibility, Board of Trustees of Armitage Academy, and the Board of Directors of the Wisconsin Public Radio Association.

She earned a B.A. degree from St. Olaf College, and M.S. and Ph.D. degrees from the University of Wisconsin-Madison. She is a member of Phi Beta Kappa, Omicron Delta Kappa, and Pi Mu Epsilon. She also completed graduate work at the University of Chicago, where she served as an instructor in the department of computer science. She taught at Carthage from 1975 to 1977, and has taught here continuously since 1981.

Paul Chilsen
Chair, Communication and Digital Media Department; Associate Professor of Communication and Digital Media. For more than two decades Paul Chilsen has worked in the film and television business, a career that has taken him all over the world and into most aspects of the industry. The first big step came on a post-college job search in Los Angeles. After production managing a couple of seasons of the popular Star Search series and some assistant director work for The Disney Channel, he realized his career in film and TV needed a decidedly different approach. So he headed back to the Midwest, where an M.F.A. in film from Columbia College (Chicago) and teaching at Columbia and Northwestern University cleared his vision.

Many projects have transpired since. His debut feature Stricken, a dramatic thriller written by W.W. Vought, (When Trumpets Fade) and starring Jamie Kennedy (Jamie Kennedy Exp., Scream I, II & III), is in worldwide distribution, most recently seen on the shelves of the major video chains. He also co-wrote an internationally distributed children's movie with occasional Travelarama co-host Bob Curry; The Last Great Ride stars Academy Award laureates Ernest Borgnine and Eileen Brennan. His thesis project, the dark comedy short Gross Ratings, received international awards and recognition, including a regional Student Academy Award nomination. Professor Chilsen produced Rain Dance, the debut film of David Mamet's assistant, Pam Susemihl and Ben Broitman's Amphibian, which won a regional Student Academy Award. He associate produced J.J. Murphy's feature Horizon, and directed two award-winning documentaries including This Instant, funded in part by the N.E.A. and a feature documentary about the American Prairie. Like so many others these days, he is shopping or finishing several screenplays,
but it is the development of the first season of his family travel adventure series Travelarama that keeps his focus sharp. The series is destined for national distribution on PBS.

An Emmy Award nomination came recently for Professor Chilsen's work on the 2nd City show CPS Right Now. The news magazine TV show highlighted all the cool things in one of the world's largest school districts, Chicago Public Schools. Professor Chilsen was a segment producer, writer and occasional director for the show.

He earned an M.F.A. at Columbia College (Chicago) and B.A. at the University of Wisconsin-Stevens Point. Professor Chilsen also did post-graduate work in film at the University of Wisconsin-Madison and was a Follett Fellow at Columbia College Chicago.

**Dan Choffnes**  
Assistant Professor of Biology, a developmental geneticist, joined the Carthage faculty in 2006. His undergraduate degree is from the University of Illinois at Champaign-Urbana. He continued his training as a National Science Foundation graduate fellow at the University of California at Berkeley, where his Ph.D. work focused on bioinformatics, gene evolution, and developmental genetics in plants. His current research aims to (1) better understand the effects of endocrine disrupting compounds on vertebrate development and (2) study the uses of medicinal plants in traditional medical systems.

**Ron Cronovich**  
Chair, Economics Department; Associate Professor of Economics, was a member of the University of Nevada-Las Vegas economics faculty from 1994 to 2008, and a three-time selection as the outstanding teacher of the year in UNLV’s college of business. He earned a B.A. in economic theory from American University in 1988, and earned a master's degree and Ph.D. in economics from the University of Michigan.

**Kevin Crosby**  
Chair, Natural Sciences Division; Associate Professor of Physics and Astronomy and Computer Science, has taught broadly across the physics curriculum, including courses in planetary astronomy and global climate science. He is currently involved in a variety of undergraduate space science research initiatives, including microgravity studies of lunar regolith, and near space exploration using sounding rockets and high altitude balloons. He also involves students in computational physics research. He and his students have published papers on several problems involving the physics of disordered materials and materials under mechanical and electrical stress. Computational physics research at Carthage makes use of molecular dynamics calculations to understand the behavior of atomic surfaces and boundaries.

Professor Crosby came to Carthage in 1998 from the University of Northern Colorado, where he was visiting assistant professor of physics. He earned his Ph.D. from Colorado State University (Beta Kappa Phi, M.S. in physics from the University of California-Davis, and B.A. in physics from Beloit College.

**Sarah Cyganiak**  
Assistant Professor of Modern Languages, is a Wisconsin native who earned a B.A. in Spanish and economics at the University of Michigan in 1998. She was a four-time All-Big Ten tennis player at Michigan, a two-time Big Ten player of the year, and captain of the 1997 Wolverines team. She earned an M.A. in Spanish language and literature at the University of Wisconsin-Madison in 2000, and is pursuing a doctorate in Romance Languages and Literature at the University of Michigan. She was an adjunct instructor at Marquette University before joining Carthage in 2007. Her current project deals with a translation and analysis of 20th century Spanish philosopher Maria Zambrano.

**Arthur Cyr**  
A. W. and Mary Margaret Clausen Distinguished Professor of Political Economy and World Business; Director of the A. W. Clausen Center for World Business; Director, International Political Economy Program, previously served as the president of the Chicago World Trade Center Association, the vice president of the Chicago Council on Foreign Relations, a faculty member and administrator at UCLA, and an executive at the Ford Foundation in the International and Education Divisions.

He is the author of four books on international relations and British politics:

**Julie Dahlstrom**  
Assistant Professor of Physics and Astronomy, came to Carthage in 2009 from the University of Chicago, where she was a postdoctoral researcher in observational astrophysics, specializing in high-resolution spectroscopy of stars and interstellar clouds as well as the abundances of elements produces in the Big Bang. During her years as a researcher, she authored or co-authored more than 50 articles appearing in refereed scientific journals and conference proceedings. She earned her master's degree and Ph.D. in astronomy and astrophysics from the University of Chicago. She earned a B.S. at Haverford College with a double major in physics and astronomy. While at the University of Chicago, Professor Dahlstrom was awarded the Robert J. Trumpler award of the Astronomical Society of the Pacific for her dissertation research and a Hubble Postdoctoral Fellowship of the Space Telescope Science Institute. Professor Dahlstrom is a data specialist and instrument scientist for the Astrophysical Research Consortium's echelle spectograph on the 3.5m telescope at Apache Point Observatory in New Mexico. She also retains close ties to Yerkes Observatory in Williams Bay, Wis., including access to observational facilities there.
Julie Dawson  
Assistant Professor of Business Administration, CPA, received her B.A. in accounting and business administration from Augustana College and her Master's in Accountancy from the University of Wisconsin at Madison. Before coming to Carthage in 2001, she was an auditor for Deloitte & Touche in Davenport, Iowa. She is the advisor of the Carthage Accounting Association as well as the Volunteer Income Tax Assistance program at Carthage.

Beth DeLaRosby  
Lecturer, Exercise and Sport Science, 2008.

Peter Dennee  
'86, Chair of the Music Department; Associate Professor of Music, joined Carthage in 2005. He conducts the Lincoln Chamber Singers and the Carthage Women's Ensemble. In addition to directing these ensembles, he teaches choral conducting and music education classes. Prior to his appointment at Carthage, Professor Dennee held positions as assistant professor of music at West Virginia University and Susquehanna University, and visiting assistant professorships at the University of Colorado-Boulder, and the University of Michigan. He has taught music at the elementary and secondary levels in Baltimore, Milwaukee, and Tempe, Ariz. He earned a Doctor of Musical Arts in choral music from Arizona State University, a master of music in music education from the Peabody Conservatory of Music at Johns Hopkins, and a bachelor of arts in music education from Carthage (1986).

Bosko Djurickovic  
Head Men's Basketball Coach; Lecturer, Exercise and Sport Science, earned his B.S. from North Park College. He joined the Carthage faculty in 1996.

Stephanie Domin  
Head Women's Cross Country Coach; Head Women's Track and Field Coach; Lecturer, Exercise and Sport Science, earned her M.A. from Loras College and her B.A. from the University of Rhode Island. She joined the Carthage faculty in 1997.

Steven Domin  
'93, Head Men's Soccer Coach; Lecturer, Exercise and Sport Science, has served at Carthage for the past nine years. His guidance has made the Red Men and Lady Reds consistent winners. The Naperville, Ill., native continues to bring enthusiasm and a tireless work ethic to the lakeshore campus, helping him earn College Conference of Illinois and Wisconsin Coach of the Year honors. Mr. Domin holds a combined 202-126-19 overall record. Under Mr. Domin's direction, Carthage has produced 58 All-CCIW performers, seven All-State of Wisconsin Collegiate performers, six All-Midwest players, two NCAA All-Americans, a conference championship and a CCIW "Player and Coach of the Year." Carthage teams have been ranked in the top ten by the NSCAA Regional and National Committee on several occasions. Mr. Domin is the Director of Coaching for the local area club programs, has served on the NCAA Men's and Women's Championship Selection Committees, and is a full-time teacher in Carthage's Exercise and Sport Science Department. Mr. Domin holds an advanced coaching license from the National Soccer Coaches Association of America (NSCAA) and a state license from the United States Soccer Federation (USSF). In addition to soccer, he was a four-year starting second baseman for the Red Men baseball team. Mr. Domin played on the 1992 and 1993 CCIW Championship teams, in the NCAA Central Region Championships, and in the Div. III NCAA College World Series. In both 1992 and 1993 he hit over .400 while setting a Carthage career mark as being the toughest to strike out. After graduating with an Exercise & Sport Science and Business Administration degree, Mr. Domin finished his master's degree in education with an emphasis on guidance and counseling.

Cathy Duffy  
Assistant Professor of Business Administration, is a certified public accountant. Before coming to Carthage, she was a corporate tax consultant at Arthur Andersen, a senior tax accountant for Amoco Corporation, an accounting instructor at Robert Morris College, and most recently, a consultant for Jefferson Wells. She currently lives in Racine, Wis., with her husband, Michael, and their three children, Michael, Amelia and Nicola. She earned her B.S. in 1989 from the University of Southern California, and M.S. in taxation from DePaul University in 1996.

Annette Duncan  
Director of Supplemental Instruction and Tutoring Program; Assistant Professor of English, earned her B.A. from Evangel College and M.A. from the University of Nebraska.

Greg Earhart  
Head Men's Swimming Coach; Aquatics Director; Lecturer in Exercise and Sport Science, came to Carthage following three successful seasons at both Indiana University and the University of Minnesota. An active member of USA Swimming, Mr. Earhart served as director of the 2001 Regional Distance Camp and marshal for the 2000 Olympic Trials. He graduated from Buena Vista College with a double major in history and political science,
where he set three school records in swimming. He earned his M.A. in public policy from the Humphrey Institute of Public Affairs at the University of Minnesota. In addition to his duties as head men's swimming coach, he serves as the director of the Koenitzer Aquatic Center and is part owner of CollegeSwimming.com.

Jacqueline Easley
Chair, Education Department; Assistant Professor of Education, received her Ph.D. from Northern Illinois, M.A. from Concordia University, and B.A. from Concordia College. She joined Carthage in 2006.

Timothy Eckert
Professor of Chemistry, regularly teaches courses in Organic and General Chemistry, and Forensic Science. He earned his B.A. at Yale University, and Ph.D. at the State University of New York at Syracuse. As a postdoctoral fellow, he did bioorganic chemical research at the University of California-Santa Barbara. During a sabbatical leave he pursued NMR research at the University of Arizona. His research at Carthage is now focused on the synthesis and NMR explorations of chiral NMR shift reagents. Professor Eckert wrote the organic chemistry text used at Carthage. He has published several papers in the Journal of Organic Chemistry, Journal of the American Chemical Society, and Journal of Chemical Education. His love for math puzzles has led him to serve as an editor for American Mathematics Competitions for high school students. He also enjoys bicycling, tennis and basketball. He joined the Carthage faculty in 1989.

Cory Everts
Assistant Baseball Coach; Intramural Director; Lecturer in Exercise and Sport Science, earned his B.A. from Carthage. He joined Carthage in 2005.

Ruth Fangmeier
Chair, Social Work Department; Professor of Social Work, was the associate director of the Lighthouse National Center for Vision and Aging in New York before coming to Carthage. Additionally, she served as a research associate for the Jewish Board of Family and Children's Services as well as for the United Nations Development Programme in New York. She spent five years as an adjunct assistant professor at the Hunter College School of Social Work. Since 1987, she has presented at nearly 80 social work conferences and seminars nationally and internationally. Her documentary film on age-related vision loss, The World Through Their Eyes, has won critical praise and numerous awards, including accolades at the British Medical Association Film and Video Festival, The CINE Golden Eagle Awards, and the U.S. International Film and Video Festival. Professor Fangmeier has authored seven books and currently is a consulting editor of the Journal of Baccalaureate Social Work. She earned her D.S.W. in social welfare from the Columbia University School of Social Work, M.S.W. from the National Catholic School of Social Service, the Catholic University of America, and B.S. in secondary education from Bowling Green State University. She joined the Carthage faculty in 1997.

Susan Foster
Women's Soccer Coach; Lecturer, Exercise and Sport Science, earned her B.S. from Northwestern University. She joined the Carthage faculty in 2003.

Antonio Fredericks
Associate Professor of Business Administration, joined the Carthage faculty in the fall of 2005. He has a BSEE from Pratt Institute; M.S. in computer science from the University of Massachusetts; master's degrees in business administration, project management and telecommunications management from the Keller Graduate School of Management; and an M.S. in computing from Marquette University. He is currently working on a J.D. at Marquette University. He previously held faculty positions at ITT Technical Institute, Robert Morris College, Columbia College and the University of Phoenix. He has more than 14 years of industry experience working as a software development engineer and manager for several major corporations such as Textron Defense Systems, IDEX and Motorola.

Eduardo Garcia-Novelli
Director of Choral Activities; Director of Carthage Choir; Associate Professor of Music, is a native of Argentina who earned two degrees from conservatories in Buenos Aires. He served as assistant director of the Argentinean National Young People Choir in Buenos Aires and served as director of the award-winning choral program at Belgrano Day School. He earned a Master of Music degree in choral conducting from Westminster Choir College of Rider University, and a Doctorate of Musical Arts in choral conducting from the University of Houston. Professor Garcia-Novelli served as assistant director of the Houston Symphony Chorus from 1997 to 2002. He came to Carthage in 2008 from Lamar University, where he was director of choral activities and director of the Symphony of Southeast Texas Chorus from 2002 to 2008. In 2006 he was awarded Lamar University's Faculty Merit Award for excellence in teaching.

Dana Garrigan
Associate Professor of Biology, came to Carthage in 2007 after eight years as a faculty member at Pacific Lutheran University. She earned a B.A. in biology from St. Olaf College in 1988, and a Ph.D. in biology from the University of Utah in 1994. After teaching at the University of Colorado's Mountain Research Station, he was an assistant professor of biological sciences at DePauw University from 1996 to 1999. He also was a visiting associate professor at the University of Washington-Tacoma in 2004-05.

Tracy Gartner
Director of the Environmental Science Program; Assistant Professor of Biology, Geography and Earth Science, joined the Carthage faculty in 2005. She directs the Environmental Science Program and teaches research- and service-oriented courses in environmental science, ecology, botany, experimental design and restoration. Professor Gartner's research focuses on how shifts in biodiversity (due to invasive species, environmental change and human disturbance) influence community structure and nutrient dynamics in ecosystems. She has presented her work at
several national conferences, including the Ecological Society of America, where she co-organized an oral session on the influence of biodiversity in the litter layer. Her work has been published in a variety of professional journals, including *Soil Biology and Biochemistry*, *Oikos*, and *Ecology Letters*. In addition, she has remained active in a variety of professional research groups, including Sigma Xi, MEXEco (Microbial Enzymes across Ecosystems), and is a co-PI for an NSF-funded network focusing on gathering continental-scale ecological data at principally undergraduate institutions. Before arriving at Carthage, she received her B.A. in biology and environmental science at Coe College (Phi Beta Kappa), and received her Ph.D. in ecology from the University of Connecticut. She did postdoctoral work in Alaska while sponsored by the University of California-Irvine.

**Danielle Geary**  
*Assistant Professor of Social Work*, graduated from Carthage in 2000 with a bachelor's degree in social work (summa cum laude). She earned a Master of Social Work in public child welfare from the University of Wisconsin-Madison in 2001. Her work experience in public child welfare includes working with Rock County DCFS, the Bureau of Milwaukee Child Welfare and Kenosha County DCFS. With nine years of direct practice in public child welfare, and five years of adjunct lecturing for Carthage, Professor Geary joined the Carthage faculty as an assistant professor in 2009. With plans to pursue a Ph.D. in social work, her research interests include child abuse and neglect issues and childhood poverty.

**Amy Gillmore**  
'94, *Head Women's Softball Coach; Lecturer in Exercise & Sport Science*, is a three-year softball letter-winner at Carthage, from 1992 to 1994. She served three years as the head softball coach and assistant girls' basketball coach at Kenosha St. Joseph High School. Her softball record at St. Joseph was 43-16. Her 1995 and 1996 teams both finished second in the Wisconsin Independent Schools Athletic Association championship, while her 1997 squad went 18-2, won a Metro Conference championship, and advanced to the WISAA semifinals. She was a three-time all-CCTW shortstop and ranks among Carthage career leaders in batting average, hits, runs scored, RBIs, doubles, triples, slugging percentage and on-base percentage. She also holds the Carthage career and season records in stolen bases. She earned an M.Ed. and a B.A. from Carthage.

**Kimberly Greene**  
Chair, *Art Department; Assistant Professor of Art*, earned a B.A. in electrical engineering from Northwestern University in 1988, then worked for 11 years in computer-related fields before returning to school. She earned a bachelor of fine arts from the New York State College of Ceramics at Alfred University in 2002, and a master of fine arts from Louisiana State University in 2005. She was a ceramics instructor at Southeastern Louisiana University in 2005-06, and an art instructor at Baton Rouge Community College in the first part of 2006, teaching art appreciation courses. She was a visiting assistant professor of ceramics and foundations at Michigan State University for one year, before coming to Carthage in 2007.

