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http://imagine.kent.edu/directions/kent/map.asp

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The University, Campus Map, Eight-Campus Network Map, Kent Institutional Characteristics, Kent State University Celebrates Differences, May 4, 1970

University Organization
Administration, Admission, Academic Regulations, Registration, Fees and Financial Aid, General Requirements and Regulations, Graduate Student Life, Graduate Student Services, Centers and Institutes, Certificate Programs, The Arts

College of Architecture and Environmental Design

College of Arts and Sciences
Anthropology
Biological Sciences
School of Biomedical Sciences
Chemical Physics Interdisciplinary Program
Chemistry
Computer Science
English
Geography
Geology
History
Justice Studies
Liberal Studies
Mathematical Sciences
Modern and Classical Language Studies
Philosophy
Physics
Political Science
Psychology
School of Biomedical Sciences
Sociology

College of Business Administration
| College of Communication and Information | Communication Studies  
Information Architecture and Knowledge Management  
Journalism and Mass Communication  
Library and Information Science  
Visual Communication Design |
|------------------------------------------|------------------------------------------------------------------|
| College of Education, Health and Human Services | Adult Counseling, Health and Vocational Education  
Educational Foundations and Special Services  
Public Health Program  
School of Exercise, Leisure and Sport  
School of Family and Consumer Studies  
School of Speech Pathology and Audiology  
Teaching, Leadership and Curriculum Studies |
| College of Fine and Professional Arts | Art  
Music  
Public Health Program  
School of Exercise, Leisure and Sport  
School of Family and Consumer Studies  
School of Speech Pathology and Audiology  
Theatre and Dance |
| College of Nursing | |
| School of Technology | |
| Special Programs Courses | |
| Graduate Faculty | |
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GRADUATE SCHOOLS CALENDAR 2005-2006

Fall Semester 2005
Aug. 19-22    Friday-Monday  International Student Orientation
Aug. 20-26    Saturday-Friday  Graduate Assistant Orientation
Aug. 29       Monday       Classes Begin
Sept. 2       Friday       Last day to file application for December graduation for doctoral and master's candidates.
Sept. 5       Monday       Labor Day. No classes. Offices closed.
Nov. 11       Friday       Veterans Day. No classes. Offices closed.
Nov. 18       Friday       Final date for oral examination of doctoral and master's candidates planning December graduation.
Nov. 23-Nov. 27   Wednesday (noon)-Sunday  Thanksgiving Recess. Offices closed Thursday and Friday.
Nove. 25      Friday       Columbus Day observed. No classes. Offices closed.
Dec. 5        Monday       All candidates for December graduation must have dissertation or thesis and abstract filed in graduate schools' offices.
Dec. 11       Sunday       Classes End
Dec. 12-18    Monday-Sunday  Final Examinations
Dec. 17       Saturday     Kent Campus Commencements
Jan. 2        Monday       New Year's Day Holiday.

Spring Semester 2006
Jan. 16       Monday       Martin Luther King, Jr. Day. No classes. Offices closed.
Jan. 17       Tuesday      Classes begin
Jan. 21       Saturday     Last day to file application for May graduation for doctoral and master's candidates.
March 27-April 2  Monday-Sunday  Spring Recess. No classes. Offices open.
April 3       Monday       Classes resume
April 7       Friday       Final date for oral examination of doctoral and master's candidates planning May graduation.
April 9-15    Sunday-Saturday  Honors Week
April 14      Friday       All candidates for May graduation must have dissertation or thesis and abstract filed in graduate schools' offices.
May 4        Thursday      Remembrance Day
May 7        Sunday       Classes end
May 8-14     Monday-Sunday  Final Examinations
May 13-14    Saturday-Sunday  Kent Campus Commencement

Summer Intercession 2006
May 22       Monday       Classes begin
May 29       Monday       Memorial Day. No classes. Offices closed.
June 9       Friday       Classes end

Summer I (Five-week term) and Summer II (Eight-week term) 2006
June 12      Monday       Classes begin
June 16      Friday       Last day to file application for August graduation for doctoral and master's candidates.
July 3       Monday       Final date for oral examination of doctoral and master's candidates planning August graduation.
July 4       Tuesday      Independence Day observed. No classes. Offices closed.
July 15      Saturday     Summer I classes end
July 21      Friday       All candidates for August graduation must have dissertation or thesis and abstract filed in graduate schools' offices.
August 5     Saturday     Summer II classes end

Summer III (Five-week term)  2006
July 17      Monday       Classes begin
July 21      Friday       All candidates for August graduation must have dissertation or thesis and abstract filed in graduate schools' offices.
August 19    Saturday     Summer III classes end
August 19    Saturday     Commencements

Note: There may be minor changes in the dates listed above. The university reserves the right to make such changes whenever conditions or circumstances warrant.

Registration will take place prior to the beginning of each semester, and late registration will be conducted during the first week of each semester. Specific dates for registration will be published in each semester's Schedule of Classes.
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# Accreditation

## ACCREDITING ORGANIZATIONS

Kent State University is accredited by the Higher Learning Commission (HLC) and is a member of the North Central Association (NCA), 30 North LaSalle, Suite 2400, Chicago, Illinois 60602, (312) 263-0456. **INDIVIDUAL GRADUATE PROGRAMS** are also accredited or approved by other organizations, including:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>AACSB International—The Association to Advance Collegiate Schools of Business</td>
<td>600 Emerson Road, Suite 300 St. Louis, Missouri 63131-6762</td>
<td>314-872-8481</td>
</tr>
<tr>
<td>American Library Association</td>
<td>50 East Huron Street Chicago, Illinois 60611-2795</td>
<td>312-280-2432</td>
</tr>
<tr>
<td>American Psychological Association</td>
<td>750 First Street, NE Washington, D.C. 20002-4242</td>
<td>202-336-5500</td>
</tr>
<tr>
<td>Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association</td>
<td>10801 Rockville Pike Rockville, Maryland 20852-3035</td>
<td>301-897-5700</td>
</tr>
<tr>
<td>Council on Accreditation of Counseling and Related Educational Programs</td>
<td>5999 Stevenson Avenue Alexandria, Virginia 22304</td>
<td>703-823-9800</td>
</tr>
<tr>
<td>Council on Rehabilitation Education</td>
<td>P.O. Box 1788 Champaign, Illinois 61824-1788</td>
<td>217-333-6688</td>
</tr>
<tr>
<td>National Association of Schools of Art and Design</td>
<td>11250 Roger Bacon Drive, Suite 21 Reston, Virginia 20190</td>
<td>703-437-0700</td>
</tr>
<tr>
<td>National Association of Schools of Music</td>
<td>11250 Roger Bacon Drive, Suite 21 Reston, Virginia 20190</td>
<td>703-437-0700</td>
</tr>
<tr>
<td>National Association of Schools of Public Affairs and Administration</td>
<td>1120 G Street, NW, Suite 730 Washington, D.C. 20005-3801</td>
<td>202-628-8965</td>
</tr>
<tr>
<td>National Council for Accreditation of Teacher Education</td>
<td>2010 Massachusetts Avenue, NW, Suite 500 Washington, D.C. 20036-1023</td>
<td>202-466-7496</td>
</tr>
<tr>
<td>National League for Nursing</td>
<td>61 Broadway, 33rd Floor New York, New York 10006</td>
<td>212-363-5555</td>
</tr>
<tr>
<td>Ohio State Department of Education</td>
<td>65 South Front Street Columbus, Ohio 43266-0308</td>
<td>877-466-3593</td>
</tr>
</tbody>
</table>

[ACCREDITING ORGANIZATIONS](#)
THE ROLE AND MISSION OF KENT STATE UNIVERSITY

The mission of Kent State University is to prepare students for responsible citizenship and productive careers, broaden intellectual perspectives and foster ethical and humanitarian values. Our faculty and staff are engaged in teaching, research, creative expression, service and partnerships that address the needs of a complex and changing world. Kent State’s eight-campus network, anchored by the largest residential campus in the region, serves as a key resource for economic, social, cultural and technological advancement.

Kent State is a supportive and inclusive learning community devoted to teaching excellence and academic freedom. By discovering and sharing knowledge in a broad array of graduate and undergraduate programs, Kent State University meets the dynamic needs of a global society.
The University

THE UNIVERSITY

The University of Kent State University, founded in 1910, is maintained by the state of Ohio. It is controlled by a Board of Trustees appointed by the governor, subject to confirmation of the state senate, and is supported by legislative appropriations and by student fees. Kent State University ranks among the top 90 public universities in the country, according to the Carnegie Foundation for the Advancement of Teaching. This places Kent State among an elite group of the nation’s nearly 3,900 colleges and universities. Kent State earns national recognition for its breadth of high-quality undergraduate programs balanced with innovative research and graduate studies in selected areas. Kent State offers 15 degrees in 215 programs at the master’s level, one degree for educational specialist in eight areas and two doctoral degrees in 59 areas.

The university is located in the densely populated section of northeastern Ohio, an area that includes nearly one-half of the state’s population and two-thirds of the state’s wealth. Kent, a city of some 30,000, rests on the banks of the Cuyahoga River in Portage County. The city offers attractive housing and neighborhoods, an excellent school system, recreational opportunities and a local park system. Even though Kent is surrounded by extensive farmland and small lakes, the city is connected with Ohio’s major metropolitan centers by interstate highways — 11 miles east of Akron, 33 miles southeast of Cleveland, 40 miles west of Youngstown and 28 miles north of Canton.

BUILDINGS AND FACILITIES

The beautifully landscaped Kent Campus is situated on 866 acres. Many of the older traditional-style buildings are arranged on the rolling, tree-covered front campus while the newer portions of the campus offer wide-open, attractively landscaped “green spaces” to complement the more modern lines of newer facilities. The university’s land holdings include the 291-acre Kent State University Airport and the 18-hole Kent State University Golf Course.

The university’s physical plant has been expanded significantly to meet the needs of growing student enrollments of more than 24,242 on the Kent Campus. Those enrollments include a graduate student population of more than 5,069 students. In addition, the university has seven Regional Campuses with an additional student enrollment of more than 12,000 students.

The focal point of the campus is the University Center with its spacious Risman Plaza. On one side of the plaza is the 12-story, open-stack Library, which houses more than 2.6 million volumes, a complete learning resource center and the university executive offices. On the other side is the Kent Student Center, which houses dining facilities, meeting and conference rooms, recreation areas, a ballroom and a bookstore.

There are 119 buildings on the Kent Campus. Among these are versatile facilities to meet a variety of academic and recreational needs. The crisp, modern lines of the newer areas of the campus, including comfortable residence hall complexes, contrast tastefully with the traditional, ivy-covered buildings of the original campus. Notable architectural landmarks include the Business Administration Building, with its bronze-mirrored window-walls, the award-winning Art Building, with translucent panels that admit the diffused and shadowless lighting vital to art classes, and the Kent State University Museum, with its acclaimed displays of historical fashion and other artifacts.

For intramurals and intercollegiate athletics, the campus includes not only Dix Stadium, among the largest in the Mid-American Conference with seating for more than 30,000, but a double ice arena; an 18-hole golf course; Memorial Athletic and Convocation Center with its physical education annex; an all-weather track; lighted tennis courts; softball fields; soccer
and rugby fields. The Field House, located next to Dix Stadium, includes a full-size football field, indoor track and state-of-the-art weight room. Additional green areas for intramural and extramural sports are provided, as well as lighted outdoor basketball courts.

The Student Recreation and Wellness Center provides a state-of-the-art facility featuring a 35-foot indoor rock climbing wall, a sports arena, 1/7-mile indoor jogging/walking track, a modern fitness floor with cardiovascular and free-weight equipment, an indoor natatorium, four glass-enclosed racquetball courts and a multipurpose gymnasium catering to indoor soccer or floor hockey.

To help students and visitors navigate the Kent campus and surrounding communities, Kent State works with the area Regional Transit Authority, PARTA. PARTA provides transit services on campus and in the local community. The heavily used service is available at no charge to Kent State students. Dix Stadium is only a few minutes away via bus transportation, which provides a continuous loop service during regular class hours. The campus loop helps to virtually eliminate all through traffic within the campus.

**ORGANIZATION**

Kent State University’s graduate programs are located in nine academic divisions: the College of Architecture and Environmental Design, the College of Arts and Sciences that also includes the School of Biomedical Sciences, the College of Business Administration, the College of Communication and Information, the College of Education, Health and Human Services, the College of Fine and Professional Arts, the College of Nursing, and the School of Technology. The Division of Research and Graduate Studies provides assistance and oversight for all graduate programs. Kent State University utilizes the semester system for academic programming.
The categories and paragraphs below emanate from and elaborate upon the Role and Mission of Kent State University. Taken as a whole, these categories and the information contained therein detail Kent State institutional characteristics embodied within the university’s role and mission statement. The university’s annual and multiyear planning efforts are thus guided by the values and goals explicitly and implicitly described by the Kent Institutional Characteristics that follow.

**STUDENTS**

Kent State University recruits an academically talented and culturally diverse student body. The university affirmatively strives to provide educational opportunities and access to students from varied backgrounds. While admission to the Kent Campus is selective, the seven Regional Campuses offer open admissions. Through its Honors College, Kent State makes a particular effort to attract students who have already demonstrated their capacity to achieve outstanding academic success. For more than three decades the university has played a leading role nationally in providing opportunities to students with disabilities. The university also provides special programs that address the needs of students who for socioeconomic reasons are underprepared but who have the ability to achieve academic success.

While undergraduate students from every region of the nation and many foreign countries attend Kent State, the majority of its undergraduate students are from Northeast Ohio and reflect the rich diversity of the region’s ethnic and cultural communities. A significant proportion of Kent State’s graduate students come from beyond the boundaries of Ohio and the nation, and their presence on campus contributes significantly to the variety of experiences available to the student body as a whole. The university is placing increasing emphasis on serving nontraditional students through programming at all of its campuses and through selected continuing education programs that complement and logically extend its academic degree programs.

**FACULTY**

To promote learning and foster the intellectual life of the university, Kent State seeks to attract and retain an active, culturally and academically diverse faculty of the highest caliber, skilled in the scholarship of teaching, discovery, application and integration. The university supports its faculty in their academic and artistic engagements and provides varied opportunities for professional development, collaboration among academic disciplines, and outreach to local, national and international communities. At Kent State University, faculty play an integral role in universitywide planning and governance.
Kent Institutional Characteristics

CURRICULUM
Kent State University is accredited by The Higher Learning Commission and is a member of the North Central Association. The university offers a wide array of associate, baccalaureate, master’s and doctoral degrees. Its programs provide a balance of academic and professional preparation in accordance with the highest national standards. Kent State fosters collaboration and articulation with community colleges and four-year institutions as well as cooperative efforts with secondary and elementary schools to further facilitate successful transition to and within higher education. The university is committed to providing a living-learning environment that encourages individual growth and promotes the successful and timely completion of degrees.

UNDERGRADUATE
All undergraduate programs reflect the university’s commitment to a liberal education foundation, which is intended to broaden intellectual and aesthetic perspectives, explore ethical and humane values, and prepare students for lifelong learning and responsible participation in a complex, changing society. The specialized major provides study in depth, which leads to knowledge and understanding in academic and professional fields of study. Undergraduate students are also offered varied opportunities to participate in research, take graduate-level coursework, and engage in work outside the classroom.

GRADUATE
Kent State University, Northeast Ohio’s senior public institution of higher education, offers an extensive range of advanced academic programs leading to the master’s degree and selected programs leading to the doctoral degree. Kent State is committed to providing graduate-level programs that complement and enhance undergraduate education and meet the highest national standards. These programs provide advanced training and knowledge essential to the economic development and general welfare of Ohio and the nation, as well as lead to research with a global impact. The university recruits and retains high-quality students from across the nation and abroad to engage in study under the direction of a distinguished graduate faculty.

SPECIAL FEATURES
Kent State University was established in 1910 as Kent Normal School. Since its inception, Kent State has maintained its commitment to provide national leadership in what have been historical strengths of the university, professional education and the liberal arts. Kent State has a rich tradition in the preparation of teachers and is among the leaders nationwide in research related to teaching and learning. The university stresses the importance of a strong liberal arts base through its Liberal Education Requirements and maintains distinguished doctoral programs in selected areas of the humanities. From the events of May 4, 1970, Kent State University inherits a unique leadership role in promoting the peaceful resolution of conflict through education.

Northeast Ohio is a region with a population of more than 4.5 million, in a geographical area that is both urban and rural. With its Kent Campus and seven Regional Campuses, located at Ashtabula, East Liverpool, Geauga, Salem, Stark, Trumbull and Tuscarawas, the Kent State University network makes a university education accessible to all segments of Northeast Ohio.

Because it is home to many corporations and the NASA Glenn Research Center, Northeast Ohio is noted for research and development activities in science and engineering. Its location gives the university a special mission in the applied and basic sciences exemplified by the internationally renowned research conducted at Kent State’s Glenn H. Brown Liquid Crystal Institute.

The broad metropolitan area encompassing Cleveland, Akron, Canton, Youngstown and Warren has superb medical and health-related research facilities. Kent State builds upon these geographical advantages to offer nationally recognized programs of study and research in the health and behavioral sciences.

Kent State University has long been devoted to improving the quality of life in the region by emphasizing community development and design, illustrated by the leadership role of the College of Architecture and Environmental Design through the Northeastern Ohio Urban Design Center.

As a major cultural resource for Northeast Ohio and a prominent player in fine arts activities at nearby Blossom Music Center and Porthouse Theatre, Kent State is committed to maintaining excellent programs in the visual and performing arts.

Telecommunications, information sciences and other communication activities abound in the region, and Kent State offers well-recognized programs in several fields of communication, including established programs in print and electronic journalism and information sciences.

Northeast Ohio is a major business and commerce center. Kent State’s programs in business and commerce are designed to serve area executives and business professionals as well as prepare students for productive careers in a global economy.

Kent State University stresses internationally related activities and participates in a number of study-abroad programs and exchanges of students and faculty. Kent State students may explore the history, languages, cultures and religions of other countries and ethnic groups by taking courses and programs offered by many academic units.

TEACHING
Kent State University views learning in all its forms as central to its mission. University faculty provide instruction that reflects current knowledge gained through ongoing scholarship and
adheres to the highest professional and ethical standards. Faculty members are readily accessible to students, who are encouraged to take an active role in the learning process. The university promotes excellence in teaching by offering faculty members opportunities for development in the areas of curriculum and instruction; by providing high-quality equipment, materials and facilities; and by maintaining a system of rewards and recognition based on the premise that teaching, research and creative activity are mutually supportive. Because teaching and learning are not confined to the classroom experience, a high value is placed on such related activities as individual instruction, thesis and dissertation direction, and academic advising.

**RESEARCH AND CREATIVE ACTIVITY**
A fundamental mission of the university is to enhance the quality of life through research and creative activity. Therefore, Kent State University has among its goals the generation, dissemination and application of knowledge in all its forms. Moreover, it considers research and creative activity necessary for teaching excellence. Faculty are expected to be actively engaged in a broad spectrum of scholarly activity conducted in accordance with the highest professional and ethical standards. Much of this activity relies upon cooperative efforts with students and staff. The university supports these efforts by fostering an environment of free inquiry; by offering opportunities for research-assigned time; and by providing the material and personnel resources required for high-quality scholarship, including an excellent library with Association of Research Libraries status. Kent State University is committed to strengthening selected research and creative programs that have attained, or hold the promise of achieving, national and international prominence, as well as those that fulfill key societal goals.

**OUTREACH AND COMMUNITY SERVICE**
Kent State University is committed to being a catalyst in finding solutions to the social, economic and cultural challenges facing society. By means of the dissemination of results from basic and applied research conducted by its faculty and graduate students, as well as through programs offered through continuing education and at the Regional Campuses, Kent State contributes significantly to the social and economic vitality of Northeast Ohio. The many activities fostered by the university in areas such as architecture, urban design, art, music, fashion design, theatre, dance, recreation and intercollegiate athletics enrich the life of the community. Its national public radio station, university press and museum are important regional and national assets.

**CAMPUS ENVIRONMENT AND COCURRICULAR ACTIVITIES**
Dedicated to creating an atmosphere in which each individual within its diverse student body can achieve, Kent State University provides a holistic learning environment conducive to the academic and personal growth of each student. Kent State’s dynamic campus life affords students the opportunity to participate in a wide range of cocurricular activities that promote intellectual, cultural, ethical, physical, aesthetic and interpersonal development. Facilitated by an able support staff involved in the university’s planning and operation, Kent State provides strong support services to help ensure the achievement of students and faculty, as well as provide for their physical, emotional and social well-being. Kent State University has attained notable success in providing accessibility for persons with disabilities. Student life at the Kent Campus is further enhanced by the university’s distinctive and attractive residential setting with all of the advantages of major urban centers nearby.

**DIVERSITY**
Kent State University is committed to an environment in which the faculty, staff and student body are representative of the cultural and ethnic variety found locally, nationally and even globally. Diversity at Kent State connotes the encouragement, celebration and support of a rich mixture of people on campus. In an effort to foster an understanding of the strengths and challenges of diversity, the university provides opportunities for the open exchange of ideas and experiences among people diverse in national origin, gender, age, sexual orientation, race, ethnicity, disability, religion and veteran status.

**ALUMNI**
Kent State University recognizes that the many significant contributions of alumni to their professions and to society as a whole represent the practical embodiment of the university’s educational philosophy and are a measure of its success. The university takes great pride in the achievements of its alumni and seeks to maintain close working ties with its graduates. The human and financial resources of alumni also provide essential assistance in assuring that the university will be able to continue to serve future generations.

**EVALUATION**
Kent State University is committed to self-assessment as a tool to evaluate and enhance institutional effectiveness. The foregoing categories provide major areas for assessment, which at Kent State involves both internal and external measures of evaluation. Through periodic program review, preparation for external accreditations, special studies and annual planning activities, academic and support units of the university are involved in an ongoing process of self-examination and improvement. Planning at Kent State guides future directions and priority setting to which decision-making and resource allocation are linked. Outcomes assessment plays a major role at the university in facilitating academic program improvement and change.
Diversity

KENT STATE UNIVERSITY COMMUNITY CELEBRATES DIFFERENCES

Kent State University is by its very nature an institution of intellectual, social and cultural diversity. The university community welcomes opportunities to learn about the different cultures and experiences of people from various regions of the United States as well as the rest of the world. Education at Kent State occurs through a variety of formal instructional settings, co-curricular activities, and less formal opportunities to meet and get to know other students, staff and faculty. The wide variety of people of differing races, ethnic backgrounds, beliefs and values constitutes one of the greatest strengths of the university. It is important to take advantage of this resource and to learn from one another about the diversity of the human community. Such an opportunity can only exist in an environment in which each student feels a part of the university community. To this end, the university encourages an atmosphere in which the diversity of its members is understood and appreciated; an atmosphere that is free of discrimination and harassment based on race, religion, ethnic heritage, age, country of national origin, disability, gender, sexual orientation or veteran status. Thus, all members of the university are expected to join in creating a positive atmosphere in which we can learn in an environment that is sympathetic, respectful and supportive.

Within this environment, Kent State offers an opportunity to all students for an education that will prepare them to pursue successful careers and to become good citizens and productive members of an increasingly diverse society in the United States and the world at large.
MAY 4, 1970

Kent State University was placed in an international spotlight after a tragic end to a student demonstration against the Vietnam War and the National Guard on May 4, 1970. Shortly after noon on that Monday, 13 seconds of rifle fire by a contingent of 28 Ohio National Guardsmen left four students dead, one permanently paralyzed, and eight others wounded. Not every student was a demonstration participant or an observer. Some students were walking to and from classes. The closest wounded student was 30 yards away from the Guard, while the farthest was nearly 250 yards away.

The divisive effect of the Vietnam War on American society was especially evident on campuses throughout the country. At Kent State, the day after the announcement to send U.S. troops into Cambodia marked the start of a weekend of antiwar protests that began on campus and spilled into the city of Kent’s downtown. Broken windows and other damage to a number of downtown businesses prompted fear, rumors and eventually a call by the city’s mayor to the governor for assistance.

The National Guard arrived Saturday night. That day some students assisted with the downtown cleanup. That night the campus headquarters of the Army Reserve Officers’ Training Corps (ROTC) was burned. Sunday morning the governor came to Kent and in the city’s firehouse held a press conference saying the university would remain open. After a Sunday of relative calm, an antiwar rally at noon on Monday brought 2,000 to 3,000 people to the University Commons area. When the Guard gave the order to disperse, some in the crowd responded with verbal epithets and stones. The Guard answered first with tear gas, but when spring winds altered its effect, the Guard attempted to enforce the Ohio Riot Act with raised bayonets, forcing demonstrators to retreat. The Guard then changed line formation. As the Guard approached the crest of Blanket Hill, some guardsmen turned toward the Taylor Hall parking lot, and between 61 and 67 shots were fired. Four students were killed and nine wounded. That afternoon University President Robert I. White ordered the university closed.

History, sorrow and healing remain a part of Kent State University. The university Library has dedicated a Memorial Room containing books, papers, studies and other materials relating to the events. In addition, the university has established an academic program designed to help students and others employ peaceful conflict resolution to resolve disputes. On May 4, 1990, the university community dedicated a permanent memorial. Each year, an annual vigil, candlelight service and commemoration enable the university, the Kent community and others to privately and publicly express their feelings. In 1999 as a result of requests from the May 4 Task Force, the university authorized the installation of markers locating the sites in the Prentice Hall parking lot where the four students were killed on May 4, 1970.

The university will continue to remember the four students who died — Allison Krause, Jeffrey Miller, Sandra Scheuer and William Schroeder — through scholarships in their names and in the words inscribed on the May 4 Memorial: “Inquire, Learn, Reflect.”

Reviewed and revised (1995) by: Provost, Faculty Senate Executive Committee, May 4 Planning Committee
Reviewed and revised (1996) by: Executive Director, University Communications
Revised (1999) by: University Relations and Marketing
Administration

ADMINISTRATION

OFFICE OF THE PROVOST
PAUL L. GASTON, Provost
STEPHANE E. BOOTH, Associate Provost for Academic Quality Improvement Project
LAURA L. DAVIS, Associate Provost for Planning and Academic Resource Management
GAYLE L. ORMISTON, Associate Provost for Faculty Affairs and Curriculum
STEVE O. MICHAEL, Vice Provost for Diversity and Academic Initiatives
EVELYN S. GOLDSMITH, Assistant Provost for Special Projects
MARTHA K. SHARP, Assistant to the Provost
L. JEFFREY MILAM, Executive Director of Academic Budgets
CONSTANCE M. DIMASCIO, Director of Curriculum Services
BARBARA A. CASHER, Manager of Academic Personnel
TO BE NAMED, Coordinator of Academic Services

DIVISION OF RESEARCH AND GRADUATE STUDIES
JOHN L. WEST, Vice President for Research and Dean of Graduate Studies
MELODY K. BAKER, Associate Dean
DANIELE FINOTELLO, Associate Dean

COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN
JAMES DALTON, Interim Dean

COLLEGE OF ARTS AND SCIENCES
JERRY M. FEEZEL, Interim Dean
E. TIMOTHY MOORE, Associate Dean
JOHN R. STALVEY, Associate Dean for Graduate Affairs
LINDA L. WILLIAMS, Associate Dean

SCHOOL OF BIOMEDICAL SCIENCES
ROBERT V. DORMAN, Director

COLLEGE OF BUSINESS ADMINISTRATION
GEORGE E. STEVENS, Dean
LAWRENCE J. MARKS, Associate Dean, Admin. and Faculty Affairs
DONALD R. WILLIAMS, Associate Dean, Graduate School of Management
ELIZABETH A. SINCLAIR-COLANDO, Assistant Dean, Undergraduate Programs

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Admission

ADMISSION

Kent State University welcomes applications for graduate study from those wishing to pursue an advanced degree at the master’s or doctoral level as a full- or part-time student. The university also encourages graduate work for students who desire to enrich their lives through nondegree courses or who are in good standing in a graduate degree program at another university and wish to enroll as transient students.

TYPES OF ADMISSION

Prospective students may apply for admission under several categories, including regular admission for master’s, doctoral, nondegree, transient study and workshop study. Details of different programs are found on subsequent pages. Each applicant is considered for admission in the particular department requested. Careful attention to the prerequisites for degree programs will ensure proper review of applications.

GENERAL REQUIREMENTS FOR ADMISSION

Applicants are expected to submit evidence of scholarly accomplishment in previous undergraduate and graduate work if undertaken. This may be accomplished in part by having achieved an undergraduate grade point average of 2.75 on a 4 point scale, although some departments may require a higher minimum GPA. At the graduate level a 3.0 GPA is expected. In all cases the GPA is only one of several measures used to determine admission. Additional considerations are letters of recommendation, scores on standardized tests and other indices of ability to do graduate-level work. Students with grade points below 2.75 will be considered for conditional admission on an individual basis. Admission in such cases will depend heavily on other indices of the student’s ability to handle graduate-level work. These might include strong performance on standardized tests, GPA in the major, and/or experiences subsequent to matriculation that are clearly indicative of strong academic ability. Evidence of holding a bachelor’s degree or equivalent from an accredited college or university must be included.

Students who hold degrees from nonaccredited institutions may be admitted under conditions that are determined in each individual case and which ordinarily include the necessity of further undergraduate work.

ADMISSION FOR DEGREE STUDENTS

Each applicant for admission to graduate work as a degree student must take the following steps:

1. Consult this catalog for admission procedures for the college or independent school offering the degree program in which you are interested.
2. Submit an application for admission with the $30 application fee. For programs in the College of Arts and Sciences, the School of Technology, the College of Communication and Information, the College of Fine and Professional Arts, School of Biomedical Sciences and College of Nursing, forms may be obtained from the Division of Research and Graduate Studies, Office of Graduate Program Services. For programs in education, applications may be obtained from the College of Education, Health and Human Services, Office of Student Services. Applications for graduate study in business may be obtained from the Graduate School of Management. Students may also apply online at https://admissions.rags.kent.edu/.
3. Submit an application at least six weeks before the opening of the semester in which you plan to begin your work. Some programs may have deadlines that differ from the above. Check the departmental section of this catalog for other deadlines. For those unable to meet program deadlines, temporary admission for one semester only (maximum 12 credit hours) may be available. Check with individual departments or schools for further information.
4. Have official transcripts from each college or university previously attended sent to the appropriate office. Please consult the instructions contained in the application for admission for submission of official transcripts. Applicants need not submit transcripts of work taken at Kent State University.
5. Consult this catalog or the online catalog at http://dept.kent.edu/rags-alpha/catalog to determine if any additional supporting materials, such as a standard examination, are needed for admission to your program. Commonly required examinations include the Graduate Record Examination, the Graduate Management Admissions Test and the Miller Analogies Test.

Incomplete application materials will be kept for a period of one year only. After that time materials will be destroyed. Students interested in admission after one year will need to reapply.

ADMISSION FOR NONDEGREE AND GRADUATE CERTIFICATE STUDENTS

Applicants who wish to take a limited number of graduate courses for self-improvement, intellectual curiosity or expansion of areas of professional expertise must take the following steps:

1. Consult this catalog for admission procedures for graduate nondegree admission status.
2. Submit two copies of the Application for Graduate Nondegree Admission with the $30.00 nonrefundable application fee. This application may be obtained from the Division of Research and Graduate Studies, Office of Graduate Program Services, Kent State University, P.O. Box 5190, Kent, OH 44242-0001, or apply online at https://admissions.rags.kent.edu/.
3. Submit the application at least six weeks prior to the start of the semester in which you plan to begin your work. Some programs may have deadlines that differ from the above. Check the departmental section of the catalog or online at http://dept.kent.edu/rags-alpha/catalog for other deadlines.
4. Have two official transcripts from the college or university posting your most recent degree (except Kent State University) sent to the Division of Research and Graduate Studies, Office of Graduate Program Services.
Students who are taking graduate certificate programs should apply as a nondegree student, unless they are already in a concurrent degree program.

**ADMISSION FOR INTERNATIONAL STUDENTS**

An international student seeking graduate admission to Kent State University should apply by letter to:

Office of Admissions
Kent State University
P.O. Box 5190
Kent, OH 44242-0001
U.S.A.

An international student is any student who is not a U.S. citizen, whether residing abroad or in the United States, or on any visa.

Upon receipt of a letter indicating a desire to apply for admission, a set of application materials will be forwarded. The application and all supporting documents should be filled out completely, describing the curriculum and degrees as they are described in the home country, and returned six months or more before the desired entrance date.

Applicants whose native language is not English must take the Test of English as a Foreign Language (TOEFL) and have an official test result submitted to Kent State University. Full information concerning this test is sent with application materials. All arrangements for taking the TOEFL or having additional score reports sent to institutions should be directed to the Test of English as a Foreign Language, Educational Testing Service, Box 899, Princeton, NJ 08540, U.S.A.

Official or certified true copies of all courses previously taken and the grade received in each course for each year from all colleges and/or universities must be submitted in support of the application. All documents must be certified and bear the seal of the endorser; unofficial photocopies are not acceptable. In addition, all documents must be accompanied by literal English translations.

Included with application materials is the “Financial Affidavit of Support.” This statement serves as a notification to Kent State University of the source and amount of funds available to a student during his/her period of stay in the United States, and must accompany every application for admission. The “Certificate of Eligibility” will not be issued until Kent State University has sufficient evidence of financial support for the applicant’s entire period of study.

All enrolled international students must apply and pay for the student group accident and sickness insurance provided by Kent State University.

**ADMISSION FOR GRADUATE WORKSHOPS AND INSTITUTES**

The College of Continuing Studies, in cooperation with academic departments, offers a variety of credit workshops. These workshops are especially designed to meet identified needs of various professions. Each workshop is set up to recognize the needs of the audience in terms of time, place, format and content.

A student holding a bachelor’s degree from an accredited institution and who has been accepted by a workshop director for a specified workshop, institute or other special program offering graduate credit may be admitted as a Special Nondegree Workshop student for the term of the workshop only. Prerequisites for admission are set by the instructional department. The temporary admission is valid for only one workshop consisting of a maximum of 12 semester hours. Students desiring to take other nonworkshop graduate courses concurrently with the workshop or to do graduate work beyond the length of the workshop term must apply for admission to the appropriate graduate college or school under regular procedures. A student may reapply for subsequent workshop participation under workshop admission regulations.

A maximum of 4 semester credit hours earned in graduate workshops may be applied to a graduate degree program. All workshops are graded “S/U.” Some departments may be more restrictive. Students are advised to consult their departments regarding application of workshop credit toward degree requirements. For further information write to the College of Continuing Studies.

**ADMISSION FOR TRANSIENT STUDENTS**

Persons who are in good standing in a graduate degree program at another university may be admitted as transient students at Kent State University to take coursework which may apply to their degree program. A Transient Student Application Form may be obtained at the office of the appropriate graduate college or school.

Transient students are admitted for one semester only. At the end of the semester for which a transient student is admitted, the admission will be inactivated. The student may register in subsequent semesters upon submission of a new Transient Student Application Form.

**ADMISSION FOR INTERNATIONAL TRANSIENT VISITING GRADUATE STUDENT**

Students who are in good standing in a graduate degree program at another university may be admitted as transient students at Kent State University to take coursework which may apply to their degree program. A Transient Student Application Form and processing through the International Admissions Office.
Admission

2. Submission of a request letter from the advisor at the home institution certifying that the student is in good standing, and a letter of acceptance from a faculty member at KSU.
3. Approval by the department/school graduate program committee and by the graduate dean of the college.

Time Limit: Student is allowed to work using Kent State facilities for a total of no more than 12 months.

Coursework: Students may also register for research hours or for regular courses but not to exceed a total of 12 credit hours over the visiting period. Tuition will be paid by their home institution or a KSU grant. Students will be identified as full-time.

GUEST STUDENT ADMISSION
Admission as a guest student enables a student to take a limited number of undergraduate or graduate courses for credit. To be admitted in this category, a student must have earned a baccalaureate degree. Guest students typically take courses for job achievement, personal enrichment or other reasons.

Guest students may remain in this status until a maximum of 6 semester hours of Kent State University credit have been attempted. Students cannot earn a degree in this admission status. Guest students who wish to pursue a degree program or continue after 6 semester hours have been attempted must apply for regular admission. Credit hours taken in this status may apply to a degree program with the approval of the dean. Guest students must meet all prerequisites for courses (or obtain permission of the instructor) and should consult with a program coordinator. Anyone who has been denied admission is not eligible for guest student status. Guest students are not eligible for financial aid.

ADMISSION TO THE COMBINED BACCALAUREATE AND MASTER’S PROGRAMS
Kent State University undergraduate students with outstanding records or individuals with exemplary professional credentials may be eligible for one of the following enrollments in a combined baccalaureate and master’s program:

COMBINED BACCALAUREATE/MASTER’S DEGREE EARLY IN THE STUDENT’S KENT UNDERGRADUATE STUDIES
A student who has achieved a GPA of 3.5 after 60 semester hours, 3.4 after 75 semester hours, 3.3 after 90 semester hours or 3.2 after 105 semester hours may apply for early admission to a master’s degree program by:
1. Completing the Application for Admission;
2. Completing the Combined Baccalaureate and Master’s Program form that includes:
   a. Listing of courses at the undergraduate level that need to be taken for the baccalaureate degree.
   b. The beginning date for graduate study.
   c. Listing of graduate courses to be utilized in satisfying the undergraduate degree.
   (In participating departments/schools, students may apply up to 12 of their accumulated graduate hours toward the completion of their undergraduate degree requirements as well. The student’s undergraduate department will determine the undergraduate coursework for which graduate credits may be substituted.) In some departments graduate coursework may be substituted only for elective undergraduate coursework and cannot be used as substitution within the major. (Please check with the graduate coordinator in your individual department.) The selection of the graduate coursework and the number of credits to be applied toward an undergraduate degree requires the approval of the graduate chair in the student’s academic department and the appropriate undergraduate and graduate deans.
3. Providing three letters of recommendation from instructors who are familiar with the student’s achievements and intended academic goals.
4. Submitting any needed test scores from standardized examinations.

COMBINED BACCALAUREATE/MASTER’S PROGRAM FOR SPECIFIED KENT PROFESSIONAL PROGRAMS

- Combined Baccalaureate/Master’s in Speech Pathology and Audiology Leading to Clinical Certification
  This program is available to Kent State students who have completed 90 semester hours and achieved a minimum GPA of 3.0. Students may, with approval of the School of Speech Pathology and Audiology, apply for admission to the combined program. Admission will be based upon satisfactory GRE scores, three letters of recommendation, and completion of the Application for Admission and Combined Baccalaureate and Master’s Program forms.

- The Combined Bachelor of Science/Master of Arts Program in Visual Communication Design
  This is a five-year degree program with optional concentrations in 2D graphic design, 3D graphic design and illustration. This program is available to Kent State students who have passed Junior Portfolio Review; completed a minimum of 90 semester hours; demonstrated excellence in formal organization and conceptual problem-solving abilities and technical skills; and maintained a minimum 3.0 overall grade point average and a 3.25 in the major. Students who meet these requirements will be invited or may petition to enter this program. An overall GPA of 3.00 and a major GPA of 3.00 in both the bachelor’s and master’s programs will be required for graduation.
• Combined Baccalaureate/Master’s Program in the College of Business Administration and Graduate School of Management
This program is available to Kent State students who have completed 90 semester hours. In addition, they must meet the GPA requirements outlined under the Combined Baccalaureate/Master’s Degree early in the Kent State student’s undergraduate studies.

• Combined Baccalaureate/Master’s Program in the Center for International and Comparative Programs and the Graduate School of Management
Students must be international relations majors and complete their major in the first three years of study. In addition, students must pass a language proficiency exam, have a cumulative GPA of 3.30 and earn a minimum GMAT score of 525 before being admitted to the M.B.A. program. In the fourth year of this combined program, students take graduate business courses that are applicable to the undergraduate degree as electives and to the M.B.A. degree as foundation coursework. During the final year, students take advanced graduate business coursework leading to the M.B.A.

• Combined Baccalaureate in Fashion Merchandising/Master of Business Administration in the College of Business Administration and Graduate School of Management
Fashion merchandising majors who qualify may enroll in the combined B.S. in Fashion Merchandising/Master’s of Business Administration program and complete both degrees within five years. Careful planning and advising are needed in order to successfully complete the programs in a timely way. Students should work closely with their faculty advisors if they intend to follow this plan. In the freshman year, the math choice should be MATH 11012 or MATH 12002. When the student has achieved 90 hours or more in the merchandising program (beginning of the junior year) and has a GPA of 3.3 or higher, they should apply for conditional admission to the MBA program. This application must occur no later than April 1 of the junior year. The GMAT exam must be completed with an appropriately high score at the time application is made.

NONTRADITIONAL MASTER’S DEGREE STUDENT
In rare instances a person who has not completed a baccalaureate degree will be considered for admission to the appropriate graduate school due to unusual and exemplary experiential learning. Such an applicant may apply for admission by presenting for departmental consideration a curricular plan encompassing undergraduate and graduate coursework to achieve a liberal educational background and professional graduate degree and three letters of recommendation attesting to the applicant's potential for graduate study. Upon departmental recommendation and the approval of the dean of the appropriate graduate school, the applicant will be admitted to undertake graduate work. Upon successful completion of the curricular plan and the particular master’s degree requirements, the student will be awarded the master’s degree.
ACADEMIC REGULATIONS

GENERAL ACADEMIC REQUIREMENTS
The university reserves the right to change course offerings and academic requirements; however, such changes should not be to the substantial disadvantage of a student during his or her enrollment. In this regard:

1. Each student's academic requirements are based on the catalog in force during his/her first semester at Kent State University.

2. Students may elect to complete their degrees under the most recent catalog but must comply with all of the new requirements relevant to their program.

3. Exceptions to the above may be necessary when changes in state certification or licensure standards mandate changes in academic requirements or in university programs.

GRADING SYSTEM
The transcript is an accurate and complete historical record of work attempted at the university. Changes to transcript entries that alter the enrollment history of a student are not to be made.

The student’s proficiency in graduate coursework is indicated in the following manner:

A (4.0)  Denotes superior scholarship
A- (3.7)  
B+ (3.3)  
B (3.0)  Denotes average performance
B- (2.7)  
C+ (2.3)  
C (2.0)  Denotes below average performance
C- (1.7)  
D+ (1.3)  
D (1.0)  Denotes far below average performance
F (0)  Denotes failure

AU The mark “AU” denotes that students have registered to audit a course. Students may audit without credit any course, subject to space availability and departmental approval. An audited course is not counted as part of the course load, but the student must go through the registration procedures and pay the normal registration fees. In particular, an audited course may not be counted as fulfilling the minimum course load requirements of a graduate appointee. An instructor may impose whatever attendance requirements are deemed necessary upon the graduate student registered for audit. The student must be informed of these requirements at the beginning of the semester. Failure to meet such attendance requirements subjects the student to being withdrawn from the course by the instructor. This will be accomplished by the instructor’s insertion of the mark “W” for the student on the final grade list.

IN The administrative mark of “IN” (Incomplete) may be given to students who are currently earning a “C” or better and are unable to complete the required work between the course withdrawal deadline and the end of classes due to extenuating circumstances. Appropriate documentation is generally required to support the extenuating circumstances. The student must initiate the request for the Incomplete mark from the instructor, and it is the responsibility of the student to make arrangements to make up the incomplete work. Incompletes must be made up within one calendar year. Instructors are required to complete and submit an Incomplete Mark Form to the department chair or director at the time grades are assigned. This form should include justification for awarding the Incomplete, the work to be completed for the course, and the grade to be assigned if the work is not completed (default grade). A copy of the Incomplete Mark Form is also provided to the student. In the event the instructor assigns an “IN” grade without a default grade, the default grade will be “F” if the work is not completed by the student. Incompletes will not be counted in the computation of grade point averages until the work is completed, at which time an appropriate grade will be assigned based on the instructor’s evaluation of the work submitted and a new grade point average computed. Unless the course is completed or an extension is granted, Incompletes will automatically lapse to the grade designated on the Incomplete Mark Form at the end of one year.

IP May be given to a student to indicate that research, individual investigation or similar efforts are in progress and that a final grade will be given in some later term. Courses for which the “IP” grade may be given are so indicated under individual departmental listings. A grade of “IP” is used for Thesis 6##99, Dissertation 8##99, workshops and courses involving internships. The instructor intending to use the grades of “S” and “U” in a course other than these must do so exclusively and only where permitted. The instructor will announce this intent to the particular class at the
beginning of the course and note it on the course syllabus. “S” — Satisfactory work is interpreted as average or superior attainment. “S” is not used in computing grade point averages, but work earning “S” may be applied toward meeting degree requirements.

“U” — Denotes unsatisfactory performance in a course for which a regular grade is inappropriate. Credit hours are recorded as credit hours attempted for which a regular grade is inappropriate. Credit hours are recorded as credit hours attempted, and the grade will be counted as an “F” in computing grade point averages.

W Denotes that a student has withdrawn from the university or from any individual course without evaluation. This mark is not used in computing grade point averages.

NF The “NF” (Never Attended F) grade denotes that students never attended one class session nor did the students formally withdraw from the course. The “NF” grade will count as an “F” (zero quality points) in computing grade point averages. In the case of a course taken pass/fail, the “NF” grade will be changed to a “Z” grade.

SF The “SF” (Stopped Attending F) grade denotes that students stopped attending the course and did not formally withdraw. The “SF” will count as an “F” (zero quality points) in computing grade point averages and must be accompanied by a date of last attendance in the course. Faculty who cannot determine the exact date of last attendance may use the date of the last academic activity in which students participated. “SF” grades are not appropriate for students who stop attending after the course withdrawal deadline. After that time, grades should be based on student performance in the completion of course requirements. In the case of a course taken pass/fail, the “NF” grade will be changed to a “Z” grade.

GRADE-TO-GRADE CHANGE POLICY
Once grades are submitted, they are final and will not be changed except in cases of administrative error. Grades will not be changed by allowing the students to do additional work (e.g., retaking exams; redoing papers; submitting extra credit papers, reports, etc.) or by using criteria other than those applied to all students in the class. In the event of a possible administrative error, the students must contact the instructor as soon as possible following the awarding of the grade. If the instructor is not available, the department/school chair should be contacted. Grade appeals for reasons other than administrative error must follow established procedures for student academic complaints. See the Student Academic Complaints (Kent Campus) procedure in the Digest of Rules and Regulations published annually on the Web site at www.kent.edu.

GRADE POINT AVERAGE REQUIREMENT
To be considered “in good standing,” a 3.0 average or better in all graduate and required undergraduate work undertaken at Kent State University should be maintained by graduate students. In order to qualify for graduation, the student must have a 3.0 average in all graduate courses attempted.

The grade point average of a student who enlists in the military service after work is begun toward a graduate degree may, at the student’s request upon return from military service, exclude the grades earned in the last semester in which that student is in residence prior to induction.

QUALITATIVE REQUIREMENTS
Only work of high quality is approved for graduate credit. Graduate students are expected to maintain a 3.0 average in all work attempted at Kent State. A student who fails to maintain a 3.0 average is subject to dismissal. In addition, in order to qualify for graduation, a 3.0 average must be maintained for all graduate coursework. Grades below “C” are not counted toward completion of requirements for any advanced degree, but are counted in evaluating a student’s grade point average. Only graduate course credits count toward a graduate degree.

A graduate student who receives a combination of more than 7 hours of “C” or lower grades or more than 4 hours of grades lower than “C” is subject to dismissal. Dismissal may be recommended by the chair of the student’s department to the graduate dean, or the dean may request the action of the department chair, or action may be recommended by the dean’s designee.

When a department has determined that the number of In Progress (“IPs”) or Incompletes (“INs”) on a student’s record indicates poor progress toward completion of a degree, it may recommend to the dean dismissal of the student. In certain programs in which professional success depends upon factors other than those measured by normal evaluations in coursework, a department has the right to separate from the program a student who, in the opinion of a duly constituted departmental committee, is not likely to succeed professionally despite earning acceptable grades. Such programs, along with the factors involved, are listed with the appropriate dean. Administrators of these programs will inform the student upon admission of the nature of the assessment and the process by which it is made. A student separated from such a program has the right to appeal the decision. Information on the process of appeal will be given in the office of the dean, appropriate academic offices and student services offices upon request.

In determining a graduate student’s grade point average, all graduate courses required regularly by the program or specially by the student’s advisor and attempted by the student while in a Kent State University graduate program are included in the computation. A change by a graduate student from one department or program to another does not eliminate the grades received under the first enrollment, which are computed in the student’s grade point average. Graduate (but not undergraduate) courses taken by the student over and above those required for the student’s program are included in the grade point average.
REINSTATEMENT AND READMISSION
A graduate student who has been dismissed from a graduate program normally may not be reinstated for work in the student's former program, or readmitted in any other program or coursework. However, after one year as a dismissed student, application for reinstatement or readmission may be made based upon evidence that former academic weaknesses have been appropriately addressed. If the pertinent department and the dean agree that another opportunity should be provided, conditional admission will be granted.

FOREIGN LANGUAGE REQUIREMENTS
There is no universal foreign language or research tool requirement. Individual departments or discipline areas may have specific requirements. Students should consult their individual departments.

LANGUAGE EXAMINATION
Where required, the examination used to establish a student's language proficiency is determined by the student's department. The examination may be a departmentally designed and administered test.

APPROPRIATE LANGUAGES
The appropriate languages are determined by the student's major department. Special arrangements for examinations in other languages must be made by the student's major department in consultation with the chair of the university's foreign language department.

TEST DATES
Dates for departmentally administered tests are set by the department.

SPECIAL LANGUAGE COURSES
A series of courses has been instituted in French and German to develop "reading" proficiency in these languages. "Reading" proficiency in a foreign language is demonstrated when the student completes one of the following sequences with a grade of "B" or better (on a grading system of "A" through "F") in each course of the sequence:
1. French 63201 and 63202
2. German 61901 and 61902

Credit hours earned in this language sequence are not applicable toward the completion of the hour requirement in a student's graduate program and do not count toward the minimum 8-hour semester load required.

PREPARATION FOR COLLEGE TEACHING
All new graduate students holding graduate appointments will be required to attend and participate in an orientation and training program the week prior to the beginning of fall semester classes. In conjunction with this, departments may require attendance at departmental orientation meetings. During the initial term of a graduate appointee's tenure, the departments require special training in college teaching.

Graduate students may register for this training under College Teaching of (the name of the department's discipline). The nature of the training is determined by each department offering it, but may include such activities as supervised experience, group discussions of teaching problems conducted by a senior member of the faculty, or directed readings. No more than 2 credits may be applied to degree requirements, with departmental approval, although registration for College Teaching of (the name of the department's discipline) may be repeated to a total of 7 hours. For details consult the chair of the department (or coordinator of college teaching in the department) or the dean.

The college teacher training program also includes a preceptorial system in several departments, with senior teaching fellows serving as advisors to small groups of beginning graduate assistants.

The Doctoral Programs
General academic policies of doctoral programs are given in this section. Special information on doctoral programs will be found in the various academic units, and individual departments may prescribe such additional requirements as they deem warranted.

The degree of Doctor of Philosophy is designed for students interested in becoming professional scholars, college and university teachers, or independent research workers in private, industrial or government research institutions.

Programs are offered in the fields of biological sciences, biomedical sciences, chemistry, communication studies, computer science, education, English, geography, geology, history, management, mathematics, music, nursing, physical education, physics, political science, psychology, sociology and speech pathology and audiology. There are programs in the interdisciplinary areas of chemical physics and educational psychology.

The degree will be conferred solely in recognition of high-level attainment in a branch of learning and in the demonstration of marked scholarly ability within a chosen field. It should be clearly understood that no specific number of credits entitles a student to a doctoral degree. However, the comprehensive knowledge expected of the student is such that the coursework and dissertation will generally demand at least three years of full-time study or its equivalent after the baccalaureate.

PROCEDURE
The student will ordinarily observe the following procedure in order to be eligible for the Ph.D. degree:

1. Indicate the intention to meet specifications of the departments concerned by applying for admission. The college or independent school and the department together will
It is expected that the graduate student working toward a doctoral degree and entering Kent State University with a baccalaureate degree will complete the degree in no more than 10 years. Normally students entering with a master's degree will complete the degree in no more than nine years. Students proceeding from the baccalaureate degree will normally pass the candidacy examination within five years, and students already possessing a master's degree will pass the candidacy examination within four calendar years of the first graduate registration at Kent State University.

A doctoral candidate is expected to satisfactorily complete the dissertation and pass the final oral examination within five calendar years after having passed the candidacy examination. Individual disciplines may have shorter time limits, and specific program descriptions should be consulted.

When an extension of any of these time limits seems to be necessary and proper, the student and advisor will petition the student's department for an extension. The extension may be denied, in which case the student will be dismissed, or it may be granted with qualification. The student, advisor and dean must be informed of the decision in writing. If the extension exceeds one year, the approval of the graduate dean is required. Requests for time extensions exceeding one year must be submitted to the dean with evidence that the degree candidate is current in his/her field of study.

Upon receiving a doctoral degree, a student is inactivated and is no longer eligible to register for courses at Kent State University. If a student wishes to continue studies, he/she will need to reapply to the appropriate academic unit.

**TRANSFER CREDIT**

A master's degree and 12 semester hours (or a maximum of 44 semester hours of graduate credit) may be accepted by transfer from accredited institutions provided (1) the work was of "A" or "B" quality; (2) the work fits into the student's program at Kent State; (3) credit is less than nine years old at the time the degree is conferred at Kent State; (4) an official transcript with an accompanying explanatory letter is filed in the department; and (5) the student's advisor, department graduate committee and the graduate dean approve.

An "accredited" institution is one that is approved or accredited by the appropriate regional accrediting agency (e.g., North Central Association of Colleges and Schools) for graduate-level work.

**RESIDENCE**

Residence requirements are determined by the graduate departments. Please consult the appropriate department as to its residence requirement for the doctorate.

**CANDIDACY**

To become a candidate for the doctorate, a student must pass a candidacy (comprehensive) examination in the field of the major subject. This examination will be taken when depart-
Academic Regulations

Doctoral candidates have the option of submitting their dissertation in electronic form instead of the paper format. A handbook titled, “Guidelines for the Preparation of Electronic Theses and Dissertations” describing this option is available at Research and Graduate Studies, at the respective College Graduate Affairs Office, and online at http://www.library.kent.edu/etd/

Dissertations submitted electronically are available through OhioLINK. If this option is exercised, no paper copies are required. Individual units may still require submission of a paper copy for their archives. It is the responsibility of the doctoral student to fulfill this requirement.

Theses and dissertations must be prepared according to established guidelines. Guidelines for preparation and typing of theses and dissertations are available in the offices of the deans.

Each doctoral candidate, upon admission to candidacy, must register for Course Number 8##99, Dissertation I, for a total of 30 hours. It is expected that a doctoral candidate will continuously register for Dissertation I, and thereafter Dissertation II, each semester, including summer, until all requirements for the degree have been met. The grade of “IP” is used until the student completes the dissertation at which time all “IP” grades in dissertation are changed to “S” grades.

All dissertations must be microfilmed according to a plan provided by University Microfilms, Ann Arbor, Michigan. All communications and relations between faculty or students and University Microfilms shall be carried out only through the Kent State University librarian.

Publication of the complete dissertation or significant parts of it is expected, but this is not to be used in lieu of the microfilming requirements as stated herein.

MULTIPLE DEGREES
A student may work simultaneously or sequentially on doctorates in two different disciplines or a doctorate in one and a master’s or baccalaureate in another if the departments involved believe there is good reason for so doing and will admit the student to both programs. Persons having a doctorate will not be permitted to work on a second degree from the same department with a different emphasis. Courses to be doubly counted shall be determined by the departments but in no case may the number of credits exceed the equivalent of a master’s degree plus 12 credits. The deans involved shall be notified of these decisions.

PRIVILEGES
A doctoral student will be allowed, with the consent of the advisor and of the instructor concerned, to enroll in any course offered at Kent State University.

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The Master’s Programs

A variety of master's programs are offered by Kent State University. General policies of the master's programs are given in this section. More specific information on master's programs is given in later sections of this catalog.

At the master's level Kent State University is authorized to grant the degrees of Master of Architecture, Master of Arts, Master of Arts in Teaching, Master of Business Administration, Master of Education, Master of Fine Arts, Master of Liberal Studies, Master of Library and Information Science, Master of Music, Master of Public Administration, Master of Science, Master of Science in Accounting, Master of Science in Nursing and Master of Technology. The College of Education, Health and Human Services also awards the Educational Specialist degree.

Graduate courses are available in the following areas: accounting, anthropology, architecture, art, biological sciences, biomedical sciences, chemical physics, chemistry, communication studies, computer science, criminal justice studies, economics, education, English, family and consumer studies, geography, geology, history, journalism, library science, management, mathematics, modern and classical language studies, music, nursing, philosophy, physical education, physics, political science, psychology, sociology, speech pathology and audiology, technology and theatre.

To pursue graduate work in a given department, the student ordinarily should have met the requirements of the university for an undergraduate major or minor in that department, but this is not mandatory. For admission to graduate work in certain areas of education, the student must have qualified for an Ohio Provisional Teaching Certificate or the equivalent. Areas in which a certificate is not required include student personnel (higher education), rehabilitation counseling, evaluation and measurement, learning and development, certain majors in special education, school psychology, early childhood education, and the elementary and secondary Master of Arts in Teaching programs.

ADVISORS

The coordinator of the program in which a student majors will either assist the student in planning a program or assign a member of the departmental faculty to act as the advisor. During the first semester in residence, each student should tentatively plan their entire graduate program with the advisor.

Where a thesis is required, the student should select a topic early in the year in consultation with the advisor. The thesis advisor will act as a consultant during the time the thesis is being written and will also help to make arrangements for the oral examination.

The deans also welcome the opportunity to advise students regarding the general regulations, but in most instances, the advisor can furnish all necessary information concerning general and departmental requirements.

ENGLISH COMPETENCE

Competence in both written and oral English is always expected of students, and judgment of such competence rests with the appropriate major department. Deficiency in English is cause for dismissal from any graduate program.

RESIDENCE

Residence requirements are determined by the graduate departments. Please consult the department as to its residency requirement for a master's degree.

TIME LIMITS

A master's degree student must register for courses at Kent State University within two years after the student's admission date in order to retain active status. Failing to do so, reapplication must be made and all requirements in effect at the time of reapplication must be met. If a student is unable to begin formal coursework during the term for which admission was originally granted, he/she must maintain current demographic information and academic transcripts at the admitting office at Kent State University and indicate the term in which he/she will register.

A master's degree student will normally complete work within six calendar years after the student's first graduate registration at Kent State University. Any credit being transferred for meeting degree requirements should also have been earned within the six-year period. Departments with time limits that vary from these norms will notify their students in writing.

When an extension seems to be necessary and proper, the student and advisor will petition the student's department for an extension. The extension may be denied, in which case the student will be dismissed, or it may be granted with qualification. The student, advisor and dean must be informed of the decision in writing. If the extension exceeds one year, the approval of the dean is required. Requests for time extensions exceeding one year must be submitted to the dean with evidence that the degree candidate is current in his/her field of study.

Upon receiving a master's degree, a student is no longer eligible to register for courses at Kent State. In order to continue studies at Kent State, reapplication in another graduate degree program or as a special nondegree student must be made and accepted.

TRANSFER CREDIT

A maximum of 12 semester hours of credit may be accepted by transfer from accredited institutions offering the master's degree provided (1) graduate credit was received from that institution; (2) the work was of "A" or "B" quality; (3) the work fits into the program; (4) credit is less than six years old at the time the degree is conferred at Kent State; (5) an official transcript with an accompanying explanatory letter is filed in the department;
and (6) the student's advisor, department graduate committee and the dean approve.

For information on transferring credit to the Master of Fine Arts degree, students should consult with the School of Art. An "accredited" institution is one that is approved or accredited by the appropriate regional accrediting agency (e.g., North Central Association) for graduate-level work.

**QUALIFYING EXAMINATION**

In some departments all graduate students are required to take a qualifying examination. Each student should inquire of the major department whether such an examination is required and when it should be taken. The student is responsible for making the arrangements for taking the examination.

Students working for a degree requiring a thesis may have their thesis topic approved as soon as they pass the qualifying examination.

**ORAL EXAMINATION**

In some departments, an oral examination, open to the university community, may be required of candidates writing a thesis. When the thesis has been accepted by a student's advisor, the department will arrange for the oral examination. The dean will be kept informed of the time and place of the examination and the composition of the examining committee. The results of the examination will be sent to the dean for approval. This examination is directed primarily toward the thesis but may contain other topics with which the committee feels the candidate should be familiar. The committee usually consists of three to five graduate faculty members, the majority of whom must be associated with the student's program.

**THESIS**

The writing of an acceptable thesis is mandatory in certain degree programs. The thesis topic must be approved by the department and filed with the graduate dean no later than the semester preceding that in which the candidate expects to receive the degree.