**Thomas Groleau**  
Chair, *Social Science Division; Associate Professor of Business Administration*, has taught courses in information systems, operations management, statistics and management science. He previously held faculty positions at the University of Kentucky and Bethel College. In addition to teaching, he has held several short-term industry positions, including a two-year stint with Kentucky Utilities. He is a member of the Institute for Operations Research and the Management Sciences, the Decision Sciences Institute, and the Christian Business Faculty Association. Professor Groleau earned both an M.S. in Operations Research and his Ph.D. in Decision Science and Information Systems from the University of Kentucky, where he was a recipient of a President Fellowship and Dissertation Year Fellowship. His B.A. is from St. Norbert College. He joined the Carthage faculty in 1999.

**Amy Haines**  
*Assistant Professor of Music*, teaches Private and Class Voice, Vocal Pedagogy, Heritage, the Carthage Symposium course Cultural Expressions of American Musical Theatre, and conducts the mainstage musicals. Increasing Carthage's use of the newest visualization technology, the Carthage Voice Science and Pedagogy Lab, equipped with VoceVista, an electroglottograph, and a SonoVx, is housed in her studio. She earned her B.A. in Music and a Diploma in Voice from Carthage, M.M. in Vocal Performance from the San Francisco Conservatory of Music, with extensive doctoral study at Northwestern University. She joined the Carthage faculty in 1987.

**Ellen Hauser**  
*Assistant Professor of Sociology and Political Science*, currently teaches courses in sociology, political science, and women's and gender studies. She teaches courses on Global Poverty, Women and Politics, African Transitions, Women of Africa, and Women's and Gender Studies Theory. Her published work includes "Uganda Relations with Western Donors in the 1990s: What Impact on Democratization?" in Cambridge University Press's *The Journal of Modern African Studies*. Her chapter "Mythical Madness vs. Invisible Insanity: Single Motherhood and Survival" will be published by Demeter Press in *Moms Gone Mad: Motherhood and Madness, Oppression and Resistance* in 2011. Professor Hauser's professional international experience includes teaching at Nanjing University in Nanjing, China, for 18 months, conducting dissertation research with high-level government officials in Uganda, and participation on the official U.S. Election Observer Team monitoring the 1996 elections in Uganda. As a Diplomacy Fellow through the American Association for the Advancement of Science, she worked at the Center for Democracy and Governance at the United States Agency for International Development in Washington, D.C. Her duties there included work in Rwanda interviewing government officials and genocide survivors to propose a program for President Clinton to announce during his 1998 visit to Rwanda. Professor Hauser organized and presided over meetings on the Great Lakes (Africa) Initiative for President Clinton's advisors. She also assisted the president's special advisor on U.S. assistance in international rule of law programs to organize efforts to allow the U.S. government to support democracy programs in China. She earned her B.M. from Augustana College, and her M.A. and Ph.D. from the University of Wisconsin-Madison. She joined Carthage in 1999.
Scott Hegrenes
Director of Discovery Program; Associate Professor of Biology, is an ecologist interested in aquatic ecosystems and conservation of biodiversity. His research interests include the effect of pollution on stream life, non-native species impacts, and the role of phenotypic plasticity in niche partitioning in fish. He maintains aquaria in the Biology Department for the study of fish behavior and bio-monitors local stream and wetland communities. His hobbies include music, breweriana, poker, and J-Terms in Central America. He earned his B.A. from Hamline University, M.S. from the University of North Dakota, and Ph.D. from Illinois State University's BEES Program (Behavior, Ecology, Evolution, and Systematics). He taught at Winona State University before coming to Carthage in 2001.

Richard Heitman
Associate Professor of Great Ideas, Classics and Philosophy, came to Carthage in 2003 from the University of Chicago, where he was an instructor at Graham School of General Studies. Prior to that appointment, he served as an adjunct lecturer of English at New York City Technical College (CUNY). He earned his B.A. in philosophy, Phi Beta Kappa, from Knox College in 1974 and his A.M. from the University of Chicago, General Studies. For many years, he was active in the theater in New York City, writing several plays and a screenplay. In 2001 he earned his Ph.D. from the University of Chicago, Committee on Social Thought. He has presented several doctoral lectures, has written for two scholarly publications, and has been selected three times as a participant in the National Endowment for the Humanities summer seminars. His book Taking Her Seriously: Penelope and the Plot of Homer's Odyssey was published by the University of Michigan Press in 2005.

Janeth Herrera
'97, Assistant Professor of Modern Languages, joined the Carthage faculty in 2004. She previously served as a Spanish instructor at Delta College in Saginaw, Mich., where she served as senator for the Humanities Division, book evaluation committee member, and diversity implementation team. She is a member of the National Collegiate Foreign Language Honor Society Alpha Mu Gamma, Wisconsin Association of Foreign Language Teachers, and the International Friendship Society. She earned her bachelor's degree in education from the Universidad Pedagogica Nacional, Bogota, Colombia in 1993, master's degree in education from Carthage in 1997, and master's degree in Spanish literature from the University of Wisconsin-Madison in 2000.

Woodrow Hodges
Associate Professor of Music, is an active performer as well as a music educator. He is a bassoonist for the Kenosha Symphony and performs in several smaller ensembles throughout the year. He teaches music theory, applied woodwinds, woodwind methods, and exploring music. He also is involved with the First Methodist Church's Chancel Choir. A winner of the coveted Helmut Schaeffer Award for lifetime service to the Kenosha Symphony, Professor Hodges currently serves as an advisor to the KSO Board of Directors. He is a member of the College Band Directors National Association, the Wisconsin Music Educators Association, Kappa Kappa Psi, a professional band fraternity, and Phi Mu Alpha Sinfonia, a professional music fraternity. A graduate of Southwestern College, he earned his M.A. and Ph.D. at the University of Iowa. He joined the Carthage faculty in 1977.

Laura Huaracha
Assistant Professor of Communication and Digital Media, came to Carthage in 2007 after two years as an adjunct instructor at the International Academy of Design and Technology in Chicago. She earned a B.A. in journalism and mass communication from Creighton University in 1997, and an M.F.A. in graphic design from Savannah (Ga.) College of Art & Design in 1999. She was an instructor at MapleWoods Community College in Kansas City, Mo., and has worked at The Grand Group, a Chicago marketing design firm, and the Potbelly Sandwich Works chain.

Carolyn Hudson
Assistant Professor of Art, was educated at the University of Leeds and Huddersfield College in England, where she earned the U.S. equivalents of B.A. and M.A. degrees in fine art and English literature, specializing in the early modern period. Before coming to Wisconsin she taught at York and Oxford Colleges of Further Education, and has taught at Carthage since 1981. Her lifelong commitment to the interdisciplinary learning experience and her arts-humanities background led to her crafting and pilot many of the cutting-edge interdisciplinary programs now at the core of the Carthage education experience. As well as teaching specialized classes in art history, she teaches in the Western Heritage Studies Program, the Women's and Gender Studies Program, and the Carthage Symposium.

Professor Hudson frequently collaborates with faculty from other departments to explore the arts from a multitude of perspectives, for example: The West and the World [Western Civ.]; The Philosophy of Art and Beauty [Art and Philosophy]; Women in the Visual and Performing Arts [Art, Music, Theater, Women and Gender]; Art, Music and Literature in Historical Context [Art, Music and English]; The Italian Experience: Art, Religion and Culture [Art and Classics]; Art and Literature in The American Century [Art and English]; Art and Psychology [Art and Psychology]. Her 2009 publication in the seventh annual International Journal for the Humanities reflects her commitment to the interdependent relationship between arts and culture: "Obama's Election and the End of Postmodernism."

Lauren Hume
Lecturer, Exercise and Sport Science, 2008.

Kimberly Instenes
Assistant Professor of Theatre, holds an M.F.A. in costume design and technology from Ohio University, and a B.A. in theatre from the University of Wisconsin-Whitewater. Her faculty credits include the University of Wisconsin-Parkside, where she was an associate professor of theatre and costume
shop supervisor; and UW-Whitewater and UW-Milwaukee, where she was an adjunct lecturer in theatrical makeup. She also taught at Lawrence University. In addition to teaching, she has designed costumes and makeup for a number of productions including Imaginary Invalid, Pride and Prejudice, Trojan War, Sweeney Todd and Translations. She continues to work as a freelance costume and makeup designer in the Milwaukee/Chicago area. Professional design credits include A Year with Frog and Toad, The Giver and Perseus Bayou at First Stage Milwaukee; Jeeves Intervenes at the Milwaukee Chamber Theatre; Romeo and JULIET at Milwaukee Shakespeare, the Milwaukee Repertory Theater, Renaissance Theatre Works, Utah Shakespearean Festival and the Racine Theatre Guild; and recently costume designer for the world premiere of Gossamer, written by Lois Lowry and performed at First Stage Milwaukee. At Carthage, she designed The Good Woman of Setzuan, Thoroughly Modern Millie and Lysistrata, for which she received a Certificate of Merit from the Kennedy Center American College Theatre Festival for costume design. She is excited to be a part of the Theatre Department here at Carthage as it strengthens and strives to create theatre artists of the highest quality. She enjoys the thrill of watching a student understand what a costume does for their character and watch that character come to life as a result. She came to Carthage in 2008.

John Isham
Assistant Professor of Great Ideas and Modern Languages, came to Carthage in 2007 from Columbia University, where he was a core lecturer in literature humanities. The Ohio native earned a B.A. in philosophy and mathematics from St. John's College, Annapolis, Md., in 1989. He began studying Russian, then earned a master's of international affairs from Columbia in 1994. He earned an M.A. in Russian language from Middlebury College in 1996; then earned an M.A., master of philosophy and Ph.D. in Russian literature, all from Columbia. He also taught courses in Russian and humanities at Columbia from 1997 to 2003, and at Drew University in Madison, N.J. from 2003 to 2005.

Laurie Jensen
'97, Head Athletic Trainer; Senior Lecturer, Exercise and Sport Science, earned her M.Ed. in 1999 and her B.A. in 1997 from Carthage. She joined the Carthage faculty in 2000.

Paul Kirkland
Assistant Professor of Great Ideas and Political Science, specializes in the study of political philosophy. He earned a B.A. in politics from Ursinus College in 1994, a master's in political science from Fordham University in 1997, and a Ph.D. in political science from Fordham in 2002. He has been a visiting instructor at Dominican University in River Forest, Ill., and a Bradley Fellow and visiting assistant professor at Kenyon College. His book, "Nietzsche's Noble Aims: Affirming Life, Confronting Modernity" was published in 2009 by Lexington Press. He came to Carthage in 2007 from the College of the Holy Cross, where he was a visiting assistant professor.

Allen Klingenberg
Associate Professor of Mathematics, earned his bachelor's and master's degrees from the University of Michigan, and his Ph.D. from Michigan State University. He joined the Carthage faculty in 2003. He is very active on the Division of Natural Sciences' Summer Undergraduate Research Experience (SURE) committee, which he has chaired for the past three years. He wrote and conducted three mathematics grants in 2005 at Carthage, and has authored 25 peer-reviewed journal articles and one book, Effective Schools Through Effective Management, with the late Fredric Genck in 1991. He is active in the American Statistical Association, the National Council of Teachers of Mathematics, and the Racine Founders Rotary Club.

Kristopher Koudelka
Assistant Professor of Biology and Chemistry, grew up in Door County, Wis., and earned a B.S. at the University of Wisconsin-River Falls. He returns to Wisconsin after six years in the San Diego area. He earned a doctorate of philosophy in 2008 in chemical biology from the Kellogg School of Science and Technology at The Scripps Research Institute (TSRI). For the past two years he was a research associate at TSRI and a visiting assistant professor at the University of San Diego. He also taught at the University of California-San Diego.

Herschel Kruger
Chair, Theatre Department; Associate Professor of Theatre, earned his M.F.A. in acting from the University of Illinois, and while there completed an independent study in directing with Dr. Burnet Hobgood. Professor Kruger is also a graduate of the National Shakespeare Conservatory’s two-year Professional Actors Training program in New York City, and holds a B.A. in theatre communications from Cardinal Stritch University. He has worked as an actor and director in New York, Illinois, Michigan, and Wisconsin.

In 2009, Professor Kruger directed the world premiere of "Honest" at Carthage, which was then selected as a full participating production at the 2010 Region III Kennedy Center American College Theatre Festival in Saginaw, Mich. Commendations were given in Curricular Development, Playwriting, and Acting by the KCACTF National Selection Committee. His 2008 production of "Independence" was selected to represent the state of Wisconsin at the 2009 Region III Kennedy Center American College Theatre Festival evening of scenes.

Professor Kruger teaches the upper-level acting and directing classes, a variety of other theatre classes, and directs two main stage productions each year. He has also led two separate J-Term trips to Greece and Germany to study theatre. Directing credits at Carthage include "Sunday in the Park With George," "Lysistrata," "Honest," "Moon Over Buffalo," "Blood Brothers," "Picasso at the Lapin Agile," "Postmortem," "Independence," and the entire "Over the Tavern" trilogy including "Over the Tavern," "King o’ the Moon," and "Last Mass at St. Casimir’s."

Erik Kulke
Assistant Professor of Modern Languages; Study Abroad Coordinator, joined the Carthage faculty in 1999. In addition to living and studying in Spain and Latin America,
he has taught English in Spain and Mexico. He teaches Spanish language, literature, and civilization courses, as well as cultural awareness and Heritage. He recently added Study Abroad to his responsibilities, working with Carthage students as they prepare for and participate in their international study experiences. His academic interests include Pre-Colombian civilizations, which has led him to travel throughout Latin America to explore numerous archeological sites from Mexico to Peru. Recently, he has traveled with groups of students to Mexico's Yucatan peninsula to study Mayan culture and civilization, exploring ruins throughout the peninsula. Professor Kulke is active in promoting wellness and congeniality among faculty and staff members through the organization of such events as the All-Carthage Golf Outing. He earned an M.A. from the University of Wisconsin-Madison and a B.A. from Gustavus Adolphus College.

Ross Larson
Adjunct Assistant Professor of Religion and Communications and Digital Media, has taught religion and public speech at Carthage since 1991. He has served as a Lutheran pastor in Chicago, St. Louis, and Racine; on the staff of the Chicago Synod; and as co-director of post-doctoral education at the Lutheran School of Theology. He is proprietor of Gener-age of doctoral education at the Lutheran School of Chicago Synod; and as co-director of post-Carthage Golf Outing. He earned an M.A. promotion of such events as the All-Carthage Golf Outing. He earned an M.A. from the University of Wisconsin-Madison and a B.A. from Gustavus Adolphus College.

John Leazer
Assistant Professor of History, specializes in European history with an emphasis on Britain and Ireland. He earned his Ph.D. from Loyola University Chicago. While there he was awarded a grant from the English Speaking Union to complete his dissertation titled The Seventeenth and Eighteenth Century Scottish Herring Fishery: The Effect of the 1707 Treaty of Union and its Impact on Early Modern Great Britain. Professor Leazer has given several conference papers on a variety of topics in British history including the Irish Famine, the Union of England and Scotland, and undergraduate response to British history. He is currently working on his book titled The Fish that Saved the Union: The Scottish Herring Fishery, the 1707 Treaty of Union and the Foraging of the United Kingdom.

Along with his classes on the history of Europe and Great Britain, Professor Leazer also teaches classes on the history of the Atlantic World, Historical Methods as well as regularly participating in the Heritage Program. He joined the Carthage faculty in 2008.

Diane Levesque
Director of the H.F. Johnson Gallery of Art; Assistant Professor of Art, served as a visiting artist lecturer in 2001 and as a visiting artist instructor in 1997. She specializes in painting, drawing, and mixed media, and has interests in gothic, northern Renaissance, and early 20th century German art. Professor Levesque has served as an executive member of the Greater Kenosha Area Foundation Arts Committee since 2002. She was a member of the board of directors of the Kenosha Institute of Arts from 1992 to 1999. Her artwork has been displayed 33 times since the early 1980s in individual and group exhibitions throughout Wisconsin and Illinois. She earned her B.A. from the State University of New York at Plattsburgh and her M.F.A. from the University of Chicago. She joined Carthage in 2004.

Brady Lindsley
'95, Head Men's and Women's Tennis Coach; Lecturer in Exercise & Sport Science, is originally from Coldwater, Mich. As a player for the Red Men from 1992 to 1995, he compiled an 82-24 career mark in singles, which puts him third on the all-time wins list. He joined the Carthage faculty in 1997. He has coached the Red Men to eight CCIW championships and eight NCAA appearances, as well as leading the Lady Reds to three CCIW championships and three NCAA appearances. He earned a B.A. in Business Administration from Carthage.

Jane Livingston
Assistant Professor of Music, specializes in piano performance, piano pedagogy, and class piano. She came to Carthage from Northwestern University School of Music, where she served on the music faculty from 1981 to 1996. She earned her B.A. from Skidmore College, where she majored in geology and minored in piano performance. She earned her M.A.T. in geology and education from the University of Vermont, and her B.M. in performance and pedagogy at Crane School of Music, State University of New York at Potsdam. While at Potsdam, she received the Eastman Kodak Award for Academic Excellence and Performance and graduated magna cum laude. She received her M.M. degree in piano performance and pedagogy at Northwestern University. Her teachers have included Albert Pflanz, Edward Hausman, Elaine Greenfield, Ronald Tarr, Arthur Tolleson and Donald Isaak. She is an active chamber musician performing with the Trio Levade, a frequent keyboardist and pianist for the Racine Theatre Guild, and an active solo pianist and duo-pianist performer. She also is an active church organist with many years of keyboard playing outside of the academic arena. Professor Livingston joined the Carthage faculty in 1993. She has made use of her geological background during recent J-Term trips to Scotland, Australia, Iceland and Hawaii.

James Lochtefeld
Director of the Asian Studies Program; Director of the Global Heritage Program; Professor of Religion, specializes in Hindu pilgrimage. His dissertation research focused on the north Indian pilgrimage city of Hardwar; the dissertation draws on Sanskrit texts, archival documents, and field research to lay out a comprehensive picture of this vibrant, vital town. It was published by Oxford University Press in December 2009 under the title God’s Gateway. In addition to the Hindu tradition, he teaches courses on Indian religion and society, the Buddhist tradition, the Sikh tradition, East Asian religion, Sanskrit and Hindi. He has led J-Term classes to India in every odd-numbered year since 1999. In both his research and his teaching, he seeks to explore the intersection of religious history, tradition and practice. Among his awards are three years as a President’s Fellow at Columbia University, the Charlotte W. Newcombe Fellowship (the most prestigious award for dissertations in religion and ethics), and a Senior Research Fellowship from the American Institute of Indian Studies. He has also served as a board member and board chair for ASIANetwork, a consortium promoting Asian studies at more than 200 member institutions. He earned his B.A. from Colgate University, M.T.S. from Harvard Divinity School, M.A. from the University of Washington, and his M. Phil.