The thesis topic should be one that will further the student's educational development by developing research or other skills that will help the student keep abreast of the field and enable the student to pursue independent work. The thesis topic is formulated by the student in consultation with the advisor and submitted to the department for approval according to normal departmental procedures.

The thesis must be completed and in the hands of the examining committee no later than eight weeks before commencement. Some departments may demand an earlier deadline. After the thesis has been accepted by the examining committee and after the candidate has passed the oral examination (if required by the major department), two copies of the final, letter-perfect thesis are prepared and submitted to the appropriate graduate office. Two copies of an abstract of not more than 400 words are included with the copies of the thesis. Students should consult guidelines for preparation of theses and dissertations, which are available in the college offices.

Each student writing a thesis is required to register continuously for Thesis I 6###99 for a total of 6 credits. A student who has completed the required 6 hours of Thesis I is expected thereafter to register continuously for Thesis II 6###99 each semester, including summer, until all degree requirements are met. No more than 6 hours of Thesis I credit may be counted toward completion of degree requirements. The student should make certain that the topic has been approved and must register for thesis writing no later than the last semester the student is in residence. Grades of "S" or "U" are used.

**MULTIPLE DEGREES**

A student may work simultaneously or sequentially on master's degrees of two designations in one discipline or on master's degrees of one or two designations in two disciplines or on a master's degree and a baccalaureate in two different disciplines if the departments involved believe that there is good reason for so doing and will admit the student to the programs. Courses may be doubly counted for the two degrees as determined by the department(s), but in no case may they exceed 12 credits except for the special cases listed below. The appropriate dean(s) shall be notified of these decisions.

When one of the degrees is the Master of Fine Arts, a two-year degree, the courses to be doubly counted shall not exceed 26 credits.

Students pursuing the Master of Business Administration and Master of Science in Nursing or Master of Business Administration and Master of Library and Information Science programs may doubly count up to 28 credits.

Students pursuing a degree of Master of Science in Information Architecture and Knowledge Management and a Master of Arts in Journalism and Mass Communication or Master of Science in Information Architecture and Knowledge Management and Master of Library and Information Science may doubly count up to a maximum of 28 credits.

**APPLICATION FOR AND AWARD OF A MASTER'S DEGREE TO A PH.D. STUDENT**

A student who has been admitted to and is currently pursuing a doctoral degree may apply for a master's degree in the same department in which the doctorate is to be taken. Upon certification that the student has met the requirements for the master's degree in that department, the degree may be awarded. The total number of graduate hours required for the Ph.D. shall not be altered thereby.
Nondegree Students

For students who wish to take a few graduate courses for personal reasons (e.g., self-improvement, intellectual curiosity), the classification of nondegree student is available. This classification is only for those students not working toward a graduate degree at Kent State University. If such a student decides to work toward a degree, then the appropriate department must be petitioned and the department and the appropriate dean must grant approval. Only 12 or fewer semester hours of such credit may be petitioned to satisfy requirements of a degree program. Such a petition must receive approval of the department and of the appropriate graduate dean. Nondegree students may not transfer credit earned at another university.

Persons who have earned a graduate degree from an accredited institution may be admitted as nondegree students, subject to departmental approval, after making application and filing evidence of such degree with the appropriate college or independent school.

Baccalaureate degree holders who wish admission to the graduate nondegree category must follow the application procedures as shown under Admission for Nondegree and Certificate Students. In order to retain active status, a student must register for coursework within two years after the admission date. The admission of a student who does not register within two years will be inactivated. Reapplication must be made if the student desires to register for coursework at this time. Once registered, a nondegree student may continue to take courses for six years. Six years after the first registration, the nondegree student will be inactivated and must reapply for admission if continued registration in graduate coursework at Kent State University is desired.

All fees, deadlines and performance standards for degree students apply to nondegree students.
Registration

REGISTRATION

Only students who have been formally admitted to a graduate program at Kent State University may register for graduate coursework and pay the appropriate fees. An official registration is a record of the student’s approved schedule of classes maintained online in the university’s Student Information System. Students must register and make payment of fees by published deadlines prior to attending classes. Students who are not officially registered for a course by published university deadlines should not be attending classes and will not receive credit or a grade for the course.

All graduate students, whether full-time or part-time, will register using Web for Students at www.wfs.kent.edu or accessible from FlashLine at http://flashline.kent.edu, or the Voice Response Information System. Access the Office of the University Registrar home page at www.registrars.kent.edu/home for specific registration dates and procedures.

All admitted students should come to the FLASHcard Office located in the Kent State Student Center to be issued an ID (the FLASHcard). Students must possess a valid Approval of Admission from the university and two valid forms of identification to receive a FLASHcard.

IMPORTANT NOTE: Corrections involving registration transactions (initial registrations, schedule adjustments, exits, etc.) must be completed by published deadlines. Refer to the University Registrar Web site for information, deadlines and procedures.

FLEXIBLY SCHEDULED COURSE SECTIONS

Some courses are offered as flexibly scheduled sections, that is, the section does not meet for the full semester. Eligibility for processing registration transactions for these courses (adding, dropping or withdrawing) is determined by the beginning and ending dates of the section. Deadlines may be determined by visiting the Office of the University Registrar Web site at www.registrars.kent.edu/home and accessing the Processing Dates for Classes link.

CLASS SCHEDULES

All courses carrying graduate credit are described in the following pages. A few of the courses are given each semester, but the majority are offered less frequently. For the most current, accurate and searchable Schedule of Classes, visit Web for Students, which is accessible from FlashLine at http://flashline.kent.edu or at www.wfs.kent.edu or the University Registrar's Web site at www.registrars.kent.edu/home.

COURSE NUMBERING SYSTEM

Courses numbered 50000 and above are for graduate students only and are referred to as graduate courses. Many of the 50000-level courses are also offered at the 40000 level for undergraduates. Students who have already completed 40000-level courses may not repeat the courses at the 50000-level for credit toward a graduate degree. No more than one-half of a graduate student’s coursework may be taken in 50000-level courses.

LATE REGISTRATION

Students who are not officially enrolled for any coursework (registered and have paid fees) as of the first day of classes for the semester will have to process a Late Registration using Web for Students or the Voice Response Information System in order to attend classes. All late registrations must be completed prior to the beginning of the third week of classes for fall and spring semesters.*

A late registration fee of $100 will be assessed for any registration processed after the first week of classes for fall and spring semester.*

Late Registration will not be accepted after the second week of classes for fall and spring semesters.* Any questions regarding this policy should be referred to the student’s college office.

Additional information about late registration is available by accessing the University Registrar’s Web site at www.registrars.kent.edu/home.

SCHEDULE ADJUSTMENTS

In addition to the schedule adjustments during the registration periods, the following schedule adjustments may be permitted during the first two weeks of the semester:*

1. Adding a course/section.
2. Dropping a course/section.
3. Changing a section (same course, different time or credit hours).
4. Changing from graded to audit status.
5. Changing from audit to graded status.

Schedule adjustments are permitted as outlined on the University Registrar Web site at www.registrars.kent.edu/home. There are no processing fees required for schedule adjustments.

1. Course adding is permitted through the second week of the semester, on a space-available basis, using Web for Students or the Voice Response Information System.*
2. Course withdrawal is permitted through the 10th week of the semester using Web for Students or the Voice Response Information System. After that time, the student is considered to be committed to the course and must complete it. Any course withdrawal(s) processed after the second week of the semester will appear on the student's academic record with a grade of "W."*
3. Any applicable refund (as noted on the Bursar's Web site) is determined by the date the transaction is processed on the Voice Response Information System or Web for Students.

REGISTRATION CANCELLATION AND EXITING THE UNIVERSITY

To receive a full refund of tuition, students who register and decide not to attend the university must cancel their registration as early as possible and no later than the end of the first week of classes.* This may be accomplished by dropping all
courses via the Voice Response Information System or Web for Students during registration periods. Any paid registration not canceled by the end of the first week of classes will be subject to the refund schedule published on the Bursar’s Web site. Any applicable refund is determined by the date the transaction is processed on the Voice Response Information System or Web for Students.

Beginning the second week of classes for fall and spring semesters*, students who are reducing their semester course load to zero hours must process an Exit Application at the college/school office. All exits are subject to the refund schedule noted on the Bursar’s Web site. The last date to process an exit is the Friday of the last week of classes (prior to the beginning of exam week).* Students who exit from their classes after the second week of the semester will receive marks of “W.” If you are registered for flexibly scheduled courses that have already ended, you are not eligible to process a University Exit following these procedures. Please contact your college or Regional Campus advising office to discuss whether other options are available.

FULL-TIME REGISTRATION
By definition, a full-time graduate student is one registered for 8 to 16 hours in any one semester, with 16 hours being the maximum number that may be carried per semester. For fee assessment purposes, a full-time student is defined under the section on fees. A graduate student who has entered into candidacy and is within the university’s maximum time and credit hour limits for completion of the degree may carry a program of one or more graduate-level credits involving research (Dissertation II) under the direction of the candidate’s dissertation advisor, and will be considered as full time.

Students who are not officially registered for a course by published university deadlines should not be attending classes and will not receive credit or a grade for the course.

PART-TIME REGISTRATION
A part-time graduate student is one taking less than 8 hours per semester. Persons doing graduate work while engaged in a full-time, on-campus position should attempt to limit themselves to one course. Off-campus work is governed by the same rules that apply to work on campus.

EVENING AND SATURDAY CLASSES
Enrollment for evening and Saturday classes is made during the regular registration periods. Anyone expecting to enroll for one of these classes should make sure that admission to graduate study has been attained and should be informed about registration periods.

SUMMER SESSION
One three-week term (Intersession), two terms of five weeks each and one term of eight weeks comprise the university’s summer session.

SELECTIVE SERVICE REQUIREMENT
Pursuant to Ohio Law, House Bill 845, all Ohio resident male students between the ages of 18 and 26 not registered with Selective Service must file a statement of Selective Service registration with the Office of the University Registrar. If you have not already registered with Selective Service, you will be contacted regarding your noncompliant status. Failure to comply will result in the assessment of nonresident tuition fees to your account and the cancellation of all state-based financial aid. Further questions may be directed to the Office of the University Registrar at 330-672-3131.

*Please refer to the Summer term calendar at www.registrars.kent.edu for summer deadlines.
FEES AND FINANCIAL AID

The Board of Trustees reserves the right to change any fees whenever conditions or circumstances make this change necessary. Please consult the most recent fee schedule for each semester available from the Bursar’s Office.

For Ohio resident students with a total program of 11+ hours (inclusive), the total tuition for each semester is approximately $3,990.

INSTALLMENT PAYMENT PLAN
The Bursar’s Office permits students to pay some or all of their registration fees and room and/or board charges in installments over a period of three months. An additional service charge is added for any fees paid under this system. Contact the Bursar’s Office for further information.

APPLICATION
A $30 nonreturnable application fee will be charged to all applicants of the graduate schools. The fee is to be paid by check or money order and enclosed with the application for admission.

LATE REGISTRATION
A late registration fee of $100 will be charged for any new registration processed after the first week of classes. See the Summer term calendar at www.registrars.kent.edu for summer deadlines.

NONRESIDENT
A student not a resident of the state of Ohio for subsidy and tuition purposes, with a total program of 11+ hours, will be assessed a nonresident surcharge of $3,506 in addition to the regular fees each semester.

PART-TIME
Resident students enrolled for 1-10 hours will be charged at the rate of $365 for each hour of credit. A nonresident student will be charged $320 per hour in addition to the regular part-time fee.

MASTER’S THESIS
Registration for Thesis 6#199 carries from 2 to 6 hours credit in any one semester. Regular fees are paid. The fee for Thesis 6#299 is $10. A student may enroll in an additional course or courses. In doing so, the student must pay the instructional fees for the additional courses at the part-time rate.

THESIS BINDING
Those who write a thesis must pay for the binding of two copies to be filed in the university Library. The charge is $10.

DOCTORAL DISSERTATION
The fee for 15 hours of Dissertation I 8#199 is $670. The fee for Dissertation II 8#299 is $15. A student may enroll in an additional course or courses with the approval of the department. In doing so, the student must pay the instructional fees for the additional courses at the part-time rate.

DISSERTATION BINDING
For doctoral candidates choosing to submit their dissertation through paper copies, the fee for binding and microfilmng of two copies of the dissertation is $65.

Ohio Student Residency for State Subsidy and Tuition Surcharge Purposes

(A) Intent and Authority
(1) It is the intent of the Ohio Board of Regents in promulgating this rule to exclude from treatment as residents, as that term is applied here, those persons who are present in the state of Ohio primarily for the purpose of receiving the benefit of a state-supported education.
(2) This rule is adopted pursuant to Chapter 119 of the Revised Code, and under the authority conferred upon the Ohio Board of Regents by Section 3333.31 of the Revised Code.

(B) Definitions
For purposes of this rule:
(1) “Resident” shall mean any person who maintains a 12-month place or places of residence in Ohio, who is qualified as a resident to vote in Ohio and receive state public assistance, and who may be subjected to tax liability under Section 5747.02 of the Revised Code, provided such person has not, within the time prescribed by this rule, declared himself or herself to be or allowed himself or herself to remain a resident of any other state or nation for any of these or other purposes.
(2) “Financial support” as used in this rule shall not include grants, scholarships and awards from persons or entities that are not related to the recipient.
(3) An “institution of higher education” shall have the same meaning as “state institution of higher education” as that term is defined in Section 3345.011 of the Revised Code, and shall also include private medical and dental colleges that receive direct subsidy from the state of Ohio.
(4) “Domicile” as used in this rule is a person’s permanent place of abode, so long as the person has the legal ability under federal and state law to reside permanently at that abode. For the purpose of this rule, only one domicile may be maintained at a given time.
(5) “Dependent” shall mean a student who was claimed by at least one parent or guardian as a dependent on that person’s Internal Revenue Service tax filing for the previous tax year.
(6) “Residency Officer” means the person or persons at an institution of higher education that has the responsibility for determining residency of students under this rule.
(7) “Community Service Position” shall mean a position volunteering or working for:
(a) VISTA, AmeriCorps, City Year, the Peace Corps or any similar program as determined by the Ohio Board of Regents; or
(b) An elected or appointed public official for a period of time not exceeding 24 consecutive months.
(C) Residency For Subsidy And Tuition Surcharge Purposes
The following persons shall be classified as residents of the state of Ohio for subsidy and tuition surcharge purposes:

1. A student whose spouse, or a dependent student, at least one of whose parents or legal guardian, has been a resident of the state of Ohio for all other legal purposes for 12 consecutive months or more immediately preceding the enrollment of such student in an institution of higher education.

2. A person who has been a resident of Ohio for the purpose of this rule for at least 12 consecutive months immediately preceding his or her enrollment in an institution of higher education and who is not receiving, and has not directly or indirectly received in the preceding 12 consecutive months, financial support from persons or entities who are not residents of Ohio for all other legal purposes.

3. A dependent student of a parent or legal guardian, or the spouse of a person who, as of the first day of a term of enrollment, has accepted full-time, self-sustaining employment and established domicile in the state of Ohio for reasons other than gaining the benefit of favorable tuition rates.

Documentation of full-time employment and domicile shall include both of the following documents:

a. A sworn statement from the employer or the employer's representative on the letterhead of the employer or the employer's representative certifying that the parent, legal guardian or spouse of the student is employed full-time in Ohio.

b. A copy of the lease under which the parent, legal guardian or spouse is the lessee and occupant of rented residential property in the state; a copy of the closing statement on residential real property located in Ohio of which the parent, legal guardian or spouse is the owner and occupant; or if the parent, legal guardian or spouse is not the lessee or owner of the residence in which he or she has established domicile, a letter from the owner of the residence certifying that the parent, legal guardian or spouse resides at that residence.

(D) Additional Criteria That May Be Considered By Residency Officers In Determining Residency May Include But Are Not Limited To The Following:

1. Criteria evidencing residency:
   a. If a person is subject to tax liability under Section 5747.02 of the Revised Code;
   b. If a person qualifies to vote in Ohio;
   c. If a person is eligible to receive Ohio public assistance;
   d. If a person has an Ohio's driver's license and/or motor vehicle registration.

2. Criteria evidencing lack of residency:
   a. If a person is a resident of or intends to be a resident of another state or nation for the purpose of tax liability, voting, receipt of public assistance, or student loan benefits (if the student qualified for that loan program by being a resident of that state or nation);
   b. If a person is a resident or intends to be a resident of another state or nation for any purpose other than tax liability, voting, or receipt of public assistance (see paragraph (D)(2)(a) of this rule).

3. For the purpose of determining residency for tuition surcharge purposes at Ohio's state-assisted colleges and universities, an individual's immigration status will not preclude an individual from obtaining resident status if that individual has the current legal status to remain permanently in the United States.

(E) Exceptions To The General Rule Of Residency For Subsidy And Tuition Surcharge Purposes:

1. A person who is living and is gainfully employed on a full-time or part-time and self-sustaining basis in Ohio and who is pursuing a part-time program of instruction at an institution of higher education shall be considered a resident of Ohio for these purposes.

2. A person who enters and currently remains upon active duty status in the United States military service while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile.

3. A person on active duty status in the United States military service who is stationed and resides in Ohio and his or her dependents shall be considered residents of Ohio for these purposes.

4. A person who is transferred by his employer beyond the territorial limits of the 50 states of the United States and the District of Columbia while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile.

5. A person who has been employed as a migrant worker in the state of Ohio and his or her dependents shall be considered a resident for these purposes provided such person has worked in Ohio at least four months during each of the three years preceding the proposed enrollment.

6. A person who was considered a resident under this rule at the time the person started a community service position as defined under this rule, and his or her spouse and dependents, shall be considered as residents of Ohio while in service and upon completion of service in the community service position.
(7) A person who returns to the state of Ohio due to marital hardship, takes or has taken legal steps to end a marriage, and reestablishes financial dependence upon a parent or legal guardian (receives greater than 50 percent of his or her support from the parent or legal guardian), and his or her dependents shall be considered residents of Ohio.

(8) A person who is a member of the Ohio National Guard and who is domiciled in Ohio, and his or her spouse and dependents, shall be considered residents of Ohio while the person is in Ohio National Guard service.

(F) Procedures

(1) A dependent person classified as a resident of Ohio for these purposes under the provisions of paragraph (C)(1) of this rule and who is enrolled in an institution of higher education when his or her parents or legal guardian removes their residency from the state of Ohio shall continue to be considered a resident during continuous full-time enrollment and until his or her completion of any one academic degree program.

(2) In considering residency, removal of the student or the student’s parents or legal guardian from Ohio shall not, during a period of 12 months following such removal, constitute relinquishment of Ohio residency status otherwise established under paragraph (C)(1) or (C)(2) of this rule.

(3) For students who qualify for residency status under paragraph (C)(3) of this rule, residency status is lost immediately if the employed person upon whom resident student status was based accepts employment and establishes domicile outside Ohio less than 12 months after accepting employment and establishing domicile in Ohio.

(4) Any person once classified as a nonresident, upon the completion of 12 consecutive months of residency, must apply to the institution he or she attends for reclassification as a resident of Ohio for these purposes if such person in fact wants to be reclassified as a resident. Should such person present clear and convincing proof that no part of his or her financial support is or in the preceding 12 consecutive months has been provided directly or indirectly by persons or entities who are not residents of Ohio for all other legal purposes, such person shall be reclassified as a resident. Evidentiary determinations under this rule shall be made by the institution which may require, among other things, the submission of documentation regarding the sources of a student’s actual financial support.

(5) Any reclassification of a person who was once classified as a nonresident for these purposes shall have prospective application only from the date of such reclassification.

(6) Any institution of higher education charged with reporting student enrollment to the Ohio Board of Regents for state subsidy purposes and assessing the tuition surcharge shall provide individual students with a fair and adequate opportunity to present proof of his or her Ohio residency for purposes of this rule. Such an institution may require the submission of affidavits and other documentary evidence that it may deem necessary to a full and complete determination under this rule.

Students who wish to appeal or change their reclassification as nonresident must complete and file a Request for Resident Classification for Tuition Purposes. Because requests for Ohio residency must be approved prior to the first day of classes of the academic term reclassification is desired, this form and all required documentation must be submitted by the following deadline dates. Retroactive residency determinations cannot be made for tuition surcharge purposes.

July 15: Fall Semester
December 15: Spring Semester
May 1: Summer Semester

Students classified as nonresident students at the time of their admission to Kent State University and qualify as residents may appeal the classification to the Director of Admissions or appropriate admitting officer. Matriculated students classified as nonresident students and who qualify as residents may appeal the classification to the Office of the University Registrar. Regional Campus students should contact their Regional Campus.

Any student denied classification or reclassification may appeal the denial to the Residency Appeals Committee by submitting a written request to the office that reviewed their Request for Resident Classification for Tuition Purposes within 14 calendar days of their denial notification.

Rev. 10/2/2003

Financial Aid

Financial assistance is available to graduate students through a variety of sources outlined below. The different types of financial assistance are designed to provide partial support for students to undertake their programs of study. Students wishing to apply for any of the appointments should contact either the chair or the graduate coordinator of their major department.

Service Appointments

GRADUATE ASSISTANTSHIPS AND TEACHING FELLOWSHIPS

The university offers both graduate assistantships and teaching fellowships. The service commitment for a graduate assistant appointment involves assisting with instruction, research or administrative duties. The service commitment for a teaching fellow is normally to perform instruction or instruction-related duties. In each instance, an appointee’s service commitment is designed not only to fulfill the university’s needs but to be beneficial to the student’s professional development.
A graduate assistant or teaching fellow must carry a minimum of 8 hours of graduate credit. Registration outside the major department must have departmental approval. Service appointees may not accept any other paid employment within the university during the tenure of their appointments. Policy regarding reappointment, dismissal and other matters of concern to graduate student appointees are found in a document entitled "Policy on Role and Status of Graduate Student Appointees."

GRADUATE RESEARCH ASSISTANTSHIPS
Graduate research assistantships are available in some departments in which there are extramural grants. The assistantship is funded by the grant. The graduate research assistant works on research under the direct supervision of a member of the graduate faculty. Registration expectations are the same as those listed for graduate assistants and teaching fellows.

UNIVERSITY FELLOWSHIPS
University fellowships are designated for doctoral students who have passed candidacy and are currently working on dissertations. Students are appointed through recommendations from a department to the appropriate graduate dean. University fellows receive a fall semester service appointment and a spring semester nonservice appointment.

TUITION SCHOLARSHIP
A tuition scholarship may be awarded by the department to a master’s or doctoral student. The recipient is expected to register for 8-16 hours of graduate credit per semester.

Student Loans and College Work-Study Program
Graduate students are encouraged to apply for financial assistance. The Student Financial Aid Office is located at 103 Michael Schwartz Center or log on to www.sfa.kent.edu. Student loans and Federal Work Study are available for eligible graduate students.

To apply, students must complete the Free Application for Federal Student Aid and have the results sent to Kent State University by the federal processor. Application packets are available from the Student Financial Aid Office. The Free Application for Federal Student Aid can also be filed over the Internet at http://fafsa.ed.gov. Students are encouraged to apply as soon as possible after January 1.

Graduate students who wish to borrow money through the Federal Direct Loan Program must complete a Free Application for Federal Student Aid. The maximum loan amount is $18,500 per academic year (subsidized plus unsubsidized). A graduate student must be enrolled at least half-time to receive a loan. Loan repayment will begin six months after a student ceases to be enrolled at least half-time.

Various payment options are available to students. The options include: Single Payment Financed (in part) by a University Loan; Installment Payment Plan; and the Monthly Payment Option. Details are available from the Bursar’s Office.
ADMINISTRATIVE POLICY REGARDING ELECTRONIC COMMUNICATIONS FOR STUDENTS

A. Introduction
Kent State University is committed to using the most advanced technology available to communicate with students and recognizes an expanding reliance on electronic communication among students, faculty, staff and the administration due to the convenience, speed, cost-effectiveness and environmental advantages of using electronic communication. Therefore, the Electronic Communications Student Policy will provide procedures and regulations to govern the use of electronic communications between the university and the students. Electronic communications may include, but are not limited to, electronic mail, electronic bulletin boards and information portals. Please refer to the Kent State University Responsible Use of Information Technology Policy for additional information and guidelines regarding electronic communication.

B. Procedural Standards
1. University use of electronic mail: A university-assigned student e-mail account shall be an official university means of communication with all students at Kent State University. Students are responsible for all information sent to them via their university-assigned e-mail account. If a student chooses to forward information in their university e-mail account, he or she is responsible for all information, including attachments, sent to any other e-mail account.

2. Assignment of student e-mail accounts: New students will be assigned an e-mail account when they participate in the PASS program for new freshmen or register for classes. Once an e-mail account is established, the address will be added to Web for Students at wfs.kent.edu and the student online directory at kent.edu/phonedirectory.

3. Expectations regarding student use of university electronic communications, which include, but are not limited to, e-mail and information portals: To stay current with university information, students are expected to check their official university e-mail account and other electronic communications on a frequent and consistent basis. Recognizing that some communications may be time-critical, the university recommends that electronic communications be checked minimally twice a week.

4. Maintenance of student e-mail accounts: Kent State University will maintain a student’s e-mail account for the life of the student to facilitate communication as an alumnus, or until such time that a former student requests that the account be closed.

5. Mass and targeted electronic communication: The distribution of mass communication to all students or targeted communication to a specific subset of students shall be restricted to Kent State University departments for university business. External requests will not be honored.

6. Educational uses of e-mail: Faculty may determine how e-mail and other electronic communications will be used in their classes, and it is recommended that faculty expectations of all electronic communication requirements be specified in their course syllabus. Faculty should expect that students are accessing official electronic communications and should use such communications for their courses accordingly.

C. Guidelines for Implementation
1. The Vice President for Enrollment Management and Student Affairs and the Vice President for Information Services shall establish guidelines for the implementation of this policy.
GENERAL REQUIREMENTS AND REGULATIONS

DEADLINES FOR FILING THESES, DISSERTATIONS AND FOR COMMENCEMENT
Deadlines are established for filing theses, dissertations, applications for graduation and similar actions initiated by graduate students. Exact dates of the various deadlines will vary somewhat from year to year and are published on the University Registrar Web site. It is the responsibility of each graduate student to be familiar with the deadlines.

REPRODUCTION OF THESES AND DISSERTATIONS
For the reproduction of theses and dissertations, a student must submit two suitable copies in partial fulfillment of degree requirements. Suitable copies are described in the guidelines and instructions for typing theses and dissertations. Guidelines may be obtained at the office of the student's graduate dean. Students should consult this document for typing instructions. This requirement is waived for doctoral students choosing the option of electronic submission of their dissertation.

TRANSCRIPTS
Copies of a student's academic transcript are available, at no charge, by requesting them in one of the following ways:

1. Come to the Office of the University Registrar Service Counter, Room 108, Michael Schwartz Center, with a photo I.D.
2. Mail a request to Kent State University, Office of the University Registrar, P.O. Box 5190, Kent, OH 44242-0001, with the information noted below.
3. Fax a request to 330-672-3867, with the information noted below.
4. Access Web for Students at www.wfs.kent.edu or http://flashline.kent.edu and log in to Student Services. Under Submit Requests For, click Official Academic Transcript to access the Transcript Request Form.

INFORMATION REQUIRED FOR TRANSCRIPT REQUEST
When making a transcript request, please provide the following information: your current name and address, any former name(s), student ID number, dates of attendance, campus(es) attended, the address(es) where the transcripts are to be mailed and your written signature.

Transcripts will be processed upon receipt and will be mailed within two business days. Please allow extra processing time at the beginning and ending of each semester.

Specific dates for availability of current semester grades and degrees may be found at www.registrarss.kent.edu/home. Select the Classes tab and click on the Processing Dates for Final Grades and Transcripts.

All financial obligations to Kent State University must be satisfied before a transcript is released.

GRADES
Final grades are reported at the close of each academic term and become part of the student’s permanent record. Students may check their grades by accessing Web for Students at www.wfs.kent.edu or from FlashLine at http://flashline.kent.edu or by calling the Voice Response Information System.

COMMENCEMENT
Degrees are conferred at commencement exercises in December, May and August. A student must file an application for graduation in the office of his/her graduate dean, where a special form may be obtained. This should be done by the end of the first week (see calendar) of the semester during which the student is reasonably certain of completing the work for the degree. If the student does not complete the work in the semester during which the application is filed, then reapplication must be done during the first week of the semester in which completion of the work for the degree is expected. August graduates must file during the first week of Summer Session I.

POSTING OF DEGREES
The integrity of academic transcripts is fundamental to the validity of coursework and degrees certified by the university. Therefore, all student transcript entries (grade and other notations) are finalized when the degree is officially posted to the permanent academic record. Degrees are posted to the students’ permanent academic records approximately 30 days following the effective date of graduation.

STUDENT CONDUCT
The Kent State University Code of Student Conduct applies to both graduate and undergraduate students. Graduate students are subject to dismissal or suspension for violations of the code.

Violations that may result in academic dismissal include furnishing false or incomplete information to the university with intent to deceive or forge, alter or misuse university documents or other official documents that serve as the basis for admission and graduation. Forgery or alteration of these documents may result in the revocation of a graduate degree or certificate.

It is the policy of Kent State University (1) that students are to perform their own academic work according to the standards set by faculty members, departments, schools and colleges of the university, and (2) that cheating and plagiarism constitute a fraudulent misrepresentation for which no credit can be given and for which appropriate sanctions are warranted and will be applied.
Graduate student life on the Kent Campus is enhanced through a variety of recreational and cultural opportunities. The Kent Student Center serves as the "living room" of the Kent Campus and is the community center of the university. On a daily basis, thousands of members of the university family—students, faculty, administrators, alumni and guests—benefit from the wealth of services, programs and activities within this vibrant 281,000 square-foot facility. Among the many services available are banking and student credit union services, the FLASHcard Office, the Office of Campus Life, several dining locations, the University Bookstore, and Enrollment Management & Student Affairs/Ombuds. The Student Center offers a wide variety of options for those looking for fun, entertainment, or a place to relax or study. In the Music Listening Center/Gallery students can retreat to a cozy chair and listen to their favorite CD on one of nine private headphones. Newspapers and magazines are also available for leisurely reading. The Cyber Café features a large-screen television, three billiard tables, and an assortment of board games. Students can surf the net on one of the café’s dozen recreational computers or grab a cup of coffee from Jazzman’s Café and relax in front of a roaring fireplace surrounded by plush couches and chairs. The Rathskeller Sports Bar, located in the lower level, is a great place for after hours. Watch the big game on one of the Rathskeller’s many large televisions or play a game of pool, pinball, or electronic trivia.

The University Bookstore, also located in the Student Center, provides textbooks, scholarly and gift books, clothing, supplies and a rapid book-ordering service. Complementing these facilities is the Kent Student Center Food Service, which includes a large cafeteria and the Schwebel Garden Room, providing more formal dining. A food court also provides for a variety of menu items.

Many university departments and organizations provide cultural activities throughout the year. The School of Art offers rotating exhibits of student, faculty and professional artists; the School of Music sponsors several hundred concerts and recitals annually; and Theatre Kent offers excellent programs of traditional and experimental theatre. The Kent/Blossom Art, Music and Theatre programs bring many internationally recognized artists to the campus during the summer.

For film buffs, Kent State offers many opportunities to see the world’s finest cinematic art. The All-Campus Programming Board (ACPB) offers current movies on weekends. In addition, the ACPB and other campus organizations schedule a variety of lectures by noted personalities and concerts by popular musicians.

To keep Northeast Ohio in touch with the latest in public affairs and cultural events, Kent State University operates radio station WKSU-FM, part of the National Public Radio network. In addition, the university is a member of a local university consortium that operates television station WEAO/WNEO of the Public Broadcasting System.

The Campus Ministries coordinate activities and information about opportunities for worship in area churches and synagogues. Both full- and part-time chaplains of several major religious denominations are available to counsel students and to provide resources for an increased understanding of their faith. In addition, nondenominational Christian groups, such as Inter-Varsity Christian Fellowship, sponsor weekly Bible studies and religious activities.

For sports and recreation enthusiasts, the university offers many opportunities. As a member of the National Collegiate Athletic Association, the Mid-American Conference and the Association of Intercollegiate Athletics for Women, Kent State sponsors 18 varsity sports for men and women. In addition, the intramural office provides athletic competition in numerous sports for undergraduate, graduate and faculty teams. The campus houses several facilities for athletics and recreation: Dix Stadium Memorial Athletic and Convocation Center, an indoor ice arena, an 18-hole golf course, an all-weather track, lighted tennis courts, baseball/softball fields, playing areas for soccer and rugby, and the Student Recreation and Wellness Center (SRWC). The SRWC, a 153,000-square-foot world-class facility, features a sports...
arena, elevated running track, natatorium, climbing wall, workout rooms and refreshment and lounge areas.

The surrounding region of northeastern Ohio provides many additional cultural and recreational attractions. The Blossom Music Center in nearby Northampton Township offers a wide variety of musical programs during the summer months, ranging from concerts by The Cleveland Orchestra to popular musicians and groups. The university also owns and operates the Porthouse Theatre, a 600-seat, open-air summer theatre located adjacent to the Blossom Music Center. Kent’s proximity to Cleveland, Youngstown and Akron provides additional opportunities for attending performances of distinguished musical ensembles, enjoying permanent and visiting exhibitions at renowned art institutes, and attending theatre, dance, film and other arts programs.

The state of Ohio provides many recreational opportunities with 12 state parks in northeastern Ohio. Nearby is the Cuyahoga Valley National Park, which is particularly known for its traditional music events each year. Well-known amusement parks are also located in northeastern Ohio — Cedar Point and Geauga Lake of Ohio. Several ski resorts, including Alpine Valley, Boston Mills and Brandywine, are close by. Kent’s proximity to major metropolitan areas provides many opportunities to see professional baseball, basketball and football.

**GRADUATE STUDENT SENATE**
The Graduate Student Senate represents the concerns of the graduate student community of Kent State University. The Graduate Student Senate also serves as an allocation body by providing funding to graduate students and graduate organizations for speakers, workshops, social events, capital equipment purchases and professional travel.

The Graduate Student Senate is composed of representatives chosen by procedures established by the graduate departments/schools of Kent State University. The Graduate Student Senate also appoints graduate student representatives to a variety of university committees.

The Graduate Student Senate Research and Presentation Colloquium showcases the work of graduate students, facilitates graduate students’ development as participants in the scholarly, professional and creative community, and creates a forum to share knowledge within and across university disciplines. The colloquium is an opportunity to turn a seminar research project into a conference paper and practice conference and professional presentation skills. All Kent State graduate students, as well as graduate students from other universities and colleges, are invited to submit abstracts for presentations in paper, slide, poster, visual arts display, or demonstration format. The colloquium takes place in mid-Spring semester and submissions are due in February. Look for more detailed information on our Web site.

Graduate Student Senate general meetings are held four times each semester. Gradfests are held for all graduate students on the Fridays following the general meetings. Additional information regarding Graduate Student Senate may be obtained from the Graduate Student Senate office at 330-672-5860, fax 330-672-3403, e-mail gss@kent.edu.

The URL of the Graduate Student Senate is: http://dept.kent.edu/gss.

**BLACK GRADUATE STUDENTS ASSOCIATION**
The purpose of the Black Graduate Students Association (BGSA) is to provide a forum for the expression of those concerns that are unique to black graduate students. All black graduate students are members. The organization meets once a month for general meetings. Ongoing programs include the First Thursday Forum, which is a noontime gathering held on the first Thursday of every month to stimulate networking, provide social support and aid black graduate students with their transition to graduate school. In addition, BGSA Week is held in the fall and spring semesters. Social activities, such as potlucks, cookouts and dinner dances, are outlets also offered by the Black Graduate Students Association. BGSA may be reached at 330-672-3401, via e-mail at bgsa@kent.edu, or see the Web site at http://www.kent.edu/bgsa for more information.
GRADUATE STUDENT SERVICES

The Career Services Center

The Career Services Center at Kent State University is committed to providing students and alumni comprehensive services in career education, career employment, student employment and academic testing.

All graduate students are welcome to use the center’s Career Resource Library, attend drop-in counseling sessions, schedule an individual counseling appointment with a career counselor or attend any of the major career fairs hosted by the center during the academic year. Flash Forward, the Career Services Center’s online recruiting system, allows students to participate in on-campus employer interviews and Web-based resume posting and job application. Please visit the Career Services Center Web site at http://www.kent.edu/career to enhance your career search.

Information Services

The Division of Information Services is dedicated to creating an environment through systems and technology that empowers Kent State University students, faculty and staff members on all campuses to pursue learning, increase institutional effectiveness and meet the competitive challenges of the future. Information Services staff members are committed to providing the university community with support to effectively use information and technology to transform and improve all university academic and administrative operations, including the quality of teaching, discovery, application integration, creative activity, work processes and decision-making.

Units within the Division of Information Services include:

ADMINISTRATIVE COMPUTING SERVICES


CLIENT SERVICES/HELPDESK

Provides a single point of contact for desktop support services for the university community and supports seven computer labs at locations across the Kent campus.

ENGINEERING & OPERATIONS

The Engineering & Operations (E&O) area provides support for the university’s data and communications infrastructure. E&O includes Data Center Operations, Network Services and Telecommunications Services. Offices within the Engineering & Operations unit include:

- Data Center Operations: Provides support services for the information technologies, systems and environments for the university community;

- Network Services: Provides the engineering and support services for the university’s integrated voice, video and data network;

- Telecommunications: Provides cost-effective solutions for voice services for the university community;

NEW MEDIA CENTER

The mission of the Kent State University New Media Center is to support teaching, learning and research through the development and integration of applied and emerging technology in higher education.

With our professional staff, faculty and students, we serve the university and its global constituents through our distributed learning, multimedia, online course and content development. We partner with innovative individuals, academic and administrative organizations to integrate and support technology in multidisciplinary teaching and research.

As a select member of the national New Media Consortium, we collaborate with leading research universities, outstanding community colleges and advanced technology organizations to articulate and promote Kent State’s leadership role in defining and exploring new ways to transform teaching, learning and creative expression. The New Media Center encourages graduate students interested in applied research and multimedia technologies to participate in workshops, seminars and a limited number of paid and credit internships offered in the center each year. For more information, please visit: http://newmedia.kent.edu/.

OFFICE OF SECURITY AND COMPLIANCE

This office oversees the security aspects of Kent State’s network and electronic data. Its responsibilities to the network begin where the “outside world” comes in contact with the university.

University Libraries and Media Services

The University Libraries of the Kent Campus are among the most important resources enriching graduate studies and research. Library resources include more than 2.6 million volumes, one million microforms and extensive collections of other media.

The primary collection is found in a 12-story building with open-stack access. Study seating for 2,000 is available at small tables and carrels adjacent to or amid the book stacks. Study facilities also include six group study rooms and 90 research carrels for faculty and doctoral candidates. The Library is open 101 hours per week while classes are in session.

The University Libraries also include six branch libraries: Architecture, Chemistry/Physics, Fashion, Map, Mathematics and Computer Science and Music. Each of the seven Regional Campuses also has its own library with a professional library director and a collection backed up by access to systemwide resources.
The Kent and Regional Campus libraries are united by KentLINK, a shared online catalog, which allows users at any campus to view holdings and initiate online requests for books throughout the campus system. More than 250,000 items per year are circulated on the KentLINK system. The University Libraries constitute the largest state-assisted university library system in northeastern Ohio. They also rank 76th in size of collections among all major academic libraries in the United States.

The University Libraries are members of the Association of Research Libraries, the Center for Research Libraries and OhioLINK. OhioLINK members make their collections and resources available to the students and faculties of other member institutions. OhioLINK complements 84 Ohio academic libraries and KentLINK by providing online access to the holdings of the State Library of Ohio. Kent State users obtain more than 40,000 items per year through the direct, user-initiated OhioLINK borrowing. OhioLINK also offers research databases in most subject areas, as well as electronic full text. Additional information resources are available via the Internet and World Wide Web. Remote access to KentLINK, OhioLINK and other resources is available.

Kent State maintains strong programs for the development of its library collections, adding approximately 50,000 volumes annually, in addition to extensive acquisitions of microforms and other media. Of particular importance for graduate work are the more than 12,000 periodical and serial titles currently received. There are also continuing comprehensive depository arrangements that annually bring into the University Libraries’ collections documents from the U.S. federal and Ohio state governments, including almost 5,000 document serials. The documents of several major international agencies are acquired comprehensively while more selective programs cover the publications of other state and foreign governments.

The University Libraries possess a strong Department of Special Collections and Archives. It is particularly rich in its holdings of True Crime, contemporary American poetry, the theatre and other performing arts, and the history of printing and publishing. Among the archival collections are papers and publications that document Kent State University’s history, the May 4 collection of letters, flyers, photographs, court records, artifacts and other primary resources that document the shootings at Kent State on May 4, 1970, and valuable materials relating to the history of Northeast Ohio. The Institute for Bibliography and Editing, a closely related research facility, is located in the main library.

Library services for graduate students are extensive. First, walk-in and telephone reference service is available in the main library 70 hours per week during the regular semesters. Live, online assistance from a reference librarian is also available. Second, in-depth research needs can be met through appointments with subject specialists in the reference department. Reference service includes orientation and overview of resources available for a specific discipline; tutorials on the use of reference resources, including research databases; suggestions and advice for developing search strategies and identifying previous research relevant to a specific topic; clarification of alternatives for obtaining desired materials; awareness of additional sources of useful information, such as online databases; and referral to other services or collections when appropriate.

In order to provide strong support for the needs of the graduate students and faculty, the University Libraries have also established a number of other special resource arrangements to create a diversified international network of academic research services.

1. The University Libraries provide networked access to many bibliographic, statistical and full-text databases. Most of these databases, plus many other resources and services, are available through the University Libraries’ Web page.
Graduate Student Services

2. Reciprocal arrangements with many other Ohio college and university libraries allow Kent State students and faculty to use and borrow materials directly from those libraries.

3. Researchers whose needs go beyond the holdings of the University Libraries can directly access more than 31 million items in the OhioLINK central database. Scholars can also utilize Interlibrary Loan. Interlibrary Loan (ILL) uses OCLC, an international bibliographic utility whose database contains the holdings of more than 30,000 libraries in 65 countries and territories, along with other bibliographic sources, to locate and obtain materials from other libraries throughout the world. Each year ILL obtains approximately 12,000 items for Kent State researchers from other sources.

4. Through the university’s membership in the Center for Research Libraries in Chicago, Interlibrary Loan obtains materials from a collection of over 3.5 million books and journals not available in most other libraries.

MEDIA SERVICES

Media Services is a division of Libraries and Media Services and is composed of Audio Visual Services and Teleproductions. Media Services provides support to faculty, staff and students in their learning, teaching, research and business activities through the production of media and the provision of numerous media formats and presentation/instructional technologies. Audio Visual Services provides classroom and instructional systems design, classroom services, a copy center, copyright clearance services, engraving services, public address and equipment repair services, instructional graphics, photocopier service, special event support and a student multimedia studio.

Teleproductions provides video operations/engineering and video production. For more information call Audio Visual Services, 330-672-3456 or Teleproductions, 330-672-2810, or visit the Web at http://media.kent.edu.

Residence Services

The university has facilities for housing single graduate students along with facilities for graduate student families.

RESIDENCE HALLS

Single graduate students may choose from a number of residence halls accommodating both graduate and upper-division undergraduate students. Korb Hall, a coed residence hall, accommodates both graduate and nontraditional undergraduate students. Centennial Court, Kent State University’s new residence halls, are also available for upper-division and graduate students. Centennial Court C, offering private rooms with a bath shared between two rooms, is open year round. Graduate/upper-division residence halls provide an environment conducive to academic pursuits.

Room assignments are made by date of application and are based on the availability of space. Room types for graduate students include singles, deluxe singles, standard doubles and suites. Each residence hall has laundry facilities and limited cooking facilities. In-room Internet access, cable television and local phone service are provided in each student room. There are computer clusters available for residence hall student use.

A prospective student interested in residence hall housing should contact the Department of Residence Services, Korb Hall, P.O. Box 5190, Kent, OH 44242-0001, or call 330-672-7000, or visit the Residence Services Web site at www.res.kent.edu.

ALLERTON STUDENT/FAMILY APARTMENTS

One- and two-bedroom apartment units are available. Junior, senior and graduate students, or students who qualify as “student families” — married couples with no more than two children, and single parents with no more than three dependent children — may apply for residence in the Allerton Student/Family Apartments. A maximum of four immediate family members may reside in two-bedroom units and a maximum of three family members may reside in one-bedroom units.

A prospective student interested in Allerton Student/Family housing should contact the Allerton Student/Family Housing Office, 1150 F Allerton St., Kent, OH 44240-0001, 330-672-2595.

Student Disability Services

Student Disability Services provides assistance to students with various disabilities in order to maximize educational opportunity and individual potential. Some services include notetaking, readers, interpreters, preferred registration, test proctoring, audiotaped textbooks and class materials, academic and
personal counseling, and special parking arrangements. In addition to coordinating various services with academic and nonacademic departments, the office serves as a liaison between community and state rehabilitation agencies. Documentation of the disability must be presented to and discussed with Student Disability Services staff prior to any accommodations being facilitated. For more information, please visit the Web site at www.kent.edu/sds.

University Health Services

The DeWeese Health Center is a full-service Primary Care facility that provides patient care, health education and psychological counseling services to several thousand undergraduate and graduate students throughout the year. These services include office visits, women’s health exams, counseling and psychological services, X-rays, laboratory tests, physical therapy, immunizations, flu shots, health promotion programs and a 24-hour nurse information line. There is no charge to students for office visits and a minimal charge for other tests and services. The health center also has a pharmacy that can fill most prescriptions and has many over-the-counter medications that are provided at a very low cost. Our services are available for all students enrolled at Kent State University. Spouses of registered students may also receive care under the spousal coverage program available through University Health Services.

Kent State University has a mandatory immunization and tuberculosis screening program for all new students. An immunization form must be completed and returned to the DeWeese Health Center. The policy and the form can be printed from our Web page or faxed to you upon request. If needed, the immunizations and testing can be provided at University Health Services or can also be obtained from local health departments.

Quality service, professionalism, integrity, accountability, caring and respect for individuality and diversity are requirements for all staff members in our health center. All student medical and psychological information is kept strictly confidential. Information is not made available to parents, university faculty or staff without a student’s written consent. We are committed to your health as we believe that it is an integral part of your academic success.

We have developed our Web site at http://uhs.kent.edu to include additional information on health issues, current programs and services, student health insurance and hours of service. At our site you will also find additional telephone numbers and e-mail addresses. Please contact us if you have any questions, comments or concerns.

Contacts:
http://www.uhs.kent.edu
Fax: 330-672-3711
330-672-2322 Medical Appointments
330-672-2487 Psychological Services
330-672-2326 Nurse Help Line (24 hours)
330-672-2443 Administration

MANDATORY IMMUNIZATIONS/SCREENING
Kent State University has a mandatory immunization and screening requirement for all new students that must be fulfilled in order to attend class. The requirements are as follows:

1. Two doses of measles, mumps and rubella (MMR) vaccine after one year of age or one dose within the past six years. High School graduates from accredited Ohio high schools since 1993 are exempt.

2. Students from the following areas are required to have a tuberculosis screening test (TB test Mantoux-type): Africa, South America, Asia (including the Middle East and the Pacific Islands except Japan), Mexico, Eastern Europe, Russia, Central America and the Caribbean. This test must be completed within 12 months prior to starting classes.

Immunizations and screenings may be received at University Health Services for a fee. For more information, call 330-672-2322.

24-HOUR NURSE CALL-IN SERVICE
Effective July 1, 2003, a nurse call-in service is available to students 24 hours a day, 365 days a year. The specially trained nurses can answer medical questions from students, discuss illnesses and injuries, give advice for treatment of simple conditions and make referrals or actual appointments at the Kent State Health Center.

PSYCHOLOGICAL COUNSELING SERVICES
Psychological Services provides high-quality, personalized counseling services by professional, licensed psychologists. Concerns with personal issues, stress, depression, substance abuse, and lack of academic progress can be discussed in a helpful manner. The professional staff is dedicated to assisting students in obtaining the most from their academic, social and personal experience at Kent State. Students may call 330-672-2487 to make an appointment or for more information.

OFFICE OF STUDENT HEALTH PROMOTION
The Office of Student Health Promotion, located on the second floor of the DeWeese Health Center, engages in educational activities to promote the health and wellness of Kent State University students. These activities include individual consultation, patient education, anonymous HIV testing, provision of campus programs covering a variety of health issues, sponsorship of the Annual Health & Wellness Conference—Mind, Body, and Spirit, sponsorship of the BACCHUS/Peer Education student organization, and participation on special event planning committees. For more information or to schedule an appointment, call 330-672-2320.
Centers and Institutes

CENTERS AND INSTITUTES
For a complete listing of all centers and institutes, visit the Web site at http://imagine.kent.edu/staff/centers/default.as.

Centers

APPLIED PSYCHOLOGY CENTER
The Applied Psychology Center is a specialized nonprofit organization within the Department of Psychology. The purpose of the Applied Psychology Center is to foster and conduct applied research in an attempt to identify, understand and solve social and organizational problems using state-of-the-art psychological expertise. The Applied Psychology Center is involved in four major kinds of activities: applied research, training, problem solving and consultation. Programs focus on local, national and international issues of social concern and have been recognized in scholarly and lay publications, as well as by receipt of major grant funding. For more information, please visit http://dept.kent.edu/psychology/.

The Applied Psychology Center is staffed by experienced psychologists, graduate students and administrative staff who represent a broad range of specializations within the field of psychology including but not limited to: health psychology, community psychology, cognitive psychology, developmental psychology, behavioral medicine, psychology of women, social psychology, clinical psychology, organizational psychology and neuropsychology. In addition, the center has many affiliates from within and outside the university community.

CHILD DEVELOPMENT CENTER (CDC)
The Child Development Center is a nationally and internationally known laboratory school affiliated with the College and Graduate School of Education, Health and Human Services at Kent State University since 1971. It is located on the Kent Campus. The center enrolls children from eighteen months through kindergarten in full-day programs across the academic year and summer. The center has a three-part mission of service to university families, professional preparation of educational personnel, and research in early childhood education/services. Priorities include:
• Enrollment of a diverse population of children and families, ensuring inclusive early childhood classrooms
• Preparation of personnel for educational programs for children and families
• Outreach services to support the development of high quality early childhood education in the region, including conferences, workshops and teacher study groups.
• Collaborative research involving faculty and undergraduate/graduate students

The center offers graduate assistantships, practicum and research opportunities for students in the College and Graduate School of Education, Health and Human Services and other colleges in the university. For more information about the Child Development Center, please visit the center or our Web site at www.educ.kent.edu/TLCS/centers/CDC/index.htm, or contact the director, Carol Bersani, at 330-672-2559.

COUNSELING AND HUMAN DEVELOPMENT CENTER
The Counseling and Human Development Center, located in the College and Graduate School of Education, Health and Human Services, provides clinical training for graduate students pursuing a master’s or doctoral degree in Professional Counseling. The mission of the CHDC is threefold: (1) to provide training to Counselor Education graduate students preparing to become professional counselors; (2) to provide counseling and related services to clients; and (3) to conduct research related to counseling and counselor education.

A full range of counseling services is offered to university students and to residents of the greater Portage County area, including individual, group, career, marriage, family and couples counseling. The CHDC staff also provides consultation, education and training to schools, churches and community agencies on a variety of mental health issues.

Counseling is provided by master’s and doctoral students in Counseling under the supervision of independently licensed faculty members in the Counseling and Human Development Services Program. The center is staffed by a full-time director, full-time secretary, four doctoral teaching fellows and a half-time secretary. All counseling rooms in the center are equipped to provide audio visual recording of counseling sessions for supervisory purposes. The CHDC provides graduate student counselors a facility in which they learn and apply the most up-to-date research in counseling theory and techniques.

For more information about the CHDC, please visit http://chdc.educ.kent.edu, or contact the center at 330-672-2208.
CENTER FOR EXECUTIVE EDUCATION AND DEVELOPMENT (CEED)
The center is a joint enterprise of the College of Business Administration and the College of Continuing Studies and is housed within the College of Business Administration. The center provides management education and training to businesses and nonprofit and governmental organizations. The center offers custom-designed management training programs, conferences and workshops. These offerings are designed to provide managers and executives of large and midsize organizations, as well as small business owners, with information and practices critical to managerial and entrepreneurial success in today’s global economic environment. For more information, please visit http://business.kent.edu/CEED.

FAMILY CHILD LEARNING CENTER
Since 1980 the nationally known Family Child Learning Center (FCLC) has been helping families and their young children. FCLC is a research and training program located in Tallmadge, Ohio, that is committed to developing, evaluating and disseminating innovative services for young children with developmental disabilities and their families. Sponsored by Akron Children’s Hospital in conjunction with Kent State University, FCLC is dedicated to enhancing the quality of life of children with developmental concerns and their families through:

- providing family-centered developmental services;
- offering applied interdisciplinary training to parents, students and professionals to work with families and children;
- conducting research on the effectiveness of practices and service models for promoting the development of young children;
- disseminating information regarding quality practices that address the needs of young children with developmental concerns and their families;
- collaborating with related organizations and the early intervention system to encourage continuous improvement in services to families and children; and
- creating opportunities for the growth and development of all staff.

The Family Child Learning Center (FCLC) includes a staff of approximately 50 full- and part-time professionals and parents.

The center offers high quality, intensive graduate training programs for Kent State University students from a variety of disciplines and programs. Opportunities vary from observational experiences to practicum placements to a year-long intensive interdisciplinary training program. Each of these opportunities is designed specifically to help graduate students acquire the knowledge and skills needed to work in positions related to serving children between birth to six years of age who are at-risk or have disabilities and their families. Students are also given the opportunity to participate in research and dissemination activities of the center.

For more information about the Family Child Learning Center, please visit www.familychild.org, or contact the center at 330-633-2055.

GLOBAL MANAGEMENT CENTER
The purposes of the Global Management Center are to support the strategic international initiative of the university in preparing our graduates for success in the global business environment through providing a distinctive academic curriculum with an organized perspective to the integrated study of international business, culture and communication; to leverage existing knowledge resources of the College of Business through the active support and coordination of further global research, international conferences, travel-for-learning grants to students, and improved access to relevant research databases; and to cooperate closely with other colleges, centers and institutes within Kent State University, with regional business partners and employers in providing well-structured experiential learning opportunities; and with universities abroad for international study and research. The primary focus and specific goals of the Global Management Center are:

- to better prepare our students so that they may perform successfully in a globally competitive working environment;
- to increase awareness and understanding of the new challenges, opportunities and concerns in global business through the coordination and encouragement of multidisciplinary scholarly research and teaching;
- to provide innovative learning experiences for students of business at Kent State University.

For further information about the center, contact Dr. Michael Barnes, Executive Director, mbarnes@kent.edu.

CENTER FOR HEALTH PROMOTION THROUGH EDUCATION
The Center for Health Promotion through Education is part of the College of Education, Health and Human Services and is affiliated with the Adult, Counseling, Health and Vocational Education Department. The center provides schools, organizations, agencies and families with research, technical assistance and training to launch and sustain collaborative, long-term efforts to promote healthy lifestyles and communities. The center strives to build an interdisciplinary foundation for understanding and preventing or reducing incidence of behaviors that place individuals and communities at risk for health problems. Ultimately, the center envisions citizens and institutions joining together to create healthy communities for people of all ages, but in which young people in particular will thrive.

To achieve its mission, the center has six major initiatives: (1) to assist agencies and schools in obtaining grants for assessment, design, implementation and/or evaluation of health promotion initiatives; (2) to conduct and/or coordinate applied research in order to identify risk behaviors and evaluate prevention and treatment programs; (3) to enhance graduate students’ professional growth by providing field experience in health promotion initiatives; (4) to market the Center for Health Pro-
motion through Education; (5) to assist the College of Educa-
tion, Health and Human Services faculty and staff on obtaining
health-related resources; (6) to represent the Center for Health
Promotion through Education at local, state and federal levels
through meetings and/or conferences.
For more information, please visit http://chp.educ.kent.edu, or
call 330-672-3195.

HUMAN DEVELOPMENT CENTER
The Human Development Center is located in the School of
Family and Consumer Studies and has the overall mission
of fostering interdisciplinary research and education in the
areas of lifespan human development and family studies, with
a particular emphasis on adult development and aging. To
achieve this mission, specific research and instructional activi-
ties include:
• Rendering consultation and support for proposal
development and grant writing;
• Providing faculty and graduate students with laboratory
space and equipment to conduct research;
• Assisting faculty and students with issues pertaining to
research design, data collection and statistical analyses;
• Establishing a collection of resources to facilitate research
and instruction (e.g., journals, handbooks, test and
measurement inventories). These resources are available
to faculty and graduate students;
• Sponsoring workshops, conferences and a distinguished
lecture series in adult development and aging.

The center currently houses various interdisciplinary research
projects, the Graduate Certificate Program in Gerontology (of-
fered jointly with The University of Akron), and the Adult
Health and Well-Being program.

Director: Greg Smith, Ed.D.
Phone: 330-672-2993
E-mail: gsmith@kent.edu

CENTER FOR INFORMATION SYSTEMS
The Center for Information Systems in the Department
of Management & Information Systems of the Kent State
University College of Business Administration, promotes
cooperation and interchange with regional information
systems executives, information system departments, and
other centers for research on computer information systems.
The center also has a strong focus on curriculum development
especially at the undergraduate level. For more information,
contact:

Dr. Geoffrey Steinberg, Associate Professor
Director of the Center for Information Systems
Faculty, Department of Management and Information Systems
College of Business
gsteinbe@bsa3.kent.edu
330-672-1152

Dr. Felix Offodile, Professor
Chair, Department of Management and Information Systems
College of Business
foffodil@bsa3.kent.edu
330-672-2953

THE CENTER FOR INNOVATION IN TRANSITION
AND EMPLOYMENT
The mission of the Center for Innovation in Transition and
Employment is supporting quality lives for people with
disabilities. The center provides leadership in the College and
Graduate School of Education, Health and Human Services and
across the region for developing successful transition practices
which lead to positive outcomes for people with disabilities.
The center provides a rich array of leadership activities to
graduate students in which students use state-of-the-art
practices learned in classes in a curriculum which combines
theory and practice. Graduate students gain practical
experience working with students with disabilities and
collaborating with professionals in the field. Financial support
is available to eligible students with an interest in transition
services. Numerous personnel development and research and
demonstration projects address the following goals:
• Preparing transition leaders: Graduate programs with
an emphasis in transition are available at the master’s
and doctoral level. Collaborative and field-based
personnel preparation are the hallmarks of projects
which support full- and part-time students with
tuition waivers and stipends. Model transition
programs provide field sites for instilling transition
competencies.
• Translating research into practice: Programs of
personnel development, outreach, research and
technical assistance focus on realizing the potential
of the knowledge base in transition. Knowledge and
issues from collaborating schools and agencies are
used as context to test promising practices from the
literature.
• Promoting effective policies and programs: Dissemination
and policy advocacy of center projects and staff are
gear ed to “getting the word out” and to work toward
greater use of transition policies and practices that work.
Materials, products and research findings are designed
delivered in numerous formats to be user-friendly
and have favorable impact.

For more information contact:
Robert Flexer
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Telephone: 330-672-0584
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rflexer@kent.edu
www.educ.kent.edu/centers/CITE
CENTER FOR INTERNATIONAL AND COMPARATIVE PROGRAMS
The Center for International and Comparative Programs coordinates university activities involving international education. These activities include international student affairs, overseas study programs, faculty and student exchanges with Kent State partner universities abroad, and research programs. The center assists in strengthening the international aspects of courses in various disciplines; in addition, it sponsors and provides assistance, as appropriate, for seminars, workshops and conferences dealing with topics in the international field. It also promotes university research of an international and comparative nature, coordinates exchange programs and seminars with foreign institutions for faculty and students, and facilitates applications and selection of candidates for international fellowships. Additionally, the center administers the Bachelor of Arts program in international relations as well as the Lyman L. Lemnitzer Center for NATO and European Union Studies.

The Office of International Student and Scholar Services (ISSS) exists within the center to provide a nurturing setting for academic success, intercultural development and mutual understanding. ISSS has three primary missions. First, it serves as a central resource for those international students seeking assistance with academic advising, cultural adjustment and emergency support. Second, the office is responsible under federal law for overseeing all matters relating to student (F) and exchange visitor (J) visas and for monitoring compliance of students and exchange visitors with current immigration regulations. Finally, the office works closely with the Office of Campus Life in facilitating the continued international enrichment of the curriculum and the overall academic environment. Special programs sponsored by ISSS include the International Awards Program, airport pickup and orientations for new international students. ISSS also coordinates the activities of the local chapter of Phi Beta Delta, the Honor Society for International Scholars.