**Lynn Loewen**

*Professor of Modern Languages*, teaches Spanish language and literature, modern language teaching methodology, modern literature in translation, theory of translation, culture awareness orientation, and heritage courses. She has studied at U.S., Mexican, and Colombian universities. Her graduate research dealt with the theory and methodology in second language acquisition and with comparative literature. She earned an M.S. in bilingual education from the University of Wisconsin-Stevens Point, and her Ph.D. in comparative literature from UW-Madison, specializing in poetry and Hispanic literature. She lived and worked in Colombia for 15 years, where she held positions as an English as a second language teacher, a principal in British and U.S. embassy-identified bilingual schools, and as a curriculum consultant for the U.S. Office of Overseas Schools, serving nine international schools in Central America and Colombia. She also taught English language and literature courses at several universities in Bogotá, Colombia. She authored a five-text series for teaching English as a second language (Colombia, 1986) and has published Spanish essays, poetry and translations in a variety of literary publications in Colombia. Among other responsibilities, Professor Loewen has served as chair of the Modern Language Department, coordinated study abroad for Carthage students, helped implement the program for TLEs (foreign scholars who teach their native language and study for their M.Ed.), and developed the M.Ed. program in Modern Language. She has presented papers, given workshops, and consulted at the Wisconsin Association of Foreign Language Teachers Conference, the National Association of Multi-cultural Educators, St. Mary's College, and for the Racine, Kenosha and Oshkosh school districts. She joined the Carthage faculty in 1988.

**Thomas Long**

*Adjunct Assistant Professor of Religion and Heritage Studies*, has taught the foundational religion course Understandings of Religion, upper-level courses in the history of Christian thought and church history, and Western Heritage I and II. Mr. Long's special interests are in the fields of inter-religious dialogue and the doctrine of the atonement. He has earned degrees from Albion College (B.A., 1968), Garrett-Evangelical Theological Seminary (M.Div., 1974), Duke University (Th.M., 1992), and Marquette University (Ph.D., 1999). His dissertation, *The Viability of a Sacrificial Theology of Atonement*, was republished in 2006 by Lutheran University Press for its 37 affiliate institutions of higher education of the Evangelical Lutheran Church of America. He joined the Carthage faculty full time in 2002. Prior to coming to Carthage, he taught at Lakeland College and Carroll and Marquette Universities. He lives with his wife, Carol, in Racine, Wis.

**Christopher Lynch**

*Chair of the Interdisciplinary Studies Division; Associate Professor of Great Ideas and Political Science*, earned his B.A. in liberal arts from St. John's College, and his M.A. and Ph.D. degrees from the University of Chicago's Committee on Social Thought. His translation and interpretation of Niccolò Machiavelli's *Art of War* was published by the University of Chicago Press in 2003. He has published articles in *Hebraic Political Studies*, *History of Political Thought*, and *Review of Politics*, and reviews in *Perspectives on Politics*, *Review of Politics* and the *Weekly Standard*. He served as a Senior Advisor in 2006-2007 at the United States Department of State. He is working on a book on war in all of Machiavelli's writings. Since joining the Carthage faculty in 2000, he has lived in Kenosha with his wife, Kate, and their children, Emily, Henry and Grace.

**Stephan Lyng**

*Professor of Sociology and Criminal Justice*, came to Carthage in 2004 after more than 15 years as an assistant and then associate professor of sociology at Virginia Commonwealth University. In addition to his nine-year tenure as director of the graduate program in sociology at VCU, he has taught at Union College and Florida Atlantic University. He specializes in medical sociology, social theory, social psychology, and the sociology of risk. He has written or co-written more than 30 published sociology articles in journals such as *The American Journal of Bioethics*, *Social Forces*, *The American Journal of Sociology*, *Theoretical Criminology* and *Crime, Media, Culture*. He is the author or co-author of three books and is presently completing a fourth book (with Jens O. Zinn) titled *Thriving on Uncertainty: Risk Taking in the 21st Century*. Professor Lyng has presented scores of professional papers and delivered invited lectures on sociology in the United States, Canada, South Africa, New Zealand, Spain, Germany, and the U.K. He is the recipient of numerous research grants. He earned his B.A., M.A., and Ph.D. from the University of Texas at Austin.

**Romwald Maczka**

*Chair, Religion Department; Professor of Religion*, is an authority on the study of Christianity and Marxism. He has served as director of the Institute for the Study of Christianity and Marxism, has lectured frequently on Marxist historiography and Christian-Marxist relations in the former Eastern Europe, and has 11 years of ministry experience in a missionary context. As a research associate for the Institute for the Study of Christianity and Marxism, he authored *Christianity and Marxism in Higher Education* as well as articles that appeared in the *Lutheran Quarterly*, *Mennonite Quarterly Review*, and *Occasional Papers on Religion and Eastern Europe*. Before the breakup of the Soviet Union, Professor Maczka was invited to chair the subcommittee on religion of the U.S.-U.S.S.R. bilateral Emerging Leader Summit Conference, an effort sponsored by the Soviet Committee on Youth Organizations and the American Center for International Leadership. In the wake of the Soviet breakup, he participated on an inter-religious task force assessing Soviet religious developments in light of American church involvement. He has received research and educational grants from Stewards Foundation, David D. Cook Foundation, Lilly Foundation, Richardson Foundation, the Evangelical Lutheran Church in America and the Mennonite Central Committee. More recently he has served as guest professor at the United Theological College, Bangalore, India, and has undertaken field research into religion and paramilitary activity in Chiapas and the Guatemalan highlands. Included in his course offerings are systematic theology, world religions, church history, monasticism, modern theology, Holocaust studies, and Reformation history. He earned both his B.A. and an M.A. degree at Wheaton College, and earned his Ph.D. at Leipzig University in Germany. He joined the Carthage faculty in 1989.
Daniel Magurshak  
Chair, Philosophy Department; Professor of Philosophy and Great Ideas, has taught at Carthage for more than 25 years, and is the founding director of the Heritage Studies Program. He specializes in European continental philosophy and has a special love for thinkers like Kierkegaard, Nietzsche and Heidegger. His recent work has concerned the social and moral philosophy of Martha Nussbaum, the postmodern thinking of John Caputo, and continuing study of all aspects of the American Western experience. Professor Magurshak draws students from a wide range of majors into his ethics classes. In addition to his teaching in philosophy and Heritage Studies, he has translated Otto Poggeler’s book *Der Denrweg Martin Heidegger* into English. Among the awards he has won are the DAAD Fellowship and an Alexander von Humboldt Fellowship for study and research in Germany. He earned his B.A. from Duquesne University, and his M.A. and Ph.D. degrees from Northwestern University. He joined the Carthage faculty in 1984.

Mark Mahoney  
Chair, Computer Science Department; Associate Professor of Computer Science, served as a senior software engineer at Motorola and an adjunct instructor of computer science at Roosevelt University prior to joining the Carthage faculty in 2002. His research interests are in the fields of object-oriented technologies, aspect-orientation, state based systems, and software engineering. His work with Bluetooth Wireless Communication protocols resulted in algorithms for avoiding fixed interferers in Bluetooth radio bands. This work resulted in a patent. Professor Mahoney teaches database design, operating systems, and software engineering courses. He earned a B.A. in computer science from Roosevelt University, and an M.S. and Ph.D. in computer science from the Illinois Institute of Technology.

Robert Maleske  
Professor of Psychology, began teaching at Carthage in 1973, left in 1985 to serve as Director of Academic Computing at the University of Wisconsin-Parkside, and returned to Carthage as a faculty member in 1988. His publications include three textbooks: *Foundations for Gathering and Interpreting Behavioral Data; Statistics: Essentials for Students in the Social Sciences; and Research Methods: Essentials for Students in Psychology*; as well as articles in *The Journal of General Psychology* and *Learning and Motivation*. Professor Maleske emphasizes a humanistic approach to facilitating student learning, as expressed in his mantra: “Inspire rather than require.” His research interests include idiographic versus nomothetic perspectives as they affect strategies for creating and implementing effective classroom learning environments, and classical conditioning strategies for developing music sight-reading ability. He facilitates the following courses: Experimental Psychology, Behavioral Research Statistics, Thesis Development, Senior Seminar and Interpersonal Dynamics. He earned his B.A. from DePaul University, and his M.A. and Ph.D. from Northwestern University.

Yuri Maltsev  
Professor of Economics, earned his B.A. and M.A. degrees at Moscow State University, and his Ph.D. in Labor Economics at the Institute of Labor Research in Moscow, Russia. Before defecting to the United States in 1989, he was a member of a senior Soviet economics team that worked on President Gorbachev's reforms package of perestroika. Prior to joining Carthage, he was a Senior Fellow at the United States Institute of Peace in Washington, D.C., a federal research agency. His work involved briefing members of Congress and senior officials at the executive branch on issues of national security and foreign economic assessment. Professor Maltsev has also appeared on CNN, Financial Network News, PBS NewsHour, C-Span, Fox News, CBC, and other American, Canadian, and European television and radio programs. He has lectured at leading universities, corporations, banks, colleges, churches, schools, and community centers all over the world. He has authored five books and hundreds of articles in U.S. and foreign publications. He joined the Carthage faculty in 1991.

Jonathan Marshall  
Associate Professor of Political Science, teaches courses in comparative politics, East Asian politics, constitutional law, and law and society. His research focuses on legal mobilization and citizen litigants in Japan, where he lived in 1988-89 and 1997-2000. His publications include "Freedom of Information, Legal Mobilization, and the Taxpayer Suit Boom in Japan" (Harvard University Program on U.S.-Japan Relations Occasional Paper 04-06) and "Casual Cynics or Disillusioned Democrats? Political Alienation in Japan" (Political Psychology 21 (December 2000) 779-804). His degrees are Ph.D., M.A. Political Science, University of California-Berkeley; B.A. East Asian Studies, Yale University.

Paul Martino  
Assistant Professor of Biology, earned a B.A. in natural sciences and mathematics from Dowling College, and an M.S. in exercise physiology from Ball State University. He received a Ph.D. in physiology from the Medical College of Wisconsin in 2006, then spent two years as a postdoctoral fellow at Wright State University. He came to Carthage in 2009 from Milwaukee Area Technical College, where he taught anatomy and physiology at two campuses.

L. J. Marx  
Head Men's Volleyball Coach; Lecturer in Exercise and Sport Science, joined the Carthage faculty in 2004.

Jerald Mast  
Chair, Political Science Department; Associate Professor of Political Science, primarily teaches and researches in the field of public policy, particularly the ways in which public values, opinions and participation affect the democratic character of decisions within the lawmaking process. He focuses on American government, specializing in the public laws and policies dealing with the environment and natural resources. His most recent publications include the chapter “International Environmental Politics” for
Joy Mast
Professor of Geography and Earth Science, was an associate professor at Northern Arizona University before her Carthage appointment. She teaches courses in physical geography, geology of national parks, biogeography, soil science, forest ecology, field methods, trip courses to Belize and to the Grand Canyon, and environmental science. She earned her B.S. in both geography and zoology from the University of Wisconsin-Madison, and her M.S and Ph.D. in geography from the University of Colorado-Boulder. Among her current research projects, she is studying forest disturbances in the Southwest related to crown fires, insect epidemics, and severe droughts. She has garnered numerous federal research grants for her work. Her prior research has been published in a number of professional journals, including *Journal of Biogeography, Professional Geographer, and Ecological Applications*. She is an associate editor for the international research journal *Plant Ecology*, and serves on the editorial board of both the *Annals of the Association of American Geographers* and *Physical Geography*. She has served as president of the Association of American Geographers Biogeography Specialty Group, and currently is the editor of their publication *The Biogeographer*. She runs the Dendroecology research lab at Carthage, and joined the Carthage faculty in 2002.

Rick Matthews
Chair, Sociology Department; Director, Criminal Justice Program; Director, Writing Development Program; Associate Professor of Sociology and Criminal Justice, specializes in criminology, specifically state and corporate crime. His most recent publications have been in the areas of state-corporate crime, examining the ways in which state agencies and corporate actors engage in criminal activities. Particular case studies published by Professor Matthews have focused on the roles played by corporations in the Holocaust, the inadequate regulatory environment that led to the Exxon Valdez oil spill, and role played by deregulation in the crash of ValuJet flight 592. He earned his B.S. from Northern Michigan University, and his M.A. and Ph.D. in sociology from Western Michigan University.

Joseph McAlhany
Assistant Professor of Great Ideas and Classics, was an assistant professor of classics at the University of New Mexico for five years. He also has held teaching positions at Columbia University, New York University, the City University of New York and Queens College. He received Columbia’s Presidential Award for Outstanding Teaching by Graduate Students in 2002. He earned a B.A. in philosophy from Haverford College in 1990, and a Ph.D. in classics from Columbia in 2003. He came to Carthage in 2007.

Martin McClendon
Assistant Professor of Theatre, joined the faculty full time in 2007 after one year as an adjunct professor. Previously he taught as an adjunct professor at Rockford College, Rockford, Ill. He earned a B.F.A. in acting from Rockford College in 1991, and an M.F.A. in acting from the University of Illinois at Urbana/Champaign in 1994. He also took a semester of actor training at Regent’s College, London. He worked as a professional actor in Chicago and Los Angeles for 10 years before getting involved in teaching. He has appeared onstage at Chicago’s Steppenwolf, Northlight, Organic and Victory Gardens theatres, among others. Most recently Professor McClendon appeared onstage in the Steppenwolf Garage production of “Honest” in the summer of 2009. The play was originally commissioned by Carthage College. He also acted in independent movies both in Chicago and Los Angeles. His TV credits include episodes of “ER” and “Early Edition,” as well as numerous commercials. He is a member of AEA, SAG and AFTRA. In addition to acting, he has designed and built scenery in Los Angeles, his hometown of Rockford, Ill., and for Chicago’s Defiant Theatre Company as well as other small companies in the Chicago area. He received a Jeff Award Citation nomination for his work with Defiant. He also worked as a furniture maker and carpenter in Los Angeles.

Brent McClintock
Associate Professor of Economics, is an economist and an attorney. Prior to his employment at Carthage, he worked as a senior economic analyst with the New Zealand Treasury. His legal studies centered on international and intellectual property law. He is licensed to practice law in Illinois and has been admitted to the U.S. District Court for Northern Illinois. He is a member of the Illinois State Bar Association. His teaching includes macroeconomics, international political economy, public policy, business law, and international trade law. Current legal research interests include the boundary between private property rights and the public domain in intellectual property law, the law of international economic integration, and the law and economics of contracts. He earned his B.Ag.Sci. (honors) degree from Lincoln University, New Zealand, and his M.S. and Ph.D. degrees from Colorado State University. He joined the Carthage faculty in 1991.

Michael McShane
Associate Professor of Great Ideas and Philosophy, earned a B.A. in philosophy and mathematics from St. John's College, Annapolis, Md., in 1990. He earned a master's degree in 1992 and a Ph.D. in 2000 from the University of Pennsylvania, where his dissertation reviewed Plotinus’ critique of discursive rationality. He taught philosophy and ethics at Loyola College (Md.) from 2001 to 2008, and is at work on a book-length project on Shakespeare’s “King Lear.”
Richard Meier
Assistant Professor of English and Writer in Residence, held a full-time position as visiting poet at Columbia College in Chicago from 2007 to 2008. From 2002 to 2005, he was a visiting assistant professor of English at Beloit College, where he was also director of creative writing from 2004 to 2005. Previously he worked in the public schools as a visiting artist, teaching poetry writing to elementary school students in New York with Teachers and Writers Collaborative and in Chicago with Hands on Stanz, where he received the Gwendolyn Brooks Prize for excellence in teaching. He has published two books of poems, "Terrain Vague" (Verse Press, 2000), and "Shelley Gave Jane a Guitar," (Wave Books, 2006). He earned a B.A. in creative writing from Hamilton College in 1988, and an M.A. in English with a concentration in creative writing from Syracuse University in 1993.

Chet Melcher
Associate Professor of Education, came to Carthage in 2004 with more than 30 years of experience in teaching and administration. The recipient of numerous state and national awards, he was recognized with the Excellence in Science Education Award by the Wisconsin Society of Science Teachers and the Outstanding Science Leadership Award by the Wisconsin Elementary Science Teachers Association. He has served on the Board of Directors of the National Science Education Leadership Association and the Wisconsin Society of Science Teachers. He was also a part of the state committee to develop the Wisconsin Model Academic Science Standards. In a leadership capacity he served on the Board of Directors of the National Science Education Leadership Association and the Wisconsin Society of Science Teachers. He was also co-chair of the Wisconsin Science Education Leadership Association and the Wisconsin Society of Science Teachers. He was also a part of the Wisconsin Science Teachers. He was also a part of the Wisconsin Science Teachers. He was also a part of the Wisconsin Science Teachers. He was also a part of the Wisconsin Science Teachers. He was also a part of the Wisconsin Science Teachers. He was also a part of the Wisconsin Science Teachers. He was also a part of the Wisconsin Science Teachers. He was also a part of the Wisconsin Science Teachers.

Yamine Mermer
Associate Professor of Religion, came to Carthage in 2009 from Swarthmore College, where she was a lecturer in Arabic for three years. The native of Algeria earned a bachelor's degree in physics from the University of Sciences and Technology of Algiers in 1980, then earned a master's degree in theoretical physics and a Ph.D. in quantum physics from the University of Durham in the U.K. After teaching for 10 years in Istanbul, Turkey, she came to Indiana University, where she has pursued a Ph.D. in Islamic and Arabic studies. She also holds a teaching certificate in scriptural reasoning: scholarly study of Jewish, Christian, and Muslim texts, from Princeton Theological Seminary.

Daniel Miller
Chair, Psychology Department; Chair, Neuroscience Program; Professor of Psychology and Neuroscience, was a graduate student of Dr. Joseph Steinmetz at Indiana University from 1989 to 1994. While in the Steinmetz lab, his research focused on the function of the hippocampus in rabbit eyeblink conditioning and the neural substrates of appetitive and aversive signaled leverpressing in rat. Currently his research interests involve the function of the amygdala in stress vulnerable rats using the signaled leverpress avoidance task. In collaboration with Dr. Richard Servatius of the Stress and Motivated Behavior Institute at the Office of Veterans Affairs in East Orange, N.J., Professor Miller and his students are using selective lesion and temporary inactivation techniques to study how discrete areas of the amygdala contribute to facilitated avoidance learning in stress vulnerable rats compared to outbred controls. He and his students at the Carthage Neuroscience Laboratory regularly present at the annual meetings of the Society for Neuroscience and Pavlovian Society. He joined the Carthage faculty in 1994.

Mark Miller
Associate Professor of Business Administration, joined the Carthage faculty in 2004 after 31 years of business experience with one of the world's largest agricultural and construction companies, CNH in Racine, Wis. He is nationally known for his expertise in supply chain management functions, including purchasing, inventory management and logistics. He has published more than 30 articles and has developed and taught numerous courses, seminars and workshops. His professional certifications include certified purchasing manager and certified integrated resource manager. Professor Miller received his bachelor's degree in business administration from Saint Thomas University, and his M.B.A. from the University of Wisconsin-Parkside. He has taught business courses at Carthage and at other colleges and universities in southeastern Wisconsin.

William Miller
Professor, Sociology and Criminal Justice, has published articles on risk taking, gambling, juvenile delinquency and homicide, among other topics. His work has been published in a number of scholarly journals including The ANNALS of the American Academy of Political and Social Sciences, Sociological Focus and Homicide Studies. He has presented research at a variety of professional meetings, has served as a reviewer for a number of academic journals, and he currently serves on the board for Women and Children's Horizons. His current research examines mixed martial arts fighting and poker. Professor Miller earned his B.A. and M.A. from Ohio University, and his Ph.D. from the University of Nevada at Las Vegas. He joined the Carthage faculty in 2000.

Stephanie Mitchell
Associate Professor of History, earned her B.A. and M.A. from the University of Virginia, and her D.Phil. from Oxford University. Before joining the Carthage faculty, she served as professor of international relations at the Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM), Mexico. Her interests include Mexico, Central America, South America, and the Caribbean. She is especially concerned with issues relating to gender and revolution. Professor Mitchell speaks Spanish, French and Haitian Creole. She joined Carthage in 2002.
Edward Montanaro
Associate Professor of Modern Languages and Economics, began teaching at Carthage in 2006, upon completion of a doctorate in Spanish at Florida State University. He also holds a master's degree in Spanish from Florida State University. His doctoral dissertation deals with the writings of 19th century Cuban poet and independence leader José Martí. Prior to earning a doctorate in Spanish, he earned master's and bachelor's degrees in economics from Florida Atlantic University and worked as a research economist for 25 years. He served for 16 years as the Director of Economic and Demographic Research for the Florida Legislature where he was in charge of economic, caseload and revenue forecasting and directed numerous policy studies. He also served as chief economic advisor to Governor Bob Graham of Florida and the Executive Director of the Legislature's Advisory Committee on Intergovernmental Relations. He holds a joint appointment in Modern Languages and Economics and is the Director of the Target Language Expert Program.

Jose Montoto
Assistant Professor of Communication and Digital Media, taught as an associate lecturer at the University of Wisconsin-Milwaukee School of the Arts for two years prior to coming to Carthage. He has worked as a Milwaukee-based freelance graphic designer and as an animation artist for the Bradley Center for a number of years. In 1999 and 2000 he was the full-time graphic designer for UW-Milwaukee's School of the Arts, where his responsibilities included the oversight and design of a wide range of print- and web-based promotional material for the various visual and performing arts groups and departments within the school. In 2001 he established Herético Studio. In addition to designing for print, web, and video/film, his studio creates and conducts visual design and communication experiments that explore the process of reading images, signs, and type. Professor Montoto lives in Milwaukee, with his wife, Heather, and three children, Fiona, Oliver and Elizabeth. He earned his B.A., M.A., and M.F.A. degrees from the University of Wisconsin-Milwaukee. He joined Carthage in 2000.

Prisca Moore
Associate Professor of Education, is actively involved in working in partnership with teachers and principals in private and public schools in Kenosha and Racine. In these professional development partnerships with Jefferson Lighthouse and Schulte Elementary Schools in the Racine Unified School District, Racine Montessori School, and St. Mary's Catholic School in Kenosha, Professor Moore and her students develop instructional projects that incorporate instructional technology to teach science and mathematics. She has been awarded six grants from AT&T Learning Network Teaching and Technology grant program, Ameritech, the Johnson Fund with Sustainable Racine, and the Wisconsin Foundation for Independent Colleges to provide technology and training to the faculty of the partnership schools as well as to provide opportunities for Technology Fellowships for Carthage students. Professor Moore is particularly interested in developing collaboration projects that incorporate the use of videoconferencing and virtual field trips as well as e-mail and video exchanges. Currently, she is working with five Carthage internships in the Racine Montessori School and Carthage College Partnership to Beautify and Enhance our Neighborhood Community: A Partnership for Teacher Professional Development through Community Project. This project was funded by the SC Johnson Fund Community Involvement Award for Neighborhood Sustainability. Her current focus is developing a collaborative partnership between the Kenosha and Racine schools and two primary schools in Australia. She also received two grants for the 2004-2005 school year from the Root-Pike Watershed Initiative Network and Sustainable Racine to support the Outdoor Classroom that she created with the Racine Montessori School and to support investigations of the Root River watershed. She is actively involved in presenting at local, regional, national, and international conferences, including the Governor of Wisconsin’s Educational Technology Conference (GWETC), National Science Teachers Association Eastern Area Conference, National Science Teachers Association national convention, annual National Council for Teachers of Mathematics conference, and the Seventh International Literacy and Education Research Network Conference on Learning at RMIT University in Melbourne, Australia.

Kevin Morris
Klingenmeyer Distinguished Professor of Chemistry, specializes in the field of physical chemistry. Before coming to Carthage, he was a Camille and Henry Dreyfus Fellow and then an Assistant Professor of Chemistry at Grinnell College, where he taught physical and general chemistry. Professor Morris has also conducted extensive research in the area of nuclear magnetic resonance spectroscopy at Grinnell College and the University of North Carolina at Chapel Hill, and has had work appear in the Journal of the American Chemical Society, the Journal of Magnetic Resonance, and the Journal of Physical Chemistry. His research at Carthage explores the aggregation of molecules in aqueous solutions. He earned his B.S. in chemistry from James Madison University and Ph.D. in chemistry from the University of North Carolina at Chapel Hill. He joined the Carthage faculty in 1996.

Maribel Morales
Adjunct Assistant Professor of Modern Languages, joined the Carthage faculty in 2006. A native of Spain, she teaches Spanish language and literature, and heritage courses. She earned her Ph.D. in American Literature from the University of Cadiz, Spain, specializing in regionalist American women writers from the end of the 19th century. Her academic interests include gender and ethnic studies. Prior to earning a doctorate in American Literature, she earned master's and bachelor's degrees in English literature and linguistics from the University of Cadiz, Spain. She studied at the University of Dublin, Ireland, with an Erasmus scholarship in 2001. She came to Carthage after teaching at the Kenosha Unified School District in the Transitional Bilingual Program for three years. At Carthage, Ms. Morales has continued promoting multicultural awareness participating at numerous international events. She is the advisor of the Latin/Belly Dance Club, a group of Carthage students who have performed at many cultural events both off and on campus.
Deerfield, Ill.

Trinity International University of College Graduate School in 1990, and earned M.A. in systematic theology from Wheaton theatre, contemporary Christian, and education from Northern Illinois University. Michigan University, and an Ed.D. in special in clinical psychology from Western from Grand Valley State University, an M.A. (CADRE). He holds a B.S. in psychology Teaching & Learning in the Center for Professor Munk also serves as Director of a new text on leadership in inclusive schools. practices for learners with special needs, and journals. He has published a book on grading articles and book chapters, and serves as a co-investigator on research projects funded by the U.S. Department of Education. Professor Munk has published numerous articles and book chapters, and serves as a reviewer for two leading special education journals. He has published a book on grading practices for learners with special needs, and a new text on leadership in inclusive schools. Professor Munk also serves as Director of Teaching & Learning in the Center for Academic Development & Research (CADRE). He holds a B.S. in psychology from Grand Valley State University, an M.A. in clinical psychology from Western Michigan University, and an Ed.D. in special education from Northern Illinois University.

David Musa
Assistant Professor of Religion, is a native of Sierra Leone who earned a B.S. in biology from Fourah Bay College, University of Sierra Leone in 1979. He earned an M.A. in systematic theology from Wheaton College Graduate School in 1990, and earned a M.Div. in pastoral counseling/missions and a Ph.D. in theological studies, both from Trinity International University of Deerfield, Ill.

David Neff
Men's Lacrosse Coach; Adjunct Professor of Business, joined Carthage in 2007.

Corinne Ness
Director of Music Theatre Studies; Assistant Professor of Music, is a performer equally adept at classical and contemporary singing styles. She has performed classical, music theatre, contemporary Christian, and bluegrass music in venues across the country. As a classical soprano, she has performed roles such as Cio-Cio San (Madama Butterfly), Alice Ford (Falstaff), and Rosalinda (Die Fledermaus). She has premiered new works by composer Rufus Brown and has appeared as a soprano soloist with the Kenosha Symphony. As director of music theatre studies at Carthage, Professor Ness directs the music theatre workshop and opera productions. She also maintains an active voice studio; her students have gone on to graduate studies, professional performance careers, and teaching careers. Her students have also earned competitive internships at prestigious theatres such as Chicago's Goodman Theatre and the Baliwick; students from her studio have won regional and professional competitions, including the Chicago Wicked singing competition and several first-place honors in the music theatre category of the NATS student auditions.

Professor Ness' expertise in music theatre has brought her to the Shanghai Conservatory of Music as a guest lecturer in their American Musical Theatre program. She has also given presentations on music theatre at two national conventions of the National Association of Teachers of Singing (2006, 2008), the Wisconsin Chapter of NATS Music Theatre Special Workshop (2010), The Voice Foundation (2009), and the Illinois High School Theatre Festival (2009, 2010). She was recently featured as an expert in Classical Singer magazine in an article regarding crossover vocal pedagogy ("Genre Wars" Classical Singer, September 2008).

Professor Ness is also a member of Carthage's music education faculty. A sought-after clinician and adjudicator, she spent a decade teaching general music to grades K-12, and has directed award-winning choral programs. She continues to work with public schools as a guest conductor and curriculum specialist, and regularly adjudicates competitions in both classical and music theatre genres. She currently coordinates the Music Institute of Chicago's ARTS LINK program, which connects public school teachers with musicians to design and deliver arts integration in the classroom. She is currently pursuing a doctoral degree in cultural and educational policy studies at Loyola University Chicago, with special interests in the way that ideas and culture "travel" and are "received." She is co-author of a piece on William Brickman, John Dewey, and educational intercrossing (in press, European Education).

Professor Ness is a certified master teacher of Estill Vocal Pedagogy. She has an M.M. from Roosevelt University, Chicago College Performing Arts; and a B.M.E. from Northern Illinois University. She came to Carthage in 2002.

William Newcomb
Assistant Technical Director, holds a B.F.A. degree in Technical Theatre from Tarleton State University, Stephenville, Texas, and an M.F.A. degree in Arts Administration from Southern Utah University. He was assistant manager of the Milwaukee Repertory Theatre for two years before coming to Carthage in 2009. Other credits include technical director of the Wells Fine Arts Center at Tarleton State University, assistant technical director at Oberlin College, scene shop foreman at Ohio Light Opera, and assistant production manager of the Utah Shakespearean Festival. Mr. Newcomb teaches Play Production I: Stagecraft in addition to managing the scene shop.

Linda Noer
Professor of Social Work and Sociology, is exceedingly active in the Kenosha/Racine area utilizing her social work skills. In addition to her duties at Carthage, she has worked since 1982 as a social worker for Lutheran Social Services of Racine and Kenosha. Professor Noer has also worked with Children's Services Society of Wisconsin, served as a consultant with Parents Anonymous in Lexington, Mass., has been the temporary director of the Child Abuse and Neglect Project in Kenosha, and was a psychiatric caseworker and director of group work services at Washburn Child Guidance Center in Minneapolis. She has been very active within the Lutheran church, with many of her activities focusing on families and faith. At present, her research interests are the use of literature to increase creative and critical thinking skills in students. Professor Noer has been a research fellow at the Lutheran Center for Social Change. She earned her B.A. degree from Gustavus Adolphus College, M.S.W. with honors from George Warren Brown School of Social Work at Washington University, and Ph.D. from Loyola University Chicago. She started at Carthage on a part-time basis in 1974 and became full time in 1982.
Thomas Noer
Valor Distinguished Professor in the Humanities; Professor of History, is an expert on the history of United States foreign policy. One of his books, Cold War and Black Liberation: The United States and White Rule in Africa, 1948-1968, was honored with the Stuart L. Bernath award from the Society for Historians of American Foreign Relations as the outstanding book on American foreign relations. Another of his books, Briton, Boer, and Yankee: America and South Africa, 1870-1914, was selected by Choice as one of the 10 Outstanding Academic Books of 1979. Professor Noer is the past recipient of residence fellowships at the Charles Warren Center for Studies in American History at Harvard University and the Department of State. The University of Michigan Press published his latest book, Soapy: A Biography of G. Mennen Williams, in 2005. He was previously a recipient of the Carthage Distinguished Teacher Award. He teaches courses in American history and diplomacy, 20th century U.S. history, African history, and historiography. He earned a B.A. at Gustavus Adolphus College, an M.A. at Washington State University, and a Ph.D. at the University of Minnesota. He joined the Carthage faculty in 1973.

Colleen O’Brien
Assistant Professor of Business Administration, joined Carthage in 2009 after having served as an adjunct faculty member at Carthage and the University of Wisconsin-Parkside. Her career includes more than 22 years in corporate finance with SC Johnson and IIT Research Institute (Chicago). She has extensive experience in process improvement, strategic planning, and team leadership/management. She is a Wisconsin native who is a summa cum laude 1986 graduate of St. Norbert College, with a degree in finance and economics. She earned her M.B.A. with concentrations in finance and marketing from the University of Chicago.

Barrington D. Ottmann Jr.
Assistant Professor of Criminal Justice, was an adjunct professor at Carthage in 2009 and 2010, teaching courses in political science and criminal justice. He grew up in the Atlanta area, served in the U.S. Coast Guard, and worked as an air traffic controller before earning a B.A. in philosophy from the University of South Alabama in 1985. He earned an M.S. in public management and policy from Carnegie Mellon University in 1987, then earned a Ph.D. in political science from the University of North Carolina at Chapel Hill in 1996. He was a lecturer in political science at East Carolina University and a visiting assistant professor of public policy analysis at North Carolina before working three years as a human services evaluator/planner for the North Carolina Department of Health & Human Services. Before coming to Carthage, he was a visiting assistant professor and lecturer in political science at Eastern Kentucky University, and held the same rank in the school of public and environmental affairs at Indiana University-Kokomo.

Jan Owens
Associate Professor of Business Administration, joined Carthage in 2006. She has a Ph.D. and M.A. from the University of Wisconsin-Madison, and an M.L.S. and B.A. from the University of Rhode Island. Her teaching, research and professional interests focus on branding and private label strategy, retailing and multi-channel marketing, and marketing research. She is a member of AMA, ACRA, AMS, and the DMA professional organizations.

Terence Peebles
Assistant Football Coach/Offensive Coordinator; Lecturer, Exercise and Sport Science, joined Carthage in 2008.

Janice Pellino
Assistant Professor of Chemistry, comes to Carthage from St. Olaf College, where she was a visiting assistant professor of chemistry from 2007 to 2010, and a visiting assistant professor of biology in 2009-10. She earned a B.S. in biochemistry from Bradley University in 2000, and earned a doctorate in biochemistry, molecular biology, and cell biology from Northwestern University in 2007. She received Northwestern’s outstanding teaching assistant award in 2002, and was awarded a fellowship at Lake Forest College in 2006.

Patrick Pfaffle
Chair, Biology Department; Professor of Biology, previously taught graduate and undergraduate-level biology courses at Indiana State University. He has received numerous awards for scientific research, including the National Institutes of Health Academic Research Enhancement Award, the Abbott Laboratories Research Award, and the ISU Proposal Incentive Award. His research has been presented at seminars across the country, and he has published his articles and abstracts in several international publications. Professor Pfaffle earned his Ph.D. in 1990 from the Medical College of Wisconsin, Department of Biochemistry. There, he received the Outstanding Dissertation Award from the Friends of the Medical College of Wisconsin. He earned his B.S. in biology from the University of Wisconsin-Stevens Point. He joined the Carthage faculty in 1997.

Mark Petering
Assistant Professor of Music, earned his B.A. from Luther College, his M.M. from Bowling Green State University, and a Ph.D. from the University of Minnesota. He joined Carthage in 2005. For more information on his composing activities, please visit www.markpetering.com.

Michael Phegley
Associate Professor of Business Administration, joined the Carthage faculty in 2004 after serving as an adjunct professor at Carthage and the University of Wisconsin-Parkside. He is an attorney with Phegley, Laufenberg & Jensen, a practice that concentrates on family, criminal, labor and employment law, as well as alternative dispute resolution. He is the municipal judge for the Village of Mount Pleasant in Racine County and also serves as a Judicial Court Commissioner for Racine County. He is a certified mediator and previously served on the Alternative Dispute Resolution Committee for the State Bar of Wisconsin. He is the faculty advisor for the Carthage Mock Trial Team and the Phi Alpha Delta Pre-Law Fraternity. He teaches Legal Environment of Business, Business Law for
Accountants and Mock Trial. He is a member of the State Bar of Wisconsin and a member and past president of the Racine County Bar Association. He is the president of the board of directors for the University of Wisconsin-Parkside Alumni Association and the vice-chair of the board of directors for St. Catherine's High School in Racine, Wis., in addition to his involvement with other community service organizations.

Kurt Piepenburg
Richard W. Miller
Distinguished Professor in the Natural and Social Sciences; Professor of Geography and Earth Science, teaches courses in geomorphology, meteorology, physical geography, remote sensing, and field methods. He has served as chair of the department of geography and the conservation program. He held the position of Vice President for Academic Affairs and Dean of the College at Carthage from 1995-2009, and also served the College as the Dean of Students from 1990 through 1994. Professor Piepenburg has directed two student field experiences on the eastern Caribbean island of Antigua, during which students completed field analyses of abandoned Holocene beaches and water quality in English Harbour. He has held an appointment as a visiting scientist on a natural resources project in Mexico, which was funded by a National Science Foundation grant of D. Miller of the State University of New York at Cortland. His primary research involves environmental impact assessment and has led to articles published in Physical Geography and Soviet Geography. He also has been involved in consulting in the private sector. He earned his B.A. from Carthage, and his M.S. and Ph.D. from the University of Wisconsin-Milwaukee, where he was honored with University fellowships. He came to Carthage in 1984.