Kent State offers several academic study-abroad programs through the center. Detailed, up-to-date information about current and developing programs, as well as other information about the Center for International and Comparative Programs and International Student Affairs services, may be obtained from the Center for International and Comparative Programs, 124 Bowman Hall, or by calling 330-672-7980, or by sending an e-mail to mrubin@kent.edu, or by visiting www.kent.edu/cicp.

THE GERALD H. READ CENTER FOR INTERNATIONAL AND INTERCULTURAL EDUCATION
The Read Center’s activities are among the enduring legacies of a comparative and international educator, Gerald H. Read, whose vision and generosity facilitated the center’s establishment in 1987. The center was designed to examine curricular issues related to international and intercultural education; to facilitate international recruitment and retention of students; to encourage educational travel opportunities for students and faculty; and to support exchange and research projects with an international and/or intercultural focus. Today, the center seeks to preserve and promote the spirit of international openness and exchange exemplified by Dr. Read’s remarkable career. The center also sponsors the Gerald H. Read Distinguished Lecture Series, seminars on international topics, and supports the efforts of the college faculty in internationalizing programs or taking a program to an international setting.

The center supports the Association of International Students in Education, a graduate student organization, and is host to the Consortium of Overseas Student Teaching, actively sending student teachers to over 18 countries. The center also offers scholarship support to faculty and graduate students for research internationally.

THE GERONTOLOGY CENTER
The Gerontology Center provides a variety of learning opportunities for mature adults and professionals in the field of aging. The center provides support to faculty and students engaging in interdisciplinary research, creative activities and service-learning opportunities related to the field of gerontology. We also serve as a resource to the community regarding issues, concerns and needs of the older population. For more information about current outreach and professional development initiatives visit http://ccsweb.ccs.kent.edu/.

KENT REGIONAL BUSINESS ALLIANCE
The Kent Regional Business Alliance (KRBA) is a nonprofit organization established in 1994 as a cooperative undertaking among northeastern Ohio businesses, area Chambers of Commerce, government, and the Kent State University system. Its mission is to facilitate the growth and development of small businesses and high-technology industry throughout Northeast Ohio. From new business orientations for start-up businesses to topic specific workshops, from one-to-one guidance from a certified business counselor to small business loans, the Kent Regional Business Alliance assists in making businesses grow.

The Kent Regional Business Alliance consists of:
• The Small Business Development Center, which provides consulting services to local businesses to help them to start and expand;
• The Procurement Technical Assistance Center, which helps businesses do business with the government;
• The Business Center for Women, which supports women business owners and provides assistance in Women Business Enterprise Certification;
• The Kent Business Incubator, which provides physical space to fledgling companies.

Businesses that are not eligible for traditional bank financing may take advantage of the loan programs offered by the Kent Regional Business Alliance.

The Kent Regional Business Alliance hires graduate assistants
and assembles student teams that work with client companies. Many students even consider starting a new business and thereafter become client companies.

For more information, please visit the Web site at: http://business.kent.edu/KRBA/index.asp.

CENTER FOR LITERATURE AND PSYCHOANALYSIS
The Center for Literature and Psychoanalysis, located in the Department of English, facilitates the psychoanalytic study of language, literature and culture, with a particular emphasis on the role of psychoanalytic research and methodology in higher education. The center coordinates faculty and student contact and collaboration across disciplines and colleges in the university; it facilitates contacts of Kent faculty and students with psychoanalytic projects at other universities and other institutions such as the Cleveland Psychoanalytic Institute, the International Federation for Psychoanalytic Education and the Association for the Psychoanalysis of Culture and Society; it marshals resources for graduate and undergraduate education; it promotes and disseminates faculty and student scholarship and research; and it serves as a focal point for securing external funding in support of its other missions.

THE LYMAN L. LEMNITZER CENTER FOR NATO AND EUROPEAN UNION STUDIES
The Lemnitzer Center was originally established to provide an institutional setting for the scholarly examination of the historical, political, economic and military experiences of the North Atlantic Treaty Organization. In 1991 a decision was made to expand the mission of the center to include an emphasis on the European Community (now European Union).

The activities of the Lemnitzer Center are devoted to the expansion and dissemination of scholarly knowledge about the North Atlantic Treaty Organization, the European Union and associated European-American issues. As part of the Center for International and Comparative Programs, the Lemnitzer Center is able to coordinate programs and to facilitate scholarship through various means, including publication of edited conference proceedings.

The center is a repository for literature related to the North Atlantic Treaty Organization and European Union and is in the process of expanding its holdings. It also serves as a public information source, presenting a series of forums and academic seminars in which the general public participates. Within the university, the center encourages the development of specialized undergraduate and graduate courses to supplement already established curricula. Graduate students in relevant disciplines at Kent State University are encouraged to become affiliated with the center as it provides access to advanced study and research opportunities in the United States and abroad. For more information, please visit the Web site at http://dept.kent.edu/cicp/lemnitzer/index.htm or call 330-672-7980.

NEW MEDIA CENTER
The mission of the Kent State University New Media Center is to support teaching, learning and research through the development and integration of applied and emerging technology in higher education.

With our professional staff, faculty and students, we serve the university and its global constituents through our distributed learning, multimedia, online course and content development. We partner with innovative individuals, academic and administrative organizations to integrate and support technology in multidisciplinary teaching and research.

As a select member of the national New Media Consortium, we collaborate with leading research universities, outstanding community colleges and advanced technology organizations to articulate and promote Kent State's leadership role in defining and exploring new ways to transform teaching, learning and creative expression.

The New Media Center encourages graduate students interested in applied research and multimedia technologies to participate in workshops, seminars and a limited number of paid and credit internships offered in the center each year.

For more information, please visit http://newmedia.kent.edu/

CENTER FOR NUCLEAR RESEARCH
The Center for Nuclear Research operates within the Physics Department to support, enhance and promote fundamental studies of the nature of atomic nuclei, subatomic particles and their interactions. The staff of the Center for Nuclear Research consists of faculty members in nuclear physics, research faculty, postdoctoral fellows and graduate students engaged in research for M.S. and Ph.D. degrees. An active visitors’ program brings distinguished physicists to campus for research seminars and scientific collaborations. The research program of the Center for Nuclear Research is strongly supported by grant funding from the National Science Foundation (NSF) and the Department of Energy. The Center for Nuclear Research provides an administrative focus for the research programs and grant funding and fosters a strong academic environment with national and international standing.

The major focus of the center is on the research training of graduate students in theoretical and experimental techniques for nuclear and particle physics. Excellent facilities are available. Laboratories are equipped with a variety of computer systems, specialized electronics and nuclear particle detectors that are among the world’s best. A unique feature of the research program is that graduate students and faculty travel to national laboratories and accelerator facilities to perform experiments. This way graduate students receive training with the nation’s most advanced scientific technology and equipment. Research investigations are focused upon the substructure and interactions of subatomic particles and nuclei as well as upon the behavior of nuclear matter at high density.
and temperature. There is an excellent environment for the training of young physicists in experimental, theoretical and computational techniques. For more information, please visit http://phys.kent.edu/CNR.

**CENTER FOR NURSING RESEARCH**
The Center for Nursing Research, located in the College of Nursing, serves to provide resources, support, collaboration and information exchange for research activities for faculty and students within the College of Nursing and the community at large. The center director facilitates and sustains research development and programs within the College of Nursing, seeks extramural funding to support research, and encourages and enables nursing research efforts with individuals, interdisciplinary teams and community groups.

Research, instructional and service activities:
- Provides consultation and support for proposal development, grant writing, programming and data management for faculty and graduate students.
- Provides statistical consultation to the College of Nursing and outside on a contractual basis.
- Facilitates efficient dissemination and effective use of scientific findings in nursing toward the societal good.
- Establishes a materials collection easily available to faculty and graduate students to facilitate research, knowledge development, proposal/grantsmanship and program development.
- Maintains a directory and records of faculty research activities and grants.
- Serves as a resource center regarding federal and private funding sources suitable for nursing research.

Center for Nursing Research e-mail: nursecnr@kent.edu  
Director: Kathleen Huttlinger, Ph.D.  
Phone: 330-672-8827  
E-mail: khattlin@kent.edu  
Secretary: Gingy Stypa  
Phone: 330-672-8799  
E-mail: gstypa@kent.edu

**THE OHIO EMPLOYEE OWNERSHIP CENTER**
The Ohio Employee Ownership Center, a program housed within the Political Science department, originated from research on the effectiveness of employee buyouts to avert job loss in Ohio. Since 1987 the Ohio Employee Ownership Center has been funded, in part by grants from the state of Ohio, to provide information, technical assistance and training on using employee ownership as a strategy for economic revitalization.

The Ohio Employee Ownership Center combines practical service to the community with research on employee ownership, making the program unique among similar state-sponsored programs in the nation. The center produces a nationally recognized publication series, develops practical training materials and techniques, coordinates workshops and conferences for the public, and facilitates joint projects among employee-owned firms. Several of the Ohio Employee Ownership Center’s most innovative projects have served as models for national and international practitioners. For more information visit, www.kent.edu/oeoc.

**OHIO LITERACY RESOURCE CENTER (OLRC)**
The Ohio Literacy Resource Center (OLRC), established in 1993, supports adult literacy programs and services throughout Ohio. Working closely with the Ohio Department of Education, state agencies, professional organizations and a variety of adult literacy providers, the center helps practitioners keep abreast of the latest developments in adult education, including technology. Services provided include professional development activities for adult literacy professionals, publications, technology expertise and a Web site to support literacy programs.

Particular OLRC emphases for 2004-05 include a family literacy component; the GED Scholars Initiative, which is a federally supported program to support GED grads at Kent State; the Ohio Literacy Alliance, an externally funded partnership with The Ohio State University to build “lifespan literacy” perspectives; and a variety of technology-related projects funded by the National Institute for Literacy.

Graduate Assistants are frequently among center personnel. For more information, please visit http://literacy.kent.edu.

**CENTER FOR PUBLIC ADMINISTRATION AND PUBLIC POLICY**
The Center for Public Administration and Public Policy is closely associated with the Master of Public Administration program. Funded through a grant from the Ohio Board of Regents and matching funds from Kent State University, the center’s mission is to provide training, technical assistance and urban-based research to benefit local governments and nonprofit organizations in Ohio.

Because the center provides “community outreach,” Master of Public Administration students have opportunities to work on projects in local governments and nonprofit organizations, complete their internships with one of the participating community agencies, and network with local government officials in classes. In fiscal year 2003, the center trained 172 local elected and appointed government officials in professional certification programs for clerks of council, clerk/treasurers, public finance officers and mayors’ court clerks. A total of 25 participants completed the assessment center process for hiring, promotion and career development. Weekly classes provided supervisory training skills for 21 management personnel and policy-making skills for nine elected city council members. Since 1983, the center has been instrumental in bringing more than $810,132 in faculty research funds, external grants and contracts to Kent State University. The center served 210 local/regional Ohio governments and nonprofit organizations in fiscal year 2003.
Centers and Institutes

**CENTER FOR PRIVACY AND THE FIRST AMENDMENT**
The Center for Privacy and the First Amendment, which is headquartered in the School of Journalism and Mass Communication, is engaged in researching access-to-government-records issues. It provides advice and counsel for anyone with a question about access to government or about other media law concerns.

The center was founded by Professor Timothy D. Smith in 1991 to provide information and research on accessing government records and meetings. It is the only center of its kind in Ohio and one of the few in the Midwest.

The center is open to inquiries from the news media, government officials and the general public. It also publishes a newsletter that is available online at http://jmc.kent.edu/cfp/cfp.htm. For more information or to ask a question about access, contact Tim Smith at 330-672-8289 or tdsmith@kent.edu.

**CENTER OF RESEARCH IN JUSTICE ISSUES**
The Center of Research in Justice Issues provides research and evaluation studies in all aspects of the justice system, including law enforcement, courts and corrections. Faculty members have expertise in quantitative and qualitative research methods and backgrounds in law, sociology, psychology, anthropology and political science. Consultation, seminars and workshops are available for justice-related issues that affect various private and public institutions as well as businesses. The center involves graduate students in its research and evaluation projects, and provides stipends, research opportunities, hourly employment and internships.

Services provided: Research and evaluation studies in all aspects of the justice system; consulting on grant writing; expert witness testimony on issues pertaining to justice, speakers, seminars and workshops on justice-related issues.

For more information, contact Dr. Edna Erez, 113 Bowman Hall, 330-672-0310.

**CENTER FOR THE STUDY OF WORLD MUSICS**
The Center for the Study of World Musics was founded to coordinate world music studies, promote the exchange of performers and scholars, provide lectures and performances for both public and academic communities, and disseminate information about world musics. Although its academic degree programs are only offered at the graduate level, it provides ensemble and classroom experiences at all levels for both music specialists and nonspecialists. The center houses the largest collection of world instruments in Ohio, including Chinese, Thai and African ensembles.

**READING AND WRITING DEVELOPMENT CENTER (RWDC)**
The Reading and Writing Center offers services to children, grades 2-12, who are experiencing difficulty in reading and supports K-12 literacy education throughout Northeast Ohio. Our tutors and diagnosticians are teachers who are pursuing graduate coursework in literacy. The diagnosis program takes place during the academic year; during the summer, the center operates a five-week tutoring program for children and youth. Professional development support activities for 2004-05 coordinated through the center include the annual KSU-U of Akron Reading Conference and an off-campus cohort-based series offered at various locations throughout Northeast Ohio.

Persons interested in graduate assistantships at the Reading and Writing Center should contact Dr. Ken Teitelbaum, Chair, Teaching, Leadership, and Curriculum Studies, 330-672-2580 or kteitelb@kent.edu. Those interested in more information about the center should visit http://www.educ.kent.edu/TLCS/centers/RWDC/.

**RESEARCH CENTER FOR EDUCATIONAL TECHNOLOGY**
The Research Center for Educational Technology (RCET) was founded in 1999 to provide a collegial network for university researchers and K-16 educators committed to studying the impact of technology on teaching and learning. Center offices are located in the Moulton Hall Learning Technologies Center.

The work of the center is multidimensional and dynamic. A broad scope of work is in place to accomplish our mission: Through scholarly study of the uses and influences of technology in K-16 education, center researchers will inform practitioners and other interested parties about how to most effectively use technology to improve students’ learning.

The Research Center for Educational Technology is committed to a cutting-edge research agenda that focuses on the impact of technology where the goals are problem solving, inquiry and authentic tasks – skills commonly identified as necessary in the digital age.

Research teams investigate the following:
- Under what conditions does technology empower learners in various cultural settings?
- Under what conditions does distance learning facilitate learning?
- Under what conditions does K-16 educators, graduate students, and/or preservice teachers learn to make decisions about effective uses of technology for higher order thinking in teaching and learning, and what factors affect these decisions?
- What alternative assessments can be used to measure student learning when technology is integrated into teaching and learning?
- Under what conditions is professional development effective for fostering integration of technology into instruction, K-16?
- Under what conditions do K-16 educators, graduate students, and/or preservice teachers learn to make decisions about effective uses of technology for higher order thinking in teaching and learning, and what factors affect these decisions?
- What alternative assessments can be used to measure student learning when technology is integrated into teaching and learning?

http://www.educ.kent.edu/TLCS/centers/RWDC/
The center currently employs two graduate students who are integral to the research work. Their responsibilities include assisting researchers in collecting data, videotaping teachers and K-12 students in the SBC Ameritech Classroom, interviewing classroom teachers, and maintaining the EndNote database.

The center also offers fellowships for research in the area of educational technology. Graduate students are encouraged to apply for a research grant. Information and an application form can be found on the center's Web site at www.rcet.org.

For more information about the Research Center for Educational Technology, please contact our offices at 330-672-5835 or e-mail at rcet@kent.edu.

**URBAN DESIGN CENTER OF NORTHEAST OHIO**

The College of Architecture and Environmental Design's Urban Design Center is committed to assisting neighborhoods and communities to become more livable places; informing policy makers and the public about the role of design in revitalizing aging communities; and developing information about the physical environment and its design. The UDC is part of a consortium of the four state universities in Northeast Ohio and works in partnership with educational, professional and volunteer organizations that share similar missions. The UDC encourages ecological integrity, the protection of cultural resources, sustainable economic prosperity and the creation of well-designed, livable communities. The UDC is located in downtown Cleveland in the Pointe Building at 820 Prospect Avenue. For additional information visit the Web site at: http://www.cudc.kent.edu/index.htm.

**WOMEN'S RESOURCE CENTER**

The Women's Resource Center exists for women students, faculty and staff. In addition to a nice library and a large collection of materials and brochures on scholarship opportunities for women, health issues, local social services for women, women's organizations and the Women's Studies Program, we offer support groups and workshops on various topics throughout the year. We are here to:

- Support women's personal and professional growth;
- Celebrate women's accomplishments;
- Create a safe, supportive space for women;
- Educate the campus and local community about women and women's concerns;
- Collaborate with other campus and community groups to expand and enhance programs for, by and about women;
- Provide diverse programming to meet the needs of a diverse campus;
- Serve as a clearinghouse for information on women's programs and services;
- Provide leadership for long-term planning to benefit the lives of women;
- Advocate for changes that will improve the lives of women and men.

The Women's Resource Center also offers internship opportunities for graduate students. For additional information, please visit www.kent.edu/administration/hr/wrc/ or contact the center at 330-672-9230.

**Institutes**

**INSTITUTE FOR APPLIED LINGUISTICS**

Applied linguistics is a broad discipline that includes translation, interpreting, foreign language teaching, teaching of English as a second language, terminology studies and software localization. The Institute for Applied Linguistics coordinates bachelor of science and master’s degree programs in professional foreign language translation for the Department of Modern and Classical Languages (MCLS). It also provides support for the second language pedagogy programs in MCLS and the teaching English as a second language (TESL) program in the English department. The institute supports faculty research in applied linguistics, translation studies, scientific, technical, literary and humanitarian translation practice, terminology theory and practice, software localization, language project management, and language informatics including computer applications in applied linguistics. The institute, in cooperation with the University of Leipzig in Germany, edits the monograph series *Translation Studies* and is also the editorial home of the American Translators Association monograph series.

**INSTITUTE FOR BIBLIOGRAPHY AND EDITING**

The Institute for Bibliography and Editing is located on the 11th floor of the main library and is immediately adjacent to the library’s Department of Special Collections, whose programs and services are supportive and closely related. A Hinman Collator and a Lindstrand Comparator, located in the institute, are available to qualified students and scholars from other institutions. Currently, definitive editions of Joseph Conrad, the Taft Papers and Robert Browning are underway. Each is using advanced computer technology for text collation, processing and production. The training of students in the methods of bibliography and scholarly editing is a fundamental concern of the faculty who participate in the program of the institute. For more information, please visit the Web site at www.ibe.kent.edu.

**INSTITUTE FOR COMPUTATIONAL MATHEMATICS**

The mission of the Institute for Computational Mathematics is to encourage and facilitate interdisciplinary research involving advanced scientific computing. In support of this mission, ICM acts as a focus for interactions among researchers from the department, Kent State University, industry and other universities, both in the United States and abroad. Although ICM is a unit within the Departments of Mathematical Sciences and Computer Science, its associated memberships include faculty from several disciplines within the university. ICM provides its associate and visiting members with excellent computing facilities and a stimulating, supporting environment for...
Centers and Institutes

cooperative scientific efforts in computational mathematics. Richard Varga and Paul Wang are research directors of ICM.

Current strengths within ICM include numerical analysis, approximation theory, symbolic mathematical computation and Internet Accessible Mathematical Computation. ICM edits and publishes the Electronic Transactions on Numerical Analysis (ETNA), maintains the Symbolic Computation Information Center Web site (SymbolicNet), offers intensive training courses for local industry, develops interdisciplinary research proposals, facilitates visiting researchers and publishes ICM Technical Reports. Visit http://icm.mcs.kent.edu/icm/ for current activities.

THE INSTITUTE FOR CYBERINFORMATION (ICI)
The mission of the Kent State University Institute for Cyber-information (ICI) is to support and stimulate interdisciplinary research and instructional initiatives within the disciplines included in the College of Communication and Information: Journalism and Mass Communication, Communication Studies, Visual Communication Design, Library and Information Science, and Information Architecture and Knowledge Management.

The ICI promotes cross-disciplinary, as well as inter-organizational collaboration, through the development of programs of research across both the college and the university. ICI promotes the integration of information and communication with, and across, traditional disciplinary boundaries, prepares proposals for funding, and serves as a resource for faculty wishing to develop interdisciplinary research initiatives. Visit our Web site at http://www.ici.kent.edu/ for further information.

INSTITUTE FOR LIBRARY AND INFORMATION LITERACY EDUCATION
The Institute for Library and Information Literacy Education (ILILE) is a demonstration project of local, statewide and national significance. The institute provides leadership in developing coordinated collaboration among K-12 teachers and library and media specialists who are concerned with advancing library and information literacy in the school curriculum. Partners at the university include the School of Library and Information Science, the College and Graduate School of Education, Health and Human Services and Libraries and Media Services.

The institute focuses on activities with PK-12 teachers, library media specialists, preservice educators and students working as collaborative peer-learner teaching teams in learning how to use school library media centers and information resources (i.e., print, electronic and Web-based) more effectively to enhance student learning. The institute also works with PK-12 administrators, academic librarians, public librarians, state and local educational agencies and colleges of education to develop instructional models for information literacy skills acquisition. The development of this project is being accomplished through the creation of a variety of endeavors that provide leadership in the research and teaching necessary for the integration of information literacy in classroom and library media centers.

The institute has four areas of focus:
- Education and Training: Prepare pre- and inservice teachers and library/media specialists to use information resources to enhance teaching and learning;
- Curriculum Development: Create a replicable model for curriculum development and delivery through which PK-12 teachers, library media specialists, administrators and students work collaboratively to promote academic success through information literacy skills;
- Promotion and Outreach: Engage in library and information literacy promotion and outreach activities to improve school library media specialists’ effectiveness in working with other educators to integrate information literacy in K-12 education;
- Research and Evaluation: Conduct a systematic program of applied research on the effectiveness of model approaches and techniques for enhancing collaboration between school library/media specialists and teachers and promoting the integration of information literacy skills in schools.

Visit http://www.ilile.org for current activities.

GLENN H. BROWN LIQUID CRYSTAL INSTITUTE
The Glenn H. Brown Liquid Crystal Institute (LCI) at Kent State University has a proud history of world-class research, industrial partnerships, collaborations and educational programs. The LCI conducts both basic and applied liquid crystal research and has established research collaborations throughout the region, the state and the world. The institute’s achievements include the discovery and characterization of new liquid crystalline phases. Kent State liquid crystal scientists have impressive patent portfolios and technology transfer activities which underscore the importance of research that crosses disciplinary and institutional boundaries.

The Liquid Crystal Institute coordinates the Chemical Physics Interdisciplinary Program which offers graduate courses and research leading to M.S. and Ph.D. degrees. The program involves participation of LCI, the Departments of Chemistry, Physics, and Mathematics, and offers concentrations in optoelectronics, physical properties of liquid crystals, liquid crystal synthesis and molecular design, and lyotropic liquid crystals and membranes.

The Liquid Crystal Institute also coordinates an industrial partnership program that includes more than 35 member companies. Members have access to the institute’s comprehensive resource facilities. Through symposia, workshops and visiting scientist programs, industrial partners are introduced to the latest research results. The institute has engendered a host of local start-up companies.

For more information, visit www.lci.kent.edu. You may also call 330-672-2654 or e-mail mail@lci.kent.edu.
Centers and Institutes

MATTHEW FERRINI INSTITUTE (MFI)
The Matthew Ferrini Institute for Human Evolutionary Research (MFI) began limited operation in 2003 and will mature during the next three years. It is dedicated to a more complete understanding of the evolutionary processes that led to the human species and its specialized characters, especially cognition. Its membership includes faculty from the Departments of Anthropology and Biology, NEOUCOM, and from other institutions within the United States and abroad. Its principal areas of investigation include skeletal biology, primate behavior, neuroendocrinological approaches to human behavior, human palaeontology and forensic medicine. The institute provides limited graduate student support and access to a wide variety of research tools, including laboratory equipment and specialized study collections.

For more information contact:
C. Owen Lovejoy, Director, Matthew Ferrini Institute
Kent State University
Department of Anthropology
Kent, OH 44242-0001
Phone: 330-672-GENE
Fax: 330-672-2999
e-mail: olovejoy@aol.com

INSTITUTE FOR THE STUDY AND PREVENTION OF VIOLENCE
The Institute for the Study and Prevention of Violence serves as a hub for empirical research on aggression and violence. This includes the exploration of the correlates and causes of violence and the identification and evaluation of programs designed to reduce all forms of violence, such as bullying and other juvenile aggression, domestic violence, gun violence, homicide and terrorism. The work of the institute also includes an examination of the organizations and systems that deal with violence and its aftermath.

The work of the institute is interdisciplinary in nature. Staff members have backgrounds in clinical and developmental psychology, criminology and criminal justice, public health, social welfare, sociology and statistics. The institute collaborates with a variety of research partners from Kent State University and elsewhere, including those at other universities, government agencies at the federal, state and local levels, and nonprofit organizations across Ohio and the U.S. Recent projects have included the assessment of domestic violence practices, the evaluation of a school-based violence intervention program, the tracking of firearm use by violent offenders, and assessments of mental health and substance use systems of care.

Since its inception, the institute has served as a training ground for undergraduate, graduate and post-doctoral students from such academic units as computer science, counseling and human development, justice studies, political science, psychology and sociology. Graduate assistants get hands-on experience in all aspects of study design and execution including, but not limited to: literature reviews; instrument design and selection; sample selection; data collection, cleaning, analysis and interpretation; and presentation and publication of results. The experience includes learning a variety of computer software programs. Institute graduate assistants have presented research findings at state and national conferences, and have co-authored articles in leading scholarly journals. Upon entering the job market, institute-affiliated graduate students and staff have secured positions at prominent institutions.
Centers and Institutes

Institute for the Study and Prevention of Violence
Director: Daniel J. Flannery, Ph.D.
230 Auditorium Building
Phone: 330-672-7917

WATER RESOURCES RESEARCH INSTITUTE
The Water Resources Research Institute facilitates and co-ordinates collaborative research in aquatic sciences across departmental boundaries. Faculty from the Departments of Biological Sciences, Geography and Geology conduct research focused on local, regional and national topics of surface and groundwater quality and abundance. The institute fosters a broad-based approach to evaluation and analysis of environmental problems related to water use. Basic and applied research projects are supported by federal, regional and state funding agencies as well as by private foundations. Many members conduct their research in association with colleagues at other universities within Ohio and surrounding states. Several members participate in the Great Lakes Aquatic Ecosystem Research Consortium, a consortium of 12 Ohio institutions of higher education that focus research on activities in the Great Lakes watershed.

The institute is a resource for citizens, governmental agencies and policy-makers, providing scientific information on which to base decisions related to the wise use and management of water and land resources. Institute members also prepare students to deal as professionals with complex issues in water and land management, water policy decisions and environmental conservation. In addition to the substantial extramural support of its research programs, WRRI has received support from the National Science Foundation and private foundations to support educational programs and research experiences for students ranging from middle school to undergraduate college students.
GRADUATE CERTIFICATE PROGRAMS

Graduate certificate programs that address contemporary, topical and/or workplace issues are offered in several academic units. The graduate certificate programs are designed to deliver focused instruction and formalized guidance in a flexible manner. Graduate certificate programs are open to degree-seeking as well as graduate nondegree students. Students must meet the admission requirements for the specific graduate certificate being sought and must declare their intent to earn the certificate.

College of Architecture and Environmental Design

GRADUATE CERTIFICATE IN URBAN DESIGN
The college offers a graduate Certificate in Urban Design (C.U.D.) as an opportunity for architecture students and graduates, as well as professionals interested in continuing education, to acquire specialized knowledge and skills in the area of urban design.

Consistent with the mission of the Cleveland Urban Design Collaborative, whose facility in downtown Cleveland hosts the program, the thrust of the program lies primarily in the “participatory approach” to design and planning. Lecture courses and seminars focus on urban social and cultural issues, while the design workshops and studios develop strategies and solutions for specific urban areas and neighborhoods. Interaction with local communities is also part of the program.

Due to its flexibility, short duration and broad range of elective courses, the program is particularly suitable for part-time students with work experience and clearly defined professional interests.

MASTER OF ARCHITECTURE / GRADUATE CERTIFICATE IN URBAN DESIGN
The concurrent Master of Architecture and graduate Certificate in Urban Design (M.Arch./C.U.D.) program follows a Recommended Course of Study of two academic years with an area of concentration in Urban Design.

It normally starts with a fall semester in residence in Florence, Italy, with field trips to other cities in Italy (Rome, Naples, Turin) and to other Northern European cities, including London, Paris and Berlin. The courses in the following semesters are offered both at the Cleveland Urban Design Collaborative and at the Kent Campus. For more details on the M.Arch./C.U.D. program, see the college Web site.

Specific financial aid is available for this particular program.

GRADUATE CERTIFICATE IN PRESERVATION ARCHITECTURE
The program leading to the graduate Certificate in Preservation Architecture (C.P.A. 16) is an opportunity for architecture students and graduates, as well as professionals interested in continuing education, to acquire specialized knowledge and skills in the area of Preservation Architecture.

The curriculum focuses on specific foundation knowledge in preservation, with particular regard to methodology, assessment criteria, preservation techniques and legislation.

The program is normally offered entirely in Florence, Italy, through the college’s International Studies Program during one semester (fall or spring) or an intensive summer term. Being based in Florence and required to take various field trips, the students have an opportunity of being exposed to important examples of building and urban preservation in Italy and in other European countries.

College of Education, Health and Human Services

EDUCATIONAL FOUNDATIONS AND SPECIAL SERVICES

BEHAVIORAL INTERVENTION SPECIALIST CERTIFICATE
The Behavioral Intervention Specialist certificate program is offered to currently licensed special education teachers and school psychologists or to graduate students currently enrolled in those disciplines that will lead to licensure. Through a series of graduate coursework in Special Education and School Psychology, as well as supervised field-based experiences, students will gain specialized knowledge and skills to collaborate with professional teams and parents in order to develop, implement and evaluate positive-behavior support programs for children and youths with behavioral concerns.

CERTIFICATE IN PERSIAN DEVELOPMENTAL SPECTRUM DISORDERS
The Pervasive Developmental Disorders Specialist (Autism) certificate is a combined program offering graduate-level coursework from Special Education and Speech Pathology and is available to currently licensed teachers or speech-language pathologists, or to individuals enrolled in graduate programs that will lead to licensure in either program. Students completing this certificate will gain specialized knowledge and skills necessary to collaborate with parents and other professionals to provide services for children, youth and adults with Pervasive Developmental Disorders (Autism Spectrum Disorders).

School of Library and Information Science

CERTIFICATE OF ADVANCED STUDY
The School of Library and Information Science offers a “sixth year” program as an opportunity for librarians and information specialists already in the field to update and upgrade professional skills. The program offers a multidisciplinary approach tailored to those who hold master’s degrees in library and information science and are interested in expanding their professional skills in various areas of library and information science. A minimum of 24 graduate hours is required for the Certificate of Advanced Study in Library and Information Science, to be completed within four years.
Prospective students must hold a master's degree in library and information science from an institution accredited by the American Library Association (or equivalent degree from schools in other countries, in the case of international students). Ideally, advanced certificate students have had at least two years of professional experience since earning their master's degree.

CERTIFICATE OF ADVANCED STUDY IN K-12 SCHOOL LIBRARY MEDIA
The School of Library and Information Science offers an advanced certificate program as an opportunity for school library media specialists already in the field to update and upgrade their professional skills. This program is tailored to those school library media specialists who hold an M.L.S./M.L.I.S. degree (or another approved graduate degree in education), school library media licensure and standard teaching credentials. The certificate is aimed at those who are interested in expanding their administrative and technology skills. Each program is individually designed and leads to a certificate in the advanced study of school librarianship. Students will be awarded the Certificate of Advanced Study in K-12 School Library Media upon successful completion of 18 semester hours of coursework.

School of Family and Consumer Studies

GERONTOLOGY CERTIFICATE
Kent State University and The University of Akron together offer a graduate-level Certificate in Gerontology, which may be received in conjunction with degrees from either institution at the specialist’s, master’s or doctoral levels. Students thus receive basic preparation in their selected discipline or major while concurrently obtaining specialized training in gerontology through the certificate program. Coursework completed at either institution may be applied to the certificate program. The two universities are located within a short 15-minute drive from each other.

Department of History

AFRICAN STUDIES PROGRAM
An African Studies Program exists at Kent State University at both the graduate and undergraduate levels. The program, which is designed to give a broad familiarity with African history, culture and contemporary problems, includes the opportunity to select from a wide range of graduate courses directly or indirectly related to Africa. Students entering the program pursue graduate degrees at the master’s or doctoral level in an established discipline such as art, history, geography, economics, music, political science, sociology, business administration, technology and education. Recognition of the African emphasis will be made by awarding a certificate in African Studies. A total of 18 semester hours are required for the certificate. The certificate will be evidence that the student has focused study and research on Africa. In addition, through contacts which the university has with various universities in East and West Africa, graduate students may have the opportunity to conduct thesis- or dissertation-related research on location in Africa. For further information, students should consult Dr. Felix K. Ekechi, Coordinator, African Studies Program, 321 Bowman Hall.

College of Nursing

POST-MASTER’S CERTIFICATES
Post-master’s certificates are offered to nurses with a master’s degree in nursing. These certificates are useful in career advancement or changes or personal fulfillment. The post-master nursing specialty certificates are:
- Administration
- Education
- Adult primary care nurse practitioner
- Women’s health nurse practitioner
- Family nurse practitioner
- Pediatric nurse practitioner
- Psychiatric mental health nurse practitioner

All certificates are offered as faculty and space are available and typically require 12 to 15 semester hours of graduate coursework beyond prerequisites. Contact the College of Nursing for specific information about post-master’s certificates.
THE ARTS

Advanced Study in the Arts

The schools of Art, Music, and Theatre and Dance in the College of Fine and Professional Arts offer nationally respected programs geared to advanced professional preparation. Graduate degree programs include the Master of Arts, Master of Fine Arts, Master of Music and Doctor of Philosophy. Related workshops and other special programs add focused opportunities for advanced study directed to specific career goals.

The School of Art (http://dept.kent.edu/art/) maintains a high creative and scholarly profile. Student exhibition opportunities in the fine arts and crafts include the School of Art Gallery, as well as guidance in external competition and exhibition experiences. International study offerings include art history experiences in Florence, Paris and London, fine arts and crafts programs in New York and Chicago and art education study in Mexico City and Finland, as well as field-based experiences in specialized institutional settings surrounding the campus. See also Kent/Blossom Art.

The active performance environment of the Hugh A. Glauser School of Music (http://dept.kent.edu/music) regularly features graduate students in solo and chamber recitals, in major ensemble concerts and opera productions, as soloists and conductors with major university ensembles, and through presentations of the works of student composers. The graduate string quartet program offers established young quartets a two-year mentorship with the Miami String Quartet, professional artists in residence. Musicology and ethnomusicology students study with faculty members in the Center of World Musics. They explore research experiences in music education; and they explore contemporary issues in secondary and higher education. The Kent Classic Arts concert series brings world class artists to the campus annually for performances and master classes. See also Kent/Blossom Music.

Graduate students in the School of Theatre and Dance (www.theatre.kent.edu) participate in mainstage productions offered in the 500-seat E. Turner Stump Theatre and the 200-seat Wright-Curtis Theatre. Performance and design/technical internships are completed in working professional theatres and related settings throughout the region. The Kent Theatre Ensemble provides touring performances in school and community settings. Graduate workshops explore such topics as stage movement and dance, vocal technique for actors, and acting for the camera. See also Porthouse Theatre.

Kent/Blossom Festivals

Since 1968 the university has mounted nationally recognized summer professional study opportunities in cooperation with Blossom Music Center, summer home of The Cleveland Orchestra. The university also owns and operates Eells Art Gallery and Porthouse Theatre on the scenic Blossom grounds in the midst of the Cuyahoga Valley National Park. Exhibition and performance activities showcase the work of nationally selected students and the professional mentors with whom they study. Graduate students experience central roles in these dynamic components of the cultural life of a major arts market.

KENT/BLOSSOM ART

Kent/Blossom Art offers a series of two-week workshops in the fine arts and craft disciplines emphasizing the exchange of creative concepts and techniques drawn from the visual media. Students selected through competitive portfolio review are encouraged to explore these relationships through lectures and studio demonstrations by visiting professionals, concentrated personal creative effort and criticism of that work by both visiting and resident faculty. Kent/Blossom Art also produces a summer exhibition series at Eells Art Gallery located on the main grounds of Blossom Music Center (http://dept.kent.edu/art/blossom1.html).

KENT/BLOSSOM MUSIC

Kent/Blossom Music enables string, woodwind, horn and piano students to develop professional skills through intensive study with visiting master artists, members of The Cleveland Orchestra, the Miami String Quartet and other university faculty. Experiences focus on major works of the chamber music repertoire and orchestral technique and solo master classes. Rigorous daily coaching and rehearsal schedules culminate in performances on the campus and at Blossom Music Center, where participants also attend open rehearsals and concerts of The Cleveland Orchestra. See also: http://dept.kent.edu/blossom.

PORHOUSE THEATRE

The Porthouse Theatre season offers three productions each summer under industry affiliations including Actors Equity Association and the Society of Stage Directors and Choreographers. College students from across the country and a small number of high school interns are selected by audition and technical credentials to work alongside professional actors, designers and directors fulfilling the artistic, technical and management needs of the theatre. In addition to these assignments, students attend master classes led by visiting professionals in various aspects of performance technique and professional development. Porthouse Theatre, a comfortable, 400-seat, outdoor, covered pavilion, attracts more than 7,000 patrons to its scenic setting each season. More information regarding Porthouse Theatre can be found online at www.theatre.kent.edu.
Architecture and Environmental Design

COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN

Conrad McWilliams, Interim Dean
304N Taylor Hall
330-672-0943
cmcwilli@kent.edu

Maurizio R. Sabini, Coordinator of Graduate Studies
304H Taylor Hall
330-672-0927
msabini@kent.edu

The College of Architecture and Environmental Design (CAED) offers graduate studies in Architecture, Urbanism and Preservation. The various courses of study lead to a National Architectural Accrediting Board (NAAB) professionally accredited Master of Architecture degree (M.Arch. 44), to a Master of Architecture and Master of Business Administration professional dual degree (M.Arch. and M.B.A. 74), to a post-professional Master of Architecture degree with a Concentration in Post-Professional Studies (M.Arch.PPS 32), to a graduate Certificate in Urban Design (C.U.D. 16) and to a graduate Certificate in Preservation Architecture (C.P.A. 16).

Visit the college’s Web site at http://www.caed.kent.edu for more information.

Master of Architecture (M.Arch. 44)

The Master of Architecture degree is accredited by the National Architectural Accrediting Board (NAAB). In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board, which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a six-year, three-year or two-year term of accreditation, depending on the extent of its conformance with established educational standards.

Master’s degree programs may consist of a preprofessional undergraduate degree and a professional graduate degree, that, when earned sequentially, constitute an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree.

The program at Kent State University seeks to prepare graduates to enter the profession of architecture by stimulating the growth of technical knowledge and design creativity, and the refinement of design skills acquired in undergraduate programs, as well as by offering a broad exposure to professional issues and knowledge. The program has an emphasis in building design and professional practice and offers students the opportunity of selecting elective courses in concentration areas of choice, such as building technology, building preservation, architectural history and theory, urban studies and design.
**ADMISSION**

The M.Arch. program is available to those holding a preprofessional degree in architecture (B.Sci. or B.Arch.) with undergraduate coursework equivalent to the Kent State University Bachelor of Science degree (see the Kent State University undergraduate catalog or visit the college Web site). Conditional admission may be granted with specific additional coursework, such as the Comprehensive Building Design and Technology Studio (ARCH 40102) currently offered in the fourth year of the B.Sci. in Architecture curriculum.

In addition to Kent State University general requirements (GPA, TOEFL, etc.), admission to the program is administered through the Graduate Studies Committee based on:

1. Curriculum vitae;
2. Statement of purpose;
3. Portfolio of design work, clearly indicating applicant’s role in group projects;
4. Letters of reference (at least three, one of which is from a nonacademic source);
5. Undergraduate GPA;
6. GRE scores.

Items (1), (2), (3) and (4) are to be mailed directly to the graduate secretary.

Review of applications (including transcripts of previous coursework for non-Kent State University students) will start after January 31. Admissions with financial offers will be notified by mail no later than March 15. Agreement to enroll with a financial offer must be received in writing within four weeks.

**PROGRAM REQUIREMENTS**

Students in the M.Arch. program must earn at least a total of 44 credit hours, 32 from core courses and 12 from elective courses. The core courses are as follows:

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<th>Core Courses</th>
<th>Hours</th>
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<tr>
<td>*ARCH 55093</td>
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<td>*ARCH 65004</td>
<td>3</td>
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</table>
(* Professional Practice)

ARCH 60102 may also be selected as an elective course.

Actual offerings and schedules may vary from year to year, and students are encouraged to register in the College of Architecture and Environmental Design preapproved Recommended Course of Study. Alternative courses of study are permitted, with approval from the college’s Graduate Studies Committee, before registration. Students should contact the college’s graduate secretary for details on registration for coursework.

**Master of Architecture/Master of Business Administration**

Graduate students interested in advanced preparation in architecture and in business administration may apply for admission to the M.Arch. and M.B.A. Dual Degree Program, which is offered jointly by the College of Architecture and Environmental Design and the Graduate School of Management (GSM). This program is designed for architects or undergraduate architectural students whose career goals include assuming middle or executive management positions in architectural practices, or who are interested in starting their own business.

**ADMISSION**

The program is available to those holding a preprofessional degree in architecture (B.S. or B.Arch.) with undergraduate coursework equivalent to the Kent State University Bachelor of Science degree (see the Kent State University undergraduate catalog or visit the college Web site). Conditional admission may be granted with specific additional coursework, including a Comprehensive Building Design and Technology Studio.

Applicants must also have an undergraduate GPA of at least 2.75 (A=4.0).

Students need to apply to both the College of Architecture and Environmental Design and the Graduate School of Management, following the respective application guidelines.

For the College of Architecture and Environmental Design, in addition to Kent State University regular application requirements, admission to the program is administered through the Graduate Studies Committee and requires:

1. Curriculum vitae;
2. Statement of purpose;
3. Portfolio of design work, clearly indicating applicant’s role in group projects;
4. Letters of reference (at least three, one of which is from a nonacademic source);
5. Undergraduate GPA;
6. GRE scores.

Items (1), (2), (3) and (4) should be mailed directly to the graduate secretary.

Applications need to be addressed to the college first. The college will then forward them to the Graduate School of Management. Each unit will make an independent decision and the student will be notified in one letter of the decisions made in both programs.

**PROGRAM REQUIREMENTS**

Students in the M.Arch./M.B.A. Dual Degree program must earn at least a total of 71 credit hours, 32 from the M.Arch. program and 39 from the M.B.A. program. As per Kent State University regulations, a minimum GPA of 3.0 must be maintained.
The required core courses are the following:

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<tr>
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<th>Hours</th>
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<tr>
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<td>ECON 62022</td>
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<td>(*Professional Practice)</td>
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The program is available to those holding a professional degree in architecture.

In addition to Kent State University regular application requirements, admission to the program is administered through the Graduate Studies Committee and is based on:

1. Curriculum vitae;
2. Statement of purpose;
3. Portfolio of design work, clearly indicating applicant’s role in group projects;
4. Letters of reference (at least three, one of which is from a nonacademic source);
5. Undergraduate GPA;
6. GRE scores.

Items (1), (2), (3) and (4) should be mailed directly to the graduate secretary.

Actual offerings and schedule will vary from year to year. Contact the college’s graduate secretary for details on coursework registration.

As a post-professional degree focused on a certain option, the M.Arch. with a concentration in post-professional studies may be earned also after the completion of the National Architectural Accrediting Board professionally accredited M.Arch.

**PROGRAM REQUIREMENTS**

The graduation requirements consist of the successful completion of a minimum of 32 credit hours with two alternative culminating experiences:

1. A thesis in the selected area of option, consisting of the typical sequence:
   - ARCH 66199 (6 credits) and
   - ARCH 66299 (2 credits, not to be counted toward completion of program requirements)

2. A capstone project in the selected area of option, involving one of the following as a final course:
   - ARCH 60704 Urban Design Studio IV (6-9 credits)
   - ARCH 60103 Graduate Design Studio III (6-9 credits)
   - ARCH 66998 Research (minimum 6 credits)

Students enrolled in the M.Arch. 32 degree program are required to define a course of study by the end of their first semester, subject to the approval of their advisor and of the Graduate Studies Committee.
To register for either studio, students enrolled in this program need to have successfully completed the required coursework for ARCH 55705 and ARCH 55710 or ARCH 55711. Elective courses may be selected from those offered by the College of Architecture and Environmental Design and by the Maxine Goodman Levin College of Urban Affairs at Cleveland State University in Cleveland, Ohio.

Actual offerings and schedules may vary from year to year, and students are encouraged to register in the college’s preapproved Recommended Course of Study. Alternative courses of study are permitted, with approval from the college’s Graduate Studies Committee, before registration. Students should contact the college’s graduate secretary for details on registration for coursework.

The concurrent Master of Architecture and graduate Certificate in Urban Design (M.Arch./C.U.D.) program follows a Recommended Course of Study of two academic years with an area of concentration in Urban Design.

It normally starts with a fall semester in residence in Florence, Italy, with field trips to other cities in Italy (Rome, Naples, Turin) and to other Northern European cities, including London, Paris and Berlin. The courses in the following semesters are offered both at the Cleveland Urban Design Collaborative and at the Kent Campus. For more details on the M.Arch./C.U.D. program, see the college Web site.

Admission and program requirements are the same as for the M.Arch. degree program. However, the following substitutions for required core courses are introduced in this program:

- ARCH 66993 for ARCH 55093
- ARCH 60705 for ARCH 56995
- ARCH 60702 for ARCH 60101
- ARCH 60704 for ARCH 60103

Specific financial aid is available for this particular program.
The program is normally offered entirely in Florence, Italy, through the college’s International Studies Program, during one semester (fall or spring) or an intensive summer term. Being based in Florence and required to take various field trips, the students have an opportunity of being exposed to important examples of building and urban preservation in Italy and in other European countries.

ADMISSION
The program is available to those holding a professional degree in Architecture or in Interior Design. In addition to Kent State University general requirements for graduate certificate programs, admission to the program is administered through the Graduate Studies Committee and is based on:
1. Curriculum vitae;
2. Statement of purpose;
3. Portfolio of design work, clearly indicating applicant’s role in group projects;
4. Transcripts of previous degree;
5. Undergraduate GPA;
6. GRE scores.

ADMISSION
The program is available to those holding a professional degree in Architecture or in Interior Design. In addition to Kent State University general requirements for graduate certificate programs, admission to the program is administered through the Graduate Studies Committee and is based on:
1. Curriculum vitae;
2. Statement of purpose;
3. Portfolio of design work, clearly indicating applicant’s role in group projects;
4. Transcripts of previous degree;
5. Undergraduate GPA;
6. GRE scores.

Items (1), (2), (3), (4) and (5) are to be mailed directly to the graduate secretary. Once accepted, applicants may register for coursework in the following semester.

PROGRAM REQUIREMENTS
Students in the Certificate in Preservation Architecture program must earn at least a total of 16 credit hours.

The required courses (6 credit hours) are the following:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 60201</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 60205</td>
<td>2</td>
</tr>
</tbody>
</table>

The other 10 credit hours must be earned from courses in Preservation in not less than three other courses. Actual offerings and schedule may vary from year to year. The elective courses may be selected from, but are not limited to, the following:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 60202</td>
<td>3-4</td>
</tr>
<tr>
<td>ARCH 60203</td>
<td>3-4</td>
</tr>
<tr>
<td>ARCH 60204</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Students are required to agree on a specific course of study with the Graduate Studies Committee prior to the beginning of the program.

Students should contact the college’s graduate secretary for details on registration for coursework:
The Graduate Secretary
College of Architecture and Environmental Design
Kent State University
P.O. Box 5190
Kent, OH 44242
Phone: 330-672-0937; 330-672-3765
Fax: 330-672-3809
www.caed.kent.edu

Courses (ARCH)

ARCH 50001
SUSTAINABLE DESIGN (1)
Writing intensive and research component addressing precedents, traditions, current directions in conservation of natural environment. Principles and methods of ecological design in architecture and urban design.

ARCH 50002
SYSTEMS DESIGN (1)
Lecture and research component addressing comprehensive integration of mechanical, electrical, communication, structural- and life-safety systems and sustainable design concerns.

ARCH 50101
4TH YEAR DESIGN STUDIO I (5)
Studio investigation of complex formal and spatial constructs addressing comprehensive concerns of architecture. Special emphasis on understanding conservation of the natural environment. CAD is required. Prerequisite: ARCH 30102 or ARCH 30112. Corequisite: ARCH 50001.

ARCH 50102
4TH YEAR DESIGN STUDIO II (5)
Studio investigation of the comprehensive concerns and understanding of building systems integration. CAD is required. Corequisite: ARCH 50002.

ARCH 50302
STRUCTURAL SYSTEMS II (3)
A continuation of building structures, statics, strength of materials and systems analysis. Emphasis is on inelastic materials, allowable stress, and design for masonry and concrete structural members and systems.

ARCH 50402
METHODS AND MATERIALS II (3)
Continued investigation of the origins, extraction, properties and processing of the basic materials of construction. Primary focus on concrete and steel-appropriate use and scale including allied systems and building materials, including glazing and interiors.

ARCH 50502
ENVIRONMENTAL TECHNOLOGY II (3)
Ecological design of large buildings. Investigation and analysis of lighting, thermal, water, electrical and waste systems in urban settings.

ARCH 55001
PROFESSIONAL PRACTICE: REAL ESTATE AND DEVELOPMENT (3)
Introduction to the economic, social, ethical and legal impact on/of development in both the public and private sectors. Computer applications and case-study analysis is required.
ARCH 55002
PROFESSIONAL PRACTICE: CONTRACT AND PLANNING LAW (3)
The course surveys laws relating to the practice of architecture and dispute resolution with emphasis on contract laws contrasted with laws of negligence and the standard care in the profession. Planning law surveys land use control mechanisms as seen through zoning, variances and practical applications.

ARCH 55003
PROFESSIONAL PRACTICE: LEADERSHIP AND ETHICS (3)
This course discusses leadership on several professional scales including architectural and urban, with emphasis on problem identification and problem-solving within an ethical framework.

ARCH 55004
PROFESSIONAL PRACTICE: OFFICE AND FINANCIAL MANAGEMENT (3)
This course examines various architectural office structures and management approaches, laws pertaining to professional registration and practice, the use of consulting engineers and financial management of the architect's office in the context of the profession as a business.

ARCH 55093
WORKSHOP: PROFESSIONAL PRACTICE (1-3)
Variable topic workshop related to architectural professional practice. Repeatable for a total of 3 credit hours. S/U grading.

ARCH 55101
FIFTH-YEAR DESIGN STUDIO I (6)
This studio intends to investigate a new scale of environmental issues that integrate both architectural and urban planning. Included are site visits, data collection, design of a master plan and an architectural form response to a segment of the total conceptual plan.

ARCH 55102
FIFTH-YEAR DESIGN STUDIO II (3-6)
Advanced design studio emphasizing comprehensive and independent investigation — exploring and manifesting ideas through architecture using competition and hypothetical or real projects as vehicles of expression.

ARCH 55201
HISTORY OF ARCHITECTURE I (3)
Architecture from prehistory through the European early Christian and Byzantine period, including Africa, India, Central and South America, Central Asia and the Far East.

ARCH 55202
HISTORY OF ARCHITECTURE II (3)
History of architecture from the European Romanesque period to early 20th century. Western and non-Western cultures including Africa, India, South America, Mexico and Japan.

ARCH 55203
HISTORY OF ARCHITECTURE III (3)
A history of 20th-century architecture.

ARCH 55210
RENAISSANCE ARCHITECTURE (3)
History and theory of Renaissance architecture from 1400 until 1600.

ARCH 55211
BAROQUE ARCHITECTURE (3)
History and theory of architecture in Europe from 1600 through 1750.

ARCH 55220
AMERICAN ARCHITECTURE: COLONIAL TO 1900 (3)
History of American architecture from Spanish, French, Dutch and English colonization through the 19th century.

ARCH 55230
FRANK LLOYD WRIGHT (3)
Examination of the life, buildings and literary works of Frank Lloyd Wright with emphasis on his contributions to American art and architecture and his place in American intellectual history. Prerequisite: ART 22007 or ARCH 55202.

ARCH 55291
SEMINAR: VARIABLE TOPICS IN ARCHITECTURAL HISTORY (1-3)
Content varies. Repeatable for a total of 3 credit hours. Prerequisite: Permission.

ARCH 55391
SEMINAR: STRUCTURES III (1-3)
A continuation of building structures, statics, strength of materials and systems analysis. Emphasis is on complex systems, including horizontal long-span and high-rise structures. Computer analysis is required. Repeatable for a total of 3 credit hours.

ARCH 55491
SEMINAR: METHODS AND MATERIALS III (1-3)
Advanced topics in methods and complex materials systems. Computer modeling and field experience is required. Repeatable for a total of 3 credit hours.

ARCH 55591
SEMINAR: ENVIRONMENTAL TECHNOLOGY III (1-3)
Variable topics in environmental technology, environmental design and energy conservation, advanced lighting techniques, etc. Repeatable for a total of 3 credit hours.

ARCH 55601
ADVANCED COMPUTER APPLICATIONS (1-3)
This course discusses advanced visualization techniques such as raytracing, radiosity and animation, and presents a variety of presentation issues and options. Repeatable for a total of 3 credit hours.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 55610</td>
<td>RECONSTRUCTING ARCHITECTURE (3)</td>
<td>The representation of race, gender and nationalistic ideologies within architectural practice and form.</td>
</tr>
<tr>
<td>ARCH 55611</td>
<td>DESIGN THEORY AND CRITICISM: 20TH CENTURY (1-3)</td>
<td>Design theory and criticism of architecture in the 20th century. Repeatable for a total of 3 credit hours.</td>
</tr>
<tr>
<td>ARCH 55620</td>
<td>INTRODUCTION TO PRESERVATION (1-3)</td>
<td>An overview of preservation including building analysis conservation, adaptive reuse, economic benefits of preservation planning as a revitalizing strategy. Prerequisite: Admission to the preservation program or permission of the instructor.</td>
</tr>
<tr>
<td>ARCH 55621</td>
<td>CURRENT ISSUES IN HISTORIC PRESERVATION (1-3)</td>
<td>Course in which practicing professionals, including architects, planners, developers and government officials, present preservation-related work. Repeatable for a total of 3 credit hours. Prerequisite: Permission.</td>
</tr>
<tr>
<td>ARCH 55630</td>
<td>INTRODUCTION TO LANDSCAPE ARCHITECTURE (1-3)</td>
<td>Introduction to landscape design with emphasis upon the relationship between landscape and buildings. Repeatable for a maximum 3 credit hours.</td>
</tr>
<tr>
<td>ARCH 55631</td>
<td>SITE ANALYSIS AND DESIGN (1-3)</td>
<td>Analysis of environmental factors as a basis for site selection and site planning. Repeatable for a total of 3 credit hours.</td>
</tr>
<tr>
<td>ARCH 55640</td>
<td>DEVELOPING ENVIRONMENTS FOR OLDER ADULTS (1-3)</td>
<td>Research of existing built environments and an investigation of the planning design process for the elderly. Repeatable for a total of 3 credit hours.</td>
</tr>
<tr>
<td>ARCH 55701</td>
<td>URBAN DESIGN STUDIO I (3-6)</td>
<td>Introduction to urban design and its relationship to other design disciplines through analysis of neighborhoods and definition of comprehensive area improvement programs. Repeatable for a total of 6 credit hours. Prerequisite: Permission.</td>
</tr>
<tr>
<td>ARCH 55702</td>
<td>URBAN DESIGN STUDIO II (3-6)</td>
<td>Urban design exploration of the formal relationships between buildings, open spaces and streets in the development of high density, mixed-use projects. Repeatable for a total of 6 credit hours. Prerequisite: Permission.</td>
</tr>
<tr>
<td>ARCH 55705</td>
<td>FORCES THAT SHAPE CITIES (1-3)</td>
<td>This course examines the forces that have shaped urban form through history, how they impact our cities today, and the challenges they will pose for the future. Repeatable for a total of 3 credit hours.</td>
</tr>
<tr>
<td>ARCH 55706</td>
<td>SOCIO-POLITICAL REPRESENTATION IN URBAN DESIGN (1-3)</td>
<td>This course explores representation of socio-political ideas/ideology through architectural and urban design. Repeatable for a total of 3 credit hours. Prerequisite: Permission.</td>
</tr>
<tr>
<td>ARCH 55707</td>
<td>REPRESENTATION IN DESIGN (1-3)</td>
<td>Course on the nature of communication in design and the representational tools the designer uses to give form to abstract ideas and converse with clients and colleagues. Repeatable for a total of 3 credit hours.</td>
</tr>
<tr>
<td>ARCH 55710</td>
<td>DESIGN METHODOLOGY AND METHODS (1-3)</td>
<td>Course on procedural theory in urban design, the nature of the design process and how its manipulation affects the quality and character of design products. Repeatable for a total of 3 credit hours.</td>
</tr>
<tr>
<td>ARCH 55711</td>
<td>CASE STUDIES IN URBAN DESIGN (1-3)</td>
<td>An in-depth evaluation of important examples of completed urban design projects presented by key project participants. Repeatable for a total of 3 credit hours.</td>
</tr>
<tr>
<td>ARCH 55793</td>
<td>WORKSHOP IN URBAN DESIGN AND PLANNING (1-3)</td>
<td>This course provides an introduction to the scope of planning and design in the making of quality urban neighborhoods with particular emphasis on the role of urban design, architecture and landscape design. Repeatable for a total of 3 credit hours. S/U grading.</td>
</tr>
<tr>
<td>ARCH 55813</td>
<td>PROFESSIONAL PRACTICE (3)</td>
<td>Study of the practice of architecture, including professional office organizations, marketing of services, law, contracts, project management and construction contract administration. Prerequisite: Permission.</td>
</tr>
<tr>
<td>ARCH 55913</td>
<td>LAND USE CONTROL LAW (3)</td>
<td>Seminar discussing land use control policies, systems, programs and laws including private controls, constitutional considerations and environmental issues. Prerequisite: Permission.</td>
</tr>
</tbody>
</table>
ARCH 56991
SEMINAR: VARIABLE TOPICS (1-3)
Variable topic seminar. Repeatable for a maximum 3 credit hours. Prerequisite: Permission.

ARCH 56992
FIELD STUDY (1-3)
Field experience. Repeatable for a maximum 3 credit hours. Prerequisite: Permission.

ARCH 56993
WORKSHOP: VARIABLE TOPIC (1-3)
Field experience. Repeat registration permitted. S/U grading. Prerequisite: Permission.

ARCH 56995
SPECIAL TOPICS (1-3)
Special topics in architecture. Repeat registration permitted. Prerequisite: Permission.

ARCH 60101
GRADUATE DESIGN STUDIO I (3-6)
Architectural studies related to buildings. Emphasis on spatial, aesthetic, environmental and functional factors in design. Repeatable for a total of 6 credit hours. Special fee: $15 per semester.

ARCH 60102
GRADUATE DESIGN STUDIO II (3-6)
Independent design project, completed under the direction of an individual advisor selected from the graduate faculty. Repeatable for a total of 6 credit hours. Prerequisite: ARCH 60101. Special fee: $15 per semester.

ARCH 60103
GRADUATE DESIGN STUDIO III (6-9)
The studio is aimed at further investigating building design issues both at a greater depth of complexity and by focusing on particular design aspects or areas of concentration. IP permissible. Prerequisite: ARCH 60101.

ARCH 60201
HISTORY AND THEORY OF PRESERVATION (3-4)
A study of the history and theory of preservation as practiced in the United States compared with international standards and practices.

ARCH 60202
BUILDING DIAGNOSTIC APPLICATIONS (3-4)
Nondestructive evaluation of damage and its causes. The diagnostic tools will permit to verify the hypothesis of the damage, supporting qualitative and quantitative data. Analytical criteria illustrated through case studies.

ARCH 60203
HISTORIC BUILDING MATERIALS CONSERVATION (3-4)
A study of historic building materials with an emphasis on causes of degradation, strategies for conservation and standards for restoration.

ARCH 60204
EXPLORING HISTORIC STRUCTURES (1-3)

ARCH 60205
PRESERVATION LEGISLATION AND POLICIES (1-3)

ARCH 60301
THEORIES OF ARCHITECTURE (1-3)
In-depth analysis and discussion of contemporary architectural theories. Critical evaluation of major authors and architectural projects. Repeatable for a total of 3 credit hours.