Stacy Pottinger
Director of the Dance Minor, Assistant Adjunct Professor of Theatre, joined the Carthage faculty in 2009. She holds a B.F.A. in dance performance from Southern Methodist University, an M.A. in dance education from the State University of New York College at Brockport, and an M.F.A. in dance from the University of Wisconsin-Milwaukee. Before coming to Carthage, she was a faculty member at Ball State University (2007-2008), and co-directed Riverbend Dance Arts, a nonprofit dance school in Hastings, Minn. (1999-2004). Her work has included a variety of interdisciplinary projects and collaborations with composers, musicians, video animators and teaching professionals of varying subjects. She continues to pursue opportunities to develop as a dance artist and draws inspiration from such experiences to share with her students.

Ms. Pottinger has performed professionally since 1996. She has worked with many independent dance artists and companies based in Minnesota, New York, Wisconsin and beyond, including the Christopher Watson Dance Company, Biodance, Kinetic Evolutions Dance Company, and the City Childrens Nutcracker. She has worked with such internationally known artists as Bill Evans and Juanita Suarez. Her choreographic work has been presented in venues around the country, including the McKinney Avenue Contemporary Theater in Dallas, Texas; the Image Movement Sound Festival in Rochester, N.Y.; the Forum in Jonesboro, Ark.; and the Minnesota Fringe Festival. Her work Collapsible Man was adjudicated and selected for the gala concert at the American College Dance Festival in Athens, Ohio (2006), and she was featured as a guest choreographer for the University of Wisconsin-River Falls dance concert in 2009. She is a co-recipient of numerous grants and awards including the SUNY College at Brockport Graduate Student Alumni Award, the National Dance Education Organization Elsa Posey Student Scholarship, and the Dawn and Jacques Lipson, M.D. award in Performing Arts. She has presented at NDEO conferences and has instructed master classes at the American College Dance Festival and at the Perpich Center for Arts Education in Minnesota.

At Carthage, Ms. Pottinger was artistic director for the 2010 dance production Higher Altitudes, and she coordinated the College's first student dance concert, Away from the Mirror. Her credits at Carthage also include choreography featured in the Theatre Department productions Lystrisata (2009); If You Say So (2007); Collapsible Man (2006); Broken-Down Graffitti Train (2010); and the staging and coaching of Pearl Primuss Bushasche Etude (2003), all of which were presented in the Higher Altitudes dance concert. She teaches Modern and Jazz Technique, Introduction to Dance and Improvisation, and Dance History.

Thomas Powers
Assistant Professor of Great Ideas and Political Science, came to Carthage from the University of Minnesota-Duluth, where he was an assistant professor of political science from 2001 to 2008. He was previously an instructor in political science at the University of Toronto. He earned a B.A. in political science from the University of Chicago in 1984, then served four years as an infantry officer in the U.S. Army before earning a master's degree and Ph.D. in political science from the University of Toronto. He has written articles on such issues as civil liberties in the War on Terror and multiculturalism, for magazines including The Weekly Standard and The Public Interest.

Jean Preston
Director, Writing Center; Adjunct Assistant Professor of English, earned her B.A. from Carthage College in English, with minors in Classics and Women’s Gender Studies, and holds an M.F.A. in Creative Writing/Poetry from the University of Southern Maine Stonecoast Writing Program. Her work has been published in Pleiades, Verse Wisconsin, The Solitary Plover, Centrique, and The Journal of the Association of Research on Mothering. She has worked as a presenter, instructor, and tutor for various academic and community organizations including the Kenosha Literacy Council and the Racine Odyssey Project, has facilitated several seminars and workshops on writing poetry, and performs her poetry with Women of an Uncertain Age.

Eric Pullin
Assistant Professor of History, earned a B.A. in history from Rockford College, an M.A. in history from Northern Illinois University, an A.M. in Labor and Industrial Relations from the University of Illinois at Urbana-Champaign, and a Ph.D. in history from the University of Wisconsin-Madison. His primary teaching and research interests address the international relations between India and the United States during the 20th century. He also teaches courses on the history of India, the history of the United States, Western Heritage, Global Heritage, and the history of dictionaries.
Jean Quashnock  
*Chair, Physics and Astronomy Department; Professor of Physics and Astronomy, Coordinator of the Dual-Degree Program in Engineering.*  
Dr. Quashnock is a research astronomer in the Sloan Digital Sky Survey (SDSS), also known as the Map of the Universe Project, an effort to catalog and map 100 million galaxies. Professor Quashnock's research interests include cosmology, large-scale structure in the universe, high-energy astrophysics and gamma-ray bursts, and absorption-line systems in quasar spectra. His work has been published in more than 60 scientific publications. He is an active member of the American Astronomical Society, the American Physical Society, the American Association of Physics Teachers, and Sigma Xi. He serves as an associate at the University of Chicago, where he previously was a lecturer and a research scientist, and collaborates with researchers there, in the Department of Astronomy & Astrophysics, and at Fermilab. He also has lectured in the Medical Physics Department of the College of Health Professions, Rosalind Franklin University. Professor Quashnock earned his B.Sc. in physics from McGill University, and Ph.D. from Princeton University in 1990. He studied the dynamics of topological defects and the effects of phase transitions in the early universe (The First Three Microseconds: Cosmic Strings, Axions, and Magnetic Fields). He has a particular interest in acoustics and the physics of music. He sings tenor in various choirs in Wisconsin. After doing postdoctoral work at the University of Chicago, he joined the Carthage faculty in 1999.

Elaine Radwanski  
*Professor of Biology,*  
Dr. Radwanski earned her Ph.D. in genetics and development at Cornell University in 1995. After earning her B.A. in biological sciences from Mount Holyoke College and M.S. in botany at the University of Wisconsin-Madison, she switched career paths and spent several years working as a programmer/analyst, systems analyst, and forecast analyst in academia, insurance, and aerospace. When her mathematician husband accepted a tenure-track position at Wells College in Aurora, N.Y., she became the college's first Grants Officer and also taught a wide range of courses in the biology department. Upon her return to graduate study in plant genetics and molecular biology, she was awarded both the Plant Science Center Fellowship and the NIH Genetics Trainee Award. While at Cornell, she taught undergraduate genetics laboratory, as well as graduate-level plant genetics and plant virology. After receiving her doctorate, she joined the Department of Plant Breeding and Biometry at Cornell as a postdoctoral associate, where her research focused on disease resistance in peppers. She joined the Carthage faculty in 1997.

Christine Renaud  
*Chair, Classics Department; Director, Women's and Gender Studies Program; Professor of Classics and Religion,*  
Dr. Renaud came to Carthage in 1995 from Bucknell University. She has also taught at Duquesne University, the University of Texas at Austin, and Wayne State University, where she earned her B.A. (Phi Beta Kappa) and M.A. in Latin. Overseas, she has lectured in Rome for Temple University and for the Intercollegiate Center for Classical Studies, then a Stanford Overseas program. In 1986 she received the Fulbright-Hays Research Grant for Italy. She then went on to earn her Ph.D. (Phi Kappa Phi) in classics and classical archaeology from the University of Texas at Austin. In addition to teaching overseas, Professor Renaud has excavated in the ancient Agora of Athens, the Roman Forum (Rome), an ancient Greek necropolis outside of Metaponto in southern Italy and for the past five years at the Villa delle Vignacce excavations at Ostia (2010), the ancient port of Rome. Outside of the classroom and the field, she has served as the Course Director of the Racine Odyssey Project and currently participates in Kenosha Literacy Council's Project Journeys.

Patricia Rieman  
*Assistant Professor of Education,*  
Dr. Rieman earned a B.S. in special education with an emphasis on mental retardation from the University of Tulsa in 1982, then spent more than 15 years as a special education teacher in Oklahoma and Illinois. She earned an M.S. in special education with an emphasis on social/emotional disorders in 1995 and an Ed.D. in curriculum and instruction with an emphasis on literacy education in 2007, both from Northern Illinois University. From 1999 to 2008, she was an adjunct instructor and clinical supervisor in NIU's departments of Literacy Education and Teaching and Learning. She was also an adjunct professor of education at Rockford College in 2007-08. She joined the Carthage faculty in 2008.

James Ripley  
*Director of Instrumental Music Activities; Professor of Music,*  
Dr. Ripley conducts the Carthage Wind Orchestra and Carthage Concert Band, is co-conductor of the Chamber Orchestra, and is head of the College’s music education program. He also serves as music advisor and principal guest conductor of the Sakuyo Wind Orchestra at Sakuyo University in Kurashiki, Japan. Prior to his appointment at Carthage, Professor Ripley served as assistant professor of conducting and ensembles at the Eastman School of Music, where he was the associate conductor of the Eastman Wind Ensemble and Wind Orchestra, and as conductor of the Symphonic Wind Ensemble at the River Campus of the University of Rochester. Before teaching at Eastman, he was associate director of bands at Northern Arizona University in Flagstaff and a faculty member at Luther College in Decorah, Iowa. He taught in the public schools of Iowa and Minnesota for 11 years.

Professor Ripley is an active arranger and editor of wind ensemble music. He collaborated with Morton Gould on the completion of the "American Ballads" for band and has recently created performance editions of Howard Hanson's "Triumphal Ode for Military Band" (published by Carl Fischer), and "Pan and the Priest" for chamber ensemble. Two of Professor Ripley's works are published in "The Donald Hunsberger Wind Library" by Warner Brothers Publications. He has authored several articles that have appeared in *The Instrumentalist, Wind Works, BD Guide,* and the *Journal of Band Research.* His professional affiliations include the College Band Directors National Association, World Association for Symphonic Bands and Ensembles (Executive Secretary), National Band Association, Music Educators National Conference, Kappa Kappa Psi and Tau Beta Sigma (honorary member). He has appeared as guest clinician and conductor throughout the United States, Canada and Japan.

Professor Ripley earned his B.A. in music education from Luther College, his M.M. in wind conducting from Northwestern University, and D.M.A. in conducting from the Eastman School of Music. He joined the Carthage faculty in 2001.
Julio Rivera
Provost; Professor of Geography and Earth Science, earned his Ph.D. in geography from the University of Wisconsin-Milwaukee, his M.A. in higher education and student affairs at The Ohio State University, and his B.A. in journalism and theology at Marquette University. Dr. Rivera has taught courses in geographic information science (GIS); satellite image interpretation; and urban, economic and cultural geography. His research focuses on the development of suburban communities and how the design of the built environment enhances or impedes community life. He worked at the Global Institute for Sustainability at Arizona State University examining trends in the development of the urban fringe in the Phoenix metropolitan area. He has brought students to Ometepe Island, Nicaragua, as part of a service-learning course in the Geography and Biology of Nicaragua. He has directed numerous undergraduate student senior thesis projects, many of which were presented at regional and national conferences. He serves as a consultant to both government and business including Snap-on Tools, World Link Inc., Racine County Convention and Visitors Bureau, and the Racine Harbor Commission. Dr. Rivera is the author of a number of papers and is a member of the Association of American Geographers, National Council on Geographic Education, and the American Conference of Academic Deans. He is a national leader in the undergraduate research movement. He is an active member of the Council on Undergraduate Research, served on its executive board, and was named its volunteer of the year in 2005. He is the recipient of the 2002 Carthage College Distinguished Teaching Award. He joined the Carthage faculty in 1997.

Isabel Rivero-Vila
Assistant Professor of Modern Languages, has taught Spanish and French as an assistant professor at Carthage since 2004. She studied at the Université de Caen Basse-Normandie (France) with an Erasmus Scholarship in 2001. She came to Carthage after teaching Spanish at several institutions in Britain and Normandy (Lycée de L'Elorn, Lycée Jean d'Arc, Lycée Coat-Mez) and Colegio Delibes in Salamanca. She also taught French at the Universidad Pontificia de Salamanca and at the University of Wisconsin-Parkside. She is currently working on her Ph.D. concerning Modern Teaching Techniques in Second Language Acquisition at the Universidad de Salamanca. She defended the first portion of her thesis, "Une proposition pour l'enseignement de la grammaire du Français langue étrangère: la culture francophone à travers l'input et l'output," for which she received the Extraordinary Award 2008 from the Universidad de Salamanca. In order to complete her doctoral research, she spent three months in France in the Université Paris XIII in the summer of 2009 and January 2010. She is currently finishing the second portion of her thesis, "Une proposition pour l'enseignement du français langue étrangère et de l'interculturel à travers le multimedia," and will defend it in January 2011. She actively engages in promoting international events at Carthage as the advisor of the International Friendship Society. She has degrees in French linguistics and literature (M.A, Universidad de Salamanca, Spain); and French education, (B.A., Universidad de Burgos, Spain).

Jeffrey Roberg
Associate Professor of Political Science. Professor Roberg's research and teaching previously focused primarily on the former Soviet Union and its successor states, exploring issues of human rights, nuclear proliferation and the relationship of the Soviet scientific community and political elites. More recently he has expanded his human rights and environmental politics research and teaching interests to include work on Latin America. He has published articles related to the former Soviet Union, Russia and Latin America, including the countries of Cuba and Argentina. In addition to his book, Soviet Science Under Control: The Struggle for Influence, published in 1998 by Macmillan Press, Professor Roberg is co-authoring a new book with Professor Penny Seymore titled Tourism in Northeastern Argentina: What is at Risk? The Intersection of Human and Indigenous Rights With the Environment, which will be published in 2011. Professor Roberg joined the Carthage faculty in 1997, where his teaching responsibilities include courses in comparative politics and international relations. He was named the Carthage Distinguished Teacher of the Year in 2003. He has led a variety of study abroad courses during Carthage's J-Term to Latin America and the post-Soviet states of Russia, Latvia, Lithuania and Estonia. He earned a Ph.D. and M.A. in political science at the University of Illinois at Urbana-Champaign and a B.A. in political science from UCLA.

Pascal Rollet
Professor of Modern Languages, specializes in 19th century French literature and the culture of modern France. He teaches French, Spanish, and Western Heritage. Since coming to Carthage, he has been committed to the promotion of study abroad and to the development of multi-cultural awareness. He earned his Licence en lettres d'enseignement d'anglais from the University of Caen, France; M.A. from the University of Kentucky; and Ph. D. from the University of Pennsylvania, where he held the William Penn and Mellon Dissertation Fellowships. In addition to English and French, he is fluent in Spanish and Italian. He joined the Carthage faculty in 1993.

Sarah Rubinfeld
Assistant Professor of Biology and Environmental Science, was born in Michigan and grew up in northern California. She earned a B.A. in geoscience from Princeton University in 1997, and M.S. and Ph. D. degrees in civil and environmental engineering from Stanford University. In 1996, she was a summer intern for the U.S. House of Representatives Committee on Science, where she did background research on global warming and the structure of the Environmental Protection Agency.

Timothy Rucks
'83, Head Football Coach; Lecturer, Exercise and Sport Science, earned his M.A. from Northeastern Illinois University and his B.A. in 1983 from Carthage. He joined the Carthage faculty in 1995.
Daniel Ruffner
Director, Athletic Training Program; Senior Lecturer, Exercise & Sport Science, earned his bachelor's degree from the University of Wisconsin-Stevens Point, and his master's degree from Illinois State University in 1992. From 1992 to 1993 he was employed at Mercy Medical Center in Oshkosh, Wis., before joining Carthage in 1993.

Neil Scharnick
Assistant Professor of Theatre, joined the Carthage faculty in 2004 after serving as Assistant Coordinator for DE (Distance Education) Academic Services at Trinity International University in Deerfield, Ill. Prior to that post, he was general business manager for Acacia Theatre Company in Milwaukee and interim technical director for the Cedarburg Performing Arts Center. He earned his B.A. in both religion and communication and performing arts from Carthage in 1999, and his M.A. in theatre from Northwestern University in 2001. He is currently A.B.D. in pursuit of his Ph.D. in theatre research at the University of Wisconsin-Madison.

Robert Schlack
Professor of Economics, is interested in international political economy, urban and regional economics, and economies in transition. In 1992 he received a Fulbright Lecturing and Research Grant for Bulgaria, and he has since returned to Eastern Europe with grants from the American Council of Learned Societies (1995) and the International Research and Exchanges Board (1994) as an invited speaker on teaching economics and curricular reform in transitional economies. His work also has been supported by grants from the University of Illinois' Summer Research Lab on Russia and Eastern Europe (1993 and 1996), the National Council on Economic Education (1994 and 1996), the Lilly Endowment (Workshop on the Liberal Arts, 1994), the National Endowment for the Humanities (Summer Seminar on Latin American Economies, 1984), and the National Science Foundation (1982-84). In addition to his travels throughout Eastern Europe, he has visited Latin America and China and served as a Peace Corps volunteer in Peru. He has presented papers at meetings of the Association for Evolutionary Economics, the Western Social Science Association, and the National Social Science Association. Several of his publications have appeared in the Journal of Economic Issues: Economies in Transition: Hypotheses Toward a Reasonable Economics, (1996); Going to Market in Bulgaria, (1993); Plant Closings: A Community's Bill of Rights, (1991); Urban Economies and Economic Heterodoxy, (1990); and Economic Change in the People's Republic of China: An Institutionalist Approach, (1989), with the latter two selected for abstracting by The Journal of Economic Literature. He earned his B.A. degree from the University of Michigan, and his M.A. and Ph.D. from Wayne State University, where he received graduate fellowship awards from Resources for the Future and the National Defense Education Act. He joined the Carthage faculty in 1975.

David Schlichting
Associate Professor of Business Administration, came to Carthage in 1997 from Marquette University, where he was a member of the accounting faculty since 1986. He earned his Ph.D. in business from the University of Wisconsin-Madison, M.B.A. from Marquette University, and B.B.A. from the University of Notre Dame. In addition to his classroom experience, Professor Schlichting is a CPA and maintains a tax and accounting practice, focusing primarily in the income tax and estate tax areas.

August Schmidt
Head Baseball Coach; Lecturer, Exercise and Sport Science, joined the Carthage faculty in 1987.

Daniel Schowalter
Professor of Religion and Classics, is interested in archaeology and the religions of the ancient Roman world. He is co-director of the excavation of a three-phase Roman temple at Omrit in northern Israel. He serves on the editorial board for the Oxford Biblical Studies Online, and on the steering committee for the Archaeology of Religion in the Roman World Section of the Society of Biblical Literature. He is co-editor of Corinth in Context: Comparative Studies on Religion and Society, recently released by Brill and the Society of Biblical Literature, and of The Roman Temple Complex at Horvat Omrit: An Interim Report, forthcoming from British Archaeological Reports. Professor Schowalter's course offerings include Classical Archaeology, Roman Religion, Greek Religion, Understandings of Religion, Letters of the New Testament, Gospels, and Women and the New Testament. He also leads I-Term tours to Greece, Turkey and Italy. He earned his B.A. degree from St. Olaf College, and his M.Div. and Th.D. from Harvard Divinity School. He joined the Carthage faculty in 1989.