ARCH 60701
URBAN DESIGN STUDIO I (3-6)
Introduction to urban design and its relationship to other design disciplines through analysis of neighborhood and definition of comprehensive area-improvement programs. Repeatable for a total of 6 credit hours.

ARCH 60702
URBAN DESIGN STUDIO II (3-6)
Urban design exploration of the formal relationships between buildings, open spaces and streets in the development of high density, mixed-use projects. Repeatable for a total of 6 credit hours.

ARCH 60703
URBAN DESIGN STUDIO III (3-6)
Design of a comprehensive redevelopment strategy and implementation strategies for an urban area of diverse existing character. Repeatable for a total of 6 credit hours.

ARCH 60704
URBAN DESIGN STUDIO IV (6-9)
Independent design project, completed under the direction of an individual advisor selected from the graduate faculty. IP permissible. Prerequisite: ARCH 60703 and 60705.

ARCH 60705
CAPSTONE PROJECT PREPARATION (1-3)
Development of a rationale and structure for the independent design project to be completed in the final semester of the program. Repeatable for a total 3 credit hours. IP permissible.
**Architecture and Environmental Design**

**ARCH 60922**

*INTRODUCTION TO ARCHITECTURAL RESEARCH METHODS (2)*

Introduction to historical, bibliographical, survey, experimental and statistical methods as they are applied to architectural problems. Prerequisite: Permission.

**ARCH 65001**

*PROFESSIONAL PRACTICE: REAL ESTATE AND DEVELOPMENT (2-4)*

Introduction to the economic, social, ethical and legal impact on development projects in both public and private sectors. Computer applications and case-study analysis are required. Prerequisite: ARCH 65001.

**ARCH 65002**

*PROFESSIONAL PRACTICE: CONTRACT AND PLANNING LAW (3)*

The course surveys laws relating to the practice of architecture and dispute resolution with emphasis on contract laws contrasted with laws of negligence and the standard of care in the profession. The planning law component surveys land use control mechanisms as seen through zoning, variances and practical applications.

**ARCH 65003**

*PROFESSIONAL PRACTICE: LEADERSHIP AND ETHICS (2-3)*

The course discusses issues of professional leadership on several scales, including the architectural and the urban, with an emphasis on problem identification and problem solving within an ethical framework.

**ARCH 65004**

*PROFESSIONAL PRACTICE: OFFICE AND FINANCIAL MANAGEMENT (3)*

The course examines various architectural office structures and management approaches, laws pertaining to professional registration and practice, the use of consulting engineers, and the financial management of an architectural office in the context of the profession as business.

**ARCH 65101**

*COMMUNITY DEVELOPMENT PROCESS (1-3)*

Advanced course on comprehensive community development. Case-study analysis, qualitative research and work with community initiatives are required. Prerequisite: Permission.

**ARCH 65102**

*URBAN SYSTEMS (1-3)*

Introduction to urban systems in its socio-economic, environmental and engineering aspects: residential fabric, commercial sector, open spaces network, transportation systems, infrastructures.

**ARCH 65632**

*URBAN ECOLOGY (1-3)*

Study of urban habitats and ecosystems. Relationships between natural systems and community design, planning, development and redevelopment.

**ARCH 65703**

*ANALYSIS OF URBAN FORM (1-3)*

Seminar on the relationship between design ideologies/theories and the realities of existing spatial relationships. Prerequisite: Permission.

**ARCH 65704**

*THEORIES OF URBANISM (1-3)*

In-depth analysis and discussion of ideologies and theories on urbanism from Modernism until present time. Critical evaluation of major authors and urban projects. Repeatable for a total of 3 credit hours.

**ARCH 66100**

*CAPSTONE PREPARATION (1-3)*

Capstone project preparation. Repeatable for a total of 3 credit hours. IP permissible. Prerequisite: Permission.

**ARCH 66199**

*THESIS I (2-6)*

Thesis students must register for a total of 6 hours. S/U grading; IP permissible.

**ARCH 66299**

*THESIS II (2)*

Following completion of 6 credit hours of Thesis I, all graduate students must continuously register for Thesis II for all subsequent academic terms (including summer) until all degree requirements are met. S/U grading; IP permissible. Prerequisite: ARCH 66199 — 6 credit hours.

**ARCH 66892**

*PRACTICUM (1-3)*

Variable topic practicum. Repeat registration permitted. Prerequisite: Permission.

**ARCH 66991**

*SEMINARY: VARIABLE TOPIC (1-4)*

Seminar on a variable topic. Repeat registration permitted.

**ARCH 66992**

*FIELD STUDY (1-3)*

Field study in architecture. Repeat registration permitted. IP permissible.

**ARCH 66993**

*WORKSHOP: VARIABLE TOPIC (1-3)*

ARCH 66995
SPECIAL TOPICS (1-4)
Special topics in architecture. Repeat registration permitted.

ARCH 66996
INDIVIDUAL INVESTIGATION (1-3)
Individual investigation in architecture. Repeat registration permitted. IP permissible. Prerequisite: Faculty written approval is required prior to registration.

ARCH 66998
RESEARCH (2-6)
Research in architecture. Repeat registration permitted. Prerequisite: Faculty written approval is required prior to registration.

ID 51093
VARIABLE TITLE WORKSHOP IN INTERIOR DESIGN (1-4)
Workshops dealing with variable topics related to the interior design profession. Learning experiences provided in a broad spectrum of specialties. S/U grading. Prerequisite: Admission to Interior Design or permission.

ID 51095
SPECIAL TOPICS IN INTERIOR DESIGN (1-4)
Discussion of a major topic or issue within the profession of interior design. Repeat registration permitted. Prerequisite: Admission to Interior Design or permission.

ID 51096
INDIVIDUAL INVESTIGATION IN INTERIOR DESIGN (1-3)
Independent study of Interior Design and related topics under the guidance of a faculty member. IP permissible. Prerequisite: Admission to Interior Design or permission.

ID 54512
HISTORIC FURNISHING TEXTILES (2)
A course designed to acclimate the student to historic textiles created primarily for use in interior architecture. Focus is on aesthetics, design and construction. A comprehensive adaptive reuse or restoration project is required. Prerequisite: ID 44525 and 44534.

ID 54524
ANGLO-AMERICAN INTERIORS (3)
An in-depth study of the Anglo-American interior and domestic furnishings with concentration on the preservation and contemporary usage of both interior architectural spaces and domestic objects. Prerequisite: ID 44512.

ID 54534
HISTORY OF INTERIORS TO 1600 (4)
A chronological study of housing and furnishings from civilization to the 15th century. Prerequisite: ID 34504, ART 22006 and 22007 or ARCH 20001 and 20002 and permission.

ID 54535
HISTORY OF INTERIORS 1600 TO PRESENT (4)
A chronological study of housing and furnishings from the Renaissance to the Victorian period, 16th to 19th centuries and 20th century. Prerequisite: ID 54534.
Master's Programs

Master's degree programs are available in 20 disciplines and interdisciplinary areas with 46 different majors and include the degrees of Master of Arts, Master of Fine Arts, Master of Liberal Studies, Master of Public Administration and Master of Science:

- Anthropology (M.A.)
- Biological Sciences (M.A., M.S.)
- Biomedical Sciences (M.S.)
- Chemical Physics (M.S.)
- Chemistry (M.A., M.S.)
- Computer Science (M.A., M.S.)
- Creative Writing (M.F.A.)
- English (M.A.)
- Geography (M.A.)
- Geology (M.S.)
- History (M.A.)
- Justice Studies (M.A.)
- Liberal Studies (L.S.M.)
- Mathematics (M.A., M.S.)
- Modern and Classical Language Studies (M.A.)
- Philosophy (M.A.)
- Physics (M.A., M.S.)
- Political Science (M.A.)
- Psychology (M.A.)
- Public Administration (M.P.A.)
- Sociology (M.A.)

Doctor of Philosophy

The Doctor of Philosophy (Ph.D.) degree is offered in 14 disciplines with 30 different majors:

- Biological Sciences
- Biomedical Sciences
- Chemical Physics
- Chemistry
- Computer Science
- English
- Geography
- Geology
- History
- Mathematics
- Physics
- Political Science
- Psychology
- Sociology

Information regarding individual graduate programs in the College of Arts and Sciences is provided on the following pages. Persons seeking information on graduate nondegree status or graduate certificate programs should consult the Division of Research and Graduate Studies, Office of Graduate Program Services, 330-672-2661. For more information, visit the College of Arts and Sciences Web site at http://as.kent.edu.
ANTHROPOLOGY

Richard S. Meindl, Chair
226 Lowry Hall
330-672-7998
rmeindl@kent.edu

Mark F. Seeman, Coordinator of Graduate Studies
215 Lowry Hall
330-672-2705
mseeman@kent.edu

Anthropology is a discipline that has traditionally emphasized cultural relativity and its extensive knowledge base of diverse human behavior. Defined as the systematic study of cultural diversity, the field of sociocultural anthropology trains master’s students to make objective observations of human societies in a variety of ecological and economic settings. It addresses the study of kinship, linguistics, religious and symbolic meaning and theories of culture change.

Archaeology is a subdiscipline of anthropology that focuses on how past societies survived or faltered depending on their ability to adapt to changing social and environmental circumstances. These anthropologists have the double mandate of investigating the archaeological record as social scientists as well as conserving it for future generations. Archaeologists are field workers and theorists, and their work ranges from specific problems pertaining to prehistoric settings, to working with local communities and amateur regional archaeologists, to providing practical training for master’s candidates seeking employment as professionals.

The subfield of biological anthropology is general human biology, with an emphasis on human evolution and variation. The analysis of primate behavior, human genetics and adaptability, paleontology, and human and primate anatomy can greatly improve master’s students’ understanding of themselves and their places in nature. A doctor of philosophy program in biological anthropology is available to graduates of the Master of Arts program and is administered by the School of Biomedical Sciences.

Visit the departmental Web site at http://www.kent.edu/anthropology for more information.

Master of Arts

Candidates for this degree may specialize in any of the three subfields of anthropology described above. The degree program in anthropology conforms to the professional standards recognized by the American Anthropological Association.

ADMISSION

Within the framework of institutional regulations, students with a recognized undergraduate degree, not necessarily in anthropology, may be admitted to the program.

A minimum undergraduate grade point average of 3.0 on a 4.0 scale is normally required. In exceptional cases, a student with a lower grade point average may be admitted on a conditional basis. All applicants must submit scores from the Graduate Record Examination and recommendations from three former professors. A Statement of Intent listing a student’s background and goals is required. Depending upon their backgrounds, students without prior anthropological training may be required to take designated undergraduate courses. These courses will not count for graduate credit. Similarly, most applicants for graduate study are expected to have a basic familiarity with statistics. Lacking such background, the student may be required to take introductory statistics on a noncredit basis.

Each student upon admission to the graduate program will be assigned to a faculty advisor on the basis of the specialty that the student has indicated. Aside from the required courses, the student must work out the remainder of his/her schedule with the advisor. Only applicants for full-time enrollment will be considered. Typically, applications are accepted for the fall semester only.

PROGRAM REQUIREMENTS

Students must complete a course of study comprising a minimum of 30 semester hours of graduate credit and 6 hours of thesis work.

The program requires of all graduate students a core of basic graduate courses in the major subfields:
Anthropology

Core Courses                      Hours
ANTH 68230 ................................................. 3  
ANTH 68430 ................................................. 3  
ANTH 68630 ................................................. 3  
ANTH 68199 ................................................. 6

This series is presented to ensure that graduate students demonstrate scholarly familiarity with the various subfields, at least sufficient for them to read intelligently in areas other than their own specialty.

Each student is also urged to elect at least one course in either linguistics or statistics. Students should choose this option in consultation with their advisors.

A minimum grade of "B" must be attained in each of the required courses: ANTH 68230, 68430 and 68630. Formal final examinations will be administered in each course. Students who score less than a "B" in these required courses will be required to pass an appropriate additional examination. This examination will be graded "S" or "U." Students who receive a "U" will automatically be dropped from the program. Additionally, students who score less than a "C" in any of the required courses cannot subsequently qualify for an M.A. degree in anthropology.

Students will be permitted to present up to 6 semester hours of credit from outside of anthropology. The 6 hours, however, are expected to relate to the course of study being pursued (all cases will be considered on an individual basis, and outside courses must be selected in consultation with the advisor and the coordinator of graduate studies). Students wishing to take statistics or linguistics courses from outside of anthropology may be permitted to do so without those hours counting against their allotted six, in the event that the courses are not available within the department when they are needed.

THESIS
By the end of the first semester of graduate work, students should select two members of the graduate anthropology faculty in addition to their principal advisor to constitute a thesis committee. This committee must approve the thesis before it is submitted to the College of Arts and Sciences. Students should arrange for the appointment of this committee with the graduate coordinator for anthropology.

A completed written thesis must be unanimously approved as a work of professional caliber as to content and form by a thesis committee of three graduate faculty. This thesis will be defended orally by the student. The defense is not to be considered a mere formality. The committee may range beyond the actual content of the thesis to questions about concepts, methods, theories upon which the thesis is based, and about the content of relevant studies included in the bibliography of the thesis.

Nonthesis Option
In cases in which the faculty believe that a student’s career would be better served by additional coursework rather than a thesis, 6 semester hours of additional coursework may be substituted for the thesis. The additional courses should compose an intensive investigation within the student’s specialty. Permission for using the nonthesis option must be arranged through the graduate coordinator. In the very rare cases where a student is granted permission to use the nonthesis option, special written comprehensive examinations will be required.

Courses (ANTH)

ANTH 58093
VARIABLE TITLE WORKSHOP IN ANTHROPOLOGY (1-6)
Classroom discussions and field study activity focused on professional and disciplinary concerns. Specific content varies with workshop group. S/U grading.

ANTH 58095
SPECIAL TOPICS IN ANTHROPOLOGY (3)
Offered irregularly when unusual resources and/or opportunities permit. Prerequisite: 6 graduate hours toward M.A. in anthropology.

ANTH 58210
CULTURE AND COMMUNICATION (3)
Study of the relationship between language and culture. Covers the basic principles of formal linguistics and their use in anthropology; case studies from the ethnography of speech. Prerequisite: Permission.

ANTH 58212
KINSHIP AND SOCIAL ORGANIZATION (3)
This course employs cross-cultural approaches to the understanding of marriage, family organization, descent and kinship system.

ANTH 58214
POLITICS OF CULTURE (3)
This course will address the way in which culture has been politicized. It will look at issues such as cultural relativism and objectivity in anthropological studies with reference to specific peoples and geographic areas.

ANTH 58220
CULTURAL ECOLOGY (3)
Analysis of relationships between sociocultural systems and physical/biological environment.

ANTH 58225
ARCHAEOLOGY OF DEATH (3)
From excavations of prehistoric burial mounds to studies of colonial gravestones, the archaeology of death has always occupied a prominent place in anthropological research. The course explores approaches to diverse meanings of life and death.
Anthropology

ANTH 58230
SOCIOCULTURAL CHANGE (3)
Analysis of institutional changes where peoples of different cultures are in sustained contact.

ANTH 58240
THE SYMBOLIC IMPERATIVE (3)
Cultural meanings from the perspective of symbols: objects, persons, relations and acts through which people communicate with each other and perceive order in their cultures. Prerequisite: Permission.

ANTH 58250
CULTURE AND CURING (3)
Examination of the relationship between cultural beliefs about the nature of reality and the essence of humanity, and causation and alleviation of disease. Prerequisite: Permission.

ANTH 58260
CULTURE CONFLICT (3)
Analyzes structured conflict situations between widely different cultures, both simple and complex, including intertribal conflict, colonial conflict, and problems arising from contact between dominant and subdominant social systems.

ANTH 58270
NATIVE PEOPLES OF NORTH AMERICA (3)
Comparative analysis of North American Indian peoples and cultures with special reference to linguistic groupings, cultural areas and contemporary issues.

ANTH 58291
SEMINAR IN REVOLUTION AND CULTURE CHANGE (3)
The seminar deals with the interrelationship between culture and revolution since antiquity. The main focus is on dramatic and abrupt culture change.

ANTH 58391
SEMINARY IN HISTORY OF ANTHROPOLOGY 1750-1950 (3)
Seminar focusing on the development of anthropology within the intellectual and historical context from the height of the Enlightenment to the close of World War II.

ANTH 58410
STONE AGE ARCHAEOLOGY (3)
Survey of Old World cultural history using archaeological data. Stresses the period from 3 million years ago to 10,000 years ago.

ANTH 58420
ARCHAEOLOGY OF NORTH AMERICA (3)
Survey of major North American and Mexican archaeological sequences with emphasis on interregional relationships.

ANTH 58425
ANCIENT MESOAMERICA (3)
Comparative analysis of Mesoamerican societies from the arrival of the first Americans over 10,000 years ago to European colonization in the 16th century A.D., including major pre-Columbian civilizations.

ANTH 58440
ARCHAEOLOGY OF ANCIENT OHIO (3)
Cultural evolution and human-environmental relationships in the ancient Ohio region documenting an 11,000-year period from initial occupation to the beginning of European written history.

ANTH 58450
STATES AND EMPIRES (3)
This course presents a comparative analysis of both Old and New World case histories to explore definitions, causal explanations and organizational parameters associated with prehistoric state and empire-level societies.

ANTH 58692
FIELD WORK IN BIOLOGICAL ANTHROPOLOGY (3)
Can be applied to any bioanth field of study and off-campus activity, ranging from museum work to U.S. and international research projects.

ANTH 58810
HUMAN PALEONTOLOGY (3)
Study of primate fossils of the Miocene and Pliocene to include the origins of humans and their earliest ancestors.

ANTH 58820
HUMAN MUSCULOSKELETAL SYSTEM (3)
A largely hands-on course introducing the study of human anatomy for students interested in biological anthropology and archaeology. Topics include skeletal and functional anatomy, biomechanics, and estimation of age and sex from isolated bones.

ANTH 58830
HUMAN BEHAVIORAL ECOLOGY AND EVOLUTION (3)
How “unique” is human behavior? Using an evolutionary perspective, we will explore the evolution of human mating systems and parental investment.

ANTH 58835
PRIMATE ECOLOGY AND CONSERVATION (3)
Study of the geographic distribution and evolutionary ecology of prosimians, monkeys and apes, and human and climatic effects on their long-term survival.

ANTH 58840
NATURAL SELECTION IN PERSPECTIVE (3)
The course provides an in-depth introduction into the theory of natural selection by reading both Darwin’s original work and recent interpretations.
ANTH 68091
RESEARCH SEMINAR IN ANTHROPOLOGICAL THEORY (3)
An opportunity for advanced students to follow up personal theoretical interests based upon a previously established foundation in theory.

ANTH 68093
VARIABLE TITLE WORKSHOP IN ANTHROPOLOGY (1-6)
Classroom presentations and field study focused on professional and disciplinary concerns. Specific content varies with workshop group. S/U grading. Prerequisite: Permission.

ANTH 68095
SPECIAL TOPICS IN ANTHROPOLOGY (3)
Offered irregularly when unusual resources and/or opportunities permit. Prerequisite: 6 graduate hours toward M.A. in anthropology.

ANTH 68096
INDIVIDUAL INVESTIGATION (1-3)
Readings and/or research supervised by member of graduate faculty. IP permissible. Prerequisite: Permission. Petition form available in the anthropology department office.

ANTH 68098
RESEARCH (1-15)
Research or individual investigation. Repeat registration permitted. IP permissible. Prerequisite: Permission. Petition form available in the anthropology department office.

ANTH 68199
THESIS I (2-6)
Thesis student must register for total of 6 hours, 2 to 6 hours in a single semester, or distributed over several semesters if desired. S/U grading; IP permissible. Prerequisite: Permission.

ANTH 68230
PROBLEMS IN CULTURAL ANTHROPOLOGY (3)
Basic graduate course in cultural anthropology required of all M.A. candidates. Course deals with major topics within this subdiscipline of anthropology. Prerequisite: Permission and graduate standing.

ANTH 68240
ETHNIC GROUP ANALYSIS: EAST ASIA (3)
Critical analysis of key aspects in traditional East Asian socio-cultural systems that can be related to modern development. Prerequisite: Permission.

ANTH 68241
ETHNIC GROUP ANALYSIS: PACIFIC ISLANDS (3)
Peoples and characteristics of culture areas of the Pacific Islands, including Polynesia, Melanesia and Micronesia, with analysis of several representative cultures from these areas. Prerequisite: Permission.

ANTH 68242
ETHNIC GROUP ANALYSIS: NORTH AMERICA (3)
Cross-cultural analysis of native cultures and societies of North America. Prerequisite: Permission.

ANTH 68299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: ANTH 68199.

ANTH 68430
PROBLEMS IN WORLD PREHISTORY (3)
Basic graduate course in prehistoric archaeology required of all M.A. candidates.

ANTH 68612
PRIMATE ANATOMY (5)
Lecture and laboratory dissection of primate cadavera from major taxonomic groups of the order primates. Emphasis on musculoskeletal and nervous systems. Prerequisite: Permission.

ANTH 68613
MORPHOLOGICAL ANALYSIS (3)
Application of current taxonomic and genetic theory to the analysis of mammalian structure, with special emphasis on the primate fossil record. Prerequisite: Permission.

ANTH 68621
PALEODEMOGRAPHY AND OSTEOLOGY (3)
An examination of the methods and theory of the use of prehistoric human remains in the reconstruction of extinct populations. Prerequisite: Permission.

ANTH 68622
HUMAN POPULATION STRUCTURE AND BIOLOGICAL DEMOGRAPHY (3)
An intensive investigation of the principles of biological demography; includes emphasis on theories of selection and mating structure. Prerequisite: Permission.

ANTH 68623
HUMAN VARIATION (3)
A detailed anthropological examination of the causes and extent of modern human variability. Prerequisite: Permission.

ANTH 68624
PRIMATE ETHOLOGY (3)
Detailed examination of the principles of primate ethology, including evolutionary trends in ecology, dominance, locomotion and social behavior. Prerequisite: Permission.

ANTH 68625
DENTAL ANTHROPOLOGY (3)
Study of the human and primate dentition as it relates to primate and human evolution. Includes general orofacial biology. Prerequisite: Permission.
ANTH 68626
PRIMATE PALEONTOLOGY (3)
Survey of primate evolution and taxonomy up to the emergence of modern hominids. Prerequisite: Permission.

ANTH 68630
PRINCIPLES OF BIOLOGICAL ANTHROPOLOGY (3)
A graduate-level introduction to the field of biological anthropology. Topics include genetics, human variation, fossil and modern primates, early man. Prerequisite: Graduate standing.

ANTH 68637
BIOANTHROPOLOGICAL DATA ANALYSIS I (5)
Examination of methods of univariate and bivariate experimental design. This survey emphasizes tests of hypothesis and estimation techniques with both classical and nonparametric procedures. (Same course as BMS 78673.)

ANTH 68638
BIOANTHROPOLOGICAL DATA ANALYSIS II (3)
This survey of multivariate analysis in anthropology includes one-sample data exploration, multiple-sample problems and regression methods. It also includes computer application. Prerequisite: ANTH 68637. (Same course as BMS 78638.)
BIOLOGICAL SCIENCES

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The Department of Biological Sciences offers graduate courses and research leading to the Master of Arts, Master of Science and Doctor of Philosophy degrees. The M.A. degree program is discipline-oriented for science teachers. Areas of study include: aquatic ecology, microbial ecology, vertebrate ecology, entomology, systems ecology, vertebrate morphology, molecular biology, vertebrate physiology, environmental physiology, immunology, mammalian physiology, physiological zoology, reproductive physiology, endocrinology, plant morphology and plant taxonomy. The Ph.D. dissertation research may be conducted in ecology, physiology or cell biology. The M.S. degree is offered in the fields of ecology, physiology, cell biology and botany.

For more information, visit the departmental Web site at http://www.kent.edu/biology/GraduatePrograms/index.cfm.

Master's Degree Programs

The M.A. nonthesis program is open to qualified persons, on a part-time or full-time basis, who have received a teaching certificate. The M.S. program is normally open to qualified students who can enroll full time. Students meeting all other requirements may be permitted to enroll on a part-time basis as long as registration is limited to formal courses and seminars. Registration for “Research” and “Thesis” is open only to full-time degree candidates. Completion of the M.S. program requires a minimum of two semesters of full-time residency. There is no curricular language requirement for the master’s degree in the department. A thesis and final oral examination are required of candidates for the M.S. degree. A total of 32 hours is required for the completion of the M.A. and M.S. degrees. Other requirements for the two master’s degrees are listed under the degree requirements in this catalog. Additional information regarding specific requirements is available upon request from the coordinator of graduate studies, Department of Biological Sciences.

Doctoral Program

The Ph.D. program is normally open only to qualified individuals who can enroll as full-time students. Students meeting all other requirements for entry into the doctoral program may be permitted to enroll on a part-time basis as long as registration is limited to formal courses and seminars. Registration for “Research” and “Dissertation” is permitted only of full-time doctoral candidates. The department does not have a curricular language requirement for the Ph.D. degree. Completion of the doctoral program requires a minimum of one year of full-time resident study. Prerequisites for registration in 70000 and 80000 courses include the master’s degree or equivalent.

Additional information regarding specific requirements is available, upon request, from the coordinator of graduate studies, Department of Biological Sciences.

GENERAL REQUIREMENTS

The general regulations of the university are followed along with the additional departmental requirements listed below. The general test of the Graduate Record Examination is required for admission into the M.S. and Ph.D. programs.

Admission of a student to the master’s program normally requires a grade point average of 3.0 (A=4) based on all coursework, both graduate and undergraduate, and acceptance of the student by a faculty advisor. Applicants with grade point averages less than 3.0 may be considered for a conditional admission if strong letters of recommendation and high Graduate Record Examination scores justify that admission.
Admission of a student to the doctoral program normally requires a grade point average of 3.25 in any prior graduate coursework and a 3.0 undergraduate grade point average. In addition, scores on the general test of the Graduate Record Examination should be in the 50th percentile or above for each section.

### Ecology/Evolutionary Biology

Students interested in pursuing careers in ecology/evolutionary biology may enroll in programs leading to the M.S. or Ph.D. with specialization in fields such as animal behavior, entomology, limnology, microbial ecology, ornithology, systems ecology, systematic and evolutionary biology, environmental physiology, vertebrate ecology, and population and community ecology. The two major areas emphasized in the department are aquatic ecology and systematics/evolutionary biology. Although courses of study are tailored to students’ interests and needs, the programs of all students normally include training in population, community, ecosystems and evolutionary ecology and statistical theory. Because of the interdisciplinary nature of ecology, students are encouraged to take courses in geology, mathematics, chemistry and other disciplines.

The research programs deal with both basic and applied problems. Graduate students, working closely with a faculty advisor, are expected to develop competence in a research area of their choice. Both the planning and the execution of their academic and research program are done in close collaboration with faculty members in related disciplines who serve as a guidance committee.

The student must have a baccalaureate and a strong background in biology and related subjects such as chemistry and math. Deficiencies at the time of admission shall be rectified during the first year of graduate study. Before admission can be completed, a prospective student must be accepted by a faculty member in the program who will act as adviser.

### Botany

Graduate study leading to an M.S. degree is offered with research in plant systematics, taxonomy, evolutionary studies, molecular biology, ecology and genetics. The master’s program provides a broad background in botanical sciences and training in research. Graduate students in botany are encouraged to become familiar with cognate disciplines that will enhance their scholarship and research potential; these include biometry, biochemistry, geology, geography and relevant foreign languages.

### Cell Biology

The department offers programs that lead to the M.S. and Ph.D. degrees in biological sciences. Through an individualized program of study and research, the student is prepared for career opportunities in teaching and research in academic, governmental and industrial settings. A core series of courses prepares the student with a rigorous foundation in theory, experimental design and technical knowledge of contemporary investigations at the cellular level of organization. Areas of research include studies of membrane structure and function, transport processes, excitation-secretion coupling, immunology, and metabolism in algae, cyanobacteria and tissues of multicellular plants and animals.

Students, working closely in collaboration with their research advisor, are expected to develop competence in a subdiscipline of their choice. Both the planning and the execution of their program of study are done with faculty members in related disciplines who act as a guidance committee.

The student must have completed a baccalaureate degree in the natural sciences with a strong background in biology and related subjects such as chemistry and math. Deficiencies at the time of admission shall be rectified during the first year of graduate study. Before admission can be completed, a prospective student must be accepted by a faculty member in the program who will act as adviser.

### Physiology

The graduate program in physiology represents a collaboration between the Department of Biological Sciences and the School of Biomedical Sciences. The department offers programs that lead to the M.S. and Ph.D. degrees in biological sciences. Research emphases in the department are in reproductive biology, endocrinology and neurobiology. The programs are research-oriented and are designed to provide the student with a thorough grounding in physiological principles and techniques as well as opportunities for specialization according to the expertise of the faculty.

Students, working closely in collaboration with their research advisor, are expected to develop competence in an area of their choice. Both the planning and the execution of their
Biological Sciences

Courses (BSCI) Biology

**BSCI 50020**  
**BIOLOGY OF AGING (3)**  
Aging in cells, plants and animals, including humans; maintaining human health during aging; current theories of aging. Lecture 3 hours weekly. Prerequisite: BSCI 20020 and CHEM 10050 and 10052.

**BSCI 50096/70096**  
**BIOLOGICAL RESEARCH AT LEIDEN UNIVERSITY (6)**  
Five-week biological sciences research experience at Leiden University in the Netherlands during which the participant will work with members of the Leiden research faculty. Prerequisite: Permission.

**BSCI 50142/70142**  
**BIOENERGETICS (3)**  
Lecture and discussion of respiration and photosynthesis, their origin, development and control in living systems. Concepts are introduced from fundamental principles. Lecture 3 hours weekly. Prerequisite: BSCI 40430 or permission.

**BSCI 50143/70143**  
**EUKARYOTIC CELL BIOLOGY (3)**  
Current survey of the structure and function of eukaryotic cells, including recent advances in research technology. Lecture 3 hours weekly. Prerequisite: BSCI 40430 or permission.

**BSCI 50158/70158**  
**MOLECULAR BIOLOGY (3)**  
Molecular genetics, DNA and RNA structure, chromosomes, DNA replication, recombination, genetic transcription and translation, gene expression, current concepts and technologies. Prerequisite: BSCI 30156 or permission.

**BSCI 50159/70159**  
**MOLECULAR BIOLOGY LABORATORY (2)**  
Experience in research methods for studying cellular and molecular processes in plant and animal systems. Laboratory 6 hours weekly. Prerequisite: BSCI 20140; BSCI 40143 or 40158; CHEM 20481 or 30481; CHEM 30475; or permission. Special fee: $50 per semester (subject to change).

**BSCI 50160/70160**  
**MARINE BIOLOGY (3)**  
Natural history and ecology of marine organisms, with emphasis on life in coastal habitats. Lecture 3 hours weekly. Prerequisite: BSCI 20560 or permission.

**BSCI 50163/70163**  
**ORGANIC EVOLUTION (3)**  
Discussion of the history of evolutionary theory, the evidence of evolution, the evolutionary forces and the products of those forces. Lecture 2 hours weekly. Prerequisite: BSCI 30156 plus 4 hours of biology.

**BSCI 50164/70164**  
**MOLECULAR SYSTEMATICS AND PHYLOGENETICS (4)**  
Modern methods used in systematics, DNA sequencing, DNA fingerprinting, phylogenetic analysis and interpretation of character evolution. Lecture 3 hours, laboratory 3 hours weekly. Prerequisite: BSCI 40163 or equivalent.

**BSCI 50165/70165**  
**HISTORY OF BIOLOGY (2)**  
Historical development of biology from antiquity to the present. Lecture 2 hours weekly. Prerequisite: BSCI 10181, 10182 or equivalent.

**BSCI 50170/70170**  
**STREAM BIOLOGY (3)**  
Identification, biology and ecology of stream-inhabiting organisms. Lecture 2 hours, laboratory 3 hours weekly. Prerequisite: BSCI 10181 and 10182 or permission.

**BSCI 50174/70174**  
**IMMUNOLOGY (3)**  
Survey of the mammalian host responses to self and nonself with emphasis on the cellular and molecular mechanisms by which innate and acquired immunity result. Experimental design and data analyses are related to current methodologies used to study immunology. Lecture 3 hours weekly. Prerequisite: BSCI 30171 and CHEM 10060, 10061 and 10062.

**BSCI 50193/70193**  
**VARIABLE TITLE WORKSHOP IN BIOLOGICAL SCIENCES (1-6)**  
Topics to be offered will meet specific needs in the biological sciences. S/U grading. Prerequisite: Permission.

**BSCI 50195/70195**  
**SPECIAL TOPICS IN BIOLOGY (1-3)**  
IP permissible. Prerequisite: Permission of instructor.

**BSCI 50196/70196**  
**INDIVIDUAL INVESTIGATION (1-3)**  
IP permissible. Prerequisite: Permission of instructor.

**BSCI 60080**  
**EXPERIMENTAL METHODS IN BIOLOGY (2)**  
The development of hypotheses, principles of experimental design, and methods of gathering and evaluating data. Prerequisite: Permission.

**BSCI 60100/70100**  
**RADIATION SAFETY (1)**  
A rigorous basis for the detection and safe handling of unsealed radioisotopic material in research and the effects of radiation on human health is presented. Prerequisite: Permission.
BSCI 60101/70101
ANALYSIS OF BIOLOGICAL DATA I (2)
Principles of probabilistic analysis; techniques for single normal variables in one- and two-sample analyses. Lecture 2 hours weekly. Prerequisite: MATH 12001 or equivalent.

BSCI 60102/70102
ANALYSIS OF BIOLOGICAL DATA II (3)

BSCI 60144/70144
SELECTED READINGS IN EUKARYOTIC CELL BIOLOGY (1)
Directed readings in cell and molecular biology from the primary and review literature will be presented and discussed by the students. Corequisite: BSCI 5/70143.

BSCI 60191/70191
SEMINAR IN BIOLOGY (1)
Departmental seminar required of all graduate students. S/U grading; IP permissible.

BSCI 60194/70194
COLLEGE TEACHING IN BIOLOGY (1)
Training and experience in college teaching of biology. Maximum of 2 hours applicable toward degree. Repeat registration permitted. Required in all degree programs. S/U grading; IP permissible. Prerequisite: Permission of instructor.

BSCI 80150
BIOLOGICAL INSTRUMENTATION (2)
Biological instrumentation and techniques. By arrangement. IP permissible. Prerequisite: Permission of instructor.

Botany

BSCI 50269/70269
BIOLOGY OF THE ALGAE (4)
Morphology, ecology and systematics of freshwater and marine algae. Lecture 3 hours, laboratory 3 hours weekly. Prerequisite: BSCI 10181, 10182, plus 10 hours of biology. Special fee: $28 per semester.

BSCI 50272/70272
PLANT ANATOMY (4)
Development and structure of cells, tissues and tissue systems of seed plants. Both vegetative and reproductive structures of angiosperms will be emphasized. Lecture 2 hours, laboratory 6 hours weekly. Prerequisite: BSCI 10181, 10182 or equivalent.

BSCI 50275/70275
SYSTEMATIC BOTANY (4)
Biosystematics, angiosperm phylogeny, survey of some major families of dicotyledons. Lecture 3 hours, laboratory 3 hours weekly. Prerequisite: BSCI 10181, 10182 or equivalent.

BSCI 50276/70276
PLANT TAXONOMY (4)
Nomenclature, classification and floristics; survey of major families of monocotyledons and some major families of dicotyledons. Lecture 3 hours, laboratory 3 hours weekly. Prerequisite: BSCI 10181, 10182 or equivalent.

BSCI 50277/70277
MORPHOLOGY OF LOWER PLANTS (4)
Nonvascular plants, emphasizing structure, reproduction, evolution, fossil history, economic, ecological and medical importance. Lecture 3 hours, laboratory 3 hours weekly. Prerequisite: BSCI 10181, 10182 or equivalent.

BSCI 50280/70280
PALYNOLGY AND PALEOECOLOGY (4)
Structure and function of pollen and spores emphasizing use in geology (stratigraphy, paleoclimatic indications), botany (taxonomy), archaeology and medicine (aeroallergens). Lecture 3 hours, laboratory 3 hours weekly. Prerequisite: BSCI 10181, 10182 or permission.

BSCI 60265/70265
PLANT METABOLISM (3)
An advanced study of absorption, transpiration, translocation, mineral nutrition, photosynthesis, respiration, nitrogen metabolism and other biochemical processes in plant cells. Lecture 3 hours weekly. Prerequisite: BSCI 30267.

BSCI 60266/70266
PLANT GROWTH AND DEVELOPMENT (3)
An advanced study of the phytohormones, light, temperature, gravity, etc., and their effect on dormancy, germination, tropisms, cellular expansion, flowering and senescence. Lecture 3 hours weekly. Prerequisite: BSCI 30267.

BSCI 60291/70291
SEMINAR IN BOTANY (1)
Seminar on botanical topics. May be repeated for credit. Credits earned may be applied toward degree if department approves. S/U grading; IP permissible. Prerequisite: Permission of instructor.

BSCI 80240
ADVANCED TOPICS IN BOTANY (2)
Lectures and/or laboratories in advanced areas of botany. By arrangement. IP permissible. Prerequisite: Permission of instructor.

BSCI 80241
ADVANCED TOPICS IN BOTANY (3)
Lectures and/or laboratories in advanced areas of botany. By arrangement. IP permissible. Prerequisite: Permission of instructor.
BSCI 50363/70363  
MICROBIAL ECOLOGY (3)  
Microbial interactions with their biotic and abiotic environment; control of distribution and physiological activities; emphasis on bacteria in aquatic systems. Prerequisite: BSCI 30171, 30360 or equivalent or permission.

BSCI 50364/70364  
LIMNOLOGY (4)  
Field and laboratory study of the principles of aquatic ecology. Recitation 1 hour, lecture 2 hours, laboratory 3 hours weekly. Prerequisite: BSCI 30360 or equivalent. Special fee: $40 per semester.

BSCI 50367/70367  
LIMNOLOGICAL TECHNIQUES (2)  
Analysis and significance of ecologically important variables and constituents of surface waters. Lecture 1 hour, laboratory 4 weekly. Prerequisite: BSCI 5/70364 or permission.

BSCI 50368/70368  
WETLAND ECOLOGY AND MANAGEMENT (4)  
Lecture, laboratory and field study of the principles of wetland ecology including adaptations of the biota to environmental conditions, comparison among different wetland habitat types and habitat management. Lecture 3 hours, laboratory 3 hours weekly. Special fee $10 per credit hour (subject to change).

BSCI 50369/70369  
LAKE MANAGEMENT (3)  

BSCI 50372/70372  
POPULATIONS, COMMUNITIES AND ECOSYSTEMS (4)  
Integrated investigation of population, community and ecosystem ecology from historical and current perspectives. Community and ecosystem views of nutrient dynamics and biodiversity provide a framework for consideration of food web patterns, energy flow, and ecosystem stability and function. Prerequisite: BSCI 30360 or 40163 or equivalent courses.

BSCI 60365/80365  
EXPERIMENTAL LIMNOLOGY (3)  
Methods and selected literature in experimental aquatic ecology will be reviewed. An experiment will be designed and carried out. Lecture-recitation 2 hours, laboratory 3 hours weekly. Prerequisite: BSCI 5/70364 or permission.

BSCI 60367/80367  
DYNAMICS OF AQUATIC COMMUNITIES (3)  
Interpretation and simulation of the structure and dynamics of algal communities within lakes and streams. Discussion of the structure and dynamic interrelationships of the components of aquatic ecosystems. Lecture 2 hours, laboratory 3 hours weekly. Prerequisite: BSCI 4/5/70269 or permission.

BSCI 60370/70370  
ECOLOGICAL GENETICS (2)  
Dynamics of genes in diploid populations and consequent interactions with and effects on components of the ecosystem, with examples. Prerequisite: BSCI 30156, 30360, 40162 or equivalent.

BSCI 60371/70371  
EVOLUTIONARY ECOLOGY (2)  
An application of the theory of natural selection to the evolution of population and community phenomena. Prerequisite: BSCI 30360 or equivalent.

BSCI 60391/70391  
SEMINAR IN ECOLOGY (1)  
Seminar on topics in animal and plant ecology. May be repeated for credit. Credits earned may be applied to degree if department approves. S/U grading; IP permissible. Prerequisite: Permission of instructor.

BSCI 80310  
ADVANCED TOPICS IN ECOLOGY (2)  
Lectures and/or laboratories in advanced areas in ecology. IP permissible. By arrangement. Prerequisite: Permission of instructor.

BSCI 80311  
ADVANCED TOPICS IN ECOLOGY (3)  
Lectures and/or laboratories in advanced areas in ecology. IP permissible. By arrangement. Prerequisite: Permission of instructor.

BSCI 50432/70432  
ENDOCRINOLOGY (3)  
Principles of endocrine regulation of physiological and metabolic processes. Morphological and functional interrelationships between systems. Lecture 3 hours weekly. Prerequisite: 5 hours of advanced physiology.

BSCI 50433/70433  
MAMMALIAN PHYSIOLOGY I (3)  
The internal environment, metabolism and energy balance, temperature regulation, nervous system and special senses. Lecture 3 hours weekly. Prerequisite: BSCI 40430; 9 hours mathematics or permission; 20 hours chemistry or permission.
BSCI 50434/70434
MAMMALIAN PHYSIOLOGY II (3)
Physiology of cardiovascular, renal, respiratory and digestive systems. Lecture 3 hours weekly. Prerequisite: BSCI 40430; 9 hours mathematics or permission; 20 hours chemistry or permission.

BSCI 50435/70435
REPRODUCTIVE PHYSIOLOGY OF MAMMALS (3)
Current concepts of reproductive processes based on studies with laboratory and domestic animals and man. Lecture 3 hours weekly. Prerequisite: BSCI 40430 and 40432 or permission.

BSCI 50436/70436
REPRODUCTIVE PHYSIOLOGY LABORATORY (1)
Anatomy and histology of the reproductive systems; research methods for studying reproductive processes. Laboratory 3 hours weekly. Pre- or corequisite: BSCI 4/5/70435.

BSCI 50439/70439
ENVIRONMENTAL PHYSIOLOGY (4)
Effects of heat, cold, oxygen, carbon dioxide, pressure, radiant energy, salt and water variations, and other environmental factors on organisms. Lecture 4 hours weekly. Prerequisite: BSCI 10181, 10182; CHEM 10060, 10061 and 10062.

BSCI 50444/70444
MAMMALIAN PHYSIOLOGY LAB I (1)

BSCI 50445/70445
MAMMALIAN PHYSIOLOGY LAB II (1)
Laboratory experimentation emphasizing physiological principles covered in BSCI 5/70434. Corequisite: BSCI 5/70434. Special fee: $40 per semester.

BSCI 60431/70431
NEUROENDOCRINOLOGY (2)
Role of the central nervous system in the regulation of hormonal and vegetative functions; structure function relationships between brain and pituitary with modern views of neuroendocrine regulation. Methods for study of neuroendocrine relationships will be discussed. Prerequisite: BSCI 5/70432.

BSCI 60438/70438
COMPARATIVE PHYSIOLOGY (4)
Comparative physiology of regulatory mechanisms (biochemistry, nervous, hormonal, etc.); such areas as neurophysiology, sensory adaptations, biological rhythms, circulatory systems, movement and locomotion, buoyancy. Prerequisite: BSCI 10181, 10182; CHEM 10060, 60061, 60062, 60063 or equivalent.

BSCI 60440/70440
CELLULAR AND MOLECULAR ENDOCRINOLOGY (3)
Analysis of current hypotheses concerning the mechanisms by which hormones control cellular metabolism and gene expression. Prerequisite: BSCI 4/5/70432.

BSCI 60446
ADVANCED HUMAN PHYSIOLOGY (3)
Physiological mechanisms of human health and disease with emphasis on integrative physiology. Lecture 3 hours weekly. Prerequisite: Permission from department.

BSCI 60461/70461
NEUROCHEMISTRY (2)
Basic biochemistry of the mammalian nervous system, including myelin structure and metabolism, stimulus-secretion coupling, neurotransmitter and eicosanoid metabolism, energy utilization and the biochemistry of nervous disorders. Prerequisite: CHEM 5/70247 or permission.

BSCI 60491/70491
SEMINAR IN PHYSIOLOGY (1)
May be repeated for credit. Credits may be applied toward degree if department approves. S/U grading; IP permissible. Prerequisite: Permission of instructor.

BSCI 60495/70495
SPECIAL TOPICS IN PHYSIOLOGY (2 or 3)
Study of problems of current importance. Content dependent on student requirements and on developments in field. IP permissible. Prerequisite: Permission of instructor.

BSCI 80430
ADVANCED TOPICS IN PHYSIOLOGY (2)
Analysis and solution of problems in contemporary physiology. By arrangement. IP permissible. Prerequisite: Permission of instructor.

BSCI 80431
ADVANCED TOPICS IN PHYSIOLOGY (3)
Analysis and solution of problems in contemporary physiology. By arrangement. IP permissible. Prerequisite: Permission of instructor.

BSCI 50515/70515
ANIMAL BEHAVIOR (3)
Study of patterns of animal behavior and the ecological and physiological mechanisms that regulate their form and occurrence. Lecture 3 hours weekly. Prerequisite: Course in zoology of a major animal group and BSCI 40430.
BSCI 50517/70517
HISTOLOGY (3)
Study of the microscopic and submicroscopic structure of the mammalian body in relation to function. Lecture 2 hours, laboratory 3 hours weekly. Prerequisite: BSCI 10181, 10182, plus 4 hours of biology.

BSCI 50525/70525
WILDLIFE RESOURCES (3)
Ecological parameters are discussed relative to the preservation and management of wild animal populations. Aesthetic, economic and environmental values are discussed. Lecture 3 hours weekly. Prerequisite: BSCI 10181 and 10182, plus 4 hours or permission.

BSCI 50556/70556
VERTEBRATE ZOOLOGY (4)
Field approach to identification and natural history of all Ohio vertebrates except birds. Lecture 3 hours, laboratory and field 3 hours weekly. Prerequisite: BSCI 10181, 10182, plus 4 hours of biology.

BSCI 60580/70580
ADVANCED ENTOMOLOGY (3)
Advanced studies in taxonomy, ecology, biology, physiology, morphology and control of insects. Prerequisite: BSCI 30580.

Research, Thesis and Dissertation

BSCI 60198
RESEARCH (1-15)
Research or individual investigation for master’s-level graduate students. Credits earned may be applied toward degree requirements if department approves. Repeat registration permitted. S/U grading; IP permissible. Prerequisite: Permission.

BSCI 60199
THESIS I (2-6)
Thesis students must register for a minimum of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible. Prerequisite: Permission.

BSCI 60299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: BSCI 60199.

BSCI 80198
RESEARCH (1-15)
Research or individual investigation for doctoral students who have not yet passed candidacy examination. Repeat registration permitted. S/U grading; IP permissible.

BSCI 80199
DISSERTATION I (15)
Doctoral dissertation, for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible. Prerequisite: BSCI 80299.

DISSERTATION II (1 or 15)
Continuing registration of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: BSCI 80199. Admission to candidacy for doctoral degree.
The School of Biomedical Sciences at Kent State University is a multidisciplinary and interdepartmental organization that provides opportunities for graduate studies and research in a variety of natural sciences related to medicine. The programs currently available are biological anthropology, cellular and molecular biology, neurosciences, pharmacology and physiology (the last in cooperation with the Department of Biological Sciences).

Although the Ph.D. and the M.S. degrees are awarded by Kent State University, the School of Biomedical Sciences is consortium-based. It draws its faculty from several departments at Kent State University, the Northeastern Ohio Universities College of Medicine (NEOUCOM), The University of Akron, Youngstown State University, The Cleveland Clinic Foundation and OAK Clinic. Curricular programs have been developed by faculty committees responsible for each of the programs. Each draws heavily from current course offerings within a number of different departments. New courses and seminars are created as required to provide integration and correlation of the multidisciplinary offerings. It is also permissible for a graduate student to be enrolled simultaneously as a candidate for the M.D. at NEOUCOM if the student has been formally accepted by both Kent State University and the College of Medicine.

Inquiries concerning the specific options, curricula, requirements and faculty membership and research interests may be addressed to the director of the School of Biomedical Sciences.

For more information, visit the school Web site at http://dept.kent.edu/biomedical

ADMISSION

Admission to a particular program will be recommended by the faculty of that program committee based upon a minimum grade point average of 3.0 (undergraduate and graduate) and the attainment of a baccalaureate degree with preparation adequate to perform graduate work in the desired field. This commonly includes two years of chemistry, one year of mathematics, one year of physics and courses in anthropology, biology and psychology as appropriate to the field. Admission with deficiencies may be accorded, but these must be made up during the first two years of graduate study. Graduate Record Examination scores must also be submitted for evaluation, although there is no minimum score required for admission. Except where otherwise specified, the M.S. degree may be awarded upon satisfactory completion of (a) the core courses, seminars and concentration electives outlined below; (b) additional coursework, research hours and 6 hours of Thesis I; and (c) an acceptable thesis for a total of 32 hours. There is no nonthesis option.

Admission to doctoral work will require either completion of the master's degree or direct matriculation to the doctoral program following completion of no less than 20 hours of graduate coursework (including the core) and will be accorded upon the recommendation of the student's guidance committee and the director of the School of Biomedical Sciences.

The Ph.D. degree is emphasized in these programs and requires the completion of the core program, the M.S. or equivalent except where otherwise specified, 30 hours of Dissertation I, and the submission of an acceptable dissertation.

A guidance committee will be formed as soon as practicable after the student registers initially but in any case no later than the end of the second semester of full-time enrollment. This committee will consist of the advisor and two other graduate faculty members of the program committee. The guidance committee will be responsible for establishment of the program of study and for the administration of the candidacy examination.
**Prospectus and Notification of Dissertation Topic**

As soon after completion of the candidacy examination as possible, the dissertation committee will be established consisting of the guidance committee and an outside discipline member — a graduate faculty member from another department at Kent State University or another program committee of the School of Biomedical Sciences. The student will submit to this committee his/her prospectus for the dissertation. The format of the prospectus will parallel that utilized for NIH grant proposals (without biographical, budget and facilities information). The dissertation committee may elect to examine the candidate on the proposal, may accept it as submitted, or may reject it with specific reasons and recommendations for reformulation.

There is a common core of coursework in the School of Biomedical Sciences. It is required of all students in each of the program areas. The School of Biomedical Sciences core consists of the following:

1. BSCI 5/70143 Eukaryotic Cell Biology (3 cr.). Must currently enroll in: BSCI 6/70144 Readings in Eukaryotic Cell Biology (1 cr.)
2. General Biochemistry (one of the following):
   - CHEM 5/70247 Principles of Biochemistry (4 cr.)
   - BSCI 5/70142 Bioenergetics (3 cr.)
   - BMS 6/70267 and 6/70268 Molecular Pathology I and II (6 cr.)
3. Quantitative Methods and Statistics:
   - ANTH 69637/BMS 78637 Analysis of BioAnthropological Data I (5 cr.)
   - ANTH 69638/BMS 78638 Analysis of BioAnthropological Data II (3 cr.)
   - BMS 6/70195 ST: Bio Stats I and II
   - PSYC 6/70163 Statistical Inference in Psychology (3 cr.)
   - Equivalent course approved by director.
4. Seminar (Each program concentration has its own seminar course and enrollment requirements)
5. Professional Development
   - BSCI 6/70194 College Teaching in Biology (1 cr.)

**Biological Anthropology**

This doctoral program includes a strong emphasis on human gross anatomy, and its graduates will be competent to teach this important curriculum element in medical, paramedical and zoological contexts; a thorough education in basic mammalian biology is also provided. Areas of concentration in this field of human biology include human paleontology, dental anthropology, human and primate osteology, paleodemography and biodemography, primate anatomy and skeletal biomechanics.

Applicants for this program should hold the M.A. or M.S. degree in anthropology or biological sciences and should have included courses in statistics and computer science in their mathematics preparation. However, a student with an outstanding academic record may, upon completion of 20 hours of graduate work, receive a waiver of the master’s degree requirement and be admitted directly to doctoral work.

The program of study consists of a core of courses as follows:

- BSCI 5/70163 ......................................................... 3
- BMS 6/78610 ......................................................... 4
- BMS 6/78611 ......................................................... 3
- BMS 78612 ......................................................... 5
- BMS 78613 ......................................................... 3
- BMS 78630 ......................................................... 3
- BMS 78631 ......................................................... 5
- BMS 78637 ......................................................... 5
- BMS 78638 ......................................................... 3
- BMS 78691 ......................................................... 1

Courses equivalent to those in the core may be submitted with the approval of the program committee. Cognate and elective courses in related departments (anthropology, biological sciences, chemistry, geology and psychology) will be selected and approved by the student’s advisory committee.

**Cellular and Molecular Biology**

This program of study is designed to prepare research scientists for careers in teaching, research, and biotechnology. Students will be expected to demonstrate an in-depth comprehension of experimental design at both the cellular and molecular level of biological organization and to develop competency in the current techniques and theory of a subspecialty. There are two concentrations within this program: cellular biology and structure, and molecular biology and genetics. Research emphases available to graduate students include cell and tissue ultrastructure; membrane structure and function; molecular aspects of neurobiology and endocrinology; genetics and metabolism of micro-organisms; virology and immunology; and enzymology with emphases on protein dynamics and folding of cytochrome P450s. Undergraduate preparation for this program should include courses specifically in genetics and either physical or biophysical chemistry in addition to those listed below. Normally, a student will be admitted to the master’s program prior to doctoral work, but in exceptional cases a student holding only a baccalaureate degree may be admitted directly into the doctoral program.

The two programs of study emphasize the development of research techniques generally applicable to investigations at the cellular and molecular level of organization, but will seek to develop proficiency in a specific field of concentration related to the dissertation research. The coursework consists of the following cores:

**Concentration in Cellular Biology and Structure**

a. BMS 6/70220 ......................................................... 5
b. BSCI 5/70143 ......................................................... 3
c. CHEM 5/70247 ......................................................... 4

or
of appropriate electives, flexibility is provided to tailor specific training to the needs and interests of particular students. A close working relationship between faculty and students is strongly encouraged, and multidisciplinary approaches to research and theoretical problems are emphasized and modeled through extensive collaborative relationships among the faculty.

The core curriculum of this program consists of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>a. BMS</td>
<td>6/70710</td>
</tr>
<tr>
<td>b. BMS</td>
<td>6/70729</td>
</tr>
<tr>
<td>c. One from among the following:</td>
<td></td>
</tr>
<tr>
<td>BMS</td>
<td>6/70267 &amp; 6/70268</td>
</tr>
<tr>
<td>BSCI</td>
<td>5/70142</td>
</tr>
<tr>
<td>BSCI</td>
<td>5/70143</td>
</tr>
<tr>
<td>BSCI</td>
<td>5/70158</td>
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<tr>
<td>CHEM</td>
<td>50245</td>
</tr>
<tr>
<td>CHEM</td>
<td>5/70247</td>
</tr>
<tr>
<td>d. BSCI</td>
<td>6/70461</td>
</tr>
<tr>
<td>e. PSYC</td>
<td>6/71651</td>
</tr>
</tbody>
</table>

Appropriate electives will be chosen from among courses in biological sciences, biomedical sciences and psychology depending upon the student’s interests and preparation.

### Pharmacology

Graduate study in pharmacology involves the Departments of Pharmacology, Anatomy, Neurobiology and Physiology at the Northeastern Ohio Universities College of Medicine and the Departments of Biological Sciences, Chemistry and Psychology at Kent State University. Completion of a core of courses outlined below is required of all students and, through the selection of appropriate electives, flexibility is provided to tailor specific training to the needs and interests of particular students:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. BMS</td>
<td>6/70550 &amp; 6/70551</td>
</tr>
<tr>
<td>b. BMS</td>
<td>6/70449 &amp; 6/70450</td>
</tr>
<tr>
<td>or</td>
<td>BSCI</td>
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<tr>
<td>c. PSYC</td>
<td>6/71651</td>
</tr>
<tr>
<td>d. CHEM</td>
<td>5/70247</td>
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<tr>
<td>or</td>
<td>BMS</td>
</tr>
<tr>
<td>or</td>
<td>BSCI</td>
</tr>
</tbody>
</table>

Electives will be chosen in consultation with the student’s advisory committee appropriate to the field of dissertation research.

### Physiology

The graduate program in physiology is jointly administered through the Department of Biological Sciences and the School of Biomedical Sciences. The faculty is composed of members drawn from the Department of Biological Sciences and the Applied Physiology Laboratory of Kent State University’s School of Exercise, Leisure and Sport, and the Departments of Physiology, Neurobiology and Anatomy of NEOUCOM. The research emphases in biological sciences are in reproductive physiology and endocrinology and in environmental and comparative physiology. In biomedical sciences the major areas of concentration are cardiopulmonary physiology and exercise physiology. The programs are research-oriented and designed to provide the student with a thorough grounding in physiological principles and techniques as well as opportunities for specialization according to the expertise of the faculty.

The specific course preparation for students entering this program include, in addition to the general requirements outlined below, genetics, biochemistry or cell biology, vertebrate anatomy, and a course in histology, developmental anatomy or embryology.

The requirements for the concentration in reproductive physiology and endocrinology and in environmental and comparative physiology are listed under biological sciences.
The core curricular requirements for the concentrations in cardiopulmonary and exercise physiology are:

a. BMS 6/70449 & 6/70450 ................. 4 & 3  
or  
BSCI 5/70433 & 5/70434 ................. 3 & 3

b. CHEM 50245 ......................................................... 4  
or  
CHEM 5/70247 ..................................................... 4  
or  
BMS 6/70267 & 6/70268 ..................... 2 & 4

c. PSYC 6/71651 & 6/71684 ......................... 3 & 3  
or  
ELS 63050, 63051, & 6/73052 ..........3, 3 & 3

Students concentrating in cardiopulmonary physiology will complete two courses from among the following:

BMS 6/70451 ............................................................... 2  
BMS 6/70452 ............................................................... 2  
BMS 6/70729 ............................................................... 4

Those choosing the exercise physiology option will take:

ELS 6/75081 ............................................................... 3  
ELS 6/75082 ............................................................... 3

Suitable electives related to the student’s dissertation research will be chosen and approved by the advisory committee.

### Courses (BMS)

#### Cellular and Molecular Biology

BMS 60220/70220  
HUMAN MICROSCOPIC ANATOMY (5)  
Morphological basis for normal and disturbed functions; structure/function relationships in human microscopic anatomy. Lectures, special laboratory and learning techniques using human tissues. Prerequisite: BSCI 5/70517 or permission of instructor.

BMS 60221/70221  
ULTRASTRUCTURE OF THE CELL (4)  
Functional organization of cells of the ultra-structural level; topographical and cytochemical electron microscopical techniques. Dynamic interactions between cells and their milieu and between organelles in normal and pathological conditions. Prerequisite: Permission of instructor.

BMS 60230/70230  
PRINCIPLES OF ELECTRON MICROSCOPY (4)  
Principles of electron microscopy will be presented with demonstrations of equipment and techniques as applied to biological materials. Prerequisite: Permission of instructor.

BMS 60251/70251  
THEORY AND PRACTICE OF CLONING AND GENETIC ENGINEERING (2)  
Recent advances in the development and understanding of genetic engineering, genomic DNA organization and gene therapy will be discussed. Prerequisite: BSCI 5/70158 and CHEM 5/70247 or BMS 6/70268, or equivalents.

BMS 60267/70267  
MOLECULAR PATHOLOGY I (2)  
Biochemical principles will be applied to explain the mechanism of human diseases in terms of defects in molecular structures and metabolic pathways. Prerequisite: CHEM 50245 or 50247.

BMS 60268/70268  
MOLECULAR PATHOLOGY II (4)  
Biochemical principles will be applied to explain the mechanism of human diseases in terms of defects in molecular structures and metabolic pathways. Prerequisite: BMS 6/70267.

BMS 60291/70291  
SEMINAR IN CELLULAR AND MOLECULAR BIOLOGY (1)  
Credits may be applied toward degree if department approves. Repeat registration permitted. S/U grading. Prerequisite: Permission.

BMS 60295/70295  
SPECIAL TOPICS IN CELLULAR AND MOLECULAR BIOLOGY (2-5)  
Study of subject or problem of current importance. Content dependent upon student requirements and on recent developments in field. IP permissible. Prerequisite: Permission.

#### Physiology

BMS 60449/70449  
MEDICAL PHYSIOLOGY I (4)  
Biophysical and biochemical concepts of integrative organ system physiology in the human: cardiovascular, pulmonary, exercise and temperature regulation physiology. Controlled. Prerequisite: BSCI 40430 or equivalent, one year college physics and college chemistry (including organic) and permission.

BMS 60450/70450  
MEDICAL PHYSIOLOGY II (3)  
Biophysical and biochemical concepts of integrative organ system physiology in the human: renal, gastrointestinal and endocrine physiology. Controlled. Prerequisite: BSCI 40430 or equivalent, one year college physics and college chemistry (including organic) and permission.

BMS 60451/70451  
MICROCIRCULATION (2)  
Theory and practical application of current techniques to evaluate fluid and solute exchange across the microvascular wall. Prerequisite: BSCI 5/70433 and 5/70434 or BMS 6/70449 and 6/70450 and permission.
BMS 60452/70452
PULMONARY PHYSIOLOGY (2)
Relationship between structure and function of the lung with focus on mechanics, circulation, gas exchange, gas transport, acid/base regulation, regulation, host defense and ventilation-perfusion. Prerequisite: BSCI 5/70433 and 5/70434 or BMS 6/70449 and 6/70450 or equivalent.

BMS 60461/70461
INTEGRATIVE PHYSIOLOGY OF THE CARDIOVASCULAR SYSTEM (2)
Critical analysis of the integrative neurohumoral regulation of the cardiovascular system at rest and during stress. Special emphasis on peripheral and central mechanisms involved in regulation of the circulation. Prerequisite: BSCI 5/70433, 5/70434 or BMS 6/70449, 6/70450 and permission.

BMS 60491/70491
SEMINAR IN MEDICAL PHYSIOLOGY (1)
Credits may be applied toward degree if department approves. Repeat registration permitted. S/U grading. Prerequisite: Permission.

BMS 60495/70495
SPECIAL TOPICS IN MEDICAL PHYSIOLOGY (2-5)
Study of subject or problem of current importance. Content dependent upon student requirements and on recent developments in field. IP permissible. Prerequisite: Permission.

Pharmacology

BMS 60550/70550
MEDICAL PHARMACOLOGY I (3)
General principles of pharmacology including metabolism, action, interactions, side effects, toxicity and therapeutic use of drugs. Prerequisite: One year of organic chemistry or biochemistry and permission.

BMS 60551/70551
MEDICAL PHARMACOLOGY II (3)
Continuation of BMS 6/70550. Prerequisite: BMS 6/70550.

BMS 60557/70557
DRUG MECHANISMS IN THE BRAIN (3)
The mechanisms of centrally acting drugs on brain function. The different classes of neuroactive drugs will be considered according to their effects at different levels of central nervous system organization: structure, physiology and biochemistry/molecular biology. Prerequisite: Permission.

BMS 60558/70558
PSYCHOACTIVE DRUGS (3)
The effects of pharmacological agents on the physiology and pathophysiology of the mammalian nervous system. Utilizing both classic and recent literature, basic research findings will be correlated with clinical therapeutics of specific human disease states. Prerequisite: BMS 6/70557.

BMS 60591/70591
SEMINAR IN PHARMACOLOGY (1)
Credits may be applied toward degree if department approves. Repeat registration permitted. S/U grading. Prerequisite: Permission.

BMS 60595/70595
SPECIAL TOPICS IN PHARMACOLOGY (2-5)
Study of subject or problem of current importance. Content dependent upon student requirements and on recent developments in field. IP permissible. Prerequisite: Permission.

BMS 60596/70596
INDIVIDUAL INVESTIGATION IN PHARMACOLOGY (1-3)
Experience with various laboratory techniques and procedures used in pharmacological research with application to experimental designs. IP permissible. Prerequisite: Permission.

Neurosciences

BMS 60710/70710
FUNCTIONAL NEUROANATOMY (6)
Study of structure and function of mammalian nervous system with emphasis on human brain and human behavior. Lecture 5 hours, laboratory and recitation 3 hours weekly. Prerequisite: Permission.

BMS 60711/70711
DEVELOPMENTAL AND EVOLUTIONARY NEUROBIOLOGY (3)
Experimental studies of the development and evolution of the vertebrate central nervous system. Prerequisite: BMS 6/70710 and permission.

BMS 60729/70729
NEUROPHYSIOLOGY (4)
The relation of aspects of the neurosciences to the fundamental properties of nervous tissue, establishing a firm base in experimental neurobiology. Lecture, discussion and laboratory. Prerequisite: BMS 6/70710 and permission of instructor.

BMS 60791/70791
SEMINAR IN NEUROBIOLOGY (1)
Credits may be applied toward degree if department approves. Repeat registration permitted. S/U grading. Prerequisite: Permission.

BMS 60795/70795
SPECIAL TOPICS IN NEUROBIOLOGY (2-3)
Study of problems of current importance. Content dependent on student requirements and on developments in field. IP permissible. Prerequisite: Permission.
BMS 68610/78610
HUMAN GROSS ANATOMY I (4)
An intensive survey of human macromorphology. Lecture 2 hours, laboratory 6 hours weekly. Prerequisite: Permission.

BMS 68611/78611
HUMAN GROSS ANATOMY II (3)
An intensive survey of human macromorphology; a 10-week course that continues BMS 6/78610. Lecture 2 hours, laboratory 6 hours weekly. Prerequisite: BMS 6/78610.

BMS 78612
PRIMATE ANATOMY (5)
Lecture and laboratory dissection of primate cadavers from major taxonomic groups of the order primates. Emphasis on musculoskeletal and nervous systems. Prerequisite: Permission.

BMS 78613
PLEISTOCENE HOMINID MORPHOLOGY (3)
An intensive examination of fossil hominids of the Plio-Pleistocene. Prerequisite: Permission.

BMS 78621
PALEODEMOGRAPHY AND OSTEOMETRY (3)
An examination of the methods and theory of the use of prehistoric human remains in the reconstruction of extinct populations. Prerequisite: Permission.

BMS 78622
HUMAN POPULATION STRUCTURE AND BIOLOGICAL DEMOGRAPHY (3)
An intensive investigation of the principles of biological demography; includes emphasis on theories of selection and mating structure. Prerequisite: Permission.

BMS 78623
HUMAN VARIATION (3)
A detailed anthropological examination of the causes and extent of modern human variability. Prerequisite: Permission.

BMS 78624
PRIMATE ETHOLOGY (3)
Detailed examination of the principles of primate ethology, including evolutionary trends in ecology, dominance, locomotion and social behavior. Prerequisite: Permission.

BMS 78625
DENTAL ANTHROPOLOGY (3)
Study of the human and primate dentition as it relates to primate and human evolution. Includes general orofacial biology. Prerequisite: Permission.

BMS 78626
PRIMATE PALEONTOLOGY (3)
Survey of primate evolution and taxonomy up to the emergence of modern hominids. Prerequisite: Permission.

BMS 78630
PRINCIPLES OF BIOLOGICAL ANTHROPOLOGY (3)
Graduate-level introduction to the field of biological anthropology. Topics include genetics, human variation, fossil and modern primates and early man. Prerequisite: Permission.

BMS 78631
SKELETAL BIOMECHANICS I: STATICS (5)
Fundamentals of statics and their application to biological structures; emphasis on solution of statics problems of increasing difficulty. Applications to bones and joints of primates.

BMS 78632
SKELETAL BIOMECHANICS II: DYNAMICS (3)
Continuation of Biomechanics I. Introduction to kinematics and kinetics with application to human and primate locomotion. Computer analysis of bone strength. Prerequisite: BMS 78631.

BMS 78637
BIOANTHROPOLOGICAL DATA ANALYSIS I (5)
Examination of methods of univariate and bivariate experimental design. This survey emphasizes tests of hypothesis and estimation techniques with both classical and nonparametric procedures.

BMS 78638
BIOANTHROPOLOGICAL DATA ANALYSIS II (3)
This survey of multivariate analysis in anthropology includes one-sample data exploration, multiple-sample problems and regression methods. It also includes computer applications. Prerequisite: BMS 78637.

BMS 78691
SEMINAR IN BIOLOGICAL ANTHROPOLOGY (1)
Credits may be applied toward degree if department approves. Repeat registration permitted. S/U grading. Prerequisite: Permission.

BMS 78692
FIELD WORK IN PALEONTOLOGY (1-5)
Excavation and/or field survey of Miocene and/or Plio-Pleistocene hominid localities. Prerequisite: Permission.

BMS 78695
SPECIAL TOPICS IN BIOLOGICAL ANTHROPOLOGY (2-5)
Study of subject or problem of current importance. Content dependent upon student requirements and on recent developments in field. IP permissible. Prerequisite: Permission.
BMS 60120/70120
LABORATORY TECHNIQUES IN BIOMEDICAL SCIENCES (2)
Minimum of two laboratory rotations per semester by arrange-
ment with individual faculty members. May be repeated once.
S/U grading. Prerequisite: Permission.

BMS 60194/70194
COLLEGE TEACHING IN BIOMEDICAL SCIENCES (1 or 2)
Training and experience in college teaching in the biomedical
sciences. Maximum of 2 hours applicable toward degree. S/U
grating. Repeat registration permitted.

BMS 60196/70196
INDIVIDUAL INVESTIGATION (1-3)
Directed investigation under supervision of faculty member in
biomedical sciences and with prior approval. May be repeated
to maximum of 6 semester hours for letter grade. Excess of 6
hours S/U grading. IP permissible. Prerequisite: Permission.

BMS 60198
RESEARCH (1-15)
Research for master’s-level graduate students. Credits earned
may be applied toward degree requirements if department
approves. Repeat registration permitted. S/U grading; IP per-
missible. Prerequisite: Permission of advisor.

BMS 60199
THESIS I (2-6)
Thesis students must register for a minimum of 6 hours, 2 to 6
hours in a single semester distributed over several semesters if
desired. S/U grading; IP permissible. Prerequisite: Permission
of advisor.

BMS 60257/70257
RESEARCH PROPOSAL (2)
Preparation and defense of a formal research proposal mod-
elled after the format of the National Institutes of Health. S/U
grating; Prerequisite: Permission.

BMS 60299
THESIS II (2)
Thesis students must continue registration each semester until
all degree requirements are met. S/U grading; IP permissible.
Prerequisite: 6 hours of BMS 60199.

BMS 80198
RESEARCH (1-15)
Research for doctoral students who have not yet passed candi-
dacy examination. Repeat registration permitted. S/U grading;
IP permissible Prerequisite. Permission of advisor.

BMS 80199
DISSERTATION I (15)
Doctoral dissertation, for which registration in at least two se-
mesters is required, first of which will be semester in which dis-
sertation work is begun and continuing until the completion of
30 hours. S/U grading; IP permissible. Prerequisite: Admission
to doctoral candidacy.

BMS 80299
DISSERTATION II (1 or 15)
Continuing registration of doctoral students who have com-
pleted the initial 30 hours of dissertation and continuing until
all degree requirements are met. S/U grading; IP permissible.
Prerequisite: 30 hours of BMS 80199.
The Chemical Physics Interdisciplinary Program offers graduate courses and research leading to the Master of Science and Doctor of Philosophy degrees. The program involves the participation of the departments of Chemistry, Physics, Mathematics and Computer Science, as well as the Liquid Crystal Institute®, and offers concentrations for the master's and doctoral degrees in the following areas:

OPTOELECTRONICS
This area of concentration is designed for the applied physicist, chemist or engineer who desires to study materials for their application in information display and related devices. This unique concentration is designed to take advantage of Kent State University's role as a leading contributor to this technology, and to prepare students for the rapidly developing display and optoelectronics industry. This concentration includes specialized chemical physics courses such as liquid crystal displays and semiconductor devices, along with supporting courses from the Department of Physics. The doctoral candidates in this concentration will investigate a research topic of importance in optoelectronics technology. The research topic could be material-oriented, examining some aspect of a material utilized in a display, or device-oriented, examining the physics of operation of the device.

PHYSICAL PROPERTIES OF LIQUID CRYSTALS
This concentration is intended for students with an interest in the physics of liquid crystalline materials, who desire more training in chemistry and materials science than is offered in the Department of Physics. Students in this concentration can be admitted from a number of undergraduate disciplines, including physics, chemistry, materials science, and chemical physics or engineering. They will pursue advanced training, studying the interaction of liquid crystals with fields and surfaces; structural transitions, instabilities, hydrodynamics, coating preparations and rheology; characterization by linear and nonlinear optics, X-rays, NMR, SEM, tunneling electron and atomic force microscopy, and other techniques. The students will take courses designed to give an in-depth understanding of the unique material properties of these phases. The coursework will prepare the students for dissertation projects that
investigate physical properties of timely interest and importance in the advancement of our understanding of liquid crystalline materials.

**LIQUID CRYSTAL SYNTHESIS AND MOLECULAR DESIGN**

This concentration is designed for the student interested in organic chemistry. The program offers more training in physics and the science of liquid crystalline materials than is traditionally provided in a graduate program in the Department of Chemistry. This concentration is tailored for students with an undergraduate background in chemistry or chemical engineering who wish to pursue graduate training in molecular design and synthesis of new and innovative liquid crystal materials. Under this program students will take several advanced courses offered in the Department of Chemistry and also courses in the Chemical Physics Interdisciplinary Program designed to improve their understanding of molecular properties important in liquid crystallinity and in the physical characterization of these materials. Dissertation work will involve the design and synthesis of new materials.

**LYOTROPIC LIQUID CRYSTALS AND MEMBRANES**

This area of concentration is appropriate for science majors who wish to extend their undergraduate education to the science of materials in living systems. This concentration is intended for undergraduate majors in chemistry, physics, chemical engineering and possibly biology, although some preparatory coursework may be required for the latter. In addition to coursework in biochemistry, this program includes such courses as Lyotropic Liquid Crystals, Micellar Systems and Chemistry of Amphiphiles, which give the students an in-depth understanding of lyotropic liquid crystal materials.

**GENERAL CHEMICAL PHYSICS**

This is a broad interdisciplinary concentration involving chemistry and physics, not focused on liquid crystals, and employing the techniques of theoretical and experimental physics. Applicants must have at least a “B” average in all undergraduate chemistry and physics courses taken for either a physics or chemistry major. Courses required for admission, in addition to introductory chemistry, are basic organic chemistry, introductory physics, intermediate mechanics, electronics and one semester of differential equations. Applicants lacking some of these requirements may enroll (without graduate credit) in the equivalents during their first year at Kent State University. Only students keenly interested in both chemistry and physics should consider entering this program.

**GENERAL GUIDELINES OF THE CHEMICAL PHYSICS INTERDISCIPLINARY PROGRAM**

The Chemical Physics Interdisciplinary Program follows the general regulations of the College of Arts and Sciences and the Office of Research and Graduate Studies. Together with a faculty advisor, incoming students can determine which concentration will best suit their needs. Exposure to current research and outside speakers is provided through participation in the liquid crystal, chemistry and physics seminar programs.

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**Master of Science**

**ADMISSION**

Because of the interdisciplinary nature of the program, students from a variety of undergraduate disciplines, such as chemistry, physics, chemical physics, materials science and engineering, will be eligible for admission to the Chemical Physics Interdisciplinary Program. Admission will be granted by examination of the student’s background on an individual basis.

**PROGRAM REQUIREMENTS**

General requirements for the Master of Science degree at Kent State University have been established by the College of Arts and Sciences and the Office of Research and Graduate Studies. While most students in the Chemical Physics Interdisciplinary Program are expected to work toward the Ph.D. degree, the master’s degree program is available. The academic requirement for the Master of Science degree is successful completion of courses from the curriculum and the completion of a master’s thesis.

A total of 32 credit hours is required for each concentration in the master’s degree program. For each of the five concentrations, students are required to complete 24-27 credit hours of core courses.

Candidates for the Master of Science degree must register for CPHY 60199, Thesis I, for a total of 6 credits. The thesis for the Maste of Science degree will present and interpret results of original research and must be defended before a committee of the Chemical Physics graduate faculty.

The choice of remaining electives must be approved by the student’s faculty advisor. Suggested course schedules and lists of recommended electives for each of the following concentrations in the master’s degree program can be found in the brochure Graduate Studies and Research in Chemical Physics at Kent State University, which is available from the program director’s office.

**Optoelectronics and Physical Properties of Liquid Crystals Concentrations**

Required Core Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 6/70541</td>
<td>3</td>
</tr>
<tr>
<td>CPHY 6/72241</td>
<td>4</td>
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<tr>
<td>CPHY 6/72242</td>
<td>2</td>
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<tr>
<td>CPHY 6/72245</td>
<td>3</td>
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<tr>
<td>CPHY 6/72250</td>
<td>3</td>
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<tr>
<td>PHY 55201</td>
<td>3</td>
</tr>
<tr>
<td>PHY 55501</td>
<td>3</td>
</tr>
</tbody>
</table>

Required Seminar:

CPHY 6/74491 (2 enrollments) ......................... 2
Chemical Physics

Liquid Crystal Synthesis and Molecular Design and Lyotropic Liquid Crystals and Membranes Concentrations

Required Core Courses:
- CHEM 6/70333 ..................................................... 3
- CHEM 6/70471 ..................................................... 3
- CHEM 6/70472 ..................................................... 3
- CHEM 6/70541 ..................................................... 3
- CHEM 6/70542 ..................................................... 3
- CPHY 6/72241 ..................................................... 4
- CPHY 6/72242 ..................................................... 4
- CPHY 6/72243 ..................................................... 4
- CPHY 6/72250 ..................................................... 4

Required Seminar:
- CPHY 6/74491 (2 enrollments) ...................... 2

General Chemical Physics Concentration

Required Core Courses:
- CHEM 5/70361 ..................................................... 2
- CHEM 5/70481 ..................................................... 2
- CHEM 6/70541 ..................................................... 3
- PHY 6/75101 ..................................................... 3
- PHY 6/75401 ..................................................... 4
- PHY 6/76402 ..................................................... 3
- PHY 55201 ..................................................... 3
- PHY 6/75203 ..................................................... 3
- CHEM 6/70542 ..................................................... 3
- PHY 6/76161 ..................................................... 3

Doctor of Philosophy

General requirements for the Doctor of Philosophy degree at Kent State University have been established by the College of Arts and Sciences and the Office of Research and Graduate Studies.

PROGRAM REQUIREMENTS

For each of the five concentrations, students are required to complete 36 credit hours of core courses and 12 credit hours of electives for the general chemical physics concentration, and 24-27 credit hours of core courses and 30 credit hours of electives for all other concentrations. The choice of electives must be approved by the student’s faculty advisor. The elective requirements may be waived depending on previously completed coursework. Suggested course schedules and lists of recommended electives for each of the following concentrations in the Doctor of Philosophy program can be found in the brochure Graduate Studies and Research in Chemical Physics at Kent State University, which is available from the program director’s office.

COMPUTER LANGUAGE REQUIREMENT

Every successful candidate for the doctoral degree must satisfy a computer language requirement. This requirement can be satisfied by one of the following: (1) Completion of either Scientific Computing (PHY 35402), Introduction to Computer Science (CS 10061) or Computer Analysis of Experimental Measurements (PHY 5/75403) with a grade of “B” or better. Equivalent coursework from the student’s previous academic records may satisfy this requirement. (2) Since a student may acquire the necessary literacy to fulfill this requirement through use of computers in carrying out dissertation research, the student’s dissertation advisor may certify proficiency for consideration by the program director.

CANDIDACY

In addition to satisfying the course and computer language requirements, the student must pass the Chemical Physics Interdisciplinary Program candidacy examination. The examination will cover material in the core courses of the chemical physics program. A student may make two attempts at passing the examination. If the student fails the second attempt, he/she will not be permitted to continue toward the doctoral degree but may complete the requirements for the Master of Science degree. The student’s first attempt at candidacy should come following the first year of study in all concentrations except general chemical physics. In exceptional cases, a student may defer taking the candidacy examination until the beginning of the third year of graduate study.

PROSPECTUS AND DISSERTATION

A prospectus of the dissertation research project is required for all Ph.D. candidates. The prospectus is prepared jointly with the student’s dissertation advisor. The prospectus must be approved by the members of the student’s dissertation committee.

A dissertation presenting and interpreting results of original research is required for the Doctor of Philosophy degree. The areas of research are outlined under the various concentrations. Following acceptance of the dissertation by the dissertation committee, the final degree requirement is the satisfactory completion of the final oral exam (defense of dissertation) before a committee of the graduate Chemical Physics faculty.

Optoelectronics and Physical Properties of Liquid Crystals Concentrations

Required Core Courses:
- CHEM 6/70541 ..................................................... 3
- CHEM 6/70542 ..................................................... 3
- CPHY 6/72241 ..................................................... 4
- CPHY 6/72242 ..................................................... 2
- CPHY 6/72245 ..................................................... 3
- CPHY 6/72250 ..................................................... 3
- PHY 55201 ..................................................... 3
- PHY 55501 ..................................................... 3
Chemical Physics

Required Seminar:
CPHY 6/74491 (4 enrollments) .............. 4

**Liquid Crystal Synthesis and Molecular Design and Lyotropic Liquid Crystals and Membranes Concentrations**

Required Core Courses:
CHEM 6/70333 ........................................ 3
CHEM 6/70471 ........................................ 3
CHEM 6/70472 ........................................ 3
CHEM 6/70541 ........................................ 3
CHEM 6/70542 ........................................ 3
CPHY 6/72241 ........................................ 4
CPHY 6/72242 ........................................ 2
CPHY 6/72243 ........................................ 3
CPHY 6/72250 ........................................ 3

Required Seminar:
CPHY 6/74491 (4 enrollments) .............. 4

**General Chemical Physics Concentration**

Each student must enroll in the following courses if equivalent credit has not already been earned. Students should consult the CPIP graduate coordinator for approval of equivalent credit.

CHEM 5/70481 ........................................ 2
MATH 4/52002 ........................................ 3
PHY 55201 ........................................... 3
and either
CHEM 6/70541 ...................................... 3
or
PHY 56101 ........................................... 4

Required Core Courses:
CHEM 5/70362 ........................................ 3
CHEM 6/70542 ........................................ 3
CHEM 6/70563 ........................................ 3
PHY 6/75101 ........................................ 3
PHY 6/75203 ........................................ 3
PHY 6/75204 ........................................ 3
PHY 6/75401 ........................................ 4
PHY 6/76161 ........................................ 3
PHY 6/76162 ........................................ 3
PHY 6/76402 ........................................ 3
and either
CHEM 6/70543 ...................................... 3
or
PHY 6/75301 ........................................ 3

Required Seminar (4 hours):
CHEM 6/70591 ........................................ 1
or
CPHY 6/74491 ........................................ 1
or
PHY 80097 (4 enrollments) ................. 4

**Courses (CPHY)**

CPHY 60199
**THESIS I (2-6)**
The thesis students must register for a total of 6 hours, 2-6 hours in a single semester or distributed over two semesters if desired. S/U grading; IP permissible. Prerequisite: Approval of advisor.

CPHY 60299
**THESIS II (2)**
The thesis students must continually register each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: CPHY 60199.

CPHY 60498
**RESEARCH (1-15)**
Research or individual investigation. Credits earned may be applied toward meeting degree requirements if approved. Repeat registration permitted. Prerequisite: Permission.

CPHY 62241/72241
**SOFT MATTER: STRUCTURES, TEXTURES AND DEFECTS (4)**
Lecture/laboratory on soft matter systems, such as thermotropic and lyotropic liquid crystals, colloids. Structures, defects and textures of phases with orientational and partial translational order.

CPHY 62242/72242
**PHYSICAL METHODS OF MATERIALS CHARACTERIZATION (2)**
Basic techniques in characterization using X-ray scattering, neutron scattering, light scattering, NMR, optical microscopy, scanning electron microscopy, transmission electron and tunneling electron microscopy and ellipsometry.

CPHY 62243/72243
**LYOTROPIC LIQUID CRYSTALS AND MICELLA SYSTEMS (3)**
Properties of lyotropic liquid crystals, polymer solutions and aqueous solutions of amphiphilic compounds. Self-assembly of amphiphilic compounds, formation and properties of micelles, cylinders, bilayers, vesicles and tubules.

CPHY 62245/72245
**PHYSICAL PROPERTIES OF LIQUID CRYSTALS (3)**
Evaluation of physical properties of liquid crystals. Combined laboratory and lecture course on techniques for characterizing important properties of liquid crystals. Prerequisite: CPHY 62250 or permission.

CPHY 62250/72250
**LIQUID CRYSTAL MATERIALS (3)**
Basic statistical physics of liquid crystals, focusing on the effects of orientational order on physical properties. Topics include phase transitions and electric, magnetic and optical response. Prerequisite: B.S. in chemistry or physics.
CPHY 64491/74491
SEMINAR: LIQUID CRYSTALS (1)
Discussion of current literature or original research in liquid crystals. Participation by students, faculty and guests. Repeat registration permitted. S/U grading. Prerequisite: Permission.

CPHY 64495/74495
SPECIAL TOPICS IN CHEMICAL PHYSICS (1-3)
Topic to be announced when scheduled. Repeat registration permitted. Prerequisite: Permission.

CPHY 72335
ADVANCED LIQUID CRYSTAL CHEMISTRY (3)
Lecture/laboratory on ordered systems and materials, including liquid crystals, liquid crystal polymers, guest-host systems and effects, photochemical interactions of anisotropic systems, materials for liquid crystal alignment.

CPHY 72415
FLUID MECHANICS AND RHEOLOGY (3)
Static and dynamic properties of fluids: hydrostatics, Navier-Stokes equations, Newtonian fluids, viscosity, anisotropic liquids and rheology of highly viscous fluids. Prerequisite: B.S. in chemistry or physics.

CPHY 72418
DEFECTS IN LIQUID CRYSTAL MATERIALS (3)
Defects in solids and liquid crystals: observation and characterization of defects, elastic properties, defect interactions and movement, and phases with periodic defect structures. Prerequisite: B.S. in chemistry or physics.

CPHY 72461
NONLINEAR OPTICS OF MATERIALS (3)
Fundamentals of nonlinear optics of materials: nonlinear polarization and susceptibilities, optical harmonic generation, sum and difference frequency generation, parametric amplifiers and oscillators, and stimulated scattering. Prerequisite: PHYS 4/55501.

CPHY 72515
CHEMISTRY OF AMPHIPHILES (3)
Multiphase liquid crystal systems: molecular structure and properties of amphiphiles in water with emphasis on thermodynamics of self-assembly, phase properties of micellar, hexagonal and lamellar systems. Prerequisite: Permission.

CPHY 72517
MEMBRANE SPECTROSCOPY (2)
Multiphase liquid crystal systems: spectroscopic techniques to determine structure and molecular dynamics of model and biological membranes with emphasis on magnetic resonance techniques. Prerequisite: Permission.

CPHY 72640
LIQUID CRYSTAL/POLYMER COMPOSITES (3)
Multiphase liquid crystal systems: formation and applications; control of physical and electro-optic properties, liquid crystal configuration and surface alignment. Prerequisite: PHYS 6/78401.

CPHY 72641
LIQUID CRYSTAL SURFACES AND INTERFACES (3)
Surface tension of liquids and solids, surface structure, Wulff constructions, wetting and roughening, and experimental methods in surface studies. Prerequisite: B.S. in chemistry or physics.

CPHY 72643
LIQUID CRYSTAL DISPLAYS (3)
Science of applications of nematic and smectic liquid crystals. Integrates fundamental concepts and modeling of liquid crystals with focus on the design of liquid crystal devices. Prerequisite: CPHY 6/72250.

CPHY 72645
SEMICONDUCTOR DEVICES (3)
Introduction to semiconductor device technology, including principles of operation, integrated circuit fabrication techniques and device applications.

CPHY 80199
DISSERTATION I (15)
Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun, and continuing until the completion of 30 hours. S/U grading; IP permissible. Prerequisite: Admission to candidacy.

CPHY 80299
DISSERTATION II (1 or 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: Completion of 30 hours of CPHY 80199.

CPHY 80498
RESEARCH (1-15)
Research or individual investigation for doctoral student who has not yet passed candidacy exam. Credit earned may be applied toward degree. Repeat registration permitted. S/U grading; IP permissible.
Chemistry

Roger B. Gregory, Chair
214 Williams Hall
330-672-2032
rgregory@kent.edu

Frederick G. Walz, Coordinator of Graduate Studies
200 Williams Hall
330-672-2493
fwalz@kent.edu

The Department of Chemistry offers graduate courses and research leading to the Master of Science, Master of Arts and Doctor of Philosophy degrees. Visit the departmental Web site at http://www.kent.edu/chemistry for more information. Detailed requirements for all programs are found at this site under PH.D. PROGRAM in the pdf document, "Regulations for Graduate Degrees in Chemistry."

ADMISSION
The general regulations of the university are followed along with the additional requirements below. A background of undergraduate courses consisting of one year each in analytical chemistry or biochemistry, organic chemistry, physical chemistry, calculus and physics is expected. A student not having all of the above courses may be accepted for graduate study if ability is shown in other courses. Deficiencies in undergraduate courses can be made up during the first year of graduate study, but no graduate credit will be earned from these courses.

Master of Science

PROGRAM REQUIREMENTS
Each student must complete a total of 32 semester hours of courses including research and thesis. Of these, at least 18 hours must be for graduate credit other than research and thesis. Required courses include College Teaching of Chemistry (CHEM 60894; 1 hour) and, in the major area, two semester hours of Seminar (CHEM 62191, 62291, 62391, 62491 or 62591) and two semester hours of Problem Solving or Recent Developments courses (CHEM 61191, 60291, 60391, 60491 or 60591). A total of 13 semester hours of graduate chemistry classroom courses are also required; one of these courses must be outside the major area.

A thesis presenting and interpreting the results of original research is required. The Department of Chemistry considers research to be a fundamental part of the Master's of Science program. Areas in which research may be carried out are analytical chemistry, biochemistry, inorganic chemistry, organic chemistry and physical chemistry. The thesis must be successfully defended in an oral examination before the student's advisory committee.

Master of Arts

PROGRAM REQUIREMENTS
A total of 32 semester hours of graduate credit is required, including at least 21 hours of classroom courses. The selection of these hours will be planned by the student and a faculty adviser to best fulfill the needs of the student. There is no research requirement for this degree. This program is only available with permission.

Doctor of Philosophy

PROGRAM REQUIREMENTS
Each student must complete a total of 90 semester hours beyond the bachelor’s degree or 60 hours beyond the master’s degree including research and dissertation. Of these, at least 30 hours must be for graduate credit other than research and dissertation. Required courses include College Teaching of Chemistry (CHEM 70894; 1 hour) and, in the major area, four semester hours of Seminar (CHEM 72191, 72291, 72391, 72491 or 72591) and four semester hours of Problem Solving or Recent Developments courses (CHEM 71191, 70291, 70391, 70491 or 70591). A total of 18 semester hours of graduate chemistry classroom courses are required; one of these courses must be outside the major area.
CANDIDACY
To be admitted to candidacy for the doctoral degree, the student must pass a written examination in the field of specialization, the form and time of the examination being determined by each division (analytical chemistry, biochemistry, inorganic chemistry, organic chemistry or physical chemistry). Those failing this examination may repeat the examination once. After passing the written examination, the student must present a detailed written proposal for his/her dissertation research. The successful oral defense of this proposal and its acceptance by the advisory committee admits the student to candidacy for the Ph.D. degree.

DISSERTATION
The dissertation describes original research. The dissertation topic can be in/between the subdisciplines of analytical chemistry, biochemistry, inorganic chemistry, organic chemistry and physical chemistry. The written dissertation is reviewed and approved by the research advisor and the advisory committee prior to scheduling the final oral examination.

Courses (CHEM)
Graduate students in chemistry may not use the following courses to fulfill degree requirements:

Nonchemistry majors may take any of these courses for credit with the permission of their major department and the Department of Chemistry.

CHEM 50000/70000
CHEMICAL INFORMATION (2)
Access to chemical documents using indexes, formulating search strategies, citation mapping, and manipulation of computer files are treated via lectures, readings and library problems. Prerequisite: CHEM 30482.

CHEM 50093/70093
VARIABLE TITLE WORKSHOP IN CHEMISTRY (1-6)
S/U grading. Prerequisite: Permission.

CHEM 50795
CURRENT TOPICS IN CHEMICAL EDUCATION (1-3)
Designed to present recent advances in chemical research, instrumentation and theory to chemistry educators. S/U grading. Prerequisite: Bachelor’s degree in science or permission.

CHEM 60894/70894
COLLEGE TEACHING OF CHEMISTRY (1)
Experience in teaching of chemistry at college level. S/U grading.

Analytical Chemistry
CHEM 50112/70112
ADVANCED ANALYTICAL CHEMISTRY (2)
An advanced study of the theory and applications of analytical chemical equilibria: acidbase, precipitation, complexation and redox. Prerequisite: CHEM 40555.

CHEM 50113/70113
CHEMICAL SEPARATIONS (3)
Theory, instrumentation and applications of chemical separations for chemical analysis. Emphasis on gas and liquid chromatography. Laboratory 3 hours weekly. Prerequisite: CHEM 40555.

CHEM 50114/70114
ELECTROANALYTICAL CHEMISTRY (3)
The physical basis of electrochemistry; instrumentation and applications in chemical analysis. Polarography, coulometry, voltametry and ion-selective electrodes. Lecture 3 hours weekly. Prerequisite: CHEM 40555.

CHEM 60111/70111
THEORY OF CHEMICAL INSTRUMENTATION (2)
General survey course on theory of instruments. Special emphasis on data interpretation and problem solving. Prerequisite: Permission.

CHEM 60115/70115
ANALYTICAL SPECTROSCOPY (3)
An advanced study of the fundamental principles, instrumentation and experimental techniques associated with different analytical spectroscopic methods.

CHEM 61191/71191
SEMINAR: PROBLEM SOLVING IN ANALYTICAL CHEMISTRY (1)
Discussion of recent chemical analysis methods, sample preparation and data handling, as well as practical student experience involving characterization of real samples. IP permissible.

CHEM 62191/72191
SEMINAR: ANALYTICAL CHEMISTRY (1)
Students register once each year. Participation extends throughout the academic year. IP permissible.

CHEM 70195
ADVANCED TOPICS, ANALYTICAL (1-3)
Advanced topics in analytical chemistry. Repeat registration permitted. Prerequisite: Permission.

Biochemistry
CHEM 50245
BIOCHEMICAL FOUNDATIONS OF MEDICINE (4)
Introduction to chemistry and metabolism of important compounds in biological systems; enzymes and characteristics
of enzyme catalysis; regulation of metabolism at molecular, cellular and organism levels; inborn and induced errors of metabolism. Designed and scheduled for, and priority given to, students in integrated life sciences program. Prerequisite: CHEM 30481 or equivalent.

CHEM 50247/70247
PRINCIPLES OF BIOCHEMISTRY (4)
Introduction to biochemical principles, including chemistry and metabolism of biochemically important compounds, biological catalysts and metabolic regulation. May be taken for graduate credit by chemistry majors. Prerequisite: CHEM 20481 or 30481 and 40555 or 40567 or permission.

CHEM 50263/70263
PHYSICAL BIOCHEMISTRY I (3)
Principles and techniques of physical chemistry used in studying biomacromolecules and biological systems. Topics covered are thermodynamics, spectroscopy, structure and properties of biological molecules. Prerequisite: CHEM 40555 or permission.

CHEM 60249/70249, 60250/70250
BIOCHEMICAL TECHNIQUES (2 each)
Laboratory work emphasizing modern methods of biochemical investigation. Experiments illustrating use of spectrophotometric, chromatographic and isotopic methods. May be taken for graduate credit by chemistry majors. S/U grading; IP permissible. Pre- or corequisite: of CHEM 6/70249 is CHEM 6/70247; of CHEM 6/70250 is CHEM 6/70249.

CHEM 60265/70265
ENZYMOLOGY (2)
Basic principles of steadystate and rapid enzyme kinetics; theory and experiment; catalytic mechanisms for selected enzymes. Prerequisite: Permission.

CHEM 60269/70269
NMR: THEORY AND APPLICATION IN BIOCHEMISTRY (1 or 2)
Basic principles of high-resolution nuclear magnetic resonance will be applied at a general level in the study of biochemical structure and function. Prerequisite: CHEM 30284, 40551 or equivalent.

CHEM 60291/70291
SEMINAR: RECENT DEVELOPMENTS IN BIOCHEMISTRY (1)
Students register once each year. Participation extends throughout the academic year. IP permissible.

CHEM 62291/72291
SEMINAR: BIOCHEMISTRY (1)
Students register once each year. Participation extends throughout the academic year. IP permissible.

CHEM 70251
COMPREHENSIVE BIOCHEMISTRY I (5)
Molecular and metabolic aspects of biochemistry including: chemistry of metabolism of low molecular weight biochemical structures; biopolymers; enzymes; bioenergetics; molecular basis of organismic systems.

CHEM 70252
COMPREHENSIVE BIOCHEMISTRY II (2)
Supramolecular and cellular aspects of biochemistry including: DNA structure and function; regulation of transcription and translation; principles of supramolecular structure and assembly; membranes; motile systems.

CHEM 70253
COMPREHENSIVE BIOCHEMISTRY III (1)
Supramolecular structure and self-organization of proteins and nucleic acids in chromatin, viruses, ribosomes, motile processes muscle, flagella and axonal transport. Prerequisite: Permission.

CHEM 70254
COMPREHENSIVE BIOCHEMISTRY IV (2)
Biological membranes; composition, structure, dynamics and biogenesis; membrane transport and energy transduction. Prerequisite: Permission.

CHEM 70295
ADVANCED TOPICS IN BIOCHEMISTRY (1-3)
Advanced topics in biochemistry. Repeat registration permitted. Prerequisite: Permission.

Inorganic Chemistry

CHEM 50352/70352
INORGANIC MATERIALS CHEMISTRY (3)
Broad survey of the synthesis, properties, characterization and applications of inorganic materials.

CHEM 50361, 50362
INTERMEDIATE INORGANIC CHEMISTRY (2 each)
Periodic system, valence, bonding, coordination compounds and acid-base behavior. Representative families of elements studied in detail. Lecture 3 hours weekly. Prerequisite: CHEM 30483; of CHEM 50362 is CHEM 50361.

CHEM 60327/70327
MODERN INORGANIC CHEMISTRY (3)
Synthesis, structure and reactivity of inorganic compounds, including transition metal and organometallic complexes. Prerequisite: CHEM 40362 or equivalent.

CHEM 60337/70337
INORGANIC MAGNETIC SPECTROSCOPY (3)
Applications of magnetic resonance spectroscopic techniques (NMR, EPR and Mossbauer) in inorganic and organometallic compounds.
Chemistry

CHEM 60347/70347
CHEMICAL CRYSTALLOGRAPHY (3)
Structure solution and refinement methods of X-ray diffraction data. Emphasis will be placed on single-crystal techniques.

CHEM 60364/70364
BIOINORGANIC CHEMISTRY (2)
Metal centers as reactants, catalysts and probes in biosystems. Electron transfers, template effects, metal-catalyzed heterolytic, oxygenations, carboxylations, transaminations, dehydrogenation, nitrogen fixation and reactions of B12-related systems. Prerequisite: CHEM 40361 or permission.

CHEM 60391/70391
SEMINAR: RECENT DEVELOPMENTS IN INORGANIC CHEMISTRY (1)
Presentation and discussion of current research papers in inorganic chemistry. Participation by students and faculty. IP permissible.

CHEM 50478/70478
SYNTHESIS OF ORGANIC LIQUID CRYSTALS (3)
Synthesis of organic thermotropic liquid crystals including nematic, smectic and discotic variants. Evaluation of the phase types using polarizing microscopy and DSC. Brief introduction into their use in display devices. Prerequisite: CHEM 30482 or equivalent.

CHEM 50481/70481
INTERMEDIATE ORGANIC CHEMISTRY (2)
Factors determining the reactivity and stability of organic molecules are discussed including selected material from current literature. Seminar type of student participation required. Prerequisite: CHEM 30483 or permission.

CHEM 60471/70471
ADVANCED ORGANIC CHEMISTRY — MECHANISTIC ASPECTS (3)
Discussion of organic reaction mechanisms. Chemistry of reactive intermediates, aromaticity, addition/elimination, nucleophilic/electrophilic substitution, bonding theories and other fundamental topics governing organic reactions. Prerequisite: CHEM 30482 or equivalent.

CHEM 60472/70472
ADVANCED ORGANIC CHEMISTRY — SYNTHETIC ASPECTS (3)

CHEM 60473/70473
STEREOSELECTIVE ORGANIC SYNTHESIS (3)
Modern methods of asymmetric synthesis; introduction to selected methods for stereoselective N-heterocycle synthesis; application of these methods in natural product synthesis. Prerequisite: CHEM 30482 or equivalent.

CHEM 61491/71491
SEMINAR: PROBLEM SOLVING IN ORGANIC CHEMISTRY (1)
Practical experience in solution of current problems of structure, synthesis and mechanism in organic chemistry. Participation extends throughout nine-month academic year. Repeat registration permitted. IP permissible.

CHEM 62491/72491
SEMINAR: ORGANIC CHEMISTRY (1)
Students register once each year. Participation extends throughout the academic year. IP permissible.

CHEM 70495
ADVANCED TOPICS, ORGANIC (1-3)
Advanced topics in organic chemistry. Repeat registration permitted. Prerequisite: Permission.
CHEM 50555/70555, 50556/70556
ELEMENTARY PHYSICAL CHEMISTRY (3 each)
Fundamental concepts of physical chemistry of current interest. Included are biological and medical aspects of physical chemistry. Graduate credit given to nonchemistry and nonphysics majors and with permission to certain chemistry majors. Prerequisite: of CHEM 5/70555 are CHEM 10061, PHY 23102, MATH 22005 or permission; of CHEM 5/70556 is CHEM 5/70555.

CHEM 50557/70557
PHYSICAL CHEMISTRY LABORATORY (2)
Experiments in numerous areas of physical chemistry, including the interpretation and reporting of obtained experimental data, correlation of results with theory and an introduction to the computer treatment of data. Pre- or corequisite: CHEM 5/70555. Special course fee: $40 per credit hour (subject to change).

CHEM 50558/70558
PHYSICAL CHEMISTRY LABORATORY (2)
Experiments and interpretation, reporting, and correlation of data with theory. Emphasis on gases, liquids, solutions, surface properties, thermodynamic variables, rates of reaction, transport phenomena and spectral properties. Pre- or corequisite: CHEM 5/70556.

CHEM 50570/70570
INTERMEDIATE PHYSICAL CHEMISTRY (2)
Special topics of physical chemistry, with applications to problems of chemical interest that are not covered in the basic course. Prerequisite: CHEM 5/70556.

CHEM 50571/70571
SURFACE CHEMISTRY (2)
Treatment of basic principles and concepts in surface and colloid chemistry. Relationship to practical systems emphasized. Prerequisite: CHEM 40555 or 40567.

CHEM 50583/70583
PHYSICAL CHEMISTRY OF MACROMOLECULES (2)
A course designed to cover the basic principles of polymer science. Structure, properties and characterization of polymeric systems will be discussed. Prerequisite: CHEM 40555 or 40567.

CHEM 60542/70542
ADVANCED PHYSICAL CHEMISTRY (3)
Covers basic materials of modern physical chemistry in the area of application of wave mechanics to atomic structures, chemical bonding and reactivity. Prerequisite: CHEM 6/70541.

CHEM 60543/70543
STATISTICAL THERMODYNAMICS (3)
Theory and applications of statistical thermodynamics and mechanics on non-interacting and interacting particles of real and model systems; gases, solutions, crystals, polymers; dielectric and magnetic phenomena. Prerequisite: CHEM 6/70542.

CHEM 60563/70563
QUANTUM CHEMISTRY (3)
Basic principles of quantum mechanics. Those aspects of theory of special interest to chemistry emphasized. Lecture 3 hours weekly. Prerequisite: CHEM 6/70541.

CHEM 60591/70591
SEMINAR: RECENT DEVELOPMENTS IN PHYSICAL CHEMISTRY (1)
Presentation and discussion of original papers from current literature. IP permissible.

CHEM 62591/72591
SEMINAR: PHYSICAL CHEMISTRY (1)
Students register once each year. Participation extends throughout the academic year. IP permissible.

CHEM 70595
ADVANCED TOPICS, PHYSICAL (1-3)
Advanced topics in physical chemistry. Repeat registration permitted. Prerequisite: Permission.

CHEM 60050/70050
CHEMISTRY RESEARCH PROPOSAL (3)
The student will prepare an independent and original research proposal that is completely distinct from the thesis project.

CHEM 60199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in single semester, distributed over several semesters if desired. IP permissible.

CHEM 60299
THESIS II (2)
Thesis students must continue registration until all degree requirements are met. S/U grading; IP permissible. Prerequisite: CHEM 60199.
CHEM 60898  
MASTER’S RESEARCH (1-15)  
Research for master’s students. Credits earned may be applied toward degree if department approves. Repeat registration permitted. S/U grading; IP permissible.

CHEM 80199  
DISSERTATION I (15)  
Doctoral dissertation, for which registration in two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible. Prerequisite: Admission to candidacy.

CHEM 80299  
DISSERTATION II (1 or 15)  
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: CHEM 80199.

CHEM 80898  
RESEARCH (1-15)  
Research for doctoral students. Credits earned may be applied toward degree if department approves. Repeat registration permitted. S/U grading; IP permissible.
COMPUTER SCIENCE

Robert A. Walker, Chair
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208 Mathematics and Computer Science Building
330-672-9031
lucc@mcs.kent.edu

The Department of Computer Science offers graduate courses and research leading to the Master of Arts, Master of Science and Doctor of Philosophy degrees in computer science.


Master of Arts/Master of Science

ADMISSION
A student entering the program must have the core components of an undergraduate computer science curriculum. In mathematics, students must have successfully completed coursework equivalent to Discrete Mathematics (CS/MATH 31011), Calculus I (MATH 12002), Calculus II (MATH 12003) and Linear Algebra (MATH 21001). In computer science, students are required to have successfully completed coursework equivalent to Data Structures (CS 33001), one additional introductory programming course (CS 23021), Computer Architecture (CS 35101), Operating Systems (CS 33211) and Design & Analysis of Algorithms (CS 46101).

PROGRAM REQUIREMENTS
The master’s program requires a total of 32 graduate-level credit hours in computer science (courses outside computer science must be approved by the advisor and graduate coordinator). Twenty-six of these credit hours must be in coursework at the 60000 level or above. Only a total of 3 credit hours of CS 69098 Research or CS 89991 Research Seminar in Computer Science may count towards the degree (however, students are allowed to take these courses multiple times).

The student must develop a Master’s Plan of Work that is approved by the advisor and graduate coordinator. The Plan of Work must ensure that the student completes at least one course in three different areas/topics. The Plan of Work must be filled out and submitted to the graduate coordinator within one-year of entrance to the program but can later be modified with approval from the advisor and graduate coordinator. Further details can be found on the department’s Web site.
The student must take CS 69191 Master's Seminar (2 credits) and make a public presentation of project and/or research work (excluding thesis or project defense) a minimum of one time before graduation. The presentation must take place in the master's seminar at least one full term before graduation and not more than two years after entering the program. This course can be taken multiple times but counts for 2 credits towards the degree.

**Program Requirements**

A doctoral student must complete 60 graduate credit hours beyond the master's degree—30 credits of which are CS 89199 Dissertation I and 30 credits (excluding Dissertation I and II) are coursework at the 70000 level or above. Only 9 credits of CS 89098 Research or CS 89991 Research Seminar in Computer Science may count towards the degree (however, students can take more than 9 credit hours of these courses).

The student will develop a Doctoral Plan of Work that is approved by the advisor and graduate coordinator. Students are highly encouraged to select an advisor and develop a Plan of Work as early as possible (i.e., before the end of their second term in the program). The Plan of Work must be filled out and submitted to the graduate coordinator within 18 months of entrance to the program.

All students must take 3 credit hours of CS 89191 Doctoral Seminar and make a public presentation of project and/or research work (excluding dissertation defense and candidacy examination) at least two times before graduation. The presentation must take place in the doctoral seminar at least one full term before graduation and not more than two years after entering the program. The doctoral seminar is offered for 1 or 2 credit hours; therefore the student must enroll in this course at least two times. This course can be taken multiple times but only 3 credit hours count toward the degree.

**Preliminary Examination**

The preliminary examination is intended to assess a student's understanding of the basic prerequisite concepts for entrance into the doctoral program in computer science. It also ensures that all incoming students have the ability to effectively reason with and integrate the underlying knowledge and concepts in the broad field of computer science. This ability is necessary to continue the student's studies in the doctoral program.
Students must successfully complete the preliminary examination within 20 months of entrance into the program. Complete information about the content and format of this examination can be found on the department's Web site.

**CANDIDACY EXAMINATION**
The candidacy examination is a comprehensive examination in the field of the major subject. The format of the candidacy examination will be determined by the student's Candidacy Examination Committee, which is composed of the student's advisor and two other graduate faculty members. The Candidacy Examination Committee must be approved by the graduate coordinator. The student must complete the candidacy examination at least one year before the dissertation defense. Further details can be found on the department's Web site.

**DISSERTATION**
A dissertation describes original research performed by the student. The dissertation topic must be approved by the advisor and graduate coordinator. A dissertation committee, made up of graduate faculty, must be formed to assess the quality and value of the work. A public dissertation defense is made by the student. The final dissertation and defense must be approved by the advisor and dissertation committee. Further details can be found on the department's Web site.

Summary of doctoral degree requirements: preliminary examination plus the Doctoral Plan of Work; 3 credits of CS 89191 Doctoral Seminar; 9 credits major concentration coursework; 9 credits minor concentration coursework; 9 credits elective coursework or research; the candidacy examination; and 30 credits of CS 89199 Dissertation I along with the dissertation and defense.

**Courses (CS)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 51012</td>
<td>FINITE MATHEMATICS</td>
<td>3</td>
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<tr>
<td></td>
<td>Cross-listed with MATH 51012. A continuation of discrete mathematics emphasizing combinatorial techniques, graph applications in algorithms, finite algebra, number theory and probability. Covers useful mathematics for CS majors. Prerequisite: CS 31011 or MATH 31011.</td>
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<tr>
<td>CS 52201</td>
<td>INTRODUCTION TO NUMERICAL COMPUTING I</td>
<td>3</td>
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<tr>
<td></td>
<td>Cross-listed with MATH 52201. An introduction to numerical methods and software for solving many common scientific computing problems. Linear systems, least-square data fitting, nonlinear equations and systems, and optimization problems. Prerequisite: MATH 12003, 21001 and CS 23021 or permission. Special fee: $10 per semester.</td>
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<tr>
<td>CS 52202</td>
<td>INTRODUCTION TO NUMERICAL COMPUTING II</td>
<td>3</td>
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<tr>
<td></td>
<td>Cross-listed with MATH 52202. A continuation of CS 52201. Topics include interpolation, numerical differentiation and integration, and numerical solution of ordinary differential equations. Prerequisite: MATH 32044 and CS 4/52201. Special fee: $10 per semester.</td>
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<tr>
<td>CS 53005</td>
<td>INTRODUCTION TO DATABASE SYSTEMS DESIGN</td>
<td>3</td>
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<td></td>
<td>An introduction to the basic theoretical aspects of database systems, file organization, search methodologies, language design and performance evaluation techniques, initial modeling concepts and their use in hierarchical, network, relational and object-oriented database designs. Prerequisite: CS 33001.</td>
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<tr>
<td>CS 53006</td>
<td>THEORY OF OBJECT-ORIENTED PROGRAMMING</td>
<td>3</td>
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<td>In-depth course on the theory and principles of object-based and object-oriented programming using a language such as C++. The course covers advanced topics in inheritance and interface planning, generic (type-independent) programming, factors of polymorphism, structure and organization of class libraries, and object-oriented design principles. Prerequisite: CS 33001. Special fee: $20 per semester.</td>
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<tr>
<td>CS 53101</td>
<td>STRUCTURE OF PROGRAMMING LANGUAGES</td>
<td>3</td>
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<td></td>
<td>Introduction to syntax, semantics, behavior and implementation issues in imperative, functional, logic and object-oriented languages; type theory, concurrency, data dependency, non-determinism and Internet languages. Prerequisite: CS 33001.</td>
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<tr>
<td>CS 53111</td>
<td>STRUCTURE OF COMPILERS</td>
<td>3</td>
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<td></td>
<td>Techniques used to write compilers including lexical analysis, syntax analysis, syntax-directed translation, type checking, run-time environments and intermediate code generation. Prerequisite: CS 35101 and 4/53101. Special fee: $20 per semester.</td>
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<tr>
<td>CS 53202</td>
<td>SYSTEMS ADMINISTRATION</td>
<td>3</td>
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<td></td>
<td>The setting up and day-to-day administration of multiuser multitasking systems, such as the various versions of UNIX, together with the analysis of problems which can arise in these activities. Prerequisite: CS 33211.</td>
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<tr>
<td>CS 53203</td>
<td>SYSTEMS PROGRAMMING</td>
<td>3</td>
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<td>Design, implementation and maintenance of system programs, system utilities; command interpreters, editors, file maintenance programs, text processors. Interrupt handling. Device drivers. Prerequisite: CS 33211. Special fee: $20 per semester.</td>
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</tbody>
</table>
CS 53901
SOFTWARE ENGINEERING (3)
An introduction to software engineering concepts: life cycle models, modeling languages, requirements analysis, specification, design, testing, validation, project management and maintenance. Prerequisite: CS 33001. Special fee: $6.67 per credit hour (subject to change).

CS 54201
ARTIFICIAL INTELLIGENCE (3)
Examines goals, problems, concepts and methods of artificial intelligence, heuristic versus algorithmic methods, natural language comprehension, theorem proving. Prerequisite: CS 33001. Special fee: $10 per semester.

CS 55111
PRINCIPLES OF VLSI DESIGN (3)
Introduction to the design of VLSI chips, with emphasis on FPLD-based design. Students will design various chips using standard industry logic synthesis tools. Prerequisite: CS 35101. Special fee: $10 per credit hour (subject to change).

CS 55201
COMPUTER COMMUNICATIONS NETWORKS (3)
An introduction to netcentric systems, data communication protocols, network architectures, routing protocols, network management, congestion control, network security, compression techniques, mobile and wireless networks, and the World Wide Web as an example of a client-server system. Prerequisite: CS 33211. Special fee: $3.33 per credit hour (subject to change).

CS 55231
INTERNET ENGINEERING (3)
Design fundamentals and working principles of Internet systems at the IP layer and above. DNS, Interdomain Routing, Internet Client Server programming, Application Level Protocols (HTTP, XML, etc.), Web Server Architecture, Browser, Internet Security and Multimedia Serving. Prerequisite: CS 33001, 53201 and 55201 or permission. Special fee: $20 per semester (subject to change).

CS 56101
DESIGN AND ANALYSIS OF ALGORITHMS (3)
Introduction to algorithmic concepts, practical techniques for the design and analysis of algorithms; searching, sorting, integer and floating point arithmetic; vector and matrix manipulation. Prerequisite: CS 33001 and MATH 12003.

CS 56201
INTRODUCTION TO THE THEORY OF AUTOMATA, FORMAL LANGUAGES AND COMPUTATION (3)
A study of alphabets, strings, languages; regular languages and expressions, finite automata, context-free grammars and languages, pushdown automata; Turing machines and fundamentals of compatibility theory. Prerequisite: CS 31011 and MATH 12003.

CS 57101
COMPUTER GRAPHICS (3)
Display file generation, interactive graphics techniques, display devices, three-dimensional graphics, graphic system design, graphic languages and applications in man/machine communications. Prerequisite: CS 33001 or permission. Special fee: $20 per semester.

CS 57105
WEB DESIGN AND PROGRAMMING I (3)
A joint computer science and visual communication design course on Web concepts and high-quality Web design: computer science, visual communication design principles, tools, architecture, presentation, design and creation of Web sites by teams. Web-based instruction is used. IP permissible. Special fee: $20 per semester.

CS 57106
WEB DESIGN AND PROGRAMMING II (3)
A joint computer science and visual communication design course on advanced Web techniques and multimedia Web design: Web servers, security, advanced design, Java servlets, applets, database connectivity, site maintenance, creation of actual Web sites by teams. IP permissible. Special fee: $20 per semester.

CS 57107
WEB DESIGN AND PROGRAMMING STUDIO (3-6)
A joint Computer Science (CS) and Visual Communication Design (VCD) project course. Comprehensive experience on aspects of Web site creation, hosting, maintenance and management. Creative combination and integration of art and programming are emphasized. IP permissible. Prerequisite: VCD 56001 or CS 57106. Special fee: $6.67 per credit hour (subject to change).

CS 59893
VARIABLE TITLE WORKSHOP IN COMPUTER SCIENCE (1-6)
Studies in special topics in computer science. S/U grading. Prerequisite: Permission.

CS 59995
SPECIAL TOPICS IN COMPUTER SCIENCE (1-3)
Various special courses will be announced in the Schedule of Classes under this title. Repeat registration permitted. Prerequisite: Permission.

CS 60093
VARIABLE TITLE WORKSHOP IN COMPUTER SCIENCE (1-3)
Studies of special topics in computer science. Not acceptable for credit toward a graduate degree in computer science without approval of the student's advisor. S/U grading. Prerequisite: Permission.
CS 60094/70094
COLLEGE TEACHING OF COMPUTER SCIENCE (1)
Techniques and problems of college teaching of computer science. Student presentation of computer science papers will be included. S/U grading.

CS 60220
BIOINFORMATICS (4)
Theory, methods and computational approaches used to interpret large volumes of Bio-Science information; reviews of major data repositories. An interdisciplinary research project is required. Prerequisite: Permission.

CS 61001
STRUCTURE OF COMPUTER SCIENCE (3)
An integrated view of the structure of computer science; algorithms, architecture, operating systems, programming languages and networking. Special emphasis on the framework of computer science and its relation to other fields. No credit for CS majors. IP permissible.

CS 61092
PRACTICUM IN CS FOR INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT (1-5)
This course is an alternative to IAKM 60199 for students interested in pursuing a CS thesis. Credit for IAKM 60199 or any other project course is not allowed. Not repeatable. S/U grading; IP permissible.

CS 61199
THESIS I FOR INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT (2-6)
Thesis students must register for a minimum of 6 hours. No credit for CS students. S/U grading; IP permissible.

CS 61299
THESIS II FOR INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT STUDENTS (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible.

CS 62201
NUMERICAL COMPUTING I (3)
Cross-listed with MATH 6/72201. Numerical methods for scientific computing emphasizing modern mathematical software and environments. Computer arithmetic and errors, linear systems of equations, least squares data fitting, eigenvalues and singular values, nonlinear systems, optimization. Prerequisite: MATH 21001, 22005 and computer programming C+ or C++ or Fortran.

CS 62202
NUMERICAL COMPUTING II (3)

CS 62251/72251
NUMERICAL ANALYSIS I (4)

CS 62252/72252
NUMERICAL ANALYSIS II (3)

CS 62261/72261
NUMERICAL SOLUTION OF ORDINARY DIFF EQS (3)

CS 62262/72262
NUMERICAL SOLUTION OF PARTIAL DIFFERENTIAL EQUATIONS (3)
Cross-listed with MATH 6/72262. Derivation and analysis of discrete methods (finite differences, finite elements) for the numerical solution of elliptic, hyperbolic and parabolic partial differential equations. Prerequisite: MATH 4/52045 and CS 4/52202.

CS 62263/72263
NUMERICAL SOLUTION OF LARGE SPARSE LINEAR SYSTEMS (3)
CS 62264/72264
NUMERICAL SOLUTION OF NONLINEAR SYSTEMS (3)

CS 63005/73005
ADVANCED DATABASE SYSTEMS DESIGN (3)
Introduction to a variety of advanced database topics and ongoing trends in modern database systems. The course includes advanced issues of object-oriented database, XML, advanced client server architecture and distributed database techniques. Prerequisite: CS 4/53005.

CS 63015/73015
DATA MINING TECHNIQUES (3)
The course presents the concepts and techniques of data mining. Data mining is a process of discovering information from a large set of databases. This course takes a database perspective on data mining. Prerequisites: CS 53005 and MATH 50011 or equivalent.

CS 63101/73101
ADVANCED PROGRAMMING LANGUAGES (3)
Topics such as programming language design problems, formal semantics, language definitions, functional programming, specialized or very high-level languages, correctness considerations, parallelism and concurrency. Prerequisite: CS 4/53101.

CS 63111/73111
ADVANCED COMPILER DESIGN (3)
Explores implementation issues such as optimization techniques, code generation, error handling, automatic compiler generation. May include compiler project parallelization. Prerequisite: CS 4/53111 and 4/55101. Special fee: $20.00 per semester.

CS 63201/73201
ADVANCED OPERATING SYSTEMS (3)
Introduction to distributed systems, interprocess communication, distributed mutual exclusion, synchronization and deadlock, distributed process management and distributed file systems. Prerequisite: CS 4/53201. Special fee: $10 per semester.

CS 63301/73301
PARALLEL AND DISTRIBUTED COMPUTING (3)
Overview of parallel and distributed computing; structuring parallel and distributed programs; parallel programming using SIMD, SPMD, MIMD and associative computing; parallel and distributed architecture using existing machines as case studies. Special fee: $6.67 per credit hour (subject to change).

CS 63304/73304
CLUSTER COMPUTING (3)
This course will investigate clusters of computers as a computing platform, hardware and software tradeoffs for cluster and application performance, and programming of clusters. Prerequisite: CS 55201.