Leonard Schulze
Chair, Division of Fine Arts; Professor of Communication and Digital Media, English; Director, Augustine Institute, teaches courses in human symbolic activity, rhetoric and persuasion, communication and community, cinema studies, and the history and structure of the English language. He is also active in the core courses and Carthage Symposium courses of the College's general education curriculum. He is the founding director of Carthage's Augustine Institute, a forum dedicated to exploring the intellectual and spiritual resources of the Augustinian/Lutheran tradition (see www.carthage.edu/ Augustine).

Before joining the Carthage faculty in 2004, Professor Schulze served as executive director of the Division for Higher Education and Schools of the Evangelical Lutheran Church in America (now Vocation and Education). He has taught German, English, philosophy, European and American literature, American studies, and communication studies at Yale University; the U.S. Military Academy at West Point; the University of Texas at Austin; Julius-Maximilians-Universität in Würzburg, Germany; and Texas Lutheran University, where he served as chair of the department of English and Communication, director of international education, vice president for academic affairs, and dean of the university.

Dozens of his articles and reviews have appeared in annual editions of The Romantic Movement: A Selective and Critical Biography, as well as in periodicals such as Studies in Romanticism, SubStance, Intersections, and the Journal of Lutheran Ethics. He is co-editor of a volume of essays on historiography and literature (Literature
Brian Schwartz

Assistant Professor of Physics and Astronomy and Great Ideas. Mr. Schwartz's expertise is in nuclear physics. His dissertation dealt with quantifying polarization achieved when atoms become molecules and is based on cyclotron research he performed at Indiana University. He earned his B.S. from the University of Dallas, and Ph.D. from Yale University. He did additional graduate study at the Universität Zürich, Switzerland.

Karin Sconzert

Associate Professor of Education, earned a B.A. in history from Lawrence University in 1987, then taught at private schools in Hammond, Ind., and Princeton, N.J., and the University of Chicago Laboratory Schools before serving as a qualitative researcher for the Consortium on Chicago School Research from 1994 to 2002. During this time she earned a Ph.D. in education from the University of Chicago in 2001. She was an assistant professor of education at Loyola University Chicago and at Ursinus College before she came to Carthage in 2007.

John Sedeska

Assistant Football Coach/Defensive Coordinator; Lecturer, Exercise and Sport Science. joined Carthage in 2008.

Penny Seymoure

Associate Professor of Psychology and Neuroscience, earned her B.A. (cum laude) and M.A. (with distinction) from California State University at Stanislaus, and her Ph.D. in Biological Psychology from the University of Illinois at Urbana-Champaign. She was a postdoctoral fellow with the University of Colorado Health Science Center in Denver from 1996 to 1998, and a postdoctoral fellow and research consultant at the University of Denver with Marshal M. Haith from 1998 until her appointment at Carthage in 2000.

Professor Seymoure currently is examining two research interests. She is interested in brain development in human and rodent models and the emergence of brain-behavior relationships. She and her students have examined interactions of gonadal hormones and environmental events along with the role of early adversity in hooded rats (isolation, stress, neonatal exposure to drugs) and their consequences on adult cognitive/spatial performance. She has published articles in several neuroscience journals and she and her students have made numerous conference presentations.

Her second research interest examines the effects of tourism development in the northeast of Argentina and its impact on the culture of the Mbya Guaraní, a preliterate rainforest people. From her 2009 sabbatical research in Argentina, she has co-edited a book about tourism, where she has written chapters that examine current land rights and indigenous rights violations against the Mbya, along with reviewing their educational systems, their food security concerns, and the psychological and physical health problems that have resulted from the loss of their traditional lands and increasing contact with tourists. She has given several conference presentations and invited talks on this research and has published journal articles that examine the loss of indigenous wisdom and forest management that coincide with rainforest deforestation and internal displacement.

Dimitri Shapovalov

Assistant Professor of Music, is a choir director, scholar, pianist, composer and educator. He joined the Carthage music faculty in 2005. His recent performance engagements include conducting a gala festival concert with the combined high school choirs of Rockford, Ill., at the historic Coronado Performing Arts Center; an appearance with the Fine Arts Festival Orchestra at the annual Messiah Sing-Along in Kenosha, Wis.; and a joint concert of the A. F. Siebert Chapel Choir and the Carthage Choir featuring guest conductor Weston Noble at Carthage. As Director of the A. F. Siebert Chapel Choir, he actively promoted the ensembles mission and visibility on and off campus. Since assuming leadership of the ensemble in 2007, he quadrupled its membership and expanded its performance schedule to include regular appearances at the annual Christmas Festival, the Family Weekend Worship Service, the Homecoming Worship Service, the Palm Sunday Concert, and many others.

Professor Shapovalov’s other professional interests include musicology, piano performance and composition. As a musicologist, he is a published author and translator on topics connected with Russian culture at the turn of the 20th century. He has presented papers on Russian music at national and international conferences, including the Prokofiev International Symposium in Manchester, UK, and the American Musicological Society in Washington, D.C. He has also been active as an accompanist and piano performer. He regularly performs solo and collaboratively at Carthage, and he has recently performed with the Sapphire Consort Group in the Twin Cities. He regularly gives workshops and master classes at the meetings of the Kenosha and Racine Music Teachers Associations. As a composer, Professor Shapovalov studied with Igor Vorobyov at the Glinka Choir College and continued his studies in the United States with Judith Lang Zaimont at the University of Minnesota. His choral compositions have received premieres from the Carthage Chapel Choir, the Cornell University Chorus, the Northwestern Women’s Chorus, and the Sapphire Consort Group in Minneapolis. His most recent composition was premiered by the A. F. Siebert Chapel Choir at the 2009 Christmas Festival at Carthage.

He earned his B.A. from the University of Minnesota and his M.A. and Ph.D. from Cornell University. He joined Carthage in 2005.
Joseph Shields
Assistant Professor of Business Administration, has worked for several major corporations, including Miller Brewing Co., ABB Robotics, and Snap-on Tool. He earned a B.A. in engineering from the University of Michigan in 1978, and an M.B.A. from the University of Wisconsin-Milwaukee in 1990.

Barbara Short
Associate Professor of Education, earned her B.A. from Augustana (Ill.) College, and her M.S. and Ed.D. from Illinois State University. Prior to coming to Carthage in 2004, she spent one year as an assistant clinical professor of education at Loyola University Chicago and 15 years as an elementary teacher in Illinois. She co-wrote the article "Moments in Constructivism: How does accepting failures allow us to examine our teaching?", which was published in Chemistry Educator (Vol.6 No.5, 2001). She currently is preparing three articles for publication, developed from her dissertation, "How Do Beliefs and Other Factors such as Prior Experiences Influence Decision-making of First-year Teachers?", and intends to continue to perform research in science education and constructivist pedagogy; teacher development and transition into career; first-year teachers; and the effect of teacher belief systems on their pedagogical practices. Professor Short has given 20 individual and group presentations and workshops on pedagogy throughout Illinois since the early 1990s.

Susanne Sklar
Assistant Professor of English and Great Ideas, earned a doctorate in religion and literature from the University of Oxford in 2007. She earned a B.S. and M.A. from Northwestern University's school of speech, after receiving her master's degree in 1980, she taught in China, worked for Greenpeace and Citizens Diplomacy of San Diego, and taught humanities at Shimer College from 1990-92 and 1996-2001. She served as arts director at Jane Addams Hull House, Chicago, from 1994-96. She was a Fulbright Scholar at Urals Pedagogical University in Ekaterinburg, Russia, in 2001-02. She has been a program consultant for Wisconsin Public Radio since 1990. Before coming to Carthage, she was a lecturer and visiting assistant professor in religion at Northwestern University.

Pamela Smiley
Chair, English Department; Professor of English, teaches the novel, introduction to literature, and Heritage studies. During 1994-1995, she was a visiting Fulbright professor in Seoul, Korea. She has conducted extensive research work in literature and composition, expository writing, creative writing, and women's studies. Professor Smiley taught at the high school level in New Zealand, at the University of Maryland-European Division, and at the high school level in Australia. She earned her B.A. degree from Winona State College, and her M.A. and Ph.D. from the University of Wisconsin-Madison. She joined the Carthage faculty in 1991.

Walter Smith
Assistant Professor of Chemistry, earned a B.S. in chemistry from Worcester Polytechnic Institute, and a Ph.D. in physical organic chemistry from Brown University. After a 21-year career as a research scientist for Baxter Healthcare Corp., he became a teacher. He was an adjunct instructor of chemistry at Elgin (Ill.) Community College, and taught chemistry, physics, and earth science at Carmel Catholic High School in Mundelein, Ill.

Mark Snively
Chair, Mathematics Department; Professor of Mathematics, is interested in research in the field of dynamical systems. His paper "Markov Partitions for the Two-Dimensional Torus," presented at the Conference and Workshop in Ergodic Theory and Symbolic Dynamics at the University of Washington, was published in Proceedings of the American Mathematical Society. Professor Snively is very active in undergraduate research, particularly in the areas of discrete mathematics and mathematical modeling. He is working to integrate mathematical software packages and mathematical modeling into the curriculum and teaches mathematics courses at introductory and upper levels. His contributions to general education at Carthage have included teaching in the Heritage program and leading the team of faculty who developed the interdisciplinary natural science course Discovery. He has served as Chair of the Wisconsin Section of the Mathematical Association of America, and is currently Secretary/Treasurer of the Wisconsin Section. Professor Snively was named the 2003-2004 Carthage Distinguished Teacher of the Year. He earned his B.S. degree at Grove City College, and his M.A. and Ph.D. degrees at Northwestern University. Professor Snively joined the Carthage faculty in 1990.

Matthew Somlai
Adjunct Assistant Professor of Sociology, 2008.

Richard Sperber
Chair, Modern Languages Department; Associate Professor of Modern Languages, teaches both German and Spanish. He earned his M.A. from the University of California at San Diego and his Ph.D. in Comparative Literature from the University of Washington. His teaching and research interests include colonial and postcolonial studies, Pacific studies, the Spanish Civil War, 19th and 20th century German literature, and 20th century Spanish literature.

David Steege
Associate Provost; Professor of English, teaches American literature, Mark Twain, the novel and the short story. He has presented and published papers on British children's literature and writing pedagogy. He was named Carthage Distinguished Teacher of the Year in 1994. He is the faculty sponsor for the Carthage chapter of Alpha Chi, the National College Honor Scholarship Society. As Associate Provost, he is the Director of January Term. Professor Steege earned his B.A. degree from Pomona College in Claremont, Calif., where he became a member of Phi Beta Kappa, and his M.A. and Ph.D. degrees from the University of North Carolina-Chapel Hill. He joined the Carthage faculty in 1991.

Clifton Stephenson
Assistant Professor of Chemistry, earned his B.S. in chemistry from Mississippi College and his Ph.D. in chemistry from the University of South Carolina. He joined the Carthage faculty in 2008. This past summer
he was a visiting professor at Marquette University, where he conducted research related to the formation of nanowires. Professor Stephenson specializes in organic chemistry and teaches courses in organic and general chemistry. He has recently published papers in Organic and Biomolecular Chemistry, Dalton Transactions, and Polymer International. His research at Carthage focuses on the modification of fluorescent dyes to form novel fluorescent sensors for small organic molecules such as pharmaceuticals.

John Stewig
Professor of Education; Director of the Center for Children’s Literature, joined the Carthage faculty in 2004.

Wenjie Sun
Assistant Professor of Geography and Earth Science, and Computer Science, joined Carthage in 2006. Originally from Harbin city in northeastern China, she earned her B.S. in geography with a minor in economics from Beijing University. Prior to Carthage, she went to graduate school at Indiana University, Bloomington, where she received her M.A. in geography, M.S. in computer science, and Ph.D. in Geographic Information Science (GIS). She teaches courses in GIS, Satellite Image and Air Photo Analysis, Human Geography, and Geography of East Asia. She has also led interdisciplinary themed J-term trips to China with Professor Choffnes from the Biology Department.

Professor Sun has been conducting research projects using GIS and Remote Sensing (RS) techniques to examine land use and land cover change (LUC) from the perspective of human-environment interaction. For her dissertation work, she has been involved in a couple of NSF-funded research projects on LUC in southern Indiana and spatially explicit decision-making lab experiments combining GIS and experimental economics. She has published in the International Journal of Geographical Information Science and given a number of talks at national professional meetings. She is also interested in applying GIS and RS to a wider range of economic, social and environmental studies. Since 2008, she has developed collaborative applied research opportunities with the Kenosha County Health Department, particularly on using GIS and spatial analyses to identify high-risk neighborhoods for the Kenosha-Racine Lead Free Communities Partnership Program and ultimately help preventing childhood lead poisoning. This collaboration has resulted not only in team projects in Advanced GIS classes, but also a successful SURE (Summer Undergraduate Research Experience) award, a senior thesis project and two national-level conference presentations. In addition, she is actively pursuing undergraduate research and teaching opportunities on regional differences in China and East Asia through organizations such as AsiaNetwork. In her spare time, she enjoys traveling, landscape photography, cooking, and badminton.

Susanna Swenson
Assistant Women's Track and Field Coach; Lecturer in Exercise and Sport Science, joined Carthage in fall 2006. She earned her M.Ed. from Iowa State University, and B.A. from Carthage.

Wayne Thompson
Associate Professor of Sociology and Criminal Justice, specializes in social dimensions of religion and crime, especially quantitative studies using sample survey research. Before he became a professor, Professor Thompson served on the research staffs of the Presbytery Church (USA), the Evangelical Lutheran Church in America and the Roman Catholic Archdiocese of New York City. His publications include studies of congregational growth and decline, religion and media, and how Catholics make school enrollment choices for their children. With his students, he provides program evaluation research services for religious, human service and criminal justice agencies. He received his M.A. degree at the University of Arizona and Ph.D. in sociology from University of Connecticut. He has been at Carthage since 1998.

Alexander Tiahnybok
Assistant Professor of Business Administration and Entrepreneurial Studies in Natural Sciences (ScienceWorks) came to Carthage in 2007 as an adjunct faculty member. He has more than 20 years of experience in the food ingredients and chemical industries working for companies such as Morton Salt, Wacker Chemie, and International Paper. He also owns a consulting firm that supports technical and marketing activities with chemical companies. He earned a B.S. in chemical engineering from Northwestern University in 1986, and an M.B.A. from DePaul University in 2003.

Ingrid Tiegel
Acting Chair, Psychology Department; Director, Social Science Program; Professor of Psychology, is a developmental psychologist interested in the areas of attachment behavior, sibling relations, early childhood interventions and education, health psychology, and youth at risk for psychopathology. She frequently consults for community programs relating to the development and education of young children and for youth at risk. She has been a commissioner and validator for the NAEYC accreditation program. She was the chair of the Community Planning Team and Executive Committee for Kenosha YES, a five-year community effort to prevent serious juvenile delinquency in Kenosha County. Previously named Carthage Distinguished Teacher of the Year, she also received an award for her teaching at the State University of New York at Stony Brook. She was the recipient of NICHD and NIMH pre-doctoral fellowships at the University of Minnesota. Her personal interests include sketching, gardening, reading, swimming, visiting museums, and attending the theater. She earned her B.A. degree from Stanford University, M.A. from San Jose State University, and Ph.D. from the University of Minnesota. Professor Tiegel came to Carthage in 1980.

Deborah Tobiason
Assistant Professor of Biology, came to Carthage in 2007 from Northwestern University, where she was a research assistant professor at Feinberg School of Medicine. She had been a postdoctoral fellow at Feinberg, a biochemistry lecturer at Elmhurst College in 2004, and a lecturer in the Upward Bound program at Columbia College in Chicago from 2000 to 2003. She earned a B.S. in biology from Loyola College of Maryland in 1992, and a Ph.D. in microbiology and
molecular genetics from Emory University in 1998.

Erik Tou
Assistant Professor of Mathematics, specializes in analytic number theory and the history of mathematics. His number-theoretic research covers a wide range of topics, from the calculus of complex functions to matrix algebra. Professor Tou currently serves as Chief Historian of the Euler Archive, a scholarly organization devoted to the collection, digitization, and translation of the works of 18th century Swiss mathematician Leonard Euler. He is also treasurer for the Euler Society (an international organization of historians of science and mathematics), and serves as editor of the society's quarterly newsletter. He received a Ph.D. in mathematics from Dartmouth College in 2007, after earning an M.A. in mathematics from Dartmouth in 2004. He earned a B.A. in mathematics from Gustavus Adolphus College in 2002. He joined the Carthage faculty in 2007.

Aaron Trautwein
Professor of Mathematics, specializes in knot theory, a subfield of topology, which is the area of mathematics that examines shape. In particular, he studies the physical and theoretical properties of harmonic knots and their applications. He has presented numerous talks on his research and wrote the chapter "An Introduction to Harmonic Knots" for the book Ideal Knots. At Carthage he teaches an array of courses for the Mathematics Department and Western Heritage Program including multivariate calculus, linear and abstract algebra, and Western Heritage I and II. He was selected as Carthage's Distinguished Teacher of the Year in 2001. Professor Trautwein resides in Kenosha and is active in his community. He completed the Leadership Kenosha Training Program and has served as Carthage's United Way Chair and on United Way Community Caring Teams for the past 15 years. He earned his B.A. from Washington University, where he majored in mathematics and secondary education, and minored in anthropology. At Washington University, he was selected to be a member of Phi Beta Kappa and earned a Missouri Lifetime Secondary School Teaching Certificate. He earned his M.A. in mathematics from St. Louis University. He received the Outstanding Teaching Assistant Award and earned his Ph.D. in Topology from the University of Iowa. He joined the Carthage faculty in 1995.

Stephen Udry
Chair, History Department; Associate Professor of History, has traveled extensively throughout Asia, and has resided in Taiwan, where he taught English for five years. He also has visited China, Japan, Korea, Nepal, Tibet, and Thailand. His dissertation was Muttering Mystics: Manchu Shamanism. He earned his A.B. degree from Columbia College, Columbia University, and his M.A. and Ph.D. from the University of Washington. He joined the Carthage faculty in 2000.

Leanne Ulmer
Head Women's Volleyball Coach; Head of Volleyball Operations; Senior Woman Administrator, was a successful head girls and boys volleyball coach at Adlat E. Stevenson High School in Lincolnshire, Ill. Ms. Ulmer earned her B.A. in social relations from the University of California-Riverside. She was member of the 1979 volleyball team, which won an Association of Intercollegiate Athletics for Women (AIAW) national championship. Later, Ms. Ulmer was inducted into the school's athletic hall of fame. She briefly played with the New York Stars of the Women's Professional Basketball League, and on the Women's Professional Golf Association mini-tour from 1989-91. Ms. Ulmer was once a winning contestant on the television game show "Wheel of Fortune."

Paul Ulrich
Director of Honors Program; Associate Professor of Great Ideas, Political Science and Philosophy, came to Carthage after having served as an adjunct professor of political science at George Washington University since 2001. Prior to that appointment, he spent two years as an instructor of Newberry Library Adult Seminars, three years as a research analyst for the Chicago Transit Authority Department of Planning, and two years as a visiting assistant professor of political science at Kenyon College. Currently, he serves as research director for the Environmental Literacy Council in Washington, D.C. Professor Ulrich has made several public presentations and is preparing a paper for publication based on his research on Plato, which is also reflected in his dissertation, "Plato's Gorgias and the Power of Speech and Reason in Politics and Education." He is fluent in Greek and Latin and is proficient in German and French. He earned his B.A. and Ph. D. from the University of Chicago. He joined Carthage in 2004.

Christian von Dehsen
Chair, Humanities Division; Professor of Religion, has a balanced background, having worked as an assistant pastor and a research associate before joining the faculty. He is the book review editor for the Lutheran Forum and Reformed Liturgy and Music and has published a collaborated paper, "Policy and Politics: The Genesis of the Lutheran Church in America." His current research projects focus on the relationship between Peter and Paul in the early church. His course offerings include the Pentateuch, Christologies of the New Testament, Greek, the Dead Sea Scrolls, and Introduction to the New Testament. He earned his B.A. degree at Queens College/The City University of New York, M.Div. degree at the Lutheran Theological Seminary at Philadelphia, and his M.Phil. and Ph.D. degrees from Union Theological Seminary in New York. He is a member of Phi Beta Kappa. He came to Carthage in 1988.

Joseph Wall
Chair, Department of Business Administration; Assistant Professor of Business Administration, joined the Carthage faculty in March 2008. He currently teaches several accounting and finance courses, and is the director of the finance major at Carthage. He earned a B.S. in engineering from Purdue University in 1993. While an undergraduate, he started his own business dealing in commercial real estate. Since 1993 he has been a full-time financial analyst and professional investor. He is a managing member and the co-founder of his investment firm, which has been in business since 1998. He earned a master's in business administration from Marquette University in 2006, where he has also taught as an adjunct professor. Among his current research projects, Professor Wall is studying ethics
issues in middle management as well as the impact of new SEC rules regarding risk disclosure. His research has been published in the American Journal of Business Education and the CPA Journal. He most recently presented at Fairfield University on the topic of Emerging Markets, alongside professor Mimi Yang of the Department of Modern Languages.

Alan Wallace
Assistant Professor of English, maintains a variety of interests, including outdoor education, new course development, and writing. He has a strong background in education, joining the faculty after teaching at the Prairie School (Racine, Wis.), University of Wisconsin-Parkside, and Kansas University. His current course offerings include an introduction to American literature, an introduction to world literature, creative writing, and advanced writing. He first suggested and strongly advocated the semester of Heritage in Japan. He is especially interested in creating innovative programs for J-Term; in 1992 he introduced the course Literature of Exploration and Adventure. In 1993 he led the backpacking and camping trip to the Big Bend National Park in Texas. Professor Wallace earned his B.A. degree at Trinity College in Hartford, Conn., and M.A. and M.Phil. degrees at Kansas University. He came to Carthage in 1989.

Yan Wang
Assistant Professor of Modern Languages, joined the Carthage faculty in 2008 as an assistant professor of Japanese. She also teaches Global Heritage and Chinese. She received a Ph.D. in Japanese Linguistics from the University of Wisconsin-Madison. Her doctoral dissertation is a comparative study between the discourse-pragmatic functions of Japanese and Chinese yes-no questions. She also holds a master's degree in Chinese Linguistics from UW-Madison. She earned a bachelor's degree in Japanese from Beijing Foreign Studies University in 1993 and a master's degree of Japanese culture from Beijing Center for Japanese Studies in 1996. From 1996 to 1999, she worked as an assistant professor of Japanese at Beijing Foreign Studies University. Prior to coming to the United States, she also studied anthropology in the University of Tokyo. Professor Wang's research interests include Japanese/Chinese discourse analysis, pragmatics, syntax, pedagogy and cultural anthropology. Her recent publications and conference presentations focus on discourse markers such as sentence final particles, "fillers" and other communicational strategies in Japanese and Chinese conversational discourse.

Marilyn Ward
Professor of Education, teaches children's literature, creative arts, social studies methods, and graduate courses in gifted and talented education. She has conducted research on multicultural themes in children's literature, multiple intelligence theory, and the development of curricular programs for gifted students. She earned her B.A. degree from the University of Wisconsin-Parkside, M.A. from Northwestern University, and Ph.D. from the University of Wisconsin-Milwaukee. She joined the Carthage faculty in 1990.

Erlan Wheeler
Professor of Mathematics and Computer Science, earned his Ph.D. from Massachusetts Institute of Technology, which he attended under a National Science Foundation Graduate Fellowship. He conducted research in the area of combinatorics. As the director of Carthage's former computer studies program, he helped launch Carthage's computer science major and department in December 1998. Now he divides his teaching between mathematics and computer science. Active in undergraduate research since receiving an NSF Research Experience for Undergraduates grant as an undergraduate at Virginia Polytechnic Institute, Professor Wheeler began Sine on the Dotted Line, The Carthage Journal of Undergraduate Mathematics, as a forum for Carthage students to publish their research. A member of Phi Beta Kappa, he joined the Carthage faculty in 1992. He received the Distinguished Teacher of the Year Award in 1995.

Gary Williams
Associate Athletic Director, is in his 12th year as a staff member at Carthage. A former assistant football coach for 10 seasons at Carthage and an academic advisor, he is currently serving as the associate athletic director for education services. In this capacity, he directs Carthage's First Year Advising Center and Student Athlete Services programs. He mentors and guides students through their transition to college life and provides support, leadership and direction for student athletes on and off the field. He also directs the efforts for Carthage's Character Quest program for student-athletes, a unique teamworl, leadership and character experiential program held each summer. He was instrumental in the efforts to initiate and develop a Leadership Certificate program at Carthage, which began in fall 2008 and provides students leadership development seminars and coaching sessions throughout the school year. In addition, he teaches courses for undergraduate and graduate students in Carthage's Exercise and Sport Science and Education departments in Sport & Coaching Psychology, Leadership Theory, and Leadership in Sport.

Mr. Williams serves the NCAA as a member of the Student Athlete Affairs Advisory Committee, is a co-founder of the National Collegiate Speakers Association, is an active member with the American Legion-based leadership experience, Badger Boys State, is a member of the Board of Directors for Big Brothers/Big Sisters of Racine & Kenosha, is a trustee for St. Sebastian's Catholic Church in Sturtevant, and is also a high school and collegiate basketball official and co-director and speaker at multiple basketball officiating seminars and camps. He has brought his passion for student-athlete development to campuses across the country speaking on issues such as motivation, personality awareness, leadership, making smart decisions in social settings, and the positive uses of social networking.

He earned his bachelor's and master's degrees from Carthage and earned his doctorate in leadership in higher education from Cardinal Stritch University. He lives in Sturtevant, Wis., with his wife, Carrie, and daughters, Brynn (age 7) and Devyn (age 3).

Brett Witt
Head Men's Cross Country Coach; Head Men's Track and Field Coach; Lecturer, Exercise and Sport Science, began his 10th year coaching men's cross country and fifth year coaching men's track and field in 2010. He previously served as an assistant men's cross-country coach from 1999 to 2000. From Plover, Wis., he graduated from the University of Wisconsin-Stevens Point in 1998, earning his B.A. in communications.
He earned his M.A. in human performance and sport studies from the University of Tennessee in 1999. At Tennessee, he was a graduate teaching assistant, and served as a graduate assistant coach in both cross country and track and field. He was a track and field mid-distance runner at UW-Stevens Point, where he was an eight-time NCAA Division III All-American and a five-time Wisconsin Intercollegiate Athletic Conference champion. He was also named a GTE/CoSIDA Academic All-American.

Accompanying his music endeavors, Professor Wolff also held teaching positions in the Ashland, Ky., public schools; South Milwaukee Public Schools; Milwaukee Area Technical College; Gateway Technical College; Alverno College, Milwaukee; Northeastern Illinois University, Chicago; the University of Wisconsin-Parkside; and Carthage College. Holding department and division chairmanships, along with building leadership positions in public schools, he also taught graduate and undergraduate courses in music, sociology, history, education, and psychology at the above-named colleges and universities. Upon retirement from the South Milwaukee Public Schools, Professor Wolff joined the Carthage faculty in 2006 as a member of the Education Department, where his principle responsibilities include teaching courses in educational psychology, advising students, and making supervisory visitations for student teachers in the public schools. His doctoral work was done in psychology and behavioral science at California Coast University. He holds an M.S. degree in educational psychology and a B.S. degree in music and music education, both from the University of Wisconsin-Milwaukee.

Additional graduate studies were done at Northwestern University and the University of Wisconsin-Madison.

Professor Wolff is a member of Division 15 (Educational Psychology) of the American Psychological Association and Phi Mu Alpha Sinfonia, the national music honorary fraternity. His current research interests include the application of Howard Gardner's Theory of Multiple Intelligences in a model middle school music education curriculum; motivation and attribution theory issues among reluctant learners; the socio-psychological effects of popular music in adolescent development; cognitive processing differences among gifted and talented populations; and pre-frontal cerebral immaturity in adolescents and its relationship to risk-taking behaviors. His topical presentations to school district faculties have included "Oppositional Defiant Disorders in School Children," "Attribution Theory and Explanatory Styles in Success and Failure Situations," and "Applications of Emotional Intelligence in Adolescent Peer Relations."

Mimi Yang
Professor of Modern Languages, is multilingual in Chinese, English, Spanish, and Portuguese. A native of China, she majored in Spanish language and literature, earning her B.A. from Beijing University, and her M.A. and Ph.D. from the University of Arizona. Before coming to Carthage in 1996, she was a visiting assistant professor of Spanish at Illinois Wesleyan University. She also has held teaching posts at the University of Arizona, Randolph-Macon Woman's College, and Dartmouth College. A recipient of numerous scholarships and awards and a frequent speaker at national and international conferences, she is the author of several articles on the Mexican painter Frida Kahlo and the Argentine writer Victoria Ocampo published in the journal Autobiographical Studies (1997), the book Interfaces: Women, Autobiography, Image and Performance (U. of Michigan Press, Ann Arbor, 1999), and the book Woman as Witness (Peter Lang, 2002). Among other publications on the Spanish mystic St. Teresa de Avila, the Dalai Lama, Confucius, and Mohandas Ghandi, she also has authored the articles "Borges and His Foundational in Postmodernism" in the journal LaChispa (1999), "To Be Human: Is the Rassias Method the Rassias Madness?" published in the fall of 1995 in The Ram's Horn, and "Una mirada oriental a las letras peruanas," which appeared in the February 1989 issue of Lundero. In addition to literary scholarly work, she conducts seminars and workshops, on- and off-campus, on cross-cultural themes in business. These include the seminar on NAFTA (North American Free Trade Agreement) in 1997, under the School of Professional Studies at Carthage and the workshop on training international business executives and managers in Iowa in 2003, sponsored by the US-China Chamber of Commerce. She joined the A.W. Clausen Center for World Business at Carthage in 2004. She has lived in Chinese-, Spanish-, and English-speaking worlds and has traveled extensively in Asia, Europe, Latin America, and North America.
Blue Ridge Parkway in North Carolina and the Chaco Culture National Historical Park in New Mexico. He has chaired several sessions, presented nearly a dozen papers and published five essays on the national level of geographic research. Professor Zorn earned his Ph.D. in geography from the University of Florida, his M.A. and B.A. in geography, and a second B.A. in interdisciplinary/environmental studies from Appalachian State University. He joined Carthage in 1997.

Limited Appointment Faculty
Margaret Alkon
Adjunct Assistant Professor of Political Science

Dennis Flath
Adjunct Assistant Professor of Biology

Linda Greening
Adjunct Assistant Professor of Biology

Sally Groleau
Adjunct Assistant Professor of Mathematics

Kathryn Johnson
Adjunct Assistant Professor of Criminal Justice

Ross Larson
Adjunct Assistant Professor of Religion, Communication and Digital Media

Thomas Long
Adjunct Assistant Professor of Religion and Heritage

John Maclay
Adjunct Assistant Professor of Theatre

Donald Michie
Professor of English Emeritus

Maria Morales
Adjunct Assistant Professor of Modern Language

William Newcomb
Assistant Technical Director, Theatre

Margaret Oliver
Adjunct Assistant Professor of Biology

Phillip Owens
Adjunct Assistant Professor of Chemistry

Stacy Pottinger
Adjunct Assistant Professor of Theatre

David Rademacher
Adjunct Assistant Professor of Psychology

Barbara Salvo
Adjunct Assistant Professor of Biology

Mathew Somlai
Adjunct Assistant Professor of Sociology

Donald Walter
Adjunct Assistant Professor of Psychology

Adjunct Faculty
Lois Aceto
Sociology

Ronald Bailey
Education

David Boehn
Political Science, Criminal Justice

Ryan Bonn
Discovery, Chemistry

Glen Brittich
Exercise & Sport Science

Nancy Cebula
Education

William Chiapete
Political Science

Richard Custin
Business Administration

Lou Ann Daniels
Education

Mark Dahlstrom
Psychology

Beth De La Rosby
Exercise & Sport Science

Jill Dierberg
Religion

Steven Doelder
Chemistry

David Duncan
Heritage

Gary Eckstein
Sociology, Criminal Justice

Carl Edenhofe
Paralegal

Cory Everts
Exercise & Sport Science

Andrew Feldpausch
Education

Richard Fields
Business Administration

Denae Fisher
Exercise & Sport Science

Dennis Flath
Biology

Bonnie Flessen
Religion

Joanne Freitag
Business Administration

David Gartner
Heritage

Denise Gifford
Education

Brian Gill
Theatre

Donald Gillespie
Business Administration

Marna Glover-Krueger
Art

Laura Gordon
Theatre

Sarah Gorke
Music

Sue Goss
Mathematics

Avery Gould
Criminal Justice

William Griffin
Education

Pamela Grubb
Exercise & Sport Science

Alison Gruber
English

Christopher Grugel
Exercise & Sport Science

Ann Hackett
Exercise & Sport Science, Theatre

Crystal Hall
Music

Amy Hanson
Education

James Harris
Business Administration

Brian Harshburger
Geography and Earth Science

Devonee Harshburger
Geography and Earth Science

John Hemenway
Business Administration

Richard Hoskins
Music

Ellen Huck
Education

Terri Huck
Education

Allison Hull
Music

Peggy Huset-Duros
Biology

Achilles Infusino
Business Administration

Eric Johnson
Art

Frank Johnson
Education

William Johnston
Education

Jessica Joseph
Psychology

John Jones
Religion
Thomas Kennedy
Education
Deborah King
Mathematics
Kari King
Communication and Digital Media
Michael Kozakis
Music
Jessica Lahner
Exercise & Sport Science
Michael Lange
Criminal Justice
Kathryn Lauer
Education
Wynne Laufenberg
Criminal Justice
Liz Limpel
Business Administration
Nana LoCicero
Education
Jinny Lourigan
Modern Language
Jessica Martin
Spanish
Debbie Masloski
Music
Louise Mattioli
Education
Joel Miller
Business Administration
J. Reed Millsaps
Paralegal
Susan Mirsky
Education
David Missurelli
Business Administration
Maria Morales
Spanish
Joseph Moreland
Business Administration
Anne Morse-Hambrock
Music
Donna Mosca
Exercise & Sport Science
Patricia Murphy
Geography
David Neff
Business Administration
David Ness
Music
Eric Nelson
Religion
Marsha Nelson
Education
Anna Oliak
Education
Margaret Oliver
Biology
Melody Orban
Education
Jason Ottmann
Exercise & Sport Science
Cory Patrick
Psychology
Lynn Parks
Education
George Peek
Paralegal
Katina Petsas
Communication and Digital Media
Marla Polley
Heritage
Arthur Preuss
Education
Laura Primozic
Art
Michael Pugh
Western Heritage
Rodolfo Ramos
Business Administration
Denise Rattigan
Education
Matthew Rarey
Art
Betty Rhodes
Geography
Darlene Rivest
Music
Stephanie Robers
Sociology
Jana Roynon
Education
JoAnne Ruvoli
English
Barbara Salvo
Biology
Matthew Saucedo
Pep Band
Jolene Schneider
Education
Christopher Schoen
Sociology
Lorian Schwaber
Music
Donald Schwartz
Political Science
Michael Seyller
Education
Michie Simpson
Modern Language
Amareshwar Singh
Chemistry
Mathew Somlai
Sociology
Melissa Snoza
Music
Katie Sopoci
Exercise and Sport Science, Theatre
Tanyamat Srungboonmee
Economics
Michelle Stander
Sociology
Kathy Steinberg
Exercise & Sport Science
Nicolette Sturino
Education
Karen Suarez
Music
Dionne Thompkins
Criminal Justice
Gloria Tillman-Kemp
The Gospel Messengers
Sharon Tilton
Education
Lynn Tracy
Religion
Matthew Tuttle
Communications and Digital Media
Eliot Underhill
Education
Marianne Unger
Sociology
Ernie Virgili, Sr.
Exercise & Sport Science
Shawn Verborg
Education
Paul Von Hoff
Music
James Walker
Business Administration
Don Walter
Psychology
Shelly Waltke
Education
Dan Wampole
Education
Dex Westrum
Western Heritage
Connie Wheeler
Exercise & Sport Science
Lisa Wiedholz-Abott
Psychology