CS 63901/73901
SOFTWARE ENGINEERING METHODOLOGIES (3)
Software process models; modeling languages; software process improvement; requirement analysis and elicitation; advanced systems and architectural design; estimation; verification and validation; reuse; and metrics.

CS 63902/73902
SOFTWARE EVOLUTION (3)
Methods and techniques supporting later life-cycle activities, including software testing and maintenance, reuse and reverse engineering. Prerequisite: CS 6/73901.

CS 63903/73903
SOFTWARE VISUALIZATION (3)
Methods and techniques to support the visualization of software to support maintenance, re-engineering and reverse engineering of large scale systems using information visualization and program understanding techniques. Prerequisite: CS 63901.

CS 64101/74101
COMPUTER ALGEBRA I (3)
Algorithms for integer and polynomial arithmetic modular and p-adic algorithms, GCD computation, factorization and resultants. Prerequisite: CS 4/56101 or permission.

CS 64102/74102
COMPUTER ALGEBRA II (3)
Additional concepts basic to computer algebra including linear algebra algorithms, factoring, parallel algorithms, interface to numerical computing, graphics, algebraic and transcendental extensions, and pattern-matching. Prerequisite: CS 6/74101.

CS 64201/74201
ADVANCED ARTIFICIAL INTELLIGENCE (3)
Additional topics in AI such as logic programming, advanced problem-solving systems, understanding natural languages, vision, learning, plan-generating systems. Prerequisite: CS 4/54201.

CS 64301/74301
PATTERN RECOGNITION PRINCIPLES (3)
Introduction to mathematical pattern recognition, feature selection, distribution-free classification, statistical classification, unsupervised learning, sequential learning and application. Prerequisite: CS 4/57101.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 64401/74401</td>
<td>IMAGE PROCESSING (3)</td>
<td>This course covers digital processing of digital imagery. Digitization of TV imagery, noise removal, image enhancement, edge and texture detection, object recognition and scene analysis. Prerequisite: CS 4/56101. Special fee: $10 per semester.</td>
</tr>
<tr>
<td>CS 65101/75101</td>
<td>ADVANCED COMPUTER ARCHITECTURE (3)</td>
<td>System performance measures, processor implementation, pipelining, system interconnection, memory hierarchy interrupts, stack architecture, vector and multiprocessors. Prerequisite: CS 4/55101.</td>
</tr>
<tr>
<td>CS 65201/75201</td>
<td>INTERCONNECTION NETWORKS (3)</td>
<td>This course provides a comprehensive coverage of interconnection networks in switching principles for high-performance computing and communications. It covers the theory, architecture, implementation and performance analysis of switching systems for multiprocessors, broadband networks and optical communications. Prerequisite: CS 4/55201 or CS 6/75101 or equivalent. Special fee: $10 per semester.</td>
</tr>
<tr>
<td>CS 65202/75202</td>
<td>ADVANCED COMMUNICATION NETWORKS (3)</td>
<td>This course covers central problems that confront network designers in high-speed networking such as real-time traffic, congestion control, quality of service (QoS), performance analysis, traffic management and Internet routing. Prerequisite: CS 4/55201.</td>
</tr>
<tr>
<td>CS 65203/75203</td>
<td>WIRELESS AND MOBILE COMMUNICATION NETWORKS (3)</td>
<td>This course examines how wireless systems work and how mobile systems are supported by the underlying network infrastructure. It covers the architecture and the interactions among different functional units in wireless and mobile systems. Prerequisite: CS 55201.</td>
</tr>
<tr>
<td>CS 65301/75301</td>
<td>SYSTEM MODELING AND PERFORMANCE EVALUATION (3)</td>
<td>Provides a detailed study of queuing, network models and their application to operating systems, computer time sharing, and multi-access systems. Prerequisite: MATH 4/50012 and CS 4/53201 or permission.</td>
</tr>
<tr>
<td>CS 66105/76105</td>
<td>PARALLEL AND DISTRIBUTED ALGORITHMS (3)</td>
<td>Introduces and evaluates important models of parallel (synchronous and asynchronous) and distributed computation using basic searching, sorting, graph, matrix, numerical computing and computational geometry algorithms. Prerequisite: CS 56101 or 63301 or permission.</td>
</tr>
<tr>
<td>66110/76110</td>
<td>COMPUTATIONAL GEOMETRY (3)</td>
<td>Geometric structures are the underlying model of several important applications, including robotics, graphics, CAD/CAM, VLSI layout, wireless networks and information visualization. Computational Geometry studies algorithms for geometric problems. Prerequisite: CS 56101.</td>
</tr>
<tr>
<td>66120/76120</td>
<td>EVOLUTIONARY COMPUTATION (3)</td>
<td>An introduction to evolutionary computation techniques for optimization, learning and design. Example topics include natural and artificial evolution, chromosome representations, search operators, co-evolution, constraint handling techniques, niching and speciation, classifier systems and theoretical foundations. Prerequisite: CS 56101.</td>
</tr>
<tr>
<td>CS 66202/76202</td>
<td>THEORY OF COMPUTATION (3)</td>
<td>Representative problems and algorithms for various complexities, recursion theory basics, complexity such as time, space, nondeterminism; relationships between complexities and hard sets. Prerequisite: CS 4/56101 and 4/56201.</td>
</tr>
<tr>
<td>CS 67101/77101</td>
<td>ADVANCED COMPUTER GRAPHICS (3)</td>
<td>The course provides an in-depth study of active research topics in computer graphics. Topics include volume rendering, image-based rendering and modeling, graphics architectures, virtual reality, modeling in computer graphics, non-photorealistic rendering, computer animation and computer games. Prerequisite: CS 57101.</td>
</tr>
<tr>
<td>CS 69098</td>
<td>RESEARCH (1-5)</td>
<td>Research or individual investigation. Credits are applied toward degree requirements, with approval, if letter grade or &quot;S&quot; is given. Repeat registration permitted.</td>
</tr>
<tr>
<td>CS 69191</td>
<td>MASTER'S SEMINAR (1-2)</td>
<td>Seminar for master's degree students to present and discuss computer science-related research and academics. Master's degree students are required to take at least 2 credit hours for completion of degree and make at least one presentation of project work or research. The course may be taken multiple times but only 2 credits count towards the master's degree. S/U grading. Prerequisite: Admission to the master's program.</td>
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</tbody>
</table>
Computer Science

CS 69199
THESIS I (2-6)
Thesis student must register for total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

CS 69299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: CS 69199.

CS 69995/79995
SPECIAL TOPICS IN COMPUTER SCIENCE (1-3)
S/U grading.

CS 89098
RESEARCH (1-15)
Research or individual investigation for doctoral students who have not yet passed their candidacy examinations. S/U grading. Repeat registration permitted.

CS 89199
DISSERTATION I (15)
Doctoral dissertation, for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible. Prerequisite: Admission to candidacy for doctoral degree.

CS 89299
DISSERTATION II (1 or 15)
Continuing registration required for doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: CS 89199.

CS 89991
RESEARCH SEMINAR IN COMPUTER SCIENCE (1-3)
Research seminar on current research in computer science. S/U grading. Prerequisite: Permission, doctoral standing.
ENGLISH

Ronald Corthell, Chair
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330-672-1742
rcorthel@kent.edu

Martha J. Cutter, Coordinator of Graduate Studies
113 Satterfield Hall
330-672-1742
mcutter@kent.edu

The English Department offers three degrees: (1) Master of Arts in Literature and Writing; (2) Master of Fine Arts in Creative Writing; and (3) Doctor of Philosophy with concentrations in a variety of areas.

At the master’s level the department offers a choice of three concentrations: (1) English literature and writing, for those who plan to proceed for a doctorate in literature or rhetoric and composition; or to enter careers in writing, publishing, community college teaching or business; (2) English for teachers, for those who seek enrichment of their teaching careers through advanced study in literature and composition; (3) teaching English as a second language, for those who plan to instruct foreign students and work in international programs.

The Master of Fine Arts in Creative Writing is designed for individuals who specialize in creative writing and wish to teach creative writing or work in allied fields. Kent State University is part of the Northeast Ohio Universities Master of Fine Arts in Creative Writing program. The NEO MFA is a multidisciplinary, interdepartmental and inter-institutional program.

The doctoral program is designed primarily for those who wish to teach literature and composition at the college or university level. The Ph.D. is offered in two areas of specialization: (1) literature, and (2) rhetoric and composition. Visit http://dept.kent.edu/english/graduate/gradprograms.htm for more information.

Master of Arts

ADMISSION
In addition to general requirements for admission, applicants should have a 3.0 GPA (A=4.0) in at least 12 hours of undergraduate work in English or related subjects beyond the sophomore level. Applicants are required to submit scores on the Graduate Record Examination (general test only), three letters of recommendation, and a one- to two-page statement of purpose. Applicants are also required to submit an 8-15
ADMISSION TO M.F.A.

Students pursuing the M.F.A. must choose a gateway school for admission to the graduate program and gain admission to a consortial graduate degree program in English. In addition to the minimum School of Graduate Studies and Research requirements, applicants must submit three letters of recommendation from individuals familiar with the applicant’s academic or professional background. The letters should include an assessment of the applicant’s current work quality and ability to successfully complete graduate training. Applicants should also submit a substantive portfolio of creative work which includes either 15-20 pages of poetry or literary translation of poetry, or 30 pages of fiction, creative nonfiction, playwriting or prose literary translation. All portfolios must include at least one finished work. All items in the portfolio should be double-spaced. Evaluation of student portfolios of creative writing will be conducted by a committee of the consortium and the degree is granted by the consortium.

Program Requirements of M.F.A.

The program requires 48 semester hours of graduate-level coursework, including a three-hour internship in teaching, editing or arts administration. There are six areas of coursework in the MFA: Writing Workshops (15 hours); Craft and Theory Courses (6 hours); Literature Courses (9 hours); Internship (3 hours); Electives (9 hours); and Thesis (6 hours). The thesis must be submitted according to the general requirements established by the School of Graduate Studies and Research. The student is required to defend the thesis in an oral presentation before a committee of graduate faculty from a minimum of two consortium schools.

Doctor of Philosophy

The doctoral program permits students to focus on literary traditions, literary theory, or rhetoric and composition.

The focus on literary traditions or literary theory emphasizes the intersections of literature, cultural theory and social practice. Graduate students identify, investigate and theorize the social functions of texts in a variety of contexts both within and outside the academy. This program crosses the increasingly fluid boundaries that have begun to characterize the profession of literary and cultural studies. A variety of cultural theories deconstruction, feminism, gender theory, historical materialism, post-colonialism, psychoanalysis are employed to understand both literary and popular texts. Students fulfill distribution requirements in several areas of English studies.

The doctoral concentration in rhetoric and composition is focused on the study of literacy, rhetoric and social practice. Grounded in rhetoric and language study, coursework and research center on how advanced literacy is embedded within and constitutive of communities of work and citizenship in contemporary culture. Study is based on coursework
distributed across five areas: introduction to the study of writing and rhetoric, theoretical foundations, language and linguistics, research methods and literate practices. Students are encouraged to conduct original research throughout their matriculation. Students will collaborate with faculty and other graduate students, for example through the Center for Research on Workplace Literacy.

ADMISSION
Applicants to the concentration in literary traditions or literary theory are expected to adhere to the regular application requirements of the university and to have the Master of Arts degree in English with a grade point average of 3.0 or above. Applicants are required to submit a 500-word statement of purpose, a sample of their research writing, and scores on the general test of the Graduate Record Examination. Applicants are not required to submit scores on the literature subject test of the Graduate Record Examination but may do so if this enhances their application.

Applicants to the concentration in rhetoric and composition are expected to hold a master’s degree in English, rhetoric or a related field (e.g., communication, education, sociology, business, philosophy) with a minimum grade point average of 3.0. Applicants must submit scores on the general test of the Graduate Record Examination. A concise but detailed statement of goals, motivations and preparations for pursuing a career compatible with the emphasis in literacy, rhetoric and social practice, and a sample of research writing is required. Generally, only applicants for full-time enrollment will be considered for admission; as a general rule, students admitted to the rhetoric and composition concentration are expected to accept research and/or teaching assistantships/fellowships during the period of their matriculation.

PROGRAM REQUIREMENTS
Students with an emphasis in literature are required to complete 27 hours of coursework beyond the Master of Arts. New graduate students without prior teaching experience must take ENG 61094. Students must also demonstrate proficiency in an approved language either by examination or by taking approved coursework in the language. A description of the Ph.D. in literature can be found at http://dept.kent.edu/english/graduate/lit.htm.

Students admitted to the Rhetoric and Composition doctoral major in Literacy, Rhetoric and Social Practice (LRSP) complete a minimum of 30 semester hours of doctoral-level coursework across the five areas noted above. Students, with guidance from faculty, complete a language requirement and a qualifying examination before writing a dissertation prospectus. The language requirement can be satisfied by either a second language or a representational system, if the latter is relevant to the student’s course of study. Upon the successful completion of the qualifying examination, students form a dissertation committee whose members direct the student through the dissertation and the completion of the degree. A description of these requirements is available from the chair of Literacy, Rhetoric and Social Practice, and can be found on the departmental Web site at http://dept.kent.edu/english/graduate/lrsp.htm.

CANDIDACY
Doctoral students must pass three written examinations in three distinct areas of English studies before being admitted to candidacy. They must also defend a dissertation prospectus.

Courses (ENG)

ENG 56201/76201
NINETEENTH-CENTURY EUROPEAN LITERATURE (3)
Major European writers of the 19th century: Romanticism, Realism, Naturalism, Symbolism and related movements.

ENG 56203/76203
TWENTIETH-CENTURY EUROPEAN LITERATURE (3)
Major European writers of the 20th century: Modernism, Postmodernism and related movements.

ENG 61000
INTRODUCTION TO RESEARCH AND PEDAGOGY IN CRITICAL READING (3)
Introduction to contemporary methods of literary and cultural criticism and to the profession of teaching English in college.

ENG 61094
INTRODUCTION TO RESEARCH IN THE TEACHING OF COLLEGE WRITING (3)
Using the Kent State program as an example, the focus will be on teaching composition, literature and language, along with the needed planning and evaluation.

ENG 62291/72291
SEMINAR: BRITISH LITERATURE 1800 TO PRESENT (3)
In-depth treatment of various topics from the Romantic and Victorian periods and the 20th century.

ENG 63001/73001
METHODOLOGY OF TESL (TEACHING ENGLISH AS A SECOND LANGUAGE) (3)
The theory and methodology of teaching English as a second language.

ENG 63031/73031
SCHOOLS OF LINGUISTICS (3)
Discussion of major trends in linguistic analysis and theory. Course centers on examining central questions, goals and methods of major schools of linguistics. Prerequisite: Upper-division/graduate-level introduction to linguistics.
ENG 63032/73032
FUNCTIONAL LINGUISTICS (3)
Examination of function as it occurs in the description of different levels of linguistic systems. Investigation of the theme/theme dichotomy and method of functional analysis. Prerequisite: Upper-division/graduate-level introduction to linguistics.

ENG 63033/73033
SECOND LANGUAGE ACQUISITION (3)
Cross-listed with MCLS 60661.
This course surveys the major theoretical approaches to language acquisition, concentrating on second language acquisition and the relationship between acquisition/learning research and second-language teaching approaches.

ENG 63034/73034
LITERATE PRACTICES AND SOCIOLINGUISTICS (3)
Discussion of sociolinguistic approaches to understanding literacy, language in workplaces and classrooms, and societal multilingualism. Survey of trends in sociolinguistic thought and method. Prerequisite: Upper-division/graduate-level introduction to linguistics.

ENG 63035
COMPUTERS IN SECOND LANGUAGE TEACHING (3)
Cross-listed with MCLS 50654.
Designed for teachers of language and culture. This course explores the availability of technology, its implementation in the classroom and its integration with foreign language skills.

ENG 63037
TEACHING CONVERSATION STRATEGIES (3)
Cross-listed with MCLS 60621.
Theories of conversational structure and strategies with practical applications for teaching conversation strategies to foreign-/second-language learners.

ENG 63038
TEACHING LITERATURE AND CULTURE (3)
Cross-listed with MCLS 60622.
Students will explore theories of literature and culture teaching, as well as strategies for teaching literature and culture.

ENG 63039
SECOND LANGUAGE CURRICULUM AND TESTING (3)
Cross-listed with MCLS 60663.
Students will study second-language curriculum and testing design and current issues, including oral proficiency testing.

ENG 63040
LINGUISTICS FOR THE LANGUAGE PROFESSIONS (3)
Cross-listed with MCLS 60601.
Students will be introduced to basic linguistic issues and how these relate to the language professions. Course focuses on functional principles, especially on options to express textual, interpersonal and ideational/experiential meaning.

ENG 63041
DESCRIPTION GRAMMAR OF ENGLISH (3)
This course provides a description of English syntax and morphology. Presentation of material will be through rules and exposure to grammatical forms in meaningful contexts.

ENG 63098
RESEARCH IN SECOND LANGUAGE PEDAGOGY (3)
Cross-listed with MCLS 60698.
Students will learn how second-language research influences their teaching practices by studying research texts and recent journal articles and conducting a research project. Prerequisite: Permission.

ENG 63391/73391
SEMINAR: LINGUISTICS (3)
In-depth treatment of various topics from modern linguistics, including phonology, morphology and various generative grammars.

ENG 64070/74070
WRITING POETRY (3)
Advanced workshop in creative writing.

ENG 64071/74071
WRITING FICTION (3)
Advanced workshop in the writing of fiction.

ENG 65011/75011
INTRODUCTION TO THE FIELD OF WRITING: THEORY RESEARCH/PRACTICE (3)
Survey introduces writing studies from various perspectives: rhetorical and composition theory, disciplinarity and professionalization, several 20th-century theoretical influences and Soviet activity theory.

ENG 65012/75012
READING AND INTERPRETING RESEARCH ON WRITING (3)
Course focuses on how to read critically and interpret published research by examining the principle means through which “knowledge” is constructed in writing research.

ENG 65022/75022
RHETORICAL THEORY: GREEK AND ROMAN (3)
Course examines classical Greek and Roman rhetorical traditions and, to a lesser extent, their reappearance in contemporary rhetorical theories and composition pedagogies.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ENG 65023/75023</td>
<td>RHETORICAL THEORY: 18TH, 19TH AND 20TH CENTURIES (3) Job</td>
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<tr>
<td></td>
<td>Course surveys 18th-, 19th- and 20th-century developments in rhetorical theory and their influences on contemporary pedagogical and theoretical practices.</td>
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<tr>
<td>ENG 65026/75026</td>
<td>LANGUAGE AND THE HUMAN SCIENCES (3)</td>
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<td>Course examines how language figures in the frameworks of scholars in various human sciences and the relevance of these approaches for studying language and writing.</td>
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<tr>
<td>ENG 65050/75050</td>
<td>PHILOSOPHY OF LANGUAGE (3)</td>
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<td></td>
<td>Cross-listed with PHIL 61050.</td>
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<td></td>
<td>Critical examination of nature and function of language, especially in relation to mental function and development.</td>
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<tr>
<td>ENG 65051/75051</td>
<td>LITERACY: FUNCTIONS, PRACTICES AND HISTORY (3)</td>
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<td></td>
<td>Course surveys and critically evaluates historical and contemporary studies of literacy in terms of three dominant metaphors (&quot;adaptation,&quot; &quot;power,&quot; &quot;grace&quot;) those studies employ.</td>
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<tr>
<td>ENG 65052/75052</td>
<td>WRITING ACTIVITY AS SOCIAL PRACTICE (3)</td>
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<td></td>
<td>Through Vygotskian-based activity theory and contemporary theories of practice, course explores the rhetorical bases and implications of studying literacy and writing as embedded activity.</td>
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<tr>
<td>ENG 65053/75053</td>
<td>WRITING TECHNOLOGIES (3)</td>
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<tr>
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<td>Course critically examines theoretical and pedagogical claims concerning writing technologies and begins identifying the conceptual components of a grounded theory for technology-enhanced literacy learning.</td>
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<tr>
<td>ENG 65057/75057</td>
<td>SEMEIOPTICS (3)</td>
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<td>Cross-listed with MCLS 60020 and PHIL 61055.</td>
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<tr>
<td></td>
<td>An introduction to contemporary theories of semiotics and to the application of those theories to linguistics, literature, translation and technology.</td>
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<tr>
<td>ENG 66001/76001</td>
<td>EARLY BRITISH LITERATURE THROUGH THE 18TH CENTURY (3)</td>
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<tr>
<td></td>
<td>A broad survey spanning many centuries. This course will identify key literary and cultural trends as represented in Beowulf to Blake.</td>
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<tr>
<td>ENG 66002/76002</td>
<td>BRITISH AND IRISH LITERATURE FROM THE EARLY ROMANTICS ONWARD (3)</td>
</tr>
<tr>
<td></td>
<td>Broad, synchronic study of the literature identified with a single period in literary history, embracing various genres and relating the literature to other cultural phenomena of the time.</td>
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<tr>
<td>ENG 66005/76005</td>
<td>OLD ENGLISH (3)</td>
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<tr>
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<td>In-depth study of Old English grammar and vocabulary, accompanied by guided reading of select Old English texts, with further reading in the history and culture of Anglo-Saxon England.</td>
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<tr>
<td>ENG 66042/76042</td>
<td>TEACHING ENGLISH IN SECONDARY SCHOOLS (3)</td>
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<td>A course for the experienced secondary English teacher who wants to explore current thinking in the teaching of literature, language and composition.</td>
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<tr>
<td>ENG 66051/76051</td>
<td>SHAKESPEARE (3)</td>
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<td>Close reading of selected plays and poems by Shakespeare with some emphasis on critical and interpretative problems.</td>
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<tr>
<td>ENG 66052/76052</td>
<td>SURVEY OF CHILDREN’S LITERATURE (3)</td>
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<td>Cross-listed with C&amp;I 6/77315.</td>
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<td>Wide reading in children's literature, with particular application to the school curriculum and the field of reading.</td>
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<tr>
<td>ENG 66053/76053</td>
<td>CRITICISM OF CHILDREN’S LITERATURE (3)</td>
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<td>Cross-listed with C&amp;I 6/77316.</td>
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<td></td>
<td>A critical study of outstanding children's literature from early times to the present. Prerequisite: ENG 31038 and a basic course in literary criticism; or permission.</td>
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<tr>
<td>ENG 66054/76054</td>
<td>BUSINESS AND TECHNICAL WRITING (3)</td>
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<td>Development of skills for writing business and technical material in clear, effective and correct English.</td>
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<tr>
<td>ENG 66101/76101</td>
<td>LITERATURE OF THE UNITED STATES THROUGH THE CIVIL WAR (3)</td>
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<td></td>
<td>Broad, synchronic study of U.S. literature identified with a single period in literary history, embracing various genres and relating the literature to other cultural phenomena of the time.</td>
</tr>
<tr>
<td>ENG 66102/76102</td>
<td>LITERATURE OF THE UNITED STATES AFTER THE CIVIL WAR (3)</td>
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<tr>
<td></td>
<td>Intensive survey of the major movements and cultural/ethnic diversity of American poetry, drama, fiction and literary nonfiction from Realism to Postmodernism.</td>
</tr>
</tbody>
</table>
ENG 66103/76103
ETHNIC LITERATURE OF THE UNITED STATES (3)
An examination of selected fiction and theory by ethnic
American authors, or of literary representations of special
topics relating to ethnic and racial identity.

ENG 66104/76104
AFRICAN-AMERICAN LITERATURE (3)
An examination of selected African-American fiction and
theory, or of a special topic relating to literary representations
of African-American culture, identity or history.

ENG 66301/76301
WORLD LITERATURE IN ENGLISH (3)
A survey of important works written in English by writers not
native to Britain, Ireland or the United States.

ENG 66302/76302
POST-COLONIAL LITERATURE IN ENGLISH (3)
An examination of selected fiction and theory in English by
post-colonial authors from India, Africa, South Africa, the
Caribbean and elsewhere.

ENG 66401/76401
LITERARY MOVEMENTS (3)
An examination of one particular movement in literary
history via its writers, artists, benefactors, thinkers, political
demagogues and critics.

ENG 66501/76501
NARRATIVE LITERATURE (3)
Close readings of selected novels, short stories, biographies,
autobiographies, life writing, journals and other forms of
narrative and verse by British, American and other writers in
English, from one or more periods in literary history.

ENG 66502/76502
DRAMATIC LITERATURE (3)
Close reading of selected plays and other dramatic forms by
writers of Britain, Ireland and the United States from one or
more periods in literary history.

ENG 66503/76503
POETRY AND/OR POETIC LITERATURE (3)
Close reading of selected poems and other poetic forms by
writers of Britain, Ireland or the United States, from one or
more periods in literary history.

ENG 66504/76504
WOMEN WRITERS (3)
Close readings of important works written in English by
women from one or more periods in literary history.

ENG 66505/76505
LITERARY MODES (3)
Analysis of works, in various genres from various periods, which
generate similar responses, with emphasis on defining source
of response. Content varies.

ENG 66592/76592
PRACTICUM IN TUTORING WRITING (1)
Practical training and experience in tutoring composition.

ENG 66595/76595
SPECIAL TOPICS: AUTHORS AND AUTHORSHIP (3)
Research-based study of problems in the theory or practice
of authorship. Typical courses include “The Creative Process,”
“Authors and Printers,” “Faulkner in Hollywood.”

ENG 66706/76706
METHODS IN THE STUDY OF LITERATURE (3)
Analytical reading and interpretation of published research
and criticism, its assumptions, trends, controversies; course will
identify and contextualize present opportunities for research
in field. Required for Ph.D.s specializing in Division II.

ENG 66791/76791
SEMINAR: BRITISH AND IRISH LITERATURE (3)
In-depth treatment of various topics from Old English
literature, Beowulf, Middle English literature and Chaucer.

ENG 66795/76795
SPECIAL TOPICS: COMPARATIVE LITERATURE (3)
Selected topics in comparative literary studies that range
from issues in the European novel to the study of literary
movements and the related arts.

ENG 66891/76891
SEMINAR: LITERATURE OF THE UNITED STATES (3)
This course will examine the construction of American
identities. Writers typically discussed are Howells, Dreiser,
Cahan, Anderson, Fitzgerald, Dos Passos, Wright, Baldwin,
Bellow, Ikada, Jen and others. Content varies.

ENG 66895/76895
SPECIAL TOPICS (3)
Study of selected special topics in literature.

ENG 66991/76991
SEMINAR: GENRE (3)
In-depth examination of one or more kinds of text focusing on
how forms are defined historically and analytically, with special
attention to current approaches.

ENG 67001/77001
HISTORY OF LITERARY THEORY (3)
A consideration of the major texts and issues that have shaped
literary theory and criticism from the Classical period to 20th-
century New Criticism.
ENG 67002/77002
CONTEMPORARY LITERARY THEORY (3)
A survey of the major works of literary theory written after 1950.

ENG 67101/77101
FEMINIST THEORY AND CRITICISM (3)
Study of key issues and concepts in feminist theory and criticism, including the nature, causes and effects (political, social and psychological) of certain types of representation of women and discourse practices employed by women.

ENG 67102/77102
GENDER THEORY AND CRITICISM (3)
An overview of the current field of literature-related discourses on gender construction, with attention to crucial historical texts that have shaped the contemporary debate.

ENG 67103/77103
PSYCHOANALYTIC THEORY AND CRITICISM (3)
Study of important issues and concepts in psychoanalytic theory and criticism. Repeatable as content varies.

ENG 67104/77104
SOCIAL AND CULTURAL THEORY AND CRITICISM (3)
Study of important issues and concepts in Marxist, new historicist, ethnic, post-colonialist and other modes of social/cultural theory and criticism. Repeatable as content varies.

ENG 67105/77105
STRUCTURALIST AND POSTSTRUCTURALIST THEORY AND CRITICISM (3)
Study of important issues and concepts in structuralist semiotics, narratology, rhetoric, genre theory and discourse theory. Repeatable as content varies.

ENG 67106/77106
HISTORICIST THEORY AND CRITICISM (3)
Study of current approaches to literary history and various historical approaches to the study of literature.

ENG 67591/77591
SEMINAR: THEORY AND CRITICISM (3)
In-depth study of important topics in contemporary theory and criticism. Repeatable as content varies.

ENG 67601/77601
DOCUMENTS AND TEXTS (3)
Surveys the forms in which written texts are preserved and the ways they are transmitted, revised and mediated. Emphasizes early and modern printing and analytical bibliography.

ENG 67691/77691
SEMINAR: SCHOLARLY EDITING (3)
In-depth treatment of various topics from modern scholarly editing. Repeatable as content varies.

ENG 68093/78093
VARIABLE TITLE WORKSHOP IN ENGLISH (2-6)
Designed to focus on concerns of the profession/discipline to bring secondary teachers up to date on new developments in the field. May be repeated for maximum credit of 8 hours provided content is different; maximum for degree credit is 4 hours. S/U grading.

ENG 68096/78096
INDIVIDUAL INVESTIGATION (1-3)
Intensive study of selected writer or special topic. IP permissible.

ENG 68098
RESEARCH (1-15)
Research for master's-level graduate students. Credits earned may be applied toward meeting degree requirements if the department approves. Repeat registration permitted. Prerequisite: Permission.

ENG 68392/78392
PRACTICUM IN TEACHING COLLEGE ENGLISH (3)
Practical training and experience in teaching beginning composition courses.

ENG 68492/78492
PRACTICUM IN TEACHING INTERNATIONAL STUDENTS (3)
Practical training and experience in teaching English composition to international students.

ENG 69199
THESIS I (2-6)
Thesis students must register for a total of 6 semester hours, 2 to 6 in a single semester, distributed over several semesters, if desired. S/U grading; IP permissible. Prerequisite: Permission.

ENG 69299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: ENG 69199.

ENG 85024
DOMAIN RHETORICS AND THE CONSTRUCTION OF KNOWLEDGE (3)
Course examines disciplinarity and knowledge production as historically and socially situated practices and how they are realized through linguistic, rhetorical and material processes and systems.

ENG 85025
THEORIES AND SYSTEMS OF WRITING AND REPRESENTATION (3)
Course examines the history and use of scripts and other means of constructing shared meaning and the attendant contemporary issues concerning writing and representation.
ENG 85033  
THE RHETORICAL NATURE AND FUNCTION OF EXTENDED DISCOURSE (3)  
Examines rhetorical nature and function of written discourse from social, cultural and psychological perspectives and how discourse production and interpretation interact with relevant contexts. Prerequisite: ENG 6/73031 and 9 doctoral hours in rhetoric and composition.

ENG 85041  
FIELD RESEARCH METHODS IN WRITING (3)  
Course focuses on qualitative methods for conducting field research in writing within communities of practice and particular contexts and for analyzing and interpreting data. Prerequisite: 9 doctoral hours in rhetoric and composition.

ENG 85042  
DISCOURSE ANALYSIS (3)  
Course explores various approaches to discourse analysis (e.g., speech act theory, pragmatics, ethnography of communication, conversation analysis) and applies them to linguistic analyses of discourse. Prerequisite: ENG 6/73031 and 9 doctoral hours in rhetoric and composition.

ENG 85043  
HISTORICAL RESEARCH METHODS IN WRITING AND RHETORIC (3)  
Course explores methods for the historical study of rhetoric and writing: archival research, ethnohistory, narrative theory, and disciplinary and institutional historiography. Prerequisite: 9 doctoral hours in rhetoric and composition.

ENG 85054  
STUDIES IN LITERACY AND COMMUNITY (3)  
Course expands on ENG 6/75052 by examining in more detail how literacy is embedded in the activities and practices of academic, civic and professional communities.

ENG 85055  
THE NATURE AND RELATIONSHIP OF ACADEMIC AND NON-ACADEMIC LITERACY (3)  
Course explores the relationship between academic and non-academic literacy, focusing on relationships pertaining to the school-to-work transitions that students make. Prerequisite: Permission.

ENG 85060  
DIRECTED READINGS IN WRITING AND RHETORIC (3)  
Topics covered will vary according to the needs of students demonstrating deficiency in qualifying exams and/or requiring additional work before undertaking a dissertation project.

ENG 88098  
RESEARCH (1-15)  
Research or individual investigation for doctoral students who have not yet passed candidacy examination. Credits earned may be applied toward degree if department approves. Repeat registration permitted. Prerequisite: Permission of the graduate chair.

ENG 89199  
DISSERTATION I (15)  
Doctoral dissertation, for which registration in two semesters is required, first of which will be the semester in which dissertation work is begun and continuing until completion of 30 hours. S/U grading; IP permissible. Prerequisite: Admission to candidacy for doctoral degree.

ENG 89299  
DISSERTATION II (1 or 15)  
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: ENG 88199.
The Department of Geography offers graduate programs of study leading to the Master of Arts and Doctor of Philosophy degrees. The department offers specialties in urban/economic geography, cartography/geographic information systems, climatology and social geography.

ADMISSION
In addition to regular application requirements of the university, all applicants must submit scores on the Graduate Record Examination, an example of their writing and a statement of interest.

Master of Arts

PROGRAM REQUIREMENTS
The curriculum for the Master of Arts degree is designed to meet the needs of students who expect to continue with a professional career in academic or applied fields such as business, environmental or social planning, geographical information systems or cartography in private or governmental agencies. Students must complete GEOG 60800, 69004 and 69701 as well as other courses suggested by their graduate committee. Students may elect to write a thesis or two research papers.

Doctor of Philosophy

PROGRAM REQUIREMENTS
The program for the Doctor of Philosophy degree is designed to provide specialized training and inquiry into contemporary problems in geography. Students should take courses with the advice of the department and their graduate committee. At least 6 hours of coursework must be taken in a cognate field in a department other than geography.

CANDIDACY
Candidacy examinations are taken after the dissertation proposal is approved by the committee. This should be completed by the end of the second year of doctoral study.

Courses (GEOG)

GEOG 50093/70093 VARIABLE TITLE WORKSHOP IN GEOGRAPHY (1-5) S/U grading; IP permissible.

GEOG 50195/70195 SPECIAL TOPICS IN GEOGRAPHY (1-3)

GEOG 51050/71050 POLAR AND ALPINE ENVIRONMENTS (3)
The geographic features of the earth's cold, treeless regions are examined, including climate, soils, glaciers, permafrost, plant and animal life and human activities. Prerequisite: GEOG 21062 or permission.

GEOG 51062/71062 ADVANCED PHYSICAL GEOGRAPHY (3)
Advanced systematic analysis of the elements of physical geography. Specific methodologies and their application to physical geography are also discussed.

GEOG 51073/71073 CONSERVATION OF OUR NATURAL RESOURCES (3)
Evaluation of past and current problems associated with the management of natural resources and the environments associated with their utilization.

GEOG 51074/71074 RESOURCE GEOGRAPHY (3)
Cultural attitudes, conceptual approaches and techniques in resource geography; analysis of selected resource issues at various area scales.
GEOG 51082/71082
GEOGRAPHY OF SOILS (3)
Study and analysis of different soil types in their relation to geographic factors.

GEOG 51265/71265
URBAN CLIMATOLOGY (3)
A study of the urban atmosphere through historical and current literature and field projects. Elements studied include temperature, radiation, moisture, wind and pollution. Prerequisite: GEOG 31062.

GEOG 52052/72052
MEDICAL GEOGRAPHY (3)
Examines the geographic patterns of morbidity and mortality, environmental correlates of major diseases and disease diffusion. Locational and accessibility issues of health care are discussed.

GEOG 52064/72064
HISTORICAL GEOGRAPHY OF THE UNITED STATES AND CANADA (3)
Study of regional origins, growth, evolution of spatial organization, changing evaluation of environments and selective geographies in United States and Canada from pre-colonial times to present.

GEOG 54010/74010
ADVANCED ECONOMIC GEOGRAPHY (3)
Geographic analysis of economic growth models, territorial production complexes, input-output models and regional distinctions in the global economy.

GEOG 54070/74070
SPATIAL ANALYSIS AND LOCATION THEORY (3)
Classical theories for location of economic activities and contemporary approach of spatial analysis, spatial organization of economic systems, behavioral models in economic geography, and spatial allocation problems.

GEOG 55085/75085
URBAN TRANSPORTATION (3)
Spatial interaction patterns in urban environments. Travel behavior, commodity flows, traffic patterns and urban transportation systems. Urban transportation problems. Theoretical developments and techniques of analysis in urban transportation.

GEOG 56035/76035
MARKETING GEOGRAPHY (3)
Study of spatial arrangement and functions of market centers and the internal spatial patterns of retail/wholesale facilities in urban areas.

GEOG 56065/76065
ADVANCED URBAN GEOGRAPHY (3)
Investigation of advanced concepts pertaining to the spatial structure of urban areas.

GEOG 56070/76070
URBAN AND REGIONAL PLANNING (3)
Analysis of the geographical aspects of planning for cities and regions.

GEOG 56092
INTERNSHIP IN GEOGRAPHY AND PLANNING (3-6)
Preprofessional work experience in local, regional and environmental planning agencies and private business designed to utilize and develop academic skills. Prerequisite: Permission.

GEOG 59006/79006
SPATIAL PROGRAMMING (3)
Introduces the student to a variety of computer programming environments suitable for analysis of spatial problems. Prerequisite: Basic statistics, GEOG 39002 or permission.

GEOG 59070/79070
GEOGRAPHIC INFORMATION SCIENCE (3)
Introduction to theories and methods for geographic data processing, including data capture and input, data storage and management, and data analysis and displays. Emphasis is on laboratory exercises using GIS software packages for real world applications.

GEOG 59080/79080
ADVANCED GEOGRAPHIC INFORMATION SCIENCE (3)
Advanced theories and techniques for handling geographic information systems, including 2D and 3D processing of geographic information, detection and analysis of geographic patterns, 2D and 3D mapping of geographic information, modeling of geographic processes, and an overview of GIS programming tools. Prerequisite: GEOG 4/59070 or permission.

GEOG 59162/79162
ADVANCED CARTOGRAPHY (3)
Study of the design and production of complex maps, symbolization, composition and color utilization. Prerequisite: GEOG 39161 or permission; GEOG 5/79163 concurrently.

GEOG 59163/79163
ADVANCED CARTOGRAPHY LABORATORY (1)
Practical experience in the techniques of the production and reproduction of maps. Special fee: $35 per semester.

GEOG 59165/79165
GEOMAPPING (3)
Information theory, data collection, automated mapping systems, representation of surfaces, lines and points, geographic data structures and applications. Mapping by line printer, plotters and interactive terminals.
GEOG 59210/79210  
EARTH IMAGERY (3)  
The student in this course will be introduced to the full variety of methods of imaging the earth for environmental analysis, including satellite methods. Prerequisite: GEOG 29160.

GEOG 59211/79211  
EARTH IMAGERY LAB (1)  
This course will support the lecture course, Earth Imagery, by giving the student exposure to the methods of manual measurement and interpretation of images. Prerequisite: Must take GEOG 5/79210 concurrently.

GEOG 59230/79230  
REMOTE SENSING (3)  
Cross-listed with GEOL 5/72030. Emphasis on computer analysis of LANDSAT data using multivariate statistical tools. Introduces statistical methods and use of the computer. Problems in earth sciences are stressed. Prerequisite: Permission.

GEOG 59480/79480  
FIELD STUDY IN GEOGRAPHY (3)  
Prepares techniques of planning and structuring field studies, the techniques of mapping and data gathering in the analysis of local field problems. Prerequisite: Permission.

GEOG 59482  
FIELD STUDY OF SELECTED RURAL AND URBAN AREAS (5)  
Field studies of rural and urban regional problems in the United States or Canada. One month or more in field; written report on findings. Limited to 15 students. Students pay for own board and laboratory fee. Prerequisite: Permission of instructor.

GEOG 59890/79890  
APPLIED GEOGRAPHY (3)  
Detailed investigation of application of geographic techniques and knowledge toward problem solving in the “real world.”

GEOG 60191/70191  
SEMINAR IN TOPICAL GEOGRAPHY (3)  
Seminar in one of the major topical fields in geography offered by title in given semester.

GEOG 60197/80197  
INTRADEPARTMENTAL COLLOQUIUM (2)  
One hour credit per semester. S/U grading; IP permissible.

GEOG 60299  
THESIS II (2)  
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: GEOG 60199.

GEOG 60800/70800  
SEMINAR IN THE DEVELOPMENT OF GEOGRAPHIC THOUGHT (3)  
Development of geographic knowledge and concepts with emphasis on recent development. Critical analysis of writings of representative geographers and scientists in related fields.

GEOG 60881/70881  
CONTEMPORARY ISSUES IN GEOGRAPHY (3)  
Survey of some of the important philosophical, methodological and contextual research areas in geography. Designed to expose students to potential research areas.

GEOG 60996  
RESEARCH IN GEOGRAPHY (1-3)  
Individual research problems in geography. IP permissible. Prerequisite: Permission.

GEOG 60998  
RESEARCH (1-15)  
Research or individual investigation for master’s-level graduate students. Credits earned may be applied toward meeting degree requirements if the department approves. Repeat registration permitted.

GEOG 62062/72062  
BEHAVIORAL GEOGRAPHY (3)  
Focuses on spatial perception, cognition and behavior. How we collect and process spatial information, behavior in space, locate space and interact in space.

GEOG 64040/74040  
SEMINAR IN ECONOMIC GEOGRAPHY (3)  
Survey of recent literature in economic geography, including industrial and technological change, services and the world economy.

GEOG 67091/77091  
SEMINAR IN REGIONAL GEOGRAPHY (3)  
Seminar on one of the major regions of the world offered by title in given semester.

GEOG 69004/79004  
ANALYSIS OF SPATIAL DATA (3)  
Application of distance measures and taxonomic techniques, analysis of association between different distributions, explanation and prediction of spatial and temporal trends —regression methods (linear and nonlinear), trend surface techniques, and spatial autocorrelation to the geographic analysis and spatial distributions. Prerequisite: GEOG 39002 or permission.
**Geography**

GEOG 69009/79009  
SPATIAL ALGORITHMS (3)  
This course explores the methodologies of how to conduct spatial analyses in a computer environment. Half the course will be in a structured teaching context and half will be project work. Prerequisite: GEOG 4/5/79006 or permission.

GEOG 69010/79010  
URBAN INFORMATION AND SYSTEMS METHODOLOGY (2)  
Urban information processing procedures for acquiring and using information; research design that emphasizes systems planning prior to research; quantitative methods and stress analysis of statistical results.

GEOG 69694/79694  
COLLEGE TEACHING OF GEOGRAPHY (2-3)  
Staff training and experience in college teaching. S/U grading. Repeat registration permitted up to 10 hours for doctoral students. Maximum of 3 hours applicable toward master’s degree requirements (with department’s approval).

GEOG 69701  
RESEARCH AND PRESENTATION OF GEOGRAPHIC DATA (3)  
Critical discussion of techniques of geographic research and preparation and presentation of research papers.

GEOG 71060  
SEMINAR IN PHYSICAL GEOGRAPHY (3)  
Research and investigation concerning theories and concepts relevant to formation of physical elements of earth’s environment. Direct and indirect relationships of physical processes — human activity and physical environment.

GEOG 72061  
SEMINAR IN CULTURAL GEOGRAPHY (3)  
Investigation of theories, concepts and trends in cultural geography. Impact of beliefs, values and attitudes on rural and urban landscape.

GEOG 75065  
SEMINAR IN THE GEOGRAPHY OF TRANSPORTATION (2)  
Concepts and theories of distribution of modes of transportation as geographic factor in spatial analysis of integrated regional development.

GEOG 76081  
SEMINAR IN URBAN GEOGRAPHY (3)  
Theoretical explanations of urban spatial patterns. Application of contemporary theories, concepts and methods to selected urban geographic problems.

GEOG 79007  
QUANTITATIVE METHODS IN GEOGRAPHY (3)  
Quantitative methods in the geographic analysis of spatial phenomena. Statistical methods of regional analysis and synthesis.

GEOG 79808  
ADVANCED SPATIAL MULTIVARIATE TECHNIQUES (2)  
Geographic application of multivariate techniques such as: multidimensional scaling, spatial filtering, and linear programming to the spatial analysis of flows, surfaces and distributions. Prerequisite: GEOG 79007.

GEOG 80199  
DISSERTATION I (15)  
Doctoral dissertation, for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible. Prerequisite: Admission to candidacy for doctoral degree.

GEOG 80299  
DISSERTATION II (1 or 15)  
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: GEOG 80199.

GEOG 80998  
RESEARCH (1-15)  
Research or individual investigation for doctoral students who have not yet passed their candidacy examination. Credits earned may be applied toward degree if department approves. Repeat registration permitted. IP permissible.

GEOG 81091  
RESEARCH IN PHYSICAL RESOURCES (2-3)  
Research on basic processes related to formation of physical environment. Investigation of significant variables in resource utilization relevant to regional planning and development. IP permissible.

GEOG 81098  
RESEARCH IN URBAN CLIMATOLOGY (2-3)  
Research on basic climatological processes both macro and micro by use of established instrument stations. Influence of expanding urbanization on climatic modification. IP permissible.

GEOG 82091  
RESEARCH IN HUMAN RESOURCES (2-3)  
Research on basic processes related to formation of cultural environment. Investigation of significant variables in human resource allocation and utilization, manpower, education, etc., as factors in growth and development of region. IP permissible.

GEOG 89082  
FOREIGN FIELD RESEARCH (1-5)  
Application of field, statistical and cartographic techniques to methodological or conceptual problems in foreign region. Emphasis on research design. IP permissible. Prerequisite: Knowledge of a language of the region.
GEOG 89092  
GRADUATE FIELD CAMP (5)  
Field research problems involving individual investigation of specific urban or rural region.

GEOG 89098  
RESEARCH IN CARTOGRAPHY (1-3)  
Investigations into function of map as medium of scientific expression; problem of map design in relation to human perception of graphically expressed spatial information.
The Department of Geology provides qualified students the opportunity for advanced study in a wide variety of geologic fields, including applied ones, leading to the Master of Science degree, and specifically in applied geologic fields leading to the Doctor of Philosophy degree.

Research and formal coursework are fundamental to both programs. Independence, imagination and innovation are given equal emphasis with traditional methodology in research. Coursework is tailored to each individual’s needs and desires insofar as these are consistent with sound geologic training.

The general admission requirements for both programs are those of the university.

Under all but the most exceptional circumstances, students must fulfill all of the following departmental admission requirements, in addition to the general university requirements:

1. A cumulative grade point average of 3.0 (A=4.0).
2. Satisfactory scores on the verbal, quantitative and analytical writing tests of the Graduate Record Examination.
3. Three letters of recommendation written by persons qualified to assess the student’s capabilities for advanced studies in geology.
4. A one-page description of research interests and career plans.

Additional departmental requirements are given below. Procedural details, additional information about the department and application information are given on our Web site at http://www.kent.edu/geology.
Master of Science

ADMISSION
In addition to regular application requirements of the university, all applicants must submit three letters of recommendation. In addition, students seeking the Master of Science as their terminal degree are expected to have completed prior to their admission, or to complete during their tenure as a graduate student, all courses (or their equivalents) required for the Bachelor of Science in Geology degree at Kent State University. However, the department may accept students who have undergraduate majors in cognate science or engineering fields that are deemed appropriate as a base for advanced work in geology. For such students, certain undergraduate courses may be waived because of their obvious lack of relevance to the student’s selected field of concentration.

PROGRAM REQUIREMENTS
To be awarded the master’s degree, a student must complete 32 semester credits (including thesis and research credits); participate in required seminars, research orientation and colloquia; and incorporate the results of a program of original geologic research in an acceptable thesis. There is no foreign language requirement.

Doctor of Philosophy

The department offers an applied geology program leading to the Doctor of Philosophy degree. To obtain this degree requires a mastery of the study of and solution of problems in, some significant phase of applied geology. Thus it is one of only a few doctoral programs that emphasizes gaining specialized skills and knowledge by the use of which the fundamental principles and methodology of geology and its allied sciences can be put to immediate and practical use.

Four major areas of concentration are available in the doctoral program, which are described briefly here. The first area involves research and study in the interrelated fields of hydrogeology, engineering geology and environmental geochemistry. Included in this area are training in exploration techniques to investigate crustal processes involved in the growth and evolution of continents. Interdisciplinary research opportunities are available through the university’s Water Resources Research Institute, which gives students access to professors, specialized research laboratories, and equipment in the Departments of Geology, Biological Sciences, Chemistry and Geography.

ADMISSION
A student can gain admission to the doctoral program at any time after completion of the baccalaureate degree. It is expected, however, that most students who do not possess the master’s degree prior to admission will gain this degree in the department prior to proceeding with doctoral study. Furthermore, it is expected that most students admitted to the doctoral program either will have majored in geology at the undergraduate level or will have a considerable background in geology if it was not their major. However, the department may accept students who have undergraduate majors in cognate science or engineering fields that are deemed appropriate as a base for advanced work in applied geology.

Lastly, it is expected that most doctoral students will have completed prior to their admission to the program, or complete during their doctoral study, all courses or their equivalents required for a Bachelor of Science degree in geology at Kent State University. This is not a universal requirement, however, and under special circumstances certain undergraduate courses may be waived because of their obvious lack of relevance to the applied field of concentration selected by the student.

PROGRAM REQUIREMENTS
The courses taken by doctoral students are determined jointly with members of the graduate faculty of the department but in all cases must fulfill certain basic requirements. Coursework shall be arranged so that it embraces one major area of concentration in applied geology and two minor areas related to either another aspect of geology or an ancillary science.

RESIDENCY
All students admitted to the doctoral program must complete two successive semesters of full-time graduate study at Kent State University. During this time they must obtain a minimum of 22 semester credits.

ADDITIONAL BREADTH REQUIREMENT
All aspirants for the doctoral degree must demonstrate either proficiency in a modern language, foreign to the student, or knowledge sufficiently advanced to propose research in a field ancillary to the student’s major. To satisfy this requirement the
student must either pass an appropriate foreign language test or prepare and defend a grant proposal in the ancillary field.

CANDIDACY
To be admitted to candidacy for the doctoral degree, a student first must fulfill the foreign language requirement and must pass comprehensive written and oral examinations. Both of these requirements must be met within two years after admission to the doctoral program.

The comprehensive examinations focus on the student's major area of concentration and two minor areas, be they in another aspect of geology or in an allied scientific or mathematical discipline, as well as on the student's mastery of the fundamentals of geology and its allied sciences. Students who fail the comprehensive examinations may be allowed to repeat them once; this must be done within nine months of the first examination.

Courses (GEOL)

GEOL 50093/70093
VARIABLE TITLE WORKSHOP IN GEOLOGY (1-8)
Workshop or training program focused on a specific professional or disciplinary topic within geology. Repeat registration permitted. S/U grading. Prerequisite: Permission.

GEOL 50095
SELECTED TOPICS IN GEOLOGY (3)
Selected topics presented by visiting professors or one-time offerings presented by regular faculty.

GEOL 51025
GENERAL GEOPHYSICS (3)
Physics of earth. Seismology; geomagnetism; heat flow, radioactivity, geochronology, gravity and isostasy, geotectonic models. Lecture 3 hours weekly. Required field trip. Prerequisite: GEOL 31070 and 31080, MATH 12002, PHY 13001 or PHY 23001.

GEOL 51073
GEOLOGY OF OHIO (3)
Minerals, rocks, fossils, structural geology, physiography, environmental geology, geologic resources. Required field trips. Does not satisfy requirements for major in geology.

GEOL 51075
GEOLOGY OF THE UNITED STATES (3)
Distribution of natural regions and geologic features of the United States. Geologic concepts illustrated by detailed examination of selected areas. Prerequisite: GEOL 31070 and 31080 or permission.

GEOL 51077
GEOLOGY OF THE NATIONAL PARKS OF NORTH AMERICA (3)
Introduction to geology of principal national parks, monuments and seashores of United States and Canada, emphasizing basic geologic principles. Lecture 3 hours weekly. Not counted toward requirements for a major in geology.

GEOL 51080
TECTONICS AND OROGENY (3)
Introduces advanced concepts of plate tectonics and mountain building with emphasis on western United States and Appalachians. Required field trip to New England. Prerequisite: GEOL 31080.

GEOL 51092
SUMMER FIELD CAMP (6)
Five weeks devoted to geologic mapping and solving structural and stratigraphic problems in Black Hills, South Dakota. IP permissible. Prerequisite: GEOL 31070 and 31080 or permission. Special fee: On actual cost basis.

GEOL 52030/72030
REMOTE SENSING (3)
Cross-listed with GEOG 5/79030. Emphasis on computer analysis of LANDSAT data using multivariate statistical tools. Introduces statistical methods and use of the computer. Problems in earth sciences are stressed.

GEOL 52035/72035
SCIENTIFIC METHOD IN GEOLOGY (3)
Applying scientific method in the field and lab; models and sampling procedures. Collecting and analyzing data. Formulating and testing hypotheses. Lecture 3 hours weekly. Required field trip.

GEOL 52067
INTRODUCTORY HYDROGEOLOGY (3)
Occurrence of groundwater in geologic materials; emphasizing utilization, conservation and management of groundwater resources. Lecture 2 hours, laboratory 2 hours weekly. Prerequisite: GEOL 31070 and 32066, MATH 12001 and 12002 or permission.

GEOL 52068
CONTAMINANT HYDROLOGY AND HYDROGEOLOGY (3)
An introduction to the basic principles of chemical and physical behavior of contaminants introduced by humans into the environment. Students are expected to understand concepts and work practical quantitative problems. Prerequisite: GEOL 4/52067, CHEM 10060, 10061, 10062, 10063.

GEOL 52069/72069
HYDROGEOCHEMISTRY (3)
Processes and evolution of the chemical composition of water in the natural hydrologic cycle. Methods of hydrochemical interpretation applied to groundwater and pollution problems. Lecture 3 hours weekly. Prerequisite: 10 hours of chemistry.
| Course Code | Course Title | Credits | Prerequisites
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<tr>
<td>GEOL 52073</td>
<td>WELL LOGGING</td>
<td>3</td>
<td>GEOL 31070</td>
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<tr>
<td>GEOL 52078</td>
<td>ENGINEERING GEOLOGY</td>
<td>4</td>
<td>Lecture 3 hours, laboratory 2 hours weekly.</td>
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<tr>
<td>GEOL 53040</td>
<td>PRINCIPLES OF GEOCHEMISTRY</td>
<td>3</td>
<td>GEOL 31070, MATH 12002, and one year of college chemistry or permission.</td>
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<tr>
<td>GEOL 53066</td>
<td>OPTICAL PETROGRAPHY</td>
<td>3</td>
<td>Lecture 2 hours, laboratory 2 hours weekly.</td>
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<tr>
<td>GEOL 54070</td>
<td>PRINCIPLES OF STRATIGRAPHY</td>
<td>4</td>
<td>GEOL 31070 and 34061 or permission.</td>
</tr>
<tr>
<td>GEOL 54074</td>
<td>PALEOCEANOGRAPHY</td>
<td>3</td>
<td>Required field trips.</td>
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<tr>
<td>GEOL 60080/70080</td>
<td>RESEARCH ORIENTATION</td>
<td>1</td>
<td>GEOL 31070 and 34061 or permission.</td>
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<td>GEOL 60095</td>
<td>SELECTED TOPICS IN GEOLOGY</td>
<td>3</td>
<td>Selected topics presented by visiting professors or one-time offerings presented by regular faculty.</td>
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<tr>
<td>GEOL 60097/80097</td>
<td>GEOLOGY COLLOQUIUM</td>
<td>1</td>
<td>Presentation by invited speakers, faculty and graduate students of selected geologic topics. Required of all graduate students in residence.</td>
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<tr>
<td>GEOL 60098</td>
<td>RESEARCH</td>
<td>1-15</td>
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<td>GEOL 60199</td>
<td>THESIS I</td>
<td>2-6</td>
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<tr>
<td>GEOL 61093/71093</td>
<td>WORKSHOP IN COLLEGE TEACHING</td>
<td>1-2</td>
<td>GEOL 61094/71094</td>
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<tr>
<td>GEOL 62025/72025</td>
<td>EXPLORATION GEOPHYSICS</td>
<td>3</td>
<td>GEOL 4/51025.</td>
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</table>

GEOL 60094/70094 | COLLEGE TEACHING OF APPLIED GEOLOGY | 1 | Training and experience in presentation of data and college teaching of applied geology, as well as a discussion forum on professional ethics and responsibilities. |
GEOL 62063/72063
COMPUTER SIMULATION IN GEOLOGY (3)
Spatial and temporal considerations in geoscience simulations. Use of geological data in modeling verification and validation of models. Display techniques. Sensitivity and Monte Carlo analyses. Prerequisite: Knowledge of a computer language.

GEOL 62065/72065
HYDROGEOLOGICAL SYSTEMS (3)
Advanced study, construction and application of a variety of modeling techniques to solve groundwater-related problems. Design, construction, programming and operation of analog and numerical models. Prerequisite: GEOL 4/52067 and 6/72068.

GEOL 62066/72066
QUANTITATIVE GEOMORPHOLOGY (3)
Interactions of land-forming systems. Slope processes, erosion, stream hydrology including runoff relations and discharge curves. Algebra of streams and topologic structure. Lecture 2 hours, laboratory 1 hour weekly. Prerequisite: GEOL 32066 and 4/5/72035 or permission.

GEOL 62067/72067
GEOPHYSICAL FLUID DYNAMICS (3)
Consideration of basic physical equations of fluid flow. Application to hydraulics, atmosphere, oceans and mechanics of ice motion. Numerical and computer implementation. Prerequisite: MATH 12002 and 12003 or equivalent.

GEOL 62068/72068
ADVANCED HYDROGEOLOGY (3)
Quantitative approach to occurrence of groundwater; methods of investigation, evaluation and development of groundwater resources, emphasizing optimization and maximal exploitation without environmental changes. Prerequisite: GEOL 4/52067; MATH 12001 or 12003 or permission.

GEOL 62070/72070
GEOLOGY AND THE LAW (3)
Legal aspects of the practice of geology as a profession. Emphasis is placed on the sources of the law that affect the practice both substantively and procedurally.

GEOL 62079/72079
ADVANCED ENGINEERING GEOLOGY (3)
Role of geology in site selection, design and construction relative to dams, tunnels, highways, slope stability and nuclear power plants. Selected case histories. Lecture 3 hours weekly. Field trip and term paper required. Prerequisite: GEOL 4/52078.

GEOL 62082/72082
INTRODUCTION TO SOIL MECHANICS (4)
Engineering properties and engineering behavior of soils including classification properties, compaction, permeability, strength and compressibility. Lecture 3 hours, laboratory 2 hours weekly. Prerequisite: GEOL 31080.

GEOL 62083/72083
ROCK SLOPE STABILITY (3)
Provide information used to recognize, avoid, design for, control and correct slope movements in rocks; determination of shear strength along rock discontinuities; stability analysis of rock slopes. Prerequisite: GEOL 4/52078.

GEOL 62084/72084
FOUNDATION ENGINEERING (3)

GEOL 63045/73045
ADVANCED GEOCHEMISTRY (3)
Advanced study of selected topics in low temperature and/or high temperature geochemistry, including principles of phase equilibria and applications to geochemical systems. Prerequisite: GEOL 4/53040.

GEOL 63047/73047
SELECTED INSTRUMENTAL METHODS OF GEOCHEMICAL ANALYSIS (3)
Selected spectroscopic techniques commonly used in analysis of geological samples. Laboratory teaches geological sample preparation, analytical methods development, and operation of chemical instrumentation. Prerequisite: GEOL 4/53040 or permission.

GEOL 63055/73055
ADVANCED IGNEOUS AND METAMORPHIC PETROLOGY (3)
Petrogenic processes relevant to evolution of selected rock groups. Petrologic techniques and methods of analysis. Microscopic study of selected rock suites. Required field trip. Prerequisite: GEOL 4/53066.

GEOL 63063/73063
SEDIMENTARY PETROLOGY (3)
Classification, texture, composition, provenance and diagenesis of sandstones and carbonates, following review of optical mineralogy. Petrographic microscopy and other laboratory techniques are emphasized. Prerequisite: GEOL 31070.

GEOL 63067/73067
CARBONATE ROCKS (3)
Basic principles of carbonate sedimentology including composition, classification origin and distribution of carbonate sediments, their diagenesis and lithification. Prerequisite: GEOL 4/53066.
GEOL 63069/73069
CLAY MINERALOGY (3)
Clay mineral classification, structures, identification. Formation, geochemical principles, chemical weathering, diagenesis, metamorphism, wallrock alteration. Industrial uses, engineering applications. Lecture 2 hours, laboratory 2 hours weekly.

GEOL 63085/73085
GEOCHEMICAL EXPLORATION (3)
Distribution and mobility of the elements. Sampling techniques; analytical methods. Primary dispersion. Secondary dispersion in sediment, soil, water, vegetation. Lecture 2 hours, laboratory 2 hours weekly. Prerequisite: GEOL 4/53040.

GEOL 64028/74028
PALEOECOLOGY (3)
Relationships between ancient organisms and their environments, as interpreted from fossils, enclosing rock strata and recent analogs. Field and laboratory studies. Saturday field trips. Prerequisite: GEOL 34061 or equivalent.

GEOL 64030/74030
SYSTEMATIC INVERTEBRATE PALEONTOLOGY I (3)
Detailed investigation and examination of important literature concerning taxonomic characters of invertebrate phyla: Protista, Porifera, Cnidaria and Bryozoa. Numerous oral reports, specimen examination. Prerequisite: GEOL 34061 or equivalent.

GEOL 64032/74032
SYSTEMATIC INVERTEBRATE PALEONTOLOGY II (3)
Detailed investigation and examination of important literature concerning taxonomic characters of invertebrate phyla: Brachiopoda, Mollusca, Arthropoda and Echinodermata. Numerous oral reports, specimen examination. Prerequisite: GEOL 34061 or equivalent.

GEOL 64034/74034
MICROPALEONTOLOGY (3)
Study of more important microfossil groups found in geologic record, emphasizing Foraminiferida, Ostracoda and Conodonta. Techniques for collecting, preparing and studying microfossils. Prerequisite: GEOL 34061 or equivalent.

GEOL 64065/74065
SEDIMENTOLOGY (3)
Fluid dynamics, grain transport, sedimentary structures, granulometry, bedform and facies sequences, and facies architecture. Interpretation of continental and marine clastic depositional environments and processes.

GEOL 64067/74067
TECTONICS AND SEDIMENTATION (3)
The distribution and migration of depositional sedimentary environments as a function of tectonic regime, climate and time. Prerequisite: GEOL 6/74065.
HISTORY

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The Department of History offers both a Master of Arts degree program and a Doctor of Philosophy degree program in most fields of history. Detailed program outlines may be obtained from the graduate coordinator’s office in the department.

Visit the department Web site at http://dept.kent.edu/history for more information.

Master of Arts

Three concentrations are available for students who wish to earn the Master of Arts degree in history:

Concentration I, for traditional work in history;
Concentration II, for work in American studies;
Concentration III, for work in public history.

Each concentration offers thesis and nonthesis options. Thesis options are intended for students who expect to continue graduate study or plan to teach in secondary schools or community colleges.

ADMISSION
Admission is limited to those applicants whose records show clear potential for success in graduate study. In addition to the regular university application requirements, applicants for the Master of Arts program must submit the general scores on the Graduate Record Examination, a letter describing their professional objectives and proposed field of study, and an example of a significant piece of written work.

PROGRAM REQUIREMENTS
All students must successfully complete History 61000 and either History 61001 or 61002. Students selecting a thesis option must demonstrate a reading knowledge of one foreign language.

In addition to the requirements listed above, all students in Concentration I must complete successfully four seminars/colloquia (at least one seminar) and must distribute their coursework among various fields, which include ancient, medieval, European, United States, Latin American and African history. It is possible to introduce a minor in a department outside the Department of History. The nonthesis option allows for an individualized minor (8-9 hours).
to successfully complete HIST 51000, 60092, 62097, three additional courses in history (at least one seminar and one colloquium) and appropriate coursework in other departments.

HIST 69896 and 69898 are not generally available until students have earned 20 semester hours.

Doctor of Philosophy

The program leading to the degree of Doctor of Philosophy aims to prepare college or university teachers, research scholars and others desiring a knowledge of historical scholarship and techniques. The student must receive a master's degree in history or its equivalent before beginning doctoral work.

ADMISSION

Admission is limited to those applicants whose records show clear potential for success in graduate study. Applicants for the Doctor of Philosophy degree program must submit the general scores on the Graduate Record Examination, a letter describing their professional objectives and proposed field of study, and an example of a significant piece of written work (such as an M.A. thesis).

PROGRAM REQUIREMENTS

The student will elect general and specialized fields in United States, European, British, medieval, Russian, African and Latin American history. The student will elect as the major the field embracing the dissertation and also two related fields in the areas of European, United States or other history. (One of the three fields may be specialized.) The student will also elect a fourth field dealing with a chronological period before 1500 or with a continent different from that of the major field.

In addition to fulfilling university requirements, the student must meet those of the Department of History. One must complete successfully HIST 79894, and either six seminars or 7/80000-level colloquia. The department requires that the student demonstrate a reading knowledge of one foreign language by the end of the second semester after initial registration. One must also demonstrate reading knowledge of a second foreign language or acquire competence in statistical techniques and computer programming or take courses in a field related to history. All students also must elect additional courses in history or in related disciplines or offer a third foreign language.

CANDIDACY

After completing all of the above requirements, the student takes written and oral examinations in the four elected fields of history.

Courses (HIST)

HIST 50093
WORKSHOP IN HISTORY (1-6)
Special workshop in history. Topic will vary according to professor. S/U grading.

HIST 50197/70197
AMERICA'S CULTURAL HERITAGE: THE ARTS AND SOCIETY (3)
An examination of selected American arts in their cultural context. American studies methodologies and concepts of history.

HIST 51000/71000
PUBLIC HISTORY (3)
A survey of public history including: archives; editing, museums and historical agency administration; historic preservation; and related skill areas (e.g., artifact analysis, oral history).

HIST 51003/71003
HISTORY OF ANCIENT GREECE (3)

HIST 51004/71004
HELLENIC CONTRIBUTIONS TO WESTERN CIVILIZATION (3)

HIST 51006/71006
ROMAN HISTORY (3)

HIST 51010/71010
THE EARLY MIDDLE AGES (3)

HIST 51011/71011
THE HIGH MIDDLE AGES (3)

HIST 51014/71014
EUROPE IN THE RENAISSANCE (3)

HIST 51016/71016
THE PROTESTANT CATHOLIC REFORMATION (3)

HIST 51017/71017
17TH-CENTURY EUROPE (3)

HIST 51018/71018
18TH-CENTURY EUROPE (3)

HIST 51020/71020
19TH-CENTURY EUROPE (3)

HIST 51024/71024
MODERN EUROPEAN HISTORY, 1914-1945 (3)

HIST 51025/71025
MODERN EUROPEAN HISTORY: 1945 TO PRESENT (3)
Survey of European political, economic, social and cultural developments since 1945.

HIST 51026/71026
TUDOR ENGLAND 1485-1603 (3)

HIST 51028/71028
ENGLAND UNDER THE HANOVERIANS (3)
History

HIST 51031/71031
MODERN BRITISH INTELLECTUAL HISTORY (3)

HIST 51040/71040
HISTORY OF GERMANY, 1648-1871 (3)

HIST 51041/71041
HISTORY OF GERMANY, 1871-PRESENT (3)

HIST 51044/71044
RUSSIA FROM ITS ORIGINS TO 1801 (3)

HIST 51045/71045
RUSSIA FROM 1801 TO PRESENT (3)

HIST 51049/71049
HISTORY OF THE BALKANS: 18TH CENTURY TO 1914 (3)

HIST 51050/71050
HISTORY OF THE BALKANS: 1914 TO PRESENT (3)

HIST 51056/71056
HISTORY OF COLONIAL AMERICA, 1492-1714 (3)
Major patterns of thought and behavior among Spanish, French and English expansionists; English colonization to 1714.

HIST 51057/71057
18TH-CENTURY AMERICA, 1714-1789 (3)

HIST 51058/71058
THE JEFFERSON-JACKSON ERA, 1789-1848 (3)

HIST 51062/71062
THE UNITED STATES: THE WESTWARD MOVEMENT (3)

HIST 51065/71065
SECTIONAL CONFLICT AND CIVIL WAR (3)

HIST 51066/71066
RECONSTRUCTION AND THE LATER SOUTH (3)

HIST 51068/71068
PROGRESSIVE AMERICA: U.S., 1900-1929 (3)

HIST 51069/71069
RECENT AMERICA: 1929 TO PRESENT (3)

HIST 51070/71070
AMERICAN SOCIAL AND INTELLECTUAL HISTORY, 1790-1876 (3)

HIST 51071/71071
AMERICAN SOCIAL AND INTELLECTUAL HISTORY, 1876 TO PRESENT (3)

HIST 51072/71072
AMERICAN MILITARY HISTORY, 1775-1900 (3)

HIST 51073/71073
AMERICAN MILITARY HISTORY, 1900-PRESENT (3)

HIST 51074/71074
AMERICAN ECONOMIC HISTORY (3)

HIST 51079/71079
HISTORY OF THE IMMIGRANT IN AMERICA (3)

HIST 51082/71082
CONSTITUTIONAL HISTORY OF THE UNITED STATES (3)

HIST 51083/71083
U.S. FOREIGN RELATIONS THROUGH WORLD WAR I (3)
The evolution of U.S. foreign policy from its colonial origins through the Paris Peace Conference of 1919 with special emphasis on the domestic roots of foreign policy.

HIST 51084/71084
U.S. FOREIGN RELATIONS FROM 1920 (3)
The history of U.S. foreign policy from the 1920s on with special emphasis on the evolving role of America as a world power.

HIST 51097/71097
COLLOQUIUM: SAINTS, MONKS AND THE MEDIEVAL COMMUNITY (3)
Investigates major religious institutions that shaped medieval European society and the impact on popular piety.

HIST 51112/71112
HISTORY OF MODERN CHINA (3)

HIST 51114/71114
ECONOMIC HISTORY OF EAST ASIA IN MODERN TIMES (3)

HIST 51116/71116
HISTORY OF JAPAN (3)

HIST 51131/71131
HISTORY OF AFRICA TO 1880 (3)

HIST 51132/71132
HISTORY OF AFRICA, 1880-PRESENT (3)

HIST 51135/71135
HISTORY OF WEST AFRICA (3)

HIST 51142/71142
INDEPENDENCE IN LATIN AMERICA (3)

HIST 51143/71143
20TH-CENTURY MEXICO (3)
HIST 51789/71789
THE FRENCH REVOLUTION AND NAPOLEON (3)
Analysis of the causes of revolution in France, political, ideological and social conflict in the construction of French democracy, expansion of the revolution outside of France.

HIST 52297/72297
COLLOQUIUM: CHINA AND JAPAN (3)

HIST 52397/72397
COLLOQUIUM: WOMEN IN EUROPE FROM ANTIQUITY TO RENAISSANCE (3)
This course examines the social, cultural and economic institutions that determined the position of women from antiquity to the 16th century. Other issues considered are the image and role of women, Christian perceptions of women and their impact on women's lives.

HIST 52497/72497
COLLOQUIUM: WOMEN IN MODERN EUROPE (3)
The colloquium addresses the experiences of European women from the Enlightenment to the present. Using primary sources and recent scholarship, students examine the relationship between women and state formation, industry, sexuality, empire, socialism, war, welfare, migration and feminism.

HIST 52567/72567
RACE RELATIONS (3)

HIST 53697/73697
COLLOQUIUM IN TUDOR AND STUART ENGLAND (3)

HIST 53797/73797
COLLOQUIUM ON VICTORIAN ENGLAND (3)
Consideration of distinctive features of Victorian England including class structure, ideas, manners, politics, foreign affairs, empire.

HIST 54297/74297
COLLOQUIUM IN AFRICAN HISTORY (3)
This course will deal with some of the major themes of African history. Topics will vary from semester to semester.

HIST 55597/75597
COLLOQUIUM IN RUSSIAN HISTORY (3)

HIST 55697/75697
COLLOQUIUM: SOCIAL HISTORY OF LATIN AMERICA (3)

HIST 55797/75797
COLLOQUIUM: COMPARATIVE LATIN AMERICAN REVOLUTIONS (3)

HIST 56597/76597
COLLOQUIUM IN 20TH-CENTURY EUROPEAN DIPLOMACY (3)
Coverage of important works dealing with major diplomatic issues from origins of World War I to present.

HIST 56897/76897
COLLOQUIUM ON THE AGE OF JEFFERSON (3)

HIST 57597/77597
COLLOQUIUM ON NATO (3)
An examination of the historical significance of the Atlantic Alliance from its origins in the late 1940s to the present.

HIST 57697/77697
COLLOQUIUM ON POST-1945 EUROPE (3)
Coverage of Europe's major political, diplomatic, economic and social developments since 1945.

HIST 58097/78097
COLLOQUIUM IN 20TH-CENTURY U.S. FOREIGN RELATIONS (3)
Covers U.S. diplomatic history from World War I to the present emphasizing bibliography and historiography.

HIST 58697/78697
COLLOQUIUM ON U.S. MIDDLE PERIOD, 1820-1900 (3)

HIST 58797/78797
COLLOQUIUM IN AFRICAN-AMERICAN HISTORY TO 1877 (3)
This colloquium specializes in African-American history prior to 1877, with emphasis on historiographical literature of the period.

HIST 58897/78897
COLLOQUIUM IN AFRICAN-AMERICAN HISTORY TO 1877 (3)
This colloquium specializes in African-American history since 1877, with emphasis on historiographical literature of the period.

HIST 58997/78997
COLLOQUIUM ON THE IMMIGRANT IN AMERICAN HISTORY (3)

HIST 59195/79195
SELECTED TOPICS IN HISTORY (3)
Special history course, varying in accordance with desire and competence of visiting faculty. Precise title to be inserted in Schedule of Classes.

HIST 60092/70092
PUBLIC HISTORY INTERNSHIP (3-6)
Students serve an internship at an institution related to their emphasis in public history (e.g., historical society, museum, archives).

HIST 61000/81000
INTRODUCTION TO HISTORICAL STUDIES (3)
S/U grading; IP permissible.
HIST 61001/81001
METHODS OF HISTORICAL RESEARCH (3)

HIST 61002/81002
HISTORIOGRAPHY (3)

HIST 61024/81024
SEMINAR IN 20TH-CENTURY EUROPEAN HISTORY (3)

HIST 61025/81025
SEMINAR: 20TH-CENTURY EUROPEAN DIPLOMATIC HISTORY (3)

HIST 61026/81026
SEMINAR IN TUDOR ENGLAND (3)

HIST 61065/81065
SEMINAR IN AMERICAN HISTORY: THE CIVIL WAR PERIOD (3)

HIST 61067/81067
AMERICA: REUNITED NATION TO WORLD POWER, 1877-1900 (3)

HIST 61069/81069
SEMINAR IN RECENT AMERICAN HISTORY (3)

HIST 61074/81074
SEMINAR IN 19TH-CENTURY AMERICA (3)

HIST 61091/81091
SEMINAR IN AFRICAN-AMERICAN HISTORY (3)
Seminar is selected topics in African-American history from the 17th century through the 20th century.

HIST 61083/81083
SEMINAR IN AMERICAN DIPLOMATIC HISTORY (3)

HIST 62097/72097
PUBLIC HISTORY COLLOQUIUM (3)
Assigned readings, discussions and papers focus on particular emphases and skill areas in public history.

HIST 62197/82197
COLLOQUIUM ON PROBLEMS IN MEDIEVAL HISTORY (3)

HIST 62997/82997
COLLOQUIUM IN EARLY MODERN EUROPE (3)

HIST 69199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

HIST 69299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: HIST 69199.

HIST 69894/79894
COLLEGE TEACHING OF HISTORY (2-3)
S/U grading; IP permissible.

HIST 69896/89896
INDIVIDUAL INVESTIGATION (2-3)
IP permissible.

HIST 69898/89898
RESEARCH (1-15)
S/U grading; IP permissible.

HIST 89199
DISSERTATION I (15)
Doctoral dissertation, for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun, and continuing until the completion of 30 hours. S/U grading; IP permissible.

HIST 89299
DISSERTATION II (1 or 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: HIST 89199.
JUSTICE STUDIES

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Master of Arts

The Master of Arts degree program in justice studies is designed to prepare students for staff and administrative careers in those fields related to prevention, treatment and control of crime and delinquency. It also offers opportunities for agency personnel to broaden their education and upgrade their skills. In addition, an important purpose of the program is to prepare students for advanced study at the doctoral level.

Since many of the graduates will eventually hold administrative positions, this program places special emphasis on preparation for active roles in agency planning, management and evaluation.

Visit the departmental Web site at http://www.kent.edu/cjst for more information.

Interested persons must meet the regular application requirements of the university.

OBJECTIVES OF THE PROGRAM

While specializations per se are not defined, the selection of elective courses and internship possibilities are varied enough for the student to develop such an emphasis. Specifically, the objectives of the program are as follows:

1. Build a firm theoretical and methodological foundation on the causation, treatment and control of crime and delinquency;
2. Develop professional skills through experience in situations where knowledge gained in the classroom can be tested in applied settings; and
3. Develop a behavioral and attitudinal orientation appropriate for the justice profession.

ADMISSION

In addition to the regular application requirements of the university, admission to the Master of Arts program requires the following:

1. A one-page statement of career interests and goals, including motivation for pursuing the graduate degree.
2. Recommendations from three persons (preferably academic) who can attest to the applicant’s potential for graduate study.

PROGRAM REQUIREMENTS

Requirements for the degree are 33 semester hours. These requirements include 15 hours of required core courses, 12 hours of electives, and 6 hours of thesis, internship and research paper, or an additional course and research. Requirements are as follows:

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<th>Course</th>
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And one of the following research requirements:

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<th>Course</th>
<th>Hours</th>
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<tr>
<td>JUS 66199</td>
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<tr>
<td>JUS 66798</td>
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</table>
and
JUS 66792 ................................................................. 4
or
JUS 66798 ................................................................. 3
and another 60000 elective course (3 hours) excluding JUS 66796.

ELECTIVES
Elective courses should be selected in consultation with the faculty advisor.

RESEARCH REQUIREMENTS
Students have three options for the final culminating research requirements. The first option is the thesis requirement. The second option is an internship and research paper. The third option is to complete one additional elective course and write a research paper.

If a student chooses the thesis option, the thesis topic must be approved by the student’s thesis committee. A completed thesis must show evidence of original research and meet the standards set by the university.

If a student chooses the internship and research option, the internship arrangements are made with a wide variety of juvenile and adult federal, state and county agencies. Students must also write a monograph over the internship experience. In addition to the internship, the student must complete an original research paper and oral examination on the research paper.

If a student chooses the additional elective course and research paper, the student can select any 60000-level course, except JUS 66796 Individual Investigation. The student must also complete an original research paper and oral examination on the research paper.

Courses (JUS)

JUS 55093
VARIABLE TITLE WORKSHOP IN JUSTICE STUDIES (1-3)
Classroom presentations and field study focused on professional and disciplinary concerns. Specific content varies with workshop topic. S/U grading. Prerequisite: Permission.

JUS 56701
CRIME, JUSTICE AND SUBSTANCE ABUSE (3)
Examination of the relationship between drug and alcohol abuse and criminal behavior. Efforts to regulate, control, prevent and treat chemical abuse offenders are considered.

JUS 56705
COMMUNITY CORRECTIONS (3)
This course is devoted to an examination of formal and informal approaches to correctional supervision and treatment through probation, parole and community residential treatment.

JUS 56708
TREATMENT METHODS (3)
Various methods of treatment are applied to corrections field. Focus is on specific techniques in community and institutional correctional settings. Direct observation utilized when possible.

JUS 66199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

JUS 66299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: CJST 66199.

JUS 66761
LAW, JUSTICE AND SOCIETY (3)
Cross-listed with POL 70707.
Course reviews the origins, structure and functioning of law in relation to social context and process. Topics to be covered include theories of law and society, law as a form of social control, and the use of law and legal institutions to address societal problems.

JUS 66762
PROSEMINAR IN ISSUES IN CONTEMPORARY JUSTICE (3)
Cross-listed with POL 60101 and POL 70701.
An analysis of current issues in the legislative, policing, judicial and correctional components of the justice system.

JUS 66763
THEORIES OF CRIME AND DELINQUENCY (3)
Cross-listed with POL 70704.
Examination of major theoretical concepts in criminology that have been utilized to explain criminal behavior and juvenile delinquency. Includes discussion of social/policy implications.

JUS 66764
JUVENILE JUSTICE (3)
An analysis of the issues and current research related to juvenile delinquency and the juvenile justice process.

JUS 66765
CRIMINAL VIOLENCE (3)
Course explores the many dimensions of criminal violence. Topics to be covered include patterns and trends, types of violence, the prediction and netiology of violent behavior and response/solutions to violence. Emphasis will be placed on the U.S.
JUS 66766
INSTITUTIONAL CORRECTIONS (3)
Analysis of the correctional institution as a social system: formal structure and informal dynamics. Basic operational problems and special programs within the institutional setting are considered.

JUS 66767
JUSTICE ADMINISTRATION (3)
Focuses on theory and practice in justice administration. Current organizational theories are considered in relation to the administration and management of criminal justice agencies. Prerequisite: Permission.

JUS 66768
RESEARCH METHODS IN JUSTICE STUDIES (3)
Methodological research designs and techniques utilized in criminal justice. Focuses on specific skills needed to complete basic and evaluative research in criminal justice. Prerequisite: Permission.

JUS 66769
JUSTICE RESEARCH APPLICATIONS (3)
Application of research methods within various content areas of justice studies, individualized research assignments included. IP permissible. Prerequisite: CJST 66768.

JUS 66770
JUSTICE INSTITUTIONS (3)
Cross-listed with POL 70702. This course introduces students to various institutions related to the U.S. criminal justice system. Students examine techniques for conducting institutional analysis and apply these techniques to law enforcement, judicial and correctional institutions.

JUS 66771
LEGAL ASPECTS OF JUSTICE ADMINISTRATION (3)
An examination of the legal rights of the offenders and victims, and constraints of law and justice practices and administration.

JUS 66772
VICTIMOLOGY (3)
Cross-listed with POL 70706. Patterns of victim-offender relationship. Role of victims in the justice studies process. Problems of adjustment to victimization and compensating the victim.

JUS 66773
CONTEMPORARY POLICING (3)
The functions and dynamics of police work in contemporary society. Current and emerging functions are emphasized.

JUS 66774
COMPARATIVE JUSTICE INSTITUTIONS AND POLICY (3)
Cross-listed with POL 70705. Cross-cultural analysis of crime and the justice institutions/justice policies of various countries. The developmental backgrounds, structure and functioning of the systems are compared. Important issues in international justice are considered.

JUS 66775
RESEARCH METHODS IN JUSTICE STUDIES II (3)
Advanced topics in multivariate statistical analysis with applications in justice studies. IP permissible. Prerequisite: JUS 66768.

JUS 66792
INTERNSHIP IN JUSTICE STUDIES (4)
Observation and work experience under direction of a faculty member in a justice institution. S/U grading; IP permissible. Prerequisite: Completion of coursework and permission.

JUS 66795
SPECIAL TOPICS (1-3)
Offered irregularly, this course provides opportunity to study special issues, developments and programs in justice studies. Topics vary. Prerequisite: Permission.

JUS 66796
INDIVIDUAL INVESTIGATION (1-3)
Intensive study of a subject that the student cannot normally pursue in a regularly scheduled course. Individual investigation topic must be approved by instructor and graduate coordinator. Prerequisite: Permission.

JUS 66798
RESEARCH (1-6)
Pursuit of research interests. Repeat registration permitted. IP permissible. Prerequisite: Permission.
LIBERAL STUDIES

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Master of Liberal Studies

The Liberal Studies program is an interdisciplinary degree program leading to a Master of Liberal Studies degree. Unlike most graduate programs that emphasize specialization, the L.S.M. encourages a broad educational perspective and interdisciplinary study. Liberal Studies students, under the guidance of the director of the Liberal Studies program and a graduate faculty advisor, select courses from regular graduate offerings to form their own integrated courses of study.

Additional information including a descriptive brochure may be obtained from the director of the Liberal Studies program.

PROGRAM REQUIREMENTS

The degree consists of 32 hours of coursework, 12 to 15 hours in a single discipline and 12 to 15 hours divided among two or more related areas. Courses may be taken in the arts, business, education, humanities, social and natural sciences.

Students will complete a program of study document in which they will develop a theme (title) and choose coursework in the major and minor areas. In developing programs of study, Liberal Studies students must adhere to several fundamental principles:

1. The program of study must be integrated.

2. Since the L.S.M. degree specifically focuses on the values of liberal arts education, the program of study must include at least 12 hours in the traditional liberal arts (humanities, social sciences or natural sciences).

3. The program of study must emphasize interdisciplinary perspectives to learning.

All students are required to take Introduction to Liberal Studies (61000) and Liberal Studies Essay (61098). Except for these, no other specific courses are required for the L.S.M. program. Candidates for the L.S.M. degree must complete the minimum 32 semester hours of graduate work, 16 hours of which must be at the 60000-level or higher. It should be understood that some available graduate courses may require appropriate prerequisite study.

Courses (A&S)

A&S 50095/70095 SPECIAL TOPICS (1-5)
Topic to be announced in the Schedule of Classes booklet. Repeat registration permitted when content varies. Prerequisite: Permission.

A&S 61000 INTRODUCTION TO LIBERAL STUDIES (2)
Cross-listed with GCOL 61000.
Introduction to history, philosophy and curricular structure of graduate liberal studies.

A&S 61095 LIBERAL STUDIES SEMINAR (3)
An interdisciplinary seminar designed for candidates in the Liberal Studies program. Topics will vary.

A&S 61098 LIBERAL STUDIES ESSAY (3)
Cross-listed with GCOL 61098.
The preparation of an essay of approximately 50 pages on a topic related to the student's program of study for the Master of Liberal Studies degree. S/U grading; IP permissible.
The Department of Mathematical Sciences offers graduate courses and research leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees in mathematics. At the master’s level, programs in pure mathematics, applied mathematics, and mathematics for secondary teachers (Master of Arts only) are available. In addition, a 12-month Master of Science in Financial Engineering program is offered in collaboration with the Department of Economics and Finance. At the doctoral level, programs in pure mathematics and applied mathematics are offered.

For more information, visit the department’s Web site at http://www.math.kent.edu. Information on the Master of Science in Financial Engineering can be found at http://business.kent.edu. This program is administered by the College of Business Administration.

**Master of Science/Master of Arts**

**PROGRAM REQUIREMENTS**

The Master of Arts and Master of Science programs require a total of 32 semester hours of graduate credit. Each student should submit a detailed plan of study for approval by the advisor by the time the first 16 semester hours of graduate credit have been completed.

There is no foreign language requirement for the Master of Arts or Master of Science degree programs.

Candidates for the Master of Science degree must write a suitable thesis. Candidates for the Master of Arts degree must pass the departmental qualifying examination at the master’s level. Students in the mathematics for teachers program are expected to pass a final examination in general mathematics.

**Pure Mathematics**

At least two of the following sequences must be completed, and at least one semester of one of the remaining sequences must be taken:

- MATH 6/71051 and 6/71052
- MATH 6/72051 and 6/72052
- MATH 6/72151 and 6/72152
- MATH 6/76051 and 6/76052
With prior permission from the graduate studies committee, up to 6 semester hours of mathematically related coursework from other departments can be applied to meet the 14-semester-hour elective requirement.

Candidates for the Master of Arts degree must pass the departmental qualifying examination at the master’s level covering three of the following areas: algebra, analysis, numerical analysis, topology, probability and statistics.

Applied Mathematics Program

The following two sequences are required:
MATH 6/70061 and 6/70062
MATH 6/72251 and 6/72252

At least 20 semester hours must be in MATH or CS courses at the 60000 level or above. Only 3 of the 6 hours of thesis will be counted toward the 20 semester hours at the 60000 level. The remaining 12 semester hours can be taken from graduate-level coursework in MATH or CS.

With permission of the advisor, up to 12 semester hours of 50000-level MATH and/or CS courses may be applied toward the total required for the degree. Candidates who do not have an undergraduate degree in applied mathematics should include MATH 52031 and 52045 in their program.

Master of Arts degree candidates must pass the departmental qualifying examination at the master’s level in numerical analysis, probability or statistics, and one additional area chosen from among the areas listed for master’s programs.

While students entering the master’s program in applied mathematics are not required to have an undergraduate degree in applied mathematics, they are expected to have proficiency in numerical analysis and statistics at the level of MATH 40012 — Introduction to Statistical Concepts and MATH 42202 — Introduction to Numerical Computing II. They are also expected to have taken computer science coursework equivalent to CS 23021 — Introduction to Object-Oriented Programming. Those who do not meet these specific requirements may be granted conditional admission by the Graduate Studies Committee.

Mathematics for Secondary Teachers Program
(Master of Arts only)

This highly individualized program has no rigid course requirements. The student’s program is designed by an advisory committee, consisting of members of the Department of Mathematical Sciences. The committee tries to tailor the coursework to meet each individual’s needs. Through an initial interview, the advisory committee helps the student clarify his or her educational objectives and formulate a graduate program that reflects a balance among professional needs, academic training and related outside interests.

At least 16 semester hours will be at the 60000 level and 22 semester hours will be in mathematics. In general, students will be expected to take two to three courses in each of the areas of modern algebra, geometry and analysis. Some additional exposure to applied mathematics and current trends in teaching will also be required.

Candidates in this program are expected to pass a final examination in general mathematics.

Doctor of Philosophy

PROGRAM REQUIREMENTS

Students who wish to pursue the Ph.D. must pass the qualifying examination at the Ph.D. level. A minor of up to 10 hours will be counted toward the completion of the degree subject to the approval of the student’s advisor and the graduate studies committee.

LANGUAGE

A reading knowledge of French, German or Russian is required for those pursuing a Ph.D. in Mathematics.

CANDIDACY

This examination will be a comprehensive examination in the field of the major subject, and will be a substantially deeper test than the qualifying examination.

Courses (MATH)

MATH 50011
INTRODUCTION TO PROBABILITY THEORY AND APPLICATIONS (3)
Permutations and combinations, discrete and continuous distributions, random variables, conditional probabilities, Baye's formula, mathematical expectation, law of large numbers, normal approximations, basic limit theorems. Prerequisite: MATH 12003.

MATH 50012
INTRODUCTION TO STATISTICAL CONCEPTS (3)
Sample spaces, continuous distributions, sampling distributions, point and interval estimation, hypothesis testing, types of error, level and power of tests, sequential and nonparametric methods. Prerequisite: MATH 21001 and 4/50012.

MATH 50022
LINEAR MODELS AND STATISTICAL ANALYSIS (3)

MATH 50031
BASIC NON-PARAMETRIC STATISTICS (3)
Rank tests for different kinds of hypotheses, large sample theory, efficiency comparisons, tests of Kolmogorov Smirnov type. Prerequisite: MATH 4/50012.
MATH 50041
STATISTICAL METHODS FOR EXPERIMENTS (3)
Comparison of two groups, t and F-statistics, ANOVA, one-way and multiway layouts, randomization, blocking. Linear regression, correlation and analysis of covariance (ANCOVA). Repeated measures-analysis of variance. Prerequisite: MATH 30011 or permission.

MATH 50042
SAMPLING THEORY (3)
This introductory course provides the methodology for the design and analysis of sampling and surveying studies. Simple random, stratified, cluster, PPS and two stage sampling techniques. Linear, ratio and regression estimators. Prerequisite: MATH 30011 or equivalent.

MATH 50051
TOPICS IN PROBABILITY THEORY AND STOCHASTIC PROCESSES (3)
Topics from conditional expectations, Markov chains, Markov processes, Brownian Motion and Martingales and their applications to stochastic calculus. Prerequisite: MATH 4/50011 or permission.

MATH 51001
INTRODUCTION TO MODERN ALGEBRA I (3)
Basic properties of groups, subgroups, factor groups. Basic properties of rings, integral domains and homomorphisms. Prerequisite: MATH 21001 and 22005.

MATH 51002
INTRODUCTION TO MODERN ALGEBRA II (3)
A continuation of MATH 51001, emphasizing properties of rings, their ideals, polynomial ring extensions, fields, finite degree extensions, roots of polynomials, constructibility. Prerequisite: MATH 4/50011 or permission.

MATH 51012
FINITE MATHEMATICS (3)
Cross-listed with CS 51012.
Mathematics: emphasizing combinatorial techniques, graph applications in algorithms, finite algebra, number theory and probability. Covers useful mathematics for CS majors. Prerequisite: CS 31011 or MATH 31011.

MATH 51021
THEORY OF MATRICES (3)
A rigorous study of the topics introduced in matrix algebra. Topics included are: canonical forms of matrices, diagonalizability criteria. Prerequisite: MATH 21001 and 22005 or permission.

MATH 52001
INTRODUCTION TO ANALYSIS I (3)
Topics include basic structure of the real numbers, Cauchy sequences, convergence, completeness of the real numbers, continuity, differentiation and Riemann integration. Prerequisite: MATH 21001 and 22005 or permission.

MATH 52002
INTRODUCTION TO ANALYSIS II (3)
Topics include further development of integration theory, infinite series, uniform convergence, several variable calculus and metric spaces. Prerequisite: MATH 4/52001.

MATH 52011
MATHEMATICAL OPTIMIZATION (3)
Analytical and numerical techniques for location of extreme points of functions and calculus of variations. Both constrained and unconstrained problems are considered. Prerequisite: MATH 21001 and 22005 or permission.

MATH 52021
GRAPH THEORY AND COMBINATORICS (3)
Fundamentals and applications of combinatorial mathematics. Topics include transversability, colorability, networks, inclusion and exclusion, matching and designs. Prerequisite: MATH 12003 and 21001 or permission.

MATH 52031
MATHEMATICAL MODELS AND DYNAMICAL SYSTEMS (3)
Formulation and analysis of mathematical models for a variety of phenomena. Mathematical methods from optimization, dynamical systems and probability are developed and applied. Modern software tools are utilized. Prerequisite: MATH 32044.

MATH 52041
ADVANCED CALCULUS (3)
The calculus and applications of scalar and vector functions of several variables. Vector differential and integral calculus. Applications to field theories, electricity and magnetism, and fluid flow. Prerequisite: MATH 21001 and 22005.

MATH 52045
INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS (3)
Introduction to Fourier series, Fourier transforms and partial differential equations. Wave, heat and potential equations of mathematical physics. Additional topics include Green’s functions and the Method of Characteristics for wave equations. Prerequisite: MATH 32044.

MATH 52048
INTRODUCTION TO COMPLEX VARIABLES (3)
Algebra of complex numbers, analytic functions, mappings, Cauchy integral theory, residue theory and applications. Prerequisite: MATH 22005.

MATH 52091
SEMINAR: MODELING PROJECTS (3)
Individual and small-group projects concerned with the formulation and analysis of mathematical models in a variety of areas. Written and oral reports required. IP permissible. Prerequisite: MATH 52031 or permission.
MATH 52201
INTRODUCTION TO NUMERICAL COMPUTING I (3)
Cross-listed with CS 52201.
An introduction to numerical methods and software for solving many common scientific computing problems. Linear systems, least-square data fitting, nonlinear equations and systems and optimization problems. Prerequisite: MATH 12003, 21001 and CS 23021 or permission. Special fee: $10 per semester (subject to change).

MATH 52202
INTRODUCTION TO NUMERICAL COMPUTING II (3)
Cross-listed with CS 52202.
A continuation of MATH 52201. Topics include interpolation, numerical differentiation and integration, and numerical solution of ordinary differential equations. Prerequisite: MATH 32044 and 52201. Special fee: $10 per semester (subject to change).

MATH 55011
DIFFERENTIAL GEOMETRY (3)
Analytic and metric differential geometry of curves and surfaces. Prerequisite: MATH 22005.

MATH 55021
EUCLIDEAN GEOMETRY (3)
Geometry of Euclid extended to advanced topics of the triangle, quadrilaterals and circles; crossratio, groups, constructions, geometric generalizations; inversion. Prerequisite: MATH 21001 or permission of instructor.

MATH 55022
LINEAR GEOMETRY (3)
Use of transformations as a tool to study geometry and to differentiate between different kinds of geometry. Linear algebra methods applied to geometry. Prerequisite: MATH 21001 or permission.

MATH 56001
ELEMENTARY TOPOLOGY (3)
Metric spaces, introduction to topological spaces, separation axioms. Prerequisite: MATH 22005.

MATH 57001
MATHEMATICAL LOGIC AND SET THEORY (3)
Axiomatic set theory, relations, development of real numbers, cardinal number, axiom of choice. Prerequisite: Permission.

MATH 57011
THEORY OF NUMBERS (3)
Divisibility properties of the integers, prime numbers, congruences, quadratic reciprocity, Diophantine equations, number theoretic functions, simple continued fractions, rational approximations. Prerequisite: MATH 12003 or permission.
MATH 60093
VARIABLE TITLE WORKSHOP IN MATHEMATICS (1-3)
Studies of special topics in mathematics. Not acceptable for credit toward a graduate degree in mathematics without approval of the student's advisor. S/U grading. Prerequisite: Permission.

MATH 60094/70094
COLLEGE TEACHING OF MATHEMATICS (1)
Techniques and problems in the teaching of college-level mathematics. Student presentations of mathematical papers and colloquia will be included.

MATH 61051/71051
ABSTRACT ALGEBRA I (4)
Advanced topics in group theory including Sylow Theorems, finite Abelian groups, divisible groups and related concepts. Includes one-hour problem session each week. Prerequisite: Permission.

MATH 61052/71052
ABSTRACT ALGEBRA II (3)
Advanced topics, commutative ring theory, and field theory, including polynomial rings, unique factorization domains, matrix rings, Galois theory. Prerequisite: MATH 6/71051.

MATH 62041/72041
METHODS OF APPLIED MATHEMATICS I (3)

MATH 62042/72042
METHODS OF APPLIED MATHEMATICS II (3)

MATH 62051/72051
FUNCTIONS OF A REAL VARIABLE I (4)
Introduction to modern concepts of real analysis including metric spaces, measure and integration theory. Prerequisite: MATH 4/52002 or permission.

MATH 62052/72052
FUNCTIONS OF A REAL VARIABLE II (3)
A continuation of MATH 6/72051. Included are basic topics in functional analysis and Hilbert space theory. Prerequisite: MATH 6/72051.

MATH 62151/72151, 62152/72152
FUNCTIONS OF A COMPLEX VARIABLE I, II (4 and 3)
Topological properties of the complex plane; analytic, entire, meromorphic functions; analytic continuation; conformal mappings; Picard's Theorem; Riemann surfaces. Prerequisite: MATH 4/52002.

MATH 62201
NUMERICAL COMPUTING I (3)
Cross-listed with CS 6/72201. Numerical methods for scientific computing emphasizing modern mathematical software and environments. Computer arithmetic and errors, linear systems of equations, least squares data fitting, eigenvalues and singular values, nonlinear systems, optimization. Prerequisite: MATH 21001, 22005 and computer programming (C or C++ or Fortran).

MATH 62202
NUMERICAL COMPUTING II (3)

MATH 62203/72203
COMPUTATIONAL FINANCE (3)
Basic numerical methods (numerical linear algebra, nonlinear equations, curve fitting, ODEs, integration, Monte-Carlo methods), numerical solution of PDEs (stability, convergence, Black-Scholes, American options, SDEs), probabilistic methods. Prerequisite: MATH 22005, 21001, 32044 and CS 10061.

MATH 62251/72251
NUMERICAL ANALYSIS I (4)

MATH 62252/72252
NUMERICAL ANALYSIS II (3)
MATH 62261/72261
NUMERICAL SOLUTION OF ORDINARY DIFFERENTIAL EQUATIONS (3)
Cross-listed with CS 6/72261.
Discretization methods for ordinary differential equations and systems. Initial-value and boundary value problems. Numerical implementation, software and analysis. Prerequisite: MATH 32044 and 4/52202 or equivalent.

MATH 62262/72262
NUMERICAL SOLUTION OF PARTIAL DIFFERENTIAL EQUATIONS (3)
Cross-listed with CS 6/72262.
Derivation and analysis of discrete methods (finite differences, finite elements) for the numerical solution of elliptic, hyperbolic and parabolic partial differential equations. Prerequisite: MATH 4/52045 and 4/52202.

MATH 62263/72263
NUMERICAL SOLUTION OF LARGE SPARSE LINEAR SYSTEMS (3)
Cross-listed with CS 6/72263.

MATH 62264/72264
NUMERICAL SOLUTION OF NONLINEAR SYSTEMS (3)
Cross-listed with CS 6/72264.
Construction and analysis of numerical methods for systems of nonlinear algebraic equations and optimization problems. Numerical implementation and software. Prerequisite: MATH 4/52041 and 4/52202 or equivalent.

MATH 64091
SEMINAR IN MATHEMATICS EDUCATION (3)
Studies in geometry, algebra, mathematics for junior and senior high school. Mathematics content professionalized for teachers. Repeat registration permitted. Prerequisite: MATH 34001 or equivalent and one year of teaching experience in high school mathematics.

MATH 66051/76051
INTRODUCTION TO TOPOLOGY I (4)
Set theory, topological spaces, continuity, product spaces, quotient spaces, separation axioms, compactness and metrizability. Prerequisite: Permission.

MATH 66052/76052
INTRODUCTION TO TOPOLOGY II (3)
Geometric topology, including connectedness, continua, homotopy, the plane and 2 manifolds. Prerequisite: MATH 6/76051.

MATH 67098/77098
RESEARCH (1-15)
Research or individual investigation. Credits are applied toward degree requirements, with approval, if letter grade of "S" is given. Repeat registration permitted.

MATH 67199
THESIS I (2-6)
Thesis student must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

MATH 67299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: MATH 67199.

MATH 70095
SELECTED TOPICS IN STATISTICS AND PROBABILITY (1-3)
Contents will vary with each offering and will complement topics covered in MATH 6/70051, 6/70052, 6/70061 and 6/70062. Repeat registration permitted. Prerequisite: Permission.

MATH 71001
STRUCTURE OF RINGS AND ALGEBRAS I (3)
Advanced topics in ring theory, including Artinian rings, Noetherian rings, advanced commutative ring theory. Prerequisite: Permission.

MATH 71002
STRUCTURE OF RINGS AND ALGEBRAS II (3)
Advanced topics in ring theory including an introduction to homological algebra. Includes Dedekind domains, regular rings, torsion theory. Prerequisite: MATH 71001.

MATH 71011
ADVANCED GROUP THEORY (3)
Advanced topics in group theory. Topics include permutation arguments, coprime actions, transfer theorems, nonsimplicity criteria. Properties of families of groups: solvable, p solvable, nilpotent, p groups. Repeat registration permitted. Prerequisite: MATH 6/71051, 6/71052 or permission.

MATH 71012
CHARACTERS OF FINITE GROUPS (3)
Development of characters of finite groups, their properties, orthogonality relations, integrality conditions. Applications include Burnside's pqr^4 theorem and existence of Frobenius kernels in Frobenius groups. Prerequisite: MATH 6/71051 and 6/71052 or permission.
MATH 71095
SELECTED TOPICS IN ALGEBRA (1-3)
Contents will vary with each offering and will complement topics covered in MATH 6/71051, 6/71052, 71001 and 71002. Repeat registration permitted. Prerequisite: Permission.

MATH 72001, 72002
FUNCTIONAL ANALYSIS I, II (3 each)
A study of principles of linear analysis in the setting of normed linear spaces and topological vector spaces. Prerequisite: MATH 6/72052 or permission of instructor.

MATH 72011
ADVANCED DIFFERENTIAL EQUATIONS (3)
Advanced topics in ordinary differential equations in real and complex plane. Prerequisite: MATH 6/72051, 6/72151.

MATH 72021
SUMMABILITY THEORY (3)
Generalizations of concept of convergent sequence; properties of classical summability methods and of related sequence spaces. Prerequisite: Permission of instructor.

MATH 72095
SELECTED TOPICS IN REAL ANALYSIS (1-3)
Contents will vary with each offering and will implement topics covered in MATH 6/72051, 6/72052 and 6/72002. Repeat registration permitted. Prerequisite: Permission.

MATH 72195
SELECTED TOPICS IN COMPLEX ANALYSIS (1-3)
Contents will vary with each offering and will complement topics covered in MATH 6/72151, 6/72152 and 72201. Repeat registration permitted. Prerequisite: Permission.

MATH 72201
APPROXIMATION THEORY (3)
Introduction to polynomial, trigonometric and spline approximations; direct and inverse theorems of constructive function theory; other topics chosen according to interest of students and instructors. Prerequisite: Permission.

MATH 72295
SELECTED TOPICS IN NUMERICAL ANALYSIS (1-3)
Cross-listed with CS 72295.
Contents will vary with each offering and will complement topics covered in MATH 6/72251, 6/72252 and MATH 72201. Repeat registration permitted. Prerequisite: Permission.

MATH 76001, 76002
ALGEBRAIC TOPOLOGY I, II (3 each)
Singular and simplicial homology and cohomology theory. Homotopy theory. Prerequisite: Permission.

MATH 76095
SELECTED TOPICS IN TOPOLOGY (1-3)
Contents will vary with each offering and will complement topics covered in MATH 6/76051, 6/76052, 76001 and 76002. Repeat registration permitted. Prerequisite: Permission.

MATH 77095
SELECTED TOPICS IN MATHEMATICS (1-3)
Contents will vary with each offering. Repeat registration permitted. Prerequisite: Permission.

MATH 80091
SEMINAR IN STATISTICS AND PROBABILITY (3)
Seminar on current research in statistics and probability. Repeat registration permitted. Prerequisite: Permission.

MATH 81091
SEMINAR IN ALGEBRA (3)
Seminar on current research in algebra. Repeat registration permitted. Prerequisite: Permission.

MATH 82091
SEMINAR IN REAL ANALYSIS (3)
Seminar on current research in real analysis. Repeat registration permitted. Prerequisite: Permission.

MATH 82191
SEMINAR IN COMPLEX VARIABLES (3)
Seminar on current research in complex analysis. Repeat registration permitted. Prerequisite: Permission.

MATH 82291
SEMINAR IN NUMERICAL ANALYSIS (3)
Cross-listed with CS 82291.
Seminar on current research in numerical analysis. Repeat registration permitted. Prerequisite: Permission.

MATH 86091
SEMINAR IN TOPOLOGY (3)
Seminar on current research in topology. Repeat registration permitted. Prerequisite: Permission.

MATH 87098
RESEARCH (1-15)
Research or individual investigation for doctoral students who have not yet passed their candidacy examinations. Credits earned may be applied toward degree if department approves. Repeat registration permitted.

MATH 87199
DISSERTATION I (15)
Doctoral dissertation, for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible. Prerequisite: Admission to candidacy for doctoral degree.

MATH 87299
DISSERTATION II (1 or 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: MATH 87199.
MODERN AND CLASSICAL LANGUAGE STUDIES

Gregory M. Shreve, Director
306E Satterfield Hall
330-673-1796
gshreve@kent.edu

Carol S. Maier, Coordinator of Graduate Studies
101C Satterfield Hall
330-672-1797
cmaier@kent.edu

The Department of Modern and Classical Language Studies offers programs in French, German, Latin and Spanish leading to the Master of Arts degree. The language programs offer a pedagogy and a literature concentration for students planning careers in teaching (elementary, secondary and college levels), and research and scholarship in language and literature studies. The translation program offers concentrations in French, German, Japanese, Russian and Spanish and prepares students for careers in translation, language engineering, international business and government. The M.A. programs can normally be completed in two academic years of full-time study, and graduate assistantships are available.

A detailed outline of the requirements for the M.A. in each language and in translation may be obtained from the coordinator of graduate studies upon request. All applicants in translation and in the modern languages who wish to apply for a graduate assistantship must also submit (1) an audiocassette tape with a five- to 10-minute statement of purpose in both their first and second languages; (2) a writing sample in their second language which should be accompanied by a signed declaration that the sample is their original work and that they received no help in its preparation.

Early in their first semester of coursework, students are advised to seek detailed information on the content of comprehensive examinations for each degree, thesis and nonthesis options, and graduate reading lists in the respective language. Students seeking public pre-K-12 teacher licensure as part of their M.A. degree are especially encouraged to consult with the department upon enrolling in the graduate program. Students holding appointment as graduate teaching assistants in the modern languages must enroll in MCLS 60094 during the first fall semester of their assistantship. With prior departmental approval, graduate students may apply up to 6 credit hours of study-abroad graduate credit and 4 credit hours of specialized graduate workshops to their degree program.

Visit the departmental Web site at http://dept.kent.edu/mcls for more information.
Students are encouraged to enroll in study-abroad programs (limit 6 hours) and in specialized workshops in advanced language or pedagogy (limit 4 hours). Departmental permission must be obtained before enrolling in such programs.

*Students who are already licensed to teach language in Ohio may, with departmental approval, substitute a graduate second-language pedagogy elective for MCLS 50660.

**Master of Arts in Translation**

The Master of Arts degree programs in translation are offered in five language concentrations: French, German, Japanese, Russian and Spanish. The translation program prepares students for careers in translation, language engineering, international business and government.

**PROGRAM REQUIREMENTS**

Students must successfully complete 37 semester hours of coursework, including a case study project. Specific course requirements include:

**French**

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**Japanese**

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Modern and Classical Language Studies

Russian

- **MCLS 60010** .................................................. 2
- **MCLS 60011** .................................................. 3
- **MCLS 60012** .................................................. 3
- **RUSS 62001** .................................................. 3
- **RUSS 62010** .................................................. 2
- **RUSS 62240** .................................................. 3
- **RUSS 62250** .................................................. 3
- **RUSS 62251** .................................................. 3
- **RUSS 62979** .................................................. 3

French

- **MCLS 60010** .................................................. 2
- **MCLS 60011** .................................................. 3
- **MCLS 60012** .................................................. 3
- **SPAN 68001** .................................................. 3
- **SPAN 68010** .................................................. 2
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- **SPAN 68251** .................................................. 3
- **SPAN 68979** .................................................. 3

Candidates must also successfully complete 6 semester hours of courses in the second language, choosing, with prior approval of the graduate coordinator, from courses in literature, culture/civilization and linguistics. If 6 hours of such courses are not available, the candidate may choose other elective hours in consultation with an advisor and the graduate coordinator. Candidates in translation with a concentration in German for whom German is not the native language must successfully complete GER 51212 as 3 of those 6 semester hours. All candidates must successfully complete 9 additional hours from the following courses or other courses approved in advance by the graduate coordinator and advisor:

Spanish

- **MCLS 60010** .................................................. 2
- **MCLS 60011** .................................................. 3
- **MCLS 60012** .................................................. 3
- **SPAN 68001** .................................................. 3
- **SPAN 68010** .................................................. 2
- **SPAN 68240** .................................................. 3
- **SPAN 68250** .................................................. 3
- **SPAN 68251** .................................................. 3
- **SPAN 68979** .................................................. 3

- **MCLS 60012** .................................................. 3
- **MCLS 60013** .................................................. 3
- **MCLS 60010** .................................................. 2

Russian

- **MCLS 60094** .................................................. 3
- **JAPN 65091** .................................................. 3
- **JAPN 65298** .................................................. 1-3

Spanish

- **MCLS 50095** .................................................. 1-3
- **MCLS 60013** .................................................. 3
- **MCLS 60020** .................................................. 3
- **MCLS 60094** .................................................. 3
- **RUSS 62091** .................................................. 3
- **RUSS 62298** .................................................. 1-3

Master of Arts in Latin

The Master of Arts degree programs in Latin with concentrations in literature and pedagogy are designed for students with varying career objectives. Students already certified to teach Latin and classics in elementary and secondary schools who wish to increase their language proficiency and effectiveness as teachers will pursue the concentration in pedagogy. The concentration in literature is designed for those who anticipate continuing their studies beyond the Master of Arts level, who plan to teach Latin and classics at the college or postsecondary level, and who wish to pursue scholarly research in classical studies.

In addition to courses in Latin language and literature, the department offers a variety of English-language culture courses in classics at the graduate level (e.g., mythology, classical art and archaeology, classical literature in translation). These courses have no language prerequisite and are open to all graduate students.

Literature

Students must successfully complete 33 semester hours of coursework plus a comprehensive final examination based on the Latin reading list or 27 semester hours of coursework plus a thesis. A minimum of 18 semester hours must be courses in Latin language and literature.

Students may combine a graduate major in Latin with a minor in another field with the approval of the adviser by completing 21 semester hours in Latin courses and 12 semester hours in
another language or department. A graduate student majoring in another field may elect a minor in Latin by successfully completing 12 semester hours in Latin.

**Pedagogy**

Students must successfully complete 36 semester hours of coursework and a final project, a portfolio, or a comprehensive examination. Additionally, students will complete an exit oral interview and an exit essay examination. Specific course requirements include LAT 66211 and CLAS 51006 or CLAS 51301 plus 6 hours of courses in Latin literature and Roman culture/civilization, of which 3 hours must be literature courses (12 hours).

In addition, students must successfully complete MCLS 50660, 60601, 60661 and 60698 (12 hours), 9 hours of graduate courses in second-language pedagogy, and 3 hours of graduate electives.

Students are encouraged to enroll in study-abroad programs (limit 6 hours) and in specialized workshops in advanced language or pedagogy (limit 4 hours). Departmental permission must be obtained before enrolling in such programs.

*Students who are already licensed to teach language in Ohio may, with departmental approval, substitute a graduate second-language pedagogy elective for MCLS 50660.

**General Courses (MCLS)**

- **MCLS 50093**
  VARIABLE TITLE WORKSHOP IN MODERN AND CLASSICAL LANGUAGE STUDIES (1-6)
  Workshops individually designed to provide instruction and training in specific areas of modern and classical language studies. S/U grading. Prerequisite: Permission.

- **MCLS 50095**
  SELECTED TOPICS (1-3)
  Topic to be announced in the Schedule of Classes. Repeat registration permitted when content varies.

- **MCLS 50654**
  COMPUTERS IN L2 TEACHING (3)
  Cross-listed with ENG 63035.
  Designed for teachers of language and culture, this course explores the availability of technology, its implementation in the classroom and its integration with second language skills.

- **MCLS 50660**
  METHODS OF TEACHING FOREIGN LANGUAGES (3)
  Theoretical bases, approaches, methods, materials and techniques of foreign language instruction at the elementary and secondary levels. Peer-teaching and 30 hours of field experience and curriculum guide required. Prerequisite: Foreign language proficiency level for teaching in public schools.

- **MCLS 60000**
  LITERARY THEORY IN MODERN AND CLASSICAL LANGUAGES (3)
  An introduction to literary theory for students of French, German, Latin and Spanish.

- **MCLS 60009**
  DOCUMENTS IN MULTILINGUAL CONTEXTS (2)
  An in-depth study of the role of documents in the multilingual information cycle as manifested in word-processing, desktop publishing and Web-based environments. Prerequisite: Graduate standing.

- **MCLS 60010**
  THEORY OF TRANSLATION AND INTERPRETING (2)
  Introduction to the theoretical bases and methods of language mediation. Corequisite: FR 63010 or GER 61010 or SPAN 68010.

- **MCLS 60011**
  TERMINOLOGY AND COMPUTER APPLICATIONS IN TRANSLATION (3)
  Practice-oriented introduction to terminology management and translation tools, such as translation memory and machine translation, and introduction to multilingual Web design. Emphasis on language engineering and localization for translators.

- **MCLS 60012**
  SOFTWARE LOCALIZATION (3)
  Introduction to localization, the translation and adaptation of products, including software and Web pages, for sale or dissemination in specific target-language markets. Course introduces the basic concepts and techniques of localization and provides a hands-on introduction to relevant computer software. Prerequisite: MCLS 60011 with a grade of “B” or better, or permission.

- **MCLS 60013**
  LANGUAGE PROJECT MANAGEMENT (3)
  Introduction to project management in the language industry. Course covers the body of knowledge and skills, including the use of project management software, required to perform the duties of a translation or localization project manager. Beginning with an overview of the language industry, the course examines the language industry project. Prerequisite: MCLS 60011 with a grade of “B” or better, or permission.
Modern and Classical Language Studies

MCLS 60020
SEMEIOTICS (3)
Cross-listed with ENG 6/75057 and PHIL 61055.
An introduction to contemporary theories of semiotics and to the application of those theories to linguistics, literature, translation and technology.

MCLS 60094
COLLEGE TEACHING OF FOREIGN LANGUAGES (1)
An introduction to current principles and issues in the teaching of foreign languages at the college elementary and intermediate levels. Required of departmental teaching assistants.

MCLS 60601
LINGUISTICS FOR THE LANGUAGE PROFESSIONS (3)
Cross-listed with ENG 63040.
Students will be introduced to basic linguistic issues and how these relate to the language professions. Course focuses on functional principles, especially on options to express textual, interpersonal and ideational/experiential meaning.

MCLS 60621
TEACHING CONVERSATION STRATEGIES (3)
Cross-listed with ENG 63037.
Theories of conversational structure and strategies with practical applications for teaching conversation strategies to foreign/second language learners.

MCLS 60622
TEACHING LITERATURE AND CULTURE (3)
Cross-listed with ENG 63038.
Students will explore theories of literature and culture teaching, as well as strategies for teaching literature and culture.

MCLS 60661
SECOND LANGUAGE ACQUISITION (3)
Cross-listed with ENG 6/73033.
This course surveys the major theoretical approaches to language acquisition, concentrating on second language acquisition and the relationship between acquisition/learning research and second language teaching approaches.

MCLS 60663
SECOND LANGUAGE CURRICULUM AND TESTING (3)
Cross-listed with ENG 63039.
Students will study second language curriculum and testing design and current issues, including oral proficiency testing.

MCLS 60698
RESEARCH IN SECOND LANGUAGE PEDAGOGY (3)
Cross-listed with ENG 63098.
Students will learn how second language research influences their teaching practices by studying research texts and recent journal articles conducting a research project. Prerequisite: FR 63001 or GER 61001 or SPAN 68001.

Classics (CLAS)

CLAS 50793
VARIABLE TITLE WORKSHOP IN CLASSICS (1-6)
Workshops individually designed to provide instruction and training in specific areas of classical studies. S/U grading. Prerequisite: Permission.

CLAS 51006
ROMAN HISTORY (3)
Cross-listed with HIST 51006.
A survey of Roman history from its beginnings to the fall of the Roman Empire.

CLAS 51097
COLLOQUIUM IN CLASSICS (3)
Detailed study of an aspect of antiquity that engages issues of current interest, for example, Women in Antiquity, Ancient Christianity, Multiculturalism in Antiquity.

CLAS 51301
CLASSICAL MYTHOLOGY (3)
Assessment of major streams of ancient mythology stressing broad humanistic concepts of religion, philosophy and literature.

CLAS 51401
GREEK ARCHAEOLOGY AND ART (3)
Cross-listed with ART 52031.
Introduction to archaeology of the Greek world with emphasis on recent discoveries and their impact on the study of Greek art, architecture and sculpture through the Hellenistic period.

CLAS 51402
ROMAN ARCHAEOLOGY AND ART (3)
Cross-listed with ART 52032.
Introduction to archaeology of the Roman world with emphasis on recent discoveries and their impact on the study of Etruscan and Roman art, architecture and sculpture through the Imperial period.

CLAS 51403
ROMAN CIVILIZATION (3)
Extensive reading and reporting on phases of Roman public and private life.

CLAS 51503
GREEK LITERATURE IN TRANSLATION (3)
Major works of Greek literature studied in their historical context and by genre; knowledge of Greek not required.

French (FR)

FR 53091
FRENCH SEMINAR (3)
Topic to be announced.
FR 53213
FRENCH COMPOSITION — ADVANCED (3)
French stylistics developed through analyses of literary extracts and practice in written expression.

FR 53216
CONTEMPORARY FRENCH CULTURE (3)
A study of selected sociological, political, cultural or economic issues in the contemporary Francophone world.

FR 53352
MONTAIGNE AND RABELAIS (3)
Thematic and stylistic study of the works of Montaigne and Rabelais. Prerequisite: 6 hours from 33330 level.

FR 53363
18TH-CENTURY FRENCH NOVEL (3)
Development of French novel during the 18th century. Reading of selected works by Prevost, Voltaire, Diderot, Rousseau and others. Prerequisite: 6 hours from 33330 level.

FR 53366
STUDIES IN 19TH-CENTURY FRENCH LITERATURE (3)
Study of selected topics in 19th-century French literature. Prerequisite: 6 hours from 33330 level.

FR 53368
20TH-CENTURY FRENCH NOVEL (3)
Study of selected 20th-century French novels, with emphasis on one or several major writers or movements. Prerequisite: 6 hours from 33330 level.

FR 53369
20TH-CENTURY FRENCH POETRY (3)
A study of selected poetry of Apollinaire, Breton, Mansour, Eluard, Michaux, Char, Reverdy, Ponge, Guillevic, Jabes, Bonnefoy, Dupin, Alpiach and others. Emphasis is placed on the relationship between poetry and the visual arts in the 20th century.

FR 53370
20TH-CENTURY FRENCH THEATRE (3)
Studies in French drama since 1900. Prerequisite: 6 hours from 33330 level.

FR 53380
FRANCOPHONE LITERATURE (3)
A study of writers, movements or works representative of French-speaking national cultures outside of France. May be repeated for credit as course content changes.

FR 63010
THE PRACTICE OF FRENCH TRANSLATION (2)
Students apply linguistic and communication science concepts to case studies of language mediation. Corequisite: MCLS 60010.