## Faculty and Staff

### Emeriti Faculty

#### Division of Education

- **Lloyd H. Melis**, B.A., Augustana College; M.A., Ph.D., Northwestern University. (Professor Emeritus of Education: 1965-94)
- **August R. Schmidt III**, B.S., Carthage College; M.S. Western Illinois University. (Director of Men's Athletics:1983-88; Professor Emeritus of Physical Education: 1963-96)
- **Jon Swift**, B.S., Carthage College; M.S., University of Wisconsin. (Professor Emeritus of Exercise and Sport Science: 1963-96)
- **Ronald Steven Zalokar**, B.A., Monmouth College; M.S. Ed., Southern Illinois University; M.S., Western Illinois University; Ed.D., Marquette University. (Professor Emeritus of Exercise and Sport Science: 1961 - 97)

#### Division of the Fine Arts


- **Richard Sjoerdma**, B.A., Calvin College; M.M., University of South Dakota; Ph.D., Ohio State University. (Professor Emeritus of Music: 1968-2007)


- **Kenneth M. Winkle**, B.A., Huron College; M.M.E., Indiana University; Ph.D., University of Iowa. (Professor Emeritus of Music: 1973-2001)

#### Division of the Humanities

- **John W. Bailey**, B.S., Hampden-Sydney College; M.A., University of Maryland; Ph.D. Marquette University. (Professor Emeritus of History: 1967-December 2000)

- **Sam Chell**, B.A., Augustana College; M.A., University of Illinois; Ph.D., University of Wisconsin - Madison. (Professor Emeritus of English: 1968-2007)

- **Mabel DuPriest**, B.A. Augustana College; M.A., Ph.D., University of Kentucky. (Professor Emerita of English: 1981-2010)

- **Ernestine Eger**, B.A., Muhlenberg College; M.A., Emory University; M.L.I.S., University of Wisconsin-Milwaukee; Ph.D., Universidad Jaime Balmes. (Professor Emerita of Modern Languages: 1965-2009)

- **Mary Katherine Kent-Rohan**, B.A., Saint Xavier College; M.A., Ph.D., University of Chicago. (Professor Emerita of German: 1969-89)


- **John Neuenschwander**, B.A., Mount Union College; M.A., University of Vermont; Ph.D., Case Western Reserve University; J.D., Illinois Institute of Technology Chicago-Kent College of Law. (Professor Emeritus of History: 1969-2008)

- **Dudley V. Riggle**, B.A., Wittenberg University; M.Div., Hamma Divinity School (Professor Emeritus of Religion and Associate in Ministry: 1961-98)


- **Lili G. Sorokin**, B.S., University of Frankfurt; M.A. University of Chicago. (Professor Emerita of German: 1962-92)

#### Division of the Natural Sciences

- **Vincent P. Hart**, B.S., Purdue University; M.S., Miami University; Ph.D., University of Iowa. (Professor Emeritus of Physics; 1971-98)


- **John McGrew**, B.A., Cornell University; M.S., University of North Texas; Ph.D., University of Michigan. (Associate Professor Emeritus of Computer Science; 1998-2002)

- **Ralph M. Tiefel**, B.S., Central Missouri State College; M.A., Ph.D., University of Missouri. (Professor Emeritus of Biology: 1957-95)

#### Division of the Social Sciences

- **Donald Gottschalk**, B.S., Marquette University. (Professor Emeritus of Business Administration: 1989-97)


- **Marc Herstand**, M.S.W., University of Northern Colorado. (Emeritus of History: 1981-2010)

- **Richard Kauffman**, M.S.W., University of Wisconsin-Madison. (Professor Emeritus of Education: 1965-94)

- **Ernestine Eger**, B.A., Muhlenberg College; M.A., Emory University; M.L.I.S., University of Wisconsin-Milwaukee; Ph.D., Universidad Jaime Balmes. (Professor Emerita of Modern Languages: 1965-2009)

- **Mary Katherine Kent-Rohan**, B.A., Saint Xavier College; M.A., Ph.D., University of Chicago. (Professor Emerita of German: 1969-89)


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- **Lili G. Sorokin**, B.S., University of Frankfurt; M.A. University of Chicago. (Professor Emerita of German: 1962-92)

- **Division of the Natural Sciences**

- **Vincent P. Hart**, B.S., Purdue University; M.S., Miami University; Ph.D., University of Iowa. (Professor Emeritus of Physics; 1971-98)


- **John McGrew**, B.A., Cornell University; M.S., University of North Texas; Ph.D., University of Michigan. (Associate Professor Emeritus of Computer Science; 1998-2002)

- **Ralph M. Tiefel**, B.S., Central Missouri State College; M.A., Ph.D., University of Missouri. (Professor Emeritus of Biology: 1957-95)

- **Division of the Social Sciences**

- **Donald Gottschalk**, B.S., Marquette University. (Professor Emeritus of Business Administration: 1989-97)


- **Leonard Scharmach**, B.S., St. Francis Major Seminary; S.T.I., Gregorian University; M.A., Ph.D., University of Wisconsin-

Richard A. Snyder, B.S., Oklahoma State University; C.P.A. (Professor Emeritus of Business Administration: 1977-89)

Thomas E. Van Dahm, B.A., Hope College; M.A., Ph.D., University of Michigan. (Professor Emeritus of Economics: 1964-91)

**Officers of the College**

F. Gregory Campbell, B.A., M.A., Ph.D.  
**President of the College;**  
**Professor of History**

William R. Abt, B.S., M.B.A.  
**Vice President for Administration and Business**

Brad Andrews, B.S., M.A. Ph.D.  
**Vice President for Enrollment and Student Services**

John M. Antaramian, B.S.  
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**Counselor for Community Partnerships**

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Campus Buildings

David A. Straz, Jr. Center for the Natural and Social Sciences (DSC)
Situated at the north end of campus, the Straz Center houses classrooms and laboratories for the various science departments, a greenhouse, and additional classroom facilities and faculty offices throughout three floors. The building also includes the 400-seat Wartburg Auditorium on the main level and the Studio Theatre located on the lower level. Additional classroom facilities are located in the lower level of the south wing.

A. W. Clausen Center for World Business (CC)
Recognizing that students are graduating into a global economy, the College opened the A. W. Clausen Center for World Business in September 2004. Situated in the north wing of the Straz Center, which formerly housed the College's library, the Clausen Center provides offices for the business, economics, political science, and computer science departments, as well as classrooms and seminar rooms, and an executive conference room in which students, faculty, and staff meet with visiting international business leaders.

Lentz Hall (LH)
This four-story building is situated just south of the Straz Center, and overlooks Lake Michigan. Lentz Hall is home to the Admissions Office, Business Office, Office of College Relations, Office of the President, Career Services, Registrar's Office, Adult Education Office, conference-seminar rooms, administrative and faculty offices, and classrooms. The College bookstore, operated by Barnes and Noble, also is housed in Lentz Hall. The building is named for the Rev. Dr. Harold H. Lentz, fifteenth president of the College, who served from 1952 to 1976. He courageously led the College during its crucial transition from Carthage, Ill., to Kenosha, Wis., which enabled the College to flourish.

Walter Fritsch Meditation Chapel
Situated in a grove of trees across from Lentz Hall, this charming chapel may be used by individuals or small groups for private meditation, and also is home to Eucharist and prayer services. The chapel is adorned with a Greek cross fashioned by internationally renowned liturgical artist Eugene Potente, Jr., a resident of Kenosha. Stones that form the altar were taken from the steps of the Old Main building at the College's former Illinois campus.

Hedberg Library (HL)
Dedicated in January 2002, Hedberg Library is a state-of-the-art facility uniting traditional print, electronic, and multi-media information resources. The 65,000-square-foot structure boasts a carefully selected 136,400-volume collection of books, periodicals, video recordings, microforms, electronic databases, compact discs, and other educational resources. The library houses academic computing services; the Bleeck Research Center; the Franklin I. and Irene List Saemann Curriculum Resource Center; the Staubitz Archives; the Fess Information Commons; the Bernard Writing Center; the Fritsch Classroom and other electronic classrooms; the Neimann Media Theater; a media and technology suite for video and audio production and presentations; and individual and small group study rooms. Donna's Bytes, a 24-hour cyber-cafe, is immediately adjacent to the library, and provides food and a social gathering space, as well as comfortable, overstuffed chairs for conversation around a fireplace. While virtually the entire campus has wireless internet access, Hedberg Library also contains nearly 500 wired network access ports. The library is named for Donald D. Hedberg, '50, Carthage Trustee and philanthropist.

A. F. Siebert Chapel (SC)
Situated in the center of the Carthage campus, A. F. Siebert Chapel provides a beautiful setting for the College's religious life programs. It is the site of a thriving worship series during the week, as well as weekend worship services, and is the gathering place for important events such as the Carthage Christmas Festival, Honors Convocation, Baccalaureate service, and concerts by renowned musical ensembles, including the Juilliard String Quartet and the Waverly Consort. The 1600-seat chapel includes the magnificent, four-manual Fritsch Memorial Pipe Organ, as well as the smaller Ehrler Meditation Chapel, and offices for the Dean of the Chapel, Director of Choral Activities, and the Catholic Campus Minister.

H. F. Johnson Center for the Fine Arts (JAC)
The Johnson Arts Center is constructed in two wings. The lower wing includes classrooms, practice areas, teaching studios, and faculty offices for both the music and the art departments, as well as for several other departments in the humanities. The upper wing houses the recital hall and an active art gallery. The building is part of the larger Religion/Arts Center complex, which includes A. F. Siebert Chapel.

N. E. Tarble Athletic and Recreation Center (TARC)
Opened in June 2001, the 156,000-square-foot N. E. Tarble Athletic and Recreation Center houses the Koenitzer Aquatic Center, which features a 25-yard by 40-meter, 16-lane swimming pool; the 5,000-square-foot Semler Health and Fitness Center; the McNamara Baseball and Softball Practice Area; the Snap-on ACE Climbing Wall; a 200-meter indoor track; the Karstetter Racquetball Courts; the Jon Swift Sports Medicine Center; an aerobics area; multipurpose courts for basketball, volleyball, and tennis; locker rooms; the Postlewaite Press Box; and offices for the athletic staff, which include the Cornog Swimming Coaches' Office, the Lyons Volleyball Coach's Office, and the Art Keller Football Coach's Office. The fieldhouse is home to the spring commencement exercises and large-scale concerts featuring national acts that have included Dave Matthews, John Mayer, Bob Dylan, and The Fray.

Tarble Arena (formerly the Physical Education Center, or PEC)
The Tarble Arena, re-opened in 2009 after a $13.5 million renovation, provides indoor facilities for physical education and athletics, and serves as the competition arena for basketball and volleyball. The new arena hosts four classrooms, seven office suites, an athletic training/exercise physiology laboratory, an athletic team fitness center and the David E. Dale Golf Center. Renovations include a new hardwood floor, new bleacher seating, and additional locker rooms for both teams and officials. The arena seats 2,500 for basketball or volleyball, and 3,000 for concerts and other events.

Todd Wehr Center (TWC)
The Todd Wehr Center stands in the middle of the student residential area. This facility, which benefits the extra-curricular life of Carthage students, contains the campus dining commons and a food court, student mailboxes and lounges, as well as a suite of multi-purpose rooms. The campus dining commons are on the upper floor, and offer a variety of eating options provided by Sodexo Food Service, North America's largest provider of food and facilities management. The facility is host to a variety of dances, performances, cabaret events, and other recreational events presented for the
enrichment of student life at Carthage. The TWC also features WOH's Place, which has numerous TVs, recreational games, and food service.

**W. A. Seidemann Natatorium**
The W. A. Seidemann Natatorium previously housed the College's swimming complex. Located in the heart of the student residential facilities, this structure will become a second student center as future home to the College Barnes and Noble Bookstore and premium food outlets. A convenience store and other facilities are planned to accommodate the needs of a growing student body.

**The Joan C. Potente Chapel**
The Joan C. Potente Chapel provides an oasis for nurturing the spirit. Reflection, meditation, prayer, and worship can restore balance and provide inspiration in the lives of those who come here. It is nestled amongst The Oaks residential village at the south end of campus.

Although open to all students and the greater community, this chapel reflects a Roman Catholic atmosphere. A gift of Gene Potente, whose work also includes the Fritsch Meditation Chapel, the Joan C. Potente Chapel is named in honor of his wife, Joan.

**Student Residence Halls**
Comfortable, on-campus housing accommodations are available to resident students in a number of residence halls. Each hall includes lounges, vending facilities, study areas, laundry rooms, and other services.

**Henry Denhart Residence Hall** is a co-ed residence hall that includes suite-style rooms similar to those found in Johnson Hall. The building is named for Henry Denhart, an early Carthage Trustee and significant benefactor.

**Joseph Johnson Residence Hall** is a co-ed hall that includes two Greek wings. The terrace level was renovated in 2001 and now includes suite-style rooms. The campus security office also is located on the terrace level. A large courtyard is situated behind the building. Johnson Hall is known for its annual "Johnson Haunted Halls" competition, which takes place each year around Halloween. The building is named for Joseph Johnson, a founder and former chairman of the board of Snap-on, Inc., who was an important benefactor of the College.

**Pat Tarble Residence Hall** is Carthage's all-female residence hall. It houses sororities and includes some study-intensive wings. Many rooms overlook Lake Michigan, while others offer suite-style accommodations. The hall is named for Mrs. Pat Tarble, who, along with her husband, Newton E. Tarble, was a generous benefactor of the College.

**Swenson Residence Hall** is Carthage's all-male residence hall. Swenson Hall houses only 26 students in 13 rooms, eight of which are equipped with private bathrooms.

**International Housing**
Since 1989, Carthage has invited young scholars from Asia, Europe, and South America to teach their native languages to Carthage students while pursuing their graduate studies at the College. These target language experts (TLE) in modern languages take residence on campus during their time at Carthage. Undergraduate international students enjoy the housing options available in the student residence halls.

**Trinity House (Home of the President)**
Built as the family home of the President of the College in the early 1960s, the building was a gift of the people of Trinity Lutheran Church in Rockford, Ill. The home was named "Trinity House" in honor the College's decades-long relationship with the congregation. The College rededicated Trinity House during Homecoming weekend in October 2003, following a major renovation of the home that summer.

**Smeds Tennis Center**
Across the street from the main campus, the $1.3 million Smeds Tennis Center features ten hard surface tennis courts, six of which are lighted; two stadium courts; an observation deck; and a clubhouse, which houses locker rooms, restrooms, team meeting space, and a juice bar. The Smeds Tennis Center is home to the Southeastern Wisconsin Men's Professional Tennis Futures, one of only 30 USTA tournaments of its kind in the country.
**14-week Semester Calendar**

**FALL TERM**

September
- 5 Sun: New students arrive
- 6-7 Mon - Tues: Returning students check in
- 8 Wed: Classes begin
- 14 Tues: Last day for late registration
- 15 Wed: Last day to add or drop a 1st 7-week course
- 22 Wed: Last day to add or drop a 14-week course
- 22 Wed: Last day to petition for overload
- 22 Wed: Last day turn in pass/fail/audit slips

October
- 6 Wed: Last day to submit coursework for an "I"
- 11 Mon: Advising for J-Term and spring semester begins
- 15 Wed: Last day to file for May graduation
- 22 Fri: Mid-term grades due
- 22 Fri: 1st 7-week courses end
- 25 Mon: 2nd 7-week courses begin
- 29 Fri: Last day to drop a course with a 'W'

November
- 1 Mon: Last day to add or drop a 2nd 7-week course
- 2 Tues: No financial refund after this date
- 5 Fri: Advising for J-Term and Spring Term 2009 ends
- 8 Mon: On-line registration for J-Term and spring semester starts
- 10 Wed: Last day for complete withdrawal
- 22-26 Mon - Fri: Thanksgiving recess
- 29 Mon: Classes resume

December
- 14 Tues: Fall Term ends after last class
- 15-17 Wed - Fri: Final examinations

**J-TERM**

January
- 4 Tue: Classes begin
- 6 Thurs: Last day to add or drop J-Term
- 11 Tues: Last day to withdraw from J-term
- 27 Thurs: J-term ends

**SPRING TERM**

February
- 1 Tues: Check in for spring semester classes
- 2 Wed: Classes begin
- 8 Tues: Last day for late registration
- 9 Wed: Last day to add or drop 1st 7-week course
- 16 Wed: Last day to add or drop 14-week course
- 16 Wed: Last day to petition for an overload
- 16 Wed: Last day to turn in pass/fail/audit slips

March
- 2 Wed: Last day to submit coursework for an "I"
- 14-18 Mon - Fri: Spring recess
- 21 Mon: Classes resume
- 21 Mon: Advising for fall semester begins
- 25 Fri: Mid-term grades due
- 25 Fri: 1st 7-week courses end
- 28 Mon: 2nd 7-week courses begin

April
- 1 Fri: Last day to drop a course with a 'W'
- 4 Mon: Last day to add or drop 2nd 7-week course
- 7 Thurs: No financial refund after this date
- 13 Wed: Last day for complete withdrawal
- 15 Fri: Advising for fall semester ends
- 18 Mon: On-line registration for fall semester begins

May
- 13 Fri: Spring semester ends after last class
- 16-18 Mon - Wed: Final examinations
- 22 Sun: Baccalaureate and Commencement

**Adult Education Calendar**

**Fall I Term: September 7 - October 21**

- September 10: Last day to add a course
- September 17: Last day to drop a course
- October 1: Last day to withdraw from a course

**Fall II Term: October 25 - December 16**

- October 29: Last day to add a course
- November 5: Last day to drop a course
- November 19: Last day to withdraw from a course

**Winter Term: January 3 - February 17**

- January 7: Last day to add a course
- January 14: Last day to drop a course
- January 28: Last day to withdraw from a course

**Spring I Term: February 21 - April 7**

- February 25: Last day to add a course
- March 4: Last day to drop a course
- March 18: Last day to withdraw from a course

**Spring II Term: April 11 - May 26**

- April 15: Last day to add a course
- April 22: Last day to drop a course
- May 6: Last day to withdraw from a course

**Summer I Term: May 31 - July 14**

- June 3: Last day to add a course
- June 10: Last day to drop a course
- June 24: Last day to withdraw from a course

**Summer II Term: July 18 - September 1**

- July 22: Last day to add a course
- July 29: Last day to drop a course
- August 12: Last day to withdraw from a course

**Summer Term**

**Summer Day 2-week session: June 1 - 11**

- June 2: Last day to add or drop a course
- June 3: Last day to withdraw from a course

**Summer Day 7-week session: June 1 - July 14**

- June 3: Last day to add a course
- June 10: Last day to drop a course
- June 24: Last day to withdraw from a course
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