FR 63093
VARIABLE TITLE WORKSHOP IN FRENCH (1-6)
Workshops individually designed to provide instruction and training in specific areas of French studies. S/U grading. Prerequisite: Permission.

FR 63098
RESEARCH (1-15)
Research or individual investigation for master’s-level graduate students. Credits earned applied toward degree requirements if department approves. Repeat registration permitted. IP permissible. Prerequisite: Permission.

FR 63191
SEMINAR IN FRENCH STUDIES (3)
Selected topics in French literature and culture.

FR 63199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

*FR 63201
READING FRENCH FOR GRADUATE STUDENTS (4)
Introduction to the fundamentals of French grammar for graduate students. Practice in reading and translation.

*FR 63202
READING FRENCH FOR GRADUATE STUDENTS (HUMANITIES/SOCIAL SCIENCES) (3)
Practice in the reading and translation of French texts in the student’s specialized field and in more general areas.

FR 63240
LITERARY AND CULTURAL TRANSLATION (3)
Translation of documents from a variety of literary and cultural sources, including literature, expository and journalistic prose, scholarly treatises and essays. Translation into French will also be emphasized.

FR 63250
COMMERCIAL, LEGAL AND DIPLOMATIC TRANSLATION (3)
An introduction to methods and resources for the translation of commercial, economic, financial, legal, diplomatic and governmental documents. Prerequisite: MCLS 60010.
Modern and Classical Language Studies

FR 63251
SCIENTIFIC, TECHNICAL AND MEDICAL TRANSLATION (3)
An introduction to methods and resources for the translation of scientific, technical, industrial and medical documents. Prerequisite: MCLS 60010.

FR 63260
INTERPRETING (3)
Introduction to the practice of foreign language interpreting. This is an intensive laboratory course meant to develop skills in consecutive interpreting. Prerequisite: MCLS 60010.

FR 63298
APPLIED TRANSLATION RESEARCH (1-3)
Work experience in translation or interpreting in a corporate, translation bureau or freelance setting, supervised by a faculty member. S/U grading; IP permissible. Prerequisite: MCLS 60010 and permission of translation coordinator.

FR 63299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: FR 63199.

FR 63979
CASE STUDY IN TRANSLATION (3)
Students will be responsible for a major translation and a terminology glossary as well as a critical analysis of the source text, the problems encountered during the translation process, and the strategies used to solve them. S/U grading. Prerequisite: Completion of course requirements for translation options of Master of Arts.

*Credit hours earned in this language sequence are not applicable toward the completion of the hour requirement in a student's graduate program, and do not count toward the minimum 8-hour semester load required.

German (GER)

GER 51095
SPECIAL TOPICS (1-4)
Topic announced in Schedule of Classes. May be repeated when content varies.

GER 51096
INDIVIDUAL INVESTIGATION (1-3)
Independent investigation of problems in German language or literature. Permission of the department chair required. May be repeated. IP permissible.

GER 51216
CONTEMPORARY GERMAN CULTURE (3)
A study of selected sociological, political, cultural and economic issues in contemporary German-speaking countries, using readings, films and legal documents as the basis for discussion. Taught in German.

GER 51300
20TH-CENTURY GERMAN AUTHORS (3)
A survey of the major movements and authors of the 20th century.

GER 51331
HISTORY OF GERMAN LITERATURE (4)
History of the development of German literature from 750 to the present.

GER 51332
GERMAN LITERATURE BY WOMEN (3)
Readings of works by female German authors. Taught in English; German majors/minors will read texts in German.

GER 51334
THE GERMAN NOVELLA (3)
Development of the German novella from the 18th century to the present. Readings of major works, lectures, analyses; taught in German.

GER 51365
CLASSICAL GERMAN LITERATURE (3)
Reading and critical analysis of major works of the Classical Age with emphasis on Goethe.

GER 51731
SURVEY OF GERMAN CINEMA (3)
A survey of major contributions to the German cinema from the beginnnings to the present; taught in German.

GER 61001
GRADUATE RESEARCH AND WRITING IN GERMAN (3)
Individual instruction and assistance with problems encountered in academic research and writing in German. Required of all graduate students in their first semester of graduate work.

GER 61010
THE PRACTICE OF GERMAN TRANSLATION (2)
Students apply linguistic and communication science concepts to case studies of language mediation. Corequisite: MCLS 60010.

GER 61091
VARIABLE TOPIC SEMINAR (3)
Topic announced in Schedule of Classes. May be repeated when content varies.
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

**GER 61200**
**HISTORY OF THE GERMAN LANGUAGE (3)**

**GER 61240**
**LITERARY AND CULTURAL TRANSLATION (3)**
Translating documents from a variety of literary and cultural sources, including literature, expository and journalistic prose, scholarly treatises and essays. Translation into German will also be emphasized.

**GER 61250**
**COMMERCIAL, LEGAL AND DIPLOMATIC TRANSLATION (3)**
An introduction to methods and resources for the translation of commercial, economic, financial, legal, diplomatic and governmental documents. Prerequisite: MCLS 60010.

**GER 61251**
**SCIENTIFIC, TECHNICAL AND MEDICAL TRANSLATION (3)**
An introduction to methods and resources for the translation of scientific, technical, industrial and medical documents. Prerequisite: MCLS 60010.

**GER 61260**
**INTERPRETING (3)**
Introduction to the practice of foreign language interpreting. This is an intensive laboratory course meant to develop skills in consecutive interpreting. Prerequisite: MCLS 60010.

**GER 61298**
**APPLIED TRANSLATION RESEARCH (1-3)**
Work experience in translation or interpreting in a corporate, translation bureau or freelance setting, supervised by a faculty member. S/U grading; IP permissible. Prerequisite: MCLS 60010 and permission of translation coordinator.

**GER 61299**
**THESIS II (2)**
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: GER 61199.

**GER 61330**
**MIDDLE HIGH GERMAN LITERATURE (3)**
Literature of the Courtly Age in the original form.

**GER 61350**
**SEMINAR ON THE LYRIC (3)**

**GER 61353**
**SEMINAR ON THE NOVEL (3)**

**GER 61354**
**SEMINAR ON GERMAN DRAMA (3)**

**GER 61361**
**SEMINAR ON THE BAROQUE (3)**
Readings in German literature and poetics of the 17th century.

**GER 61366**
**SEMINAR ON ROMANTICISM (3)**

**GER 61398**
**RESEARCH (1-15)**
Research for master’s-level graduate students. Credit toward degree requirements may be given with department approval. Repeat registration permitted. IP permissible. Prerequisite: Permission.

*GER 61901
**READING GERMAN FOR GRADUATE STUDENTS (4)**
Introduction to the fundamentals of German grammar for graduate students. Practice in reading and translation.

*GER 61902
**READING GERMAN FOR GRADUATE STUDENTS (3)**
Continued practice in reading and translation. Independent study of scholarly texts in the student’s own discipline. Prerequisite: GER 61901 or permission.

**GER 61979**
**CASE STUDY IN TRANSLATION (3)**
Students will be responsible for a major translation and a terminology glossary as well as a critical analysis of the source text, the problems encountered during the translation process and the strategies used to solve them. S/U grading. Prerequisite: Completion of course requirements for translation option of Master of Arts.

*Credit hours earned in this language sequence are not applicable toward the completion of the hour requirement in a student’s graduate program and do not count toward the minimum 8-hour semester load required.

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**Japanese (JAPN)**

**JAPN 65001**
**GRADUATE RESEARCH AND WRITING IN JAPANESE (3)**
Individual instruction and assistance with problems encountered in academic research and writing in Japanese. Required of all graduate students in their first fall semester.

**JAPN 65010**
**THE PRACTICE OF JAPANESE TRANSLATION (2)**
Students apply linguistic and communication science concepts to case studies of language mediation. Corequisite: MCLS 60010.
JAPN 65091
SEMINAR (3)
Topic announced in Schedule of Classes; may be repeated when content varies.

JAPN 65240
LITERARY AND CULTURAL TRANSLATION (3)
Translation of documents from a variety of literary and cultural sources, including literature, expository and journalistic prose, scholarly treatises and essays. Translation into Japanese will also be emphasized.

JAPN 65250
COMMERCIAL, LEGAL AND DIPLOMATIC TRANSLATION (3)
An introduction to methods and resources for the translation of commercial, economic, financial, legal, diplomatic and governmental documents. Prerequisite: MCLS 60010.

JAPN 65251
SCIENTIFIC, TECHNICAL AND MEDICAL TRANSLATION (3)
An introduction to methods and resources for the translation of scientific, technical, industrial and medical documents. Prerequisite: MCLS 60010.

JAPN 65298
APPLIED TRANSLATION RESEARCH (1-3)
Work experience in translation or interpreting in a corporate, translation bureau or freelance setting, supervised by a faculty member. S/U grading; IP permissible. Prerequisite: MCLS 60010 and permission of translation coordinator.

JAPN 65979
CASE STUDY IN TRANSLATION (3)
Students will be responsible for a major translation and a terminology glossary, as well as a critical analysis of the source text, the problems encountered during the translation process and the strategies used to solve them. S/U grading. Prerequisite: Completion of requirements for M.A. in translation.

LAT 56374
JUVENAL’S SATIRES AND MARTIAL’S EPIGRAMS (3)
General consideration of Roman satire.

LAT 56375
LUCRETIUS (3)
De Rerum Natura.

LAT 66199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in single semester, distributed over several semesters if desired. S/U grading; IP permissible.

LAT 66211
ADVANCED PROSE COMPOSITION (3)

LAT 66299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: LAT 66199.

LAT 66351
LATIN COMEDY (3)
Characteristics of Latin comedy; readings from Plautus and Terence.

LAT 66373
ADVANCED PROSE AUTHORS (3)

LAT 66391
SEMINAR IN CLASSICAL LITERATURE (2 or 3)
Topics to be announced. IP permissible.

LAT 66398
RESEARCH (1-15)
Research or individual investigation for master’s-level graduate students. Credits earned applied toward degree requirements if department approves. Repeat registration permitted. IP permissible. Prerequisite: Permission.

Russian (RUSS)

RUSS 62001
GRADUATE RESEARCH AND WRITING IN RUSSIAN (3)
Individual instruction and assistance with problems encountered in academic research and writing in Russian. Required of all graduate students in their first fall semester of graduate work.

RUSS 62010
THE PRACTICE OF RUSSIAN TRANSLATION (2)
Students apply linguistic and communication science concepts to case studies of language meditation. Corequisite: MCLS 60010.
RUSS 62091
SEMINAR (3)
Topic announced in Schedule of Classes; may be repeated when content changes.

RUSS 62240
LITERARY AND CULTURAL TRANSLATION (3)
Translation of documents from a variety of literary and cultural sources, including literature, expository and journalistic prose, scholarly treatises and essays. Translation into Russian will also be emphasized.

RUSS 62250
COMMERCIAL, LEGAL AND DIPLOMATIC TRANSLATION (3)
An introduction to methods and resources for the translation of commercial, economic, financial, legal, diplomatic and governmental documents. Prerequisite: MCLS 60010.

RUSS 62251
SCIENTIFIC, TECHNICAL AND MEDICAL TRANSLATION (3)
An introduction to methods and resources for the translation of scientific, technical, industrial and medical documents. Prerequisite: MCLS 60010.

RUSS 62298
APPLIED TRANSLATION RESEARCH (1-3)
Work experience in translation of interpreting in a corporate, translation bureau or freelance setting, supervised by a faculty member. Prerequisite: MCLS 60010 and permission of translator coordinator.

RUSS 62979
CASE STUDY IN TRANSLATION (3)
Students will be responsible for a major translation and a terminology glossary, as well as a critical analysis of the source text, the problems encountered during the translation process and the strategies used to solve them. S/U grading. Prerequisite: Completion of requirements for M.A. in translation.

Spanish (SPAN)

SPAN 58095
SELECTED TOPICS IN SPANISH (3)
Topic to be announced in semester Schedule of Classes. May be repeated to maximum of 15 hours.

SPAN 58215
SPANISH COMPOSITION — ADVANCED (3)
Literary, political and commercial texts examined for style and structure; class assignments to aid the students' writing style; presentation of grammatical and idiomatic expressions.

SPAN 58216
CONTEMPORARY HISPANIC CULTURE (3)
A study of selected sociological, political, cultural or economic issues in the contemporary Hispanic world.

SPAN 58340
MEDIEVAL SPANISH POETRY (3)
Spanish poetry from its origins to 1500.

SPAN 58350
DON QUIXOTE (3)
A detailed study of Cervantes' masterpiece.

SPAN 58351
MINOR WORKS OF CERVANTES (3)
La Numancia, Entremeses, La Galatea, Novelas ejemplares.

SPAN 58352
MEDIEVAL SPANISH PROSE (3)
The development of medieval Spanish prose, with special emphasis on La Celestina.

SPAN 58354
NEOCLASSICISM AND ROMANTICISM (3)
Survey of Neoclassicism and Romanticism in Spain.

SPAN 58356
GOLDEN AGE PROSE (3)
Study of the development of the various forms of prose fiction during the Spanish Golden Age.

SPAN 58358
19TH-CENTURY NOVEL (3)

SPAN 58360
20TH-CENTURY SPANISH DRAMA (3)
Representative works of leading Spanish dramatists of the 20th century.

SPAN 58364
THE GENERATION OF ’98 AND AFTER (3)
Intensive reading of representative works with an examination of the historical circumstances that led to the formation of the Generation of ’98.

SPAN 58366
THE NOVEL OF THE MEXICAN REVOLUTION (3)
A critical sociocultural and literary examination of selected Mexican novels that explore a variety of responses to the first major 20th-century mass upheaval in Latin America known as the Mexican Revolution.

SPAN 58370
MODERNISM IN SPANISH AMERICA (3)
Ruben Dario and other writers of the modernista movement; works include modernist poetry, short stories and essays.
**Modern and Classical Language Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 58372</td>
<td>SPANISH-AMERICAN NOVEL I (3)</td>
<td>3</td>
<td>A cultural and literary analysis of selected major Spanish-American novels written between 1900 and 1950.</td>
</tr>
<tr>
<td>SPAN 58373</td>
<td>SPANISH-AMERICAN NOVEL II (3)</td>
<td>3</td>
<td>A cultural and literary analysis of selected major Spanish-American novels written from 1950 to the present.</td>
</tr>
<tr>
<td>SPAN 58374</td>
<td>MODERN SPANISH-AMERICAN DRAMA (3)</td>
<td>3</td>
<td>Analysis of selected plays from various Spanish-American countries.</td>
</tr>
<tr>
<td>SPAN 58376</td>
<td>CONTEMPORARY SPANISH-AMERICAN SHORT STORY (3)</td>
<td>3</td>
<td>The development of the Spanish-American short story from 1917 to the present.</td>
</tr>
<tr>
<td>SPAN 58422</td>
<td>EARLY SPANISH-AMERICAN DISCOURSE (3)</td>
<td>3</td>
<td>This course provides a critical analysis of cultural and literary issues on texts dealing with early colonial Spanish-American expression.</td>
</tr>
<tr>
<td>SPAN 58423</td>
<td>SPANISH-AMERICAN INDIAN DISCOURSE (3)</td>
<td>3</td>
<td>This course provides a critical analysis of cultural and literary issues in selected excerpts of the Spanish-American Indian expression from pre-Columbian to Colonial times.</td>
</tr>
<tr>
<td>SPAN 68001</td>
<td>SPANISH LITERARY RESEARCH AND WRITING (3)</td>
<td>3</td>
<td>Individual instruction with problems encountered in academic research and writing in Spanish. Required of all graduate students in their first semester of graduate work.</td>
</tr>
<tr>
<td>SPAN 68010</td>
<td>THE PRACTICE OF SPANISH TRANSLATION (2)</td>
<td>2</td>
<td>Students apply linguistic and communication science concepts to case studies of language mediation. Corequisite: MCLS 60010.</td>
</tr>
<tr>
<td>SPAN 68093</td>
<td>VARIABLE TITLE WORKSHOP IN SPANISH (1-6)</td>
<td>1-6</td>
<td>Workshops individually designed to provide instruction and training in specific areas of Spanish studies. Prerequisite: Permission.</td>
</tr>
<tr>
<td>SPAN 68095</td>
<td>SELECTED TOPICS (3)</td>
<td>3</td>
<td>Selected topics on Spanish literature or linguistics.</td>
</tr>
<tr>
<td>SPAN 68098</td>
<td>RESEARCH (1-15)</td>
<td>1-15</td>
<td>Research or individual investigation for master's-level graduate students. Credits earned applied toward degree requirements if department approves. Repeat registration permitted. IP permissible. Prerequisite: Permission.</td>
</tr>
<tr>
<td>SPAN 68191</td>
<td>SEMINAR IN FICTION (3)</td>
<td>3</td>
<td>Intensive study of one or two major writers of a movement in the history of Spanish and Spanish-American fiction.</td>
</tr>
<tr>
<td>SPAN 68199</td>
<td>THESIS I (2-6)</td>
<td>2-6</td>
<td>Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. IP permissible.</td>
</tr>
<tr>
<td>*SPAN 68201</td>
<td>READING SPANISH FOR GRADUATE STUDENTS (4)</td>
<td>4</td>
<td>Introduction to the fundamentals of Spanish grammar for graduate students. Practice in reading and translation.</td>
</tr>
<tr>
<td>*SPAN 68202</td>
<td>READING SPANISH FOR GRADUATE STUDENTS (HUMANITIES/ SOCIAL SCIENCES) (3)</td>
<td>3</td>
<td>Specialized graded readings in Spanish for students in the humanities and social sciences. Not open to Spanish majors.</td>
</tr>
<tr>
<td>SPAN 68240</td>
<td>LITERARY AND CULTURAL TRANSLATION (3)</td>
<td>3</td>
<td>Translating documents from a variety of literary and cultural sources, including literature, expository and journalistic prose, scholarly treatises and essays. Translation into Spanish will also be emphasized.</td>
</tr>
<tr>
<td>SPAN 68250</td>
<td>COMMERCIAL, LEGAL AND DIPLOMATIC TRANSLATION (3)</td>
<td>3</td>
<td>An introduction to methods and resources for the translation of commercial, economic, financial, legal, diplomatic and governmental documents. Prerequisite: MCLS 60010.</td>
</tr>
<tr>
<td>SPAN 68251</td>
<td>SCIENTIFIC, TECHNICAL AND MEDICAL TRANSLATION (3)</td>
<td>3</td>
<td>An introduction to methods and resources for the translation of scientific, technical, industrial and medical documents. Prerequisite: MCLS 60010.</td>
</tr>
<tr>
<td>SPAN 68260</td>
<td>INTERPRETING (3)</td>
<td>3</td>
<td>Introduction to the practice of foreign language interpreting. This is an intensive laboratory course meant to develop skills in consecutive interpreting. Prerequisite: MCLS 60010.</td>
</tr>
</tbody>
</table>
Modern and Classical Language Studies

SPAN 68298
APPLIED TRANSLATION RESEARCH (1-3)
Work experience in translation or interpreting in a corporate, translation bureau or freelance setting, supervised by a faculty member. S/U grading; IP permissible. Prerequisite: MCLS 60010 and permission of translation coordinator.

SPAN 68299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: SPAN 68199.

SPAN 68391
SEMINAR IN THEATRE (3)
Intensive study of one or two major dramatists or movements in the history of Spanish and Spanish-American theatre.

SPAN 68591
SEMINAR IN POETRY (3)
Intensive study of one or two major poets or of a movement in the history of Spanish and Spanish-American poetry.

SPAN 68979
CASE STUDY IN TRANSLATION (3)
Students will be responsible for a major translation and a terminology glossary as well as a critical analysis of the source text, the problems encountered during the translation process and the strategies used to solve them. S/U grading. Prerequisite: Completion of course requirements for translation option of Master of Arts.

*Credit hours earned in this language sequence are not applicable toward the completion of the hour requirement in a student’s graduate program and do not count toward the minimum 8-hour semester load required.
Philosophy

PHILOSOPHY

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Master of Arts

The Master of Arts degree program in philosophy is designed to provide opportunities to pursue intensive, in-depth study within the discipline of philosophy, with particular attention given to developing an appreciation for the varieties of philosophical methods, perspectives and modes of analysis, and their relation to the methodological concerns and interests of other disciplines. The M.A. program offers courses of study in three concentrations for persons interested in pursuing a terminal master’s degree in philosophy, for persons pursuing doctoral work in philosophy, as well as for persons wishing to supplement and enhance their work in other disciplines and degree programs. The concentrations offered are in the areas of Culture/History, Ethics/Practice and Interpretation/Method.


ADMISSION

In general, an undergraduate grade point average of 3.0 (on a 4.0 scale) is required for admission. All applicants must submit scores on the Graduate Record Examination and three letters of recommendation to the Department of Philosophy. It is recommended that applicants intending to pursue the M.A. in philosophy as preparation for doctoral study should possess the equivalent of two years of college-level preparation in a foreign language and at least the equivalent of an undergraduate minor in philosophy (18 semester hours). Those applicants intending to pursue the M.A. in philosophy as preparation for or as a supplement to work in another discipline, as well as persons planning to pursue a terminal M.A., in most cases should present evidence of at least the equivalent of an undergraduate minor in philosophy along with other material demonstrating preparation for admission. Students who do not have an undergraduate major or minor in philosophy should consult the graduate coordinator prior to submitting their application.

All applicants to the M.A. degree program must submit a brief statement of purpose for pursuing advanced work in philosophy. Applicants should indicate their preference for area of concentration and choice of culminating experience option,
Persons wishing to pursue a concentration within the program without completing the M.A. degree should consult the graduate coordinator and, where appropriate, an adviser in the home discipline.

**ADVISING**
On admission each student will be assigned a program advisory group of three faculty members. The program advisory group for each student will be selected on the basis of student and faculty interests and faculty availability. Each program advisory group will be designated by the graduate coordinator. Once a student submits a tentative thesis/research project proposal, a thesis advisory group is formed. Upon the approval of a thesis proposal, the thesis advisory group functions as the program advisory group.

**PROGRAM REQUIREMENTS**
The M.A. degree in philosophy requires 35 hours beyond the baccalaureate degree including 6 hours of research directed toward the completion of the thesis or 9 hours of research directed toward the completion of a nonthesis research project option.

Students who lack background preparation in a specific area will be required to take an undergraduate course, and earn a letter grade of "B" or better in that course, as a prerequisite for further graduate study in that area. The student's program advisory group, in consultation with the graduate coordinator, will determine which course prerequisites are needed.

Beyond required and elected coursework of each concentration, candidates are required to participate in PHIL 69997, Colloquium, for each semester in residence. No more than two semester hours of colloquium can be counted toward degree requirements. The graduate coordinator will consider, in consultation with the graduate faculty, various options for satisfying the colloquium requirement where circumstances demand additional consideration.

There are four elements common to each concentration: a "core" or disciplinary matrix (12 hours); concentration electives (15 hours for thesis option and 12 hours for nonthesis option); culminating experience (6 hours for thesis option and 9 hours for nonthesis option); and colloquium (2 hours).

Within the disciplinary matrix there are two required methods courses, PHIL 60101 and 60102, and two disciplinary matrix seminars: the spring semester disciplinary matrix seminar is required of all first-year students; the fall disciplinary matrix seminar is required of all second-year students. PHIL 60101 serves as prerequisite for PHIL 60102 and any disciplinary matrix seminar.

Proposals for a culminating experience can be made only after a student has met at least the following requirements: satisfactory completion of PHIL 60101 and one required concentration course; and completion of or present good standing in each of PHIL 60102, at least one disciplinary matrix seminar (PHIL 60110 or 60114), and a second required concentration course.

**ELECTIVES**
In addition to the electives available through the disciplinary matrix seminars and concentration selections, all courses offered in the graduate philosophy program serve as general electives in any concentration, regardless of concentration specification. The selection of electives, especially if the courses are designated as a concentration specific elective, should be made with the advice and approval of a student’s program advisory group in consultation with the graduate coordinator. In no instance will the research project or thesis count toward satisfying hours for concentration elective requirements.

Students in the philosophy graduate program are encouraged to enroll in one course outside philosophy appropriate to their concentrations and interests. The student’s program advisory group and the graduate coordinator will approve the selection of this course with respect to specific use for a concentration.

**Courses (PHIL)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 50005</td>
<td>HEALTH CARE ETHICS (3) Ethical problems in health care will be critically assessed. Student will consider how these specific ethical problems illustrate the ethical enterprise. Prerequisite: Graduate standing in philosophy or in a health care discipline or permission.</td>
</tr>
<tr>
<td>PHIL 50093</td>
<td>VARIABLE TITLE WORKSHOP IN PHILOSOPHY (1-6) S/U grading.</td>
</tr>
<tr>
<td>PHIL 51010</td>
<td>PROBLEMS IN THE PHILOSOPHY OF RELIGION (3) Philosophical examination of issues and problems presented by various writers in philosophy of religion.</td>
</tr>
<tr>
<td>PHIL 51015</td>
<td>PHILOSOPHICAL STUDY OF RELIGION (3) A philosophical examination of pivotal issues, schools and theorists in the study of religion, and the future of comparative studies. This course pursues the academic study of religion at an advanced level.</td>
</tr>
<tr>
<td>PHIL 51020</td>
<td>SOCIAL PHILOSOPHY (3) Philosophical examination of theories of society as proposed by various writers.</td>
</tr>
<tr>
<td>PHIL 51025</td>
<td>PHILOSOPHY OF LAW (3) Critical examination of nature and function of law.</td>
</tr>
<tr>
<td>PHIL 51030</td>
<td>ETHICAL THEORIES AND PRACTICES (3) Intensive and in-depth study of some dimensions of philosophic traditions in ethics.</td>
</tr>
</tbody>
</table>
PHIL 51035
PHILOSOPHY OF SCIENCE (3)
Analysis of methodological problems in scientific disciplines.

PHIL 51040
THEORIES OF KNOWLEDGE (3)
Study of various problems in philosophic theories of knowledge, with some emphasis on current philosophic challenges to such theories.

PHIL 51042
TOPICS IN METAPHYSICS (3)
A philosophical examination of at least three issues in metaphysics with an emphasis on the historical debates that give rise to them and on their contemporary contexts.

PHIL 51045
METALOGIC (3)
Relatively formal treatment of syntactic and semantic theory, of propositional and predicate logic, with some attention to the limits of formalism.

PHIL 51050
PHILOSOPHICAL ANALYSIS AND BEYOND (3)
Study of major problems in analytic philosophy and subsequent philosophical analysis.

PHIL 51055
PHENOMENOLOGY AND BEYOND (3)
Investigation of phenomenological movement, its methods, and the scope and course of its applications, in philosophy and other disciplines.

PHIL 51060
PRAGMATISM AND BEYOND (3)
Detailed reading from classical American pragmatists along with some attention to later interpretations and exploration of current reappraisals and developments.

PHIL 51065
PLATO (3)
Detailed examination of selected Platonic dialogues, with some attention to Plato's development and dismissal of certain pre-Socratic (and Socratic) themes.

PHIL 51070
ARISTOTLE (3)
Detailed examination of selected works of Aristotle, with some attention given to Aristotle's development and dismissal of certain pre-Socratic and Platonic themes.

PHIL 51076
CONTINENTAL PHILOSOPHY (3)
Investigation of some figure, issue or theme in continental philosophy from Descartes to present.

PHIL 51077
BRITISH AND AMERICAN PHILOSOPHY (3)
Detailed investigation of a figure or issue in British or American philosophy.

PHIL 51080
PHILOSOPHY AND ART IN THE MODERN AGE (3)
Exploring, with emphasis on the modern age, philosophical conceptions of art in their interplays with, especially, practicing artists' attitudes toward theory. Prerequisite: Graduate standing in philosophy or art, or permission.

PHIL 51085
THEORIES, CONCEPTS AND NARRATIVES (3)
Concentrated discussion of explanation, its elements, its varieties and its alternatives.

PHIL 51086
PHILOSOPHY OF EXPRESSION (3)
Concentrated study of expression through philosophy of literature, of music, of body, of language and of symbols.

PHIL 59995
SPECIAL TOPICS (3)
When content varies, may be repeated for credit.

PHIL 59996
INDIVIDUAL INVESTIGATION (1-3)
S/U grading; IP permissible. Repeat registration permitted with departmental approval. Prerequisite: Departmental permission before registration.

PHIL 60101
PHILOSOPHY’S METHODS (3)
Exploration of differing approaches to philosophical problems, particularly that of method; practice in identifying these approaches and methods as they occur in classic and current texts; practice in research methods.

PHIL 60102
PHILOSOPHY’S RIGORS AND LATITUDES (3)
Identifying, classifying and evaluating terms, allusions and tactics that commonly occur in a variety of philosophical texts; recognizing modes of philosophizing other than strict argumentation and formal techniques.

PHIL 60110
CLASSIC FIGURE DISCIPLINARY MATRIX SEMINAR (3)
Intensive primary-source reading using a significant portion of the works of a classic philosophic figure, along with critical appreciation of secondary literature.

PHIL 60111
CURRENT FIGURE DISCIPLINARY MATRIX SEMINAR (3)
Intensive-primary source reading using a significant portion of the works of a current philosophic figure, along with critical appreciation of journal literature.
PHIL 50512
CLASSIC ISSUE DISCIPLINARY MATRIX SEMINAR (3)
Intensive reading focused on a classic philosophic issue, with readings selected to reflect the issue’s fate in various thinkers and periods.

PHIL 50513
CURRENT ISSUE DISCIPLINARY MATRIX SEMINAR (3)
Intensive reading focused on current philosophic issue, tracing the issue’s rise, including at least three authors who discuss the issue, exploring the spectrum of journal literature related to the issue.

PHIL 50514
EMERGENT FIGURE AND ISSUES DISCIPLINARY MATRIX SEMINAR (3)
Intensive reading on an emergent figure and issues the figure brings to prominence; focus on the historical contexts and relevant issues out of which the figure, issues and new orientation(s) emerge.

PHIL 50550
PHILOSOPHY OF LANGUAGE (3)
Cross-listed with ENG 6/75050.
Critical examination of nature and function of language, especially in relation to mental function and development.

PHIL 50555
SEMEIOTICS (3)
Cross-listed with ENG 6/75057 and MCLS 60020.
An introduction to contemporary theories of semiotics and to the application of those theories to linguistics, literature, translation and technology.

PHIL 50560
INTERPRETIVE STYLES AND TRADITIONS (3)
Critical appreciation of the theories and practices of interpretation comprehended according to certain classical, current and emergent philosophic styles and traditions.

PHIL 50562
THEORIES AND PRACTICES FOR AN ETHICS OF CARING (3)
Critical appreciation of classic, current and emerging contributions to, critiques of and alternatives within an ethics of caring.

PHIL 50563
PHILOSOPHY’S ROLES IN ETHICS ACROSS THE DISCIPLINES (3)
A philosophic reading of texts bearing on the traditions and new emergence of a concern for ethics in many contexts and in many academic disciplines especially related to the roles philosophy is seen to serve.

PHIL 50575
LOGICAL THEORY (3)
Intensive study of issues concerning conceptual framework or presuppositions of logic; or challenges or alternatives to classi- cal logic or to logic itself.

PHIL 50584
RESEARCH ETHICS (3)
Exploration of methodologies, the treatment of human and animal research subjects, responsible authorship practices and the role of the scientist in the moral community.

PHIL 50585
METAETHICS (3)
Examination of the conceptions, presuppositions and value judgments of ethical theories.

PHIL 50594
COLLEGE TEACHING OF PHILOSOPHY (1)
Discussion, critique and development of concepts to guide the teaching of philosophy including concepts of procedures and tactics for planning, pacing, presenting, representing and reviewing philosopic texts, figures and issues. S/U grading; IP permissible.

PHIL 50599
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible. Prerequisite: Departmental permission before registration.

PHIL 50629
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: PHIL 50599.

PHIL 50695
SPECIAL TOPICS (3)
Selected topics in philosophy. Repeat registration permitted. Prerequisite: Permission.

PHIL 50697
Colloquium (1)
Student, faculty and invited guests participate in conference-like contexts to present and discuss issues of current philosophic interest. Repeat registration permitted. S/U grading; IP permissible.

PHIL 50698
Research or individual investigation for master’s-level graduate students. Credits earned may be applied toward meeting degree requirements. Repeat registration permitted with departmental approval. S/U grading; IP permissible. Prerequisite: Departmental permission before registration.
The Department of Physics offers graduate courses and research opportunities leading to the degrees of Doctor of Philosophy, Master of Science and Master of Arts. Additional requirements and information can be found in the Departmental Information and Policy Guide, which can be obtained from the Department of Physics upon request. Information on current research activities can be found in the brochure entitled Graduate Studies and Research in Physics at Kent State University, which is also available on request.

Visit http://phys.kent.edu for more information.

### Master of Science

**PROGRAM REQUIREMENTS**
A total of 32 semester hours of credits is required, which includes 6 hours of thesis and the following physics courses or their equivalents: 55201, 55202, 6/75101 and 6/76161. The remaining hours may be divided among course, seminar and research credits according to the interests of the student with the consent of the advisor. A thesis presenting and interpreting results of original research is required. The research areas are outlined in the dissertation section under the doctoral program.

### Master of Arts

**PROGRAM REQUIREMENTS**
A total of 32 semester hours of graduate credit is required, with no more than one half at the 50000 level. The distribution of these hours will be planned by the student together with the faculty advisor to best fulfill the needs of the student.

### Doctor of Philosophy

Each student is required to take a set of basic courses as outlined in the Departmental Information and Policy Guide. Students may petition to have specific course requirements waived if a grade of “B” or higher was obtained for an equivalent course at another school. The basic physics courses will prepare the student for the candidacy examination. Students present at least one seminar during their graduate career.

**DISSERTATION**
The dissertation presents results of original research. Topics available for dissertation research are primarily in the areas of condensed matter physics and high-energy nuclear physics. Condensed matter research emphasizes liquid crystal/soft condensed matter physics and systems exhibiting highly correlated electrons/superconductors. It includes problems involving theory and computation, critical phenomena, X-ray scattering, nuclear magnetic resonance, light scattering, magnetic and electric phenomena, ultrasonics, and thermal and optical properties. Small angle neutron scattering and synchrotron X-ray experiments are carried out at national facilities such as the National Institute for Standard and Technology and Argonne National Laboratory. High-energy nuclear research probes the subatomic structure of matter via the subatomic particles and their strong interaction processes. Experiments are carried out at national accelerator facilities such as the Thomas Jefferson National Laboratory and the Brookhaven Relativistic Heavy Ion Collider. Research in subatomic theory concentrates on modeling hadrons in terms of quarks and gluons using relativistic...
quantum field theory and describing high energy collision processes of hot, dense nuclear matter in terms of basic quark-gluon interactions.

<table>
<thead>
<tr>
<th>Courses (PHY)</th>
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</thead>
<tbody>
<tr>
<td><strong>PHY 50020</strong>  ADVANCED PHYSICS LAB (2)</td>
</tr>
<tr>
<td>Advanced experiments in classical and modern physics are selected to accompany and to supplement graduate-level physics courses. Repeat registration permitted. Prerequisite: Two years of physics.</td>
</tr>
<tr>
<td><strong>PHY 50093</strong>  VARIABLE TITLE WORKSHOP IN PHYSICS (1-6)</td>
</tr>
<tr>
<td>Workshops individually designed to provide instruction and training in specific areas of physics. S/U grading. Prerequisite: Permission.</td>
</tr>
<tr>
<td><strong>PHY 50095/70095</strong>  SPECIAL TOPICS (1-3)</td>
</tr>
<tr>
<td>Topic announced when scheduled. Prerequisite: Permission.</td>
</tr>
<tr>
<td><strong>PHY 50096</strong>  INDIVIDUAL INVESTIGATION (1-3)</td>
</tr>
<tr>
<td>Individual projects for physics graduate students. IP permissible.</td>
</tr>
<tr>
<td><strong>PHY 50195/70195</strong>  SPECIAL TOPICS (1-3)</td>
</tr>
<tr>
<td>Topic announced when scheduled. Prerequisite: Permission.</td>
</tr>
<tr>
<td><strong>PHY 52020</strong>  APPLIED PHYSICS LABORATORY (2)</td>
</tr>
<tr>
<td>Experiments using various research techniques at advanced level. Repeat registration permitted.</td>
</tr>
<tr>
<td><strong>PHY 52500</strong>  PHYSICS OF LABORATORY DEVICES AND TECHNIQUES (3)</td>
</tr>
<tr>
<td>Physics of semiconducting devices such as diodes, transistors; laboratory techniques using temperature control, vacuum pumps; X-ray, neutron, light and electron scattering.</td>
</tr>
<tr>
<td><strong>PHY 52512</strong>  GENERAL ELECTRONIC INSTRUMENTATION (4)</td>
</tr>
<tr>
<td>Laboratory-based course in digital and analog electronics. Computer interfacing and computer-based technique all within context of applications in measurements, signal-to-noise enhancement and control instrumentation. Lecture 2 hours, laboratory 4 hours weekly.</td>
</tr>
<tr>
<td><strong>PHY 52513</strong>  COMPUTER SYSTEMS DESIGN (3)</td>
</tr>
<tr>
<td>Hands-on experience in selecting and using a microcomputer-based data acquisition and control system in the science laboratory. Lecture 1 hour, laboratory 4 hours weekly. IP permissible. Prerequisite: Proficiency in a high-level computer language. (Equivalent to CS 10061.)</td>
</tr>
<tr>
<td><strong>PHY 54291</strong>  PLANETARIUM OPERATION AND PROGRAMMING (1)</td>
</tr>
<tr>
<td>Planetarium operation, advantages and limitations. Slides, technamation, special effects and programs for K-12 grades, public and special groups. Prerequisite: Permission.</td>
</tr>
<tr>
<td><strong>PHY 54802</strong>  ASTROPHYSICS (3)</td>
</tr>
<tr>
<td>Galactic structure, stellar formation and evolution, origin of the elements (or nucleosynthesis), nonoptical astronomies and a description of various cosmological theories. Prerequisite: MATH 12003 and a major or minor in the physical sciences or technology, or consent of instructor.</td>
</tr>
<tr>
<td><strong>PHY 55201</strong>  ELECTROMAGNETIC THEORY I (3)</td>
</tr>
<tr>
<td>Properties of electric and magnetic fields developed by vector methods. Emphasis in Electromagnetic Theory I is on static fields in both vacuum and matter. Pre- or corequisite: MATH 32044 or equivalent and 16 hours of physics or permission.</td>
</tr>
<tr>
<td><strong>PHY 55202</strong>  ELECTROMAGNETIC THEORY II (3)</td>
</tr>
<tr>
<td>Sequel to Electromagnetic Theory I, continuing development of theory of classical electromagnetic fields with emphasis on dynamic fields. Prerequisite: PHY 55201 or permission.</td>
</tr>
<tr>
<td><strong>PHY 55301</strong>  THERMODYNAMICS (3)</td>
</tr>
<tr>
<td>Fundamental concepts in thermodynamics from macroscopic as well as statistical approaches. Includes applications to engineering. Prerequisites: MATH 22005 or equivalent and 10 hours of physics.</td>
</tr>
<tr>
<td><strong>PHY 55403/75403</strong>  COMPUTER ANALYSIS OF EXPERIMENTAL MEASUREMENTS (2)</td>
</tr>
<tr>
<td>Applications of the minicomputer to the reduction and analysis of data. Error analysis; rootfinding; curvefitting; smoothing of data. Prerequisite: MATH 22005 and PHY 35402 or equivalent.</td>
</tr>
<tr>
<td><strong>PHY 55501</strong>  FUNDAMENTALS OF MODERN OPTICS (3)</td>
</tr>
<tr>
<td>Emission and propagation of coherent and incoherent light, and nonlinear optical effects; introduction to devices and spectroscopic techniques based on modern optics. Prerequisite: PHY 55201 or equivalent.</td>
</tr>
<tr>
<td><strong>PHY 55612</strong>  MICROPROCESSOR-BASED DESIGN (3)</td>
</tr>
<tr>
<td>Design, construction, programming and interfacing of microcontrollers based on a 16-bit microprocessor. IP permissible.</td>
</tr>
</tbody>
</table>
PHY 56101  QUANTUM AND ATOMIC PHYSICS  (4)
Bohr theory, wave mechanics, wave packets. Application to barriers, oscillators, hydrogen atoms, multielectron atoms, X-rays, molecular spectra. At level of Eisberg-Resnick’s Quantum Physics. Prerequisite: Permission.

PHY 56301  INTRODUCTION TO NUCLEAR PHYSICS  (3)
Introduction to the concepts of nuclear physics including basic properties of the atomic nucleus, experimental techniques, nuclear models and reactions, nuclear fission and fusion, and elementary particles. Prerequisite: PHY 36001, MATH 22005 or permission.

PHY 56401  INTRODUCTION TO SOLID STATE  (3)
Crystal structure, crystal diffraction and reciprocal lattice, crystal binding, phonons and lattice vibrations, Fermi gas, energy bands. Prerequisite: 18 hours of physics; MATH 22004 or permission.

PHY 60091/80091  PHYSICS SEMINAR  (1)
Discussion of current literature or of original research in physics. Participation by students, faculty and guests. S/U grading; IP permissible.

PHY 60093/70093  VARIABLE TITLE WORKSHOP IN PHYSICS  (1-6)
Workshops individually designed to provide instruction and training in specific areas of physics. S/U grading.

PHY 60094/70094  COLLEGE TEACHING OF PHYSICS  (1-3)
Methodology of teaching in a university, college or junior college. Includes observation of kinds of teaching and practice teaching. S/U grading; IP permissible.

PHY 60098  RESEARCH  (1-15)
Research or individual investigation. Credits earned may be applied toward meeting degree requirements if department approves. Repeat registration permitted. IP permissible.

PHY 60199  THESIS I  (2-6)
Thesis students must register for total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible. Prerequisite: Approval of advisor.

PHY 60299  THESIS II  (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: PHY 60199.

PHY 60395/70395  ADVANCED TOPICS  (1-3)
Selected special topics of current research interest. Prerequisite: Permission.

PHY 64101/74101  ADVANCED PROBLEM SOLVING IN PHYSICS  (3)
This course imparts advanced problem-solving skills not acquired in regular courses. Examples from four basic areas of physics (classical mechanics, electricity and magnetism, quantum mechanics and statistical physics) will be emphasized. Graduate letters grades and S/U grading. Prerequisite: PHY 6/75101, 6/75203, 6/76161, 6/75301 or departmental/instructor approval.

PHY 65101/75101  CLASSICAL MECHANICS  (3)
Lagrange’s equations, variational principles, two-body central force problems, rigid body motion, Hamilton’s equations, canonical transformations, Hamilton-Jacobi theory, small oscillations. Prerequisite: Permission.

PHY 65203/75203  CLASSICAL ELECTRODYNAMICS I  (3)
Introduction to electrostatics, boundary value problems, multipoles, electrostatics of macroscopic media, magnetostatics, time-varying fields, Maxwell’s equations, conservation laws. Prerequisite: Permission.

PHY 65204/75204  CLASSICAL ELECTRODYNAMICS II  (3)
Plane electromagnetic waves, simple radiating systems, scattering, special theory of relativity, relativistic dynamics, radiation of moving charges, Bremsstrahlung. Prerequisite: PHY 6/75203.

PHY 65301/75301  STATISTICAL MECHANICS I  (4)
An introduction to statistical mechanics, including classical and quantum statistics. Derives thermodynamic quantities from a statistical viewpoint. Prerequisite: PHY 35301 or equivalent permission.

PHY 65401/75401  MATHEMATICAL METHODS IN PHYSICS  (4)
Tensors, groups, complex variables and calculus of residues, second-order differential equations, orthogonal functions, Bessel, Legendre and selected special functions, Fourier series, integral transforms, integral equations. Prerequisite: Permission.
PHY 66161/76161
QUANTUM MECHANICS I (3)

PHY 66162/76162
QUANTUM MECHANICS II (3)

PHY 66201/76201
PARTICLE PHYSICS (3)
Discussion of particle detectors, invariance principles and conservation laws, fundamental interactions, quark model of hadrons, basic concepts of field theory, the Standard Model and selected topics of current interest. Prerequisite: PHY 6/76162 or permission.

PHY 66302/76302
NUCLEAR PHYSICS (3)
Theory of nuclear processes including properties of nuclear quantum states, twobody forces, nuclear structure and models, nuclear reactions and nuclear radiation physics. Prerequisite: PHY 56101 or equivalent or permission.

PHY 66401/76401
SOLID STATE PHYSICS I (3)
Crystalline state, with emphasis on wave propagation, zone and band theory, phonons. Applications to electrical and thermal conductivities, specific heats, optical, dielectric and magnetic properties. Prerequisite: PHY 56101 or 6/76161.

PHY 66402/76402
SOLID STATE PHYSICS II (3)
Covers several topics, including conduction in metals, dielectric and ferroelectric properties, the origin of magnetism, phenomenological and BCS descriptions of superconductivity, elastic theory and semiconductor physics. Prerequisite: PHY 6/76401 and 6/76161.

PHY 68401/78401
LIQUID CRYSTAL PHYSICS (3)
The molecular structure and properties of liquid crystals and their role in biological systems and industrial applications. Prerequisite: B.S. in physics.

PHY 75302
STATISTICAL MECHANICS II (3)
Classical and quantum statistics with emphasis on Fermi and Bose systems. Introduction to approximate methods including cluster expansions and virial coefficients. Applications to critical phenomena. Prerequisite: PHY 6/75301.

PHY 76163
QUANTUM MECHANICS III (3)
Second quantization and field theory formalism are developed for the many-particle system. Topics include the electron gas and nuclear matter. Prerequisite: PHY 6/76162.

PHY 76303
ADVANCED NUCLEAR PHYSICS (3)
Advanced concepts and theories of nuclear interactions. Topics include the nucleon-nucleon interaction, nuclear structure, reactions, nuclear matter and strong interactions of elementary particles. Prerequisite: PHY 6/76302 and 76163.

PHY 76403
ADVANCED CONDENSED MATTER PHYSICS (3)
Advanced theories of solids, fluids, superfluids, magnetic, ferroelectric and liquid crystal systems and the experimental methods that probe them. Prerequisite: PHY 6/76402.

PHY 80097
PHYSICS COLLOQUIUM (1)
Presentation by invited speakers of research and other topics on graduate level followed by discussion period. Regular attendance of all physics majors expected. Three or more meetings each semester as arranged. S/U grading; IP permissible.

PHY 80098
RESEARCH (1-15)
Research or individual investigation for doctoral students who have not yet passed their candidacy exams. Credit earned may be applied toward the degree if the department approves. IP permissible. Prerequisite: Admission to doctoral study.

PHY 80199
DISSERTATION I (15)
Doctoral dissertation, for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun, and continuing until the completion of 30 hours. S/U grading; IP permissible. Prerequisite: Admission to candidacy for doctoral degree and permission.

PHY 80299
DISSERTATION II (1 or 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: PHY 80199.

PHY 88191
CHEMICAL PHYSICS SEMINAR (1)
Discussions of current literature or of original research in chemical physics. Participation by students, faculty and guests. S/U grading; IP permissible.
Political Science

POLITICAL SCIENCE

John Logue, Chair
302 Bowman Hall
330-672-2060
jlogue@kent.edu

Mark Cassell, Coordinator of Graduate Studies
302 Bowman Hall
330-672-8945
mcassell@kent.edu

The Department of Political Science offers work leading to the degrees of Master of Arts, Master of Public Administration and Doctor of Philosophy. The Master of Arts and Doctor of Philosophy programs emphasize the field of public policy.

For more information, visit the departmental Web site at http://www.kent.edu/polisci/.

ADMISSION
In addition to regular application requirements of the university, admission to the Master of Arts and Doctor of Philosophy programs requires a grade point average of at least 3.0 on a 4.0 scale. Applications of students with a grade point average under 3.0 should include additional evidence of ability to do graduate work in political science. Admission to the Master of Public Administration program requires a grade point average of at least 2.75. All applicants must submit scores on the Graduate Record Examination and three letters of recommendation.

Students applying for the Doctor of Philosophy program must also furnish a writing sample demonstrating their research and writing ability.

Master of Arts

PROGRAM REQUIREMENTS
The Master of Arts program is designed for students who do not anticipate continuing their education beyond the master's degree, or who do not plan to continue their education at Kent State.

The normal 36-hour program for M.A. students is as follows:

Year 1—Students complete four core seminars plus two proseminars. The proseminars correspond to two areas in which the students develop a concentration.

Year 2—Students take two elective courses in the areas of concentration, and one additional course to be approved by the student's advisor. Full-time M.A. students satisfy these requirements in three semesters, leaving a fourth semester to prepare an M.A. thesis or two papers of distinction.

Students may elect to complete a minor in a related discipline, which involves the successful completion of 9 credit hours of coursework in that discipline. Students not electing a minor in a related discipline are permitted to submit as many as 6 credits from related departments. Note that taking courses outside of political science will probably require additional coursework above the 32 hours for an M.A. All credits from outside the department must be approved by the student's M.A. committee.

Master of Public Administration

PROGRAM REQUIREMENTS
The Master of Public Administration (MPA) program is a graduate degree for students wishing to pursue a career in either the public or not-for-profit sectors. The MPA program offers both a public management and a public policy concentration, and is accredited by the National Association of Schools of Public Affairs and Administration (NASPAA). The management con-
concentration features an entire online degree option, as well as traditional classroom-based delivery option. Features such as online audio conferencing from each student’s home or office promotes class interaction. More information on these various options is available on the department Web site at http://www.kent.edu/mpa.

Both the management and policy concentrations require a minimum of 42 credit hours of coursework, including the completion of a 3 credit-hour Capstone Seminar. The Capstone Seminar involves the completion of a written, analytical project. Students who lack public or nonprofit sector experience, or who wish to change fields and gain additional practical experience, will have a field placement as part of 3 credit-hour Internship, in addition to the Capstone Seminar. The requirements for each of the concentrations are described below:

**MPA: Public Management Concentration**

This concentration has 10 required courses (30 credit hours) and 3 elective courses (9 credit hours) that may be customized or taken within a designated area of specialization, plus a Capstone Seminar, and for students without previous experience, a formal field placement Internship (3).

The core courses provide students with a broad foundation in public and nonprofit management, including the scope and history of public administration, administrative theory, ethical behavior in public management, public financial management, program evaluation, methods, personnel management and information technology management.

Three elective courses are chosen by the student in consultation with an academic advisor. Designated areas of specialization that may be selected include public and nonprofit financial management, municipal management, nonprofit management, justice management, and nursing management. Other areas of specialization utilizing elective coursework outside of the program may be developed based upon the student’s needs.

**MPA: Public Policy Concentration**

The public policy concentration requires the completion of five specified courses (15 credit hours), three more courses chosen from a list of options (9 credit hours), and four elective courses (15 credit hours), plus a Capstone course, and depending on the student’s experience or needs, a formal field placement Internship.

The core requirements offer theory and skills oriented toward the practice of policy analysis. These include courses in the policy process, ethical issues, policy analysis, microeconomics and research methods. Students select at least one of the designated courses in each of the following three areas: public management; financial management; and an advanced tool in policy research or analysis. Five electives chosen in consulta-

**Doctor of Philosophy**

PROGRAM REQUIREMENTS

The Doctor of Philosophy prepares students for research and teaching careers in higher education and for research-based careers in other fields. The program’s primary focus is on public policy. In addition to coursework, the program requires that students pass a qualifying exam after their first year, two field exams in their two areas of concentration, complete a research skill requirement, and write and defend a dissertation. The normal program for full-time students is as follows:

Year 1—Students complete four core seminars, two prosemundars and pass a qualifying exam. The qualifying exam is based on the core material at the end of the year.

Years 2-3—Students complete a proseminar, seven electives and fulfill the research-tool requirement in consultation with their Ph.D. advisory committee. After completing the necessary coursework, students must pass two field exams. Field examinations are completed before the second semester of a student’s third year. After passing the examinations, the students must defend a prospectus, create a dissertation committee and begin preparatory work on the dissertation. Students are expected to defend a prospectus by the end of their third year.

Years 4-5—Students write dissertation and present a public, oral defense.

Students in the M.A. program may request admission to the Ph.D. program in their second year by petitioning the graduate studies committee and providing a transcript of their graduate coursework at Kent State University, three letters of recommendation from Kent State faculty, and a paper demonstrating their research and writing skills.

To meet the residency requirement, all Ph.D. students must spend two consecutive semesters pursuing doctoral studies full time.

**PREPARATION FOR COLLEGE TEACHING**

All Ph.D. students are encouraged to participate in the department’s teaching program. Second-year students enroll in POL 71094, College Teaching in Political Science, during the spring semester. Third-year students work closely with faculty mentors, serving as teaching assistants in the fall semester and team teaching in the spring semester. Students then become teaching fellows with full responsibility for the design and delivery of their own courses.
## Political Science

<table>
<thead>
<tr>
<th>Courses (POL)</th>
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<tbody>
<tr>
<td><strong>American Government and Politics</strong></td>
</tr>
<tr>
<td>POL 51191</td>
</tr>
</tbody>
</table>

| International Relations Comparative Politics |
| POL 51591 | SEMINAR: PROBLEMS IN INTERNATIONAL RELATIONS/COMPARATIVE GOVERNMENT (3) | For graduate students outside of Political Science who wish to take 40000-level international/comparative government courses for graduate credit. Students must meet all of the requirements of the 40000 level plus do additional work as agreed upon by the instructor. May be taken more than once but never for more than 3 hours in any one semester. Instructor and course content may vary from semester to semester. IP permissible. |

| Public Policy |
| POL 51391 | SEMINAR: PROBLEMS IN PUBLIC POLICY (3) | For graduate students outside of Political Science who wish to take 40000-level public policy courses for graduate credit. Students must meet all of the requirements of the 40000 level plus do additional work as agreed upon by the instructor. May be taken more than once but never more than 3 hours in any one semester. Instructor and course content may vary from semester to semester. IP permissible. |

| Core Seminars |
| POL 60002/70002 | APPROACHES TO PUBLIC POLICY (3) | This course introduces students to the philosophy of science and scientific inquiry within the context of the social sciences and presents a broad survey of leading paradigms and debates within the field of public policy. |
| POL 60003/70003 | POLICY METHODS I (3) | This course provides a selective introduction to basic quantitative methods for the analysis of public policy dealing with basic descriptive and inferential statistics and an introduction to qualitative techniques. |
| POL 60004/70004 | PUBLIC POLICY METHODS II (3) | This course introduces students to multivariate quantitative techniques appropriate for the analysis of public policy and incorporates a broad array of advanced qualitative analysis. |
| POL 60006/70006 | FOUNDATIONS OF PUBLIC POLICY (3) | This course covers the development of policy studies as a field. As a broad survey, this course introduces general concepts and debates with applications within each field of specialization. |
| POL 60101/70101 | PROSEMINAR IN AMERICAN POLITICS AND POLICY (3) | This course provides a broad survey of the policy-making process in the U.S. government. Coverage includes formal government structures, as well as informal networks of private groups that seek to influence public policy at the national level. |
| POL 60102/70102 | AMERICAN POLICY PROCESS (3) | This course emphasizes the politics of the policy process. Among topics covered are theories of policy formulation, implementation and evaluation. Prerequisite: POL 60101 or 60301. |
| POL 60103/70103 | CONGRESS, THE PRESIDENCY AND THE COURTS (3) | Focuses on the three branches of the U.S. government, specifically Congress, the presidency and the judiciary. Coverage includes institutional rules and procedures that shape the incentives of these political actors and ultimately policy outcomes. Prerequisite: POL 60101. |
| POL 60104/70104 | CULTURAL CONTEXT OF AMERICAN POLITICS (3) | This course examines the ideological foundations upon which the public policy process in the United States is constructed. Particular attention is given to the often conflicting societal attitudes toward the U.S. government and its conduct of public policy. Prerequisite: POL 60101. |
| POL 60105/70105 | FEDERALISM AND STATE POLICYMAKING (3) | This course covers the theory and practice of federalism with emphasis on its consequences for policy outcomes. Students also examine the transformation of the policy role of state governments in recent years. Prerequisite: POL 60101. |
POL 60106/70106
URBAN POLICY AND POLITICS (3)
Urban public policy takes place within the context of suburbanization and metropolitan sprawl. Issues raised in this course include poverty, race and the role of business in local policy-making. Prerequisite: POL 60101 or 60301.

POL 60107/70107
CONFLICT AND CONSENSUS IN THE PUBLIC SECTOR (3)
This course introduces students to public sector conflict resolution processes such as environmental mediation, regulatory-negotiation, collaborative problem-solving and consensus-building. Of particular interest is the utility of these processes in specific arenas of public policy. Prerequisite: POL 60101, 60301 or 60701.

Policy Analysis and Administration

POL 60301/70301
PROSEMINAR IN POLICY ANALYSIS AND ADMINISTRATION (3)
This course covers the systematic procedures for analysis of policy problems. Special attention is paid to economic concepts such as cost-benefit analysis and the role of multiple values in the policy process.

POL 60302/70302
BUREAUCRACY AND THE POLICYMAKING PROCESS (3)
This course provides students with a theoretical and practical understanding of the bureaucracy as a unit of analysis in policy studies. Of particular interest is the interaction of the bureaucracy with other policy-making institutions and nonstate actors. Prerequisite: POL 60301.

POL 60303/70303
REGULATORY POLICY (3)
This course examines the politics of regulatory policy from a variety of theoretical perspectives. These theories are applied to several domains of regulation, primarily those relating to public finance. Prerequisite: POL 60301.

POL 60304/70304
ANALYTIC TECHNIQUES OF POLICY-MAKING (3)
This course covers the concepts, techniques and conventions for assessing economic efficiency when this is one of the social and political goals relevant to public policy-makers. Students are introduced to theories of cost-benefit analysis as they pertain to public policy. Prerequisite: POL 60301.

POL 60305/70305
STATE AND LOCAL GOVERNMENT FINANCIAL ANALYSIS (3)
This course provides an overview of the state and local sectors of government. Primary attention is paid to the financial role of the subnational governments with regard to taxing and spending policies. Prerequisite: POL 60301.

POL 60306/70306
LEADERSHIP AND PUBLIC POLICY (3)
This course exposes students to the role of leadership issues in shaping contemporary public policy. Students are introduced to contending theories of policy leadership in specific domains such as health care, the environment and neighborhood governance. Prerequisite: POL 60301.

POL 60307/70307
ISSUES IN AMERICAN PUBLIC POLICY (3)
The primary purpose of this course is to apply the conceptual tools of public policy analysis to current issues facing the U.S. government. Students are introduced to the major policy debates regarding these issues with reference to the historical, political-economic and cultural context in which they occur. Prerequisite: POL 60301.

Transnational and Comparative Politics and Policy

POL 60501/70501
PROSEMINAR IN TRANSNATIONAL AND COMPARATIVE POLITICS AND POLICY (3)
This course introduces students to the primary concepts, theories and subfields of comparative and transnational politics. Each field of study is reviewed along with the primary subfields of analysis.

POL 60502/70502
GLOBAL GOVERNANCE (3)
This course examines issues, problems and debates regarding global governance in the contemporary world. Of primary interest is the array of actors in this process, including nation-states, intergovernmental organizations and nongovernmental organizations. Prerequisite: POL 60501.

POL 60503/70503
FOREIGN POLICY ANALYSIS (3)
This course provides an overview of the diverse analytic traditions and issues that relate to the study of foreign policy. Areas of coverage include theories of foreign policy decision-making, levels of analysis and policy domains. Prerequisite: POL 60501.

POL 60504/70504
U.S. FOREIGN POLICY (3)
This course examines the dilemmas facing the U.S. government as it confronts a rapidly changing international system. Historical patterns are considered along with current issues regarding the formulation and conduct of U.S. foreign policy. Prerequisite: POL 60501 or 60101.

POL 60505/70505
COMPARATIVE PUBLIC POLICY AND ADMINISTRATION (3)
This course examines theoretical and substantive issues in comparative public policy and public administration. The various frameworks, approaches and schools of thought are reviewed in each area of study. Prerequisite: POL 60501 or 60301.
POL 60506/70506
INTERNATIONAL POLITICAL ECONOMY AND DEVELOPMENT
POLICY (3)
This course is designed to provide a variety of perspectives
with which to make sense of the structure of the international
economy and the policy options available to governments
seeking to encourage domestic economic development. Prereq-
quisite: POL 60501.

POL 60507/70507
CONFLICT TRANSFORMATION AND RECONCILIATION (3)
Cross-cultural analysis of transition from mass violence to
justice and from protracted conflict to democracy. Subjects of
study include truth and reconciliation commissions, criminal
tribunals, apologies, reparations and other aids to conflict
transformation. Prerequisite: POL 60501 or 60701.

Justice Politics and Policy

POL 60701/70701
PROSEMINAR IN ISSUES IN CONTEMPORARY JUSTICE (3)
A policy analysis of current issues in the legislative, policing,
judicial and correctional components of the justice system.

POL 60703/70703
COMMUNITY AND DOMESTIC VIOLENCE (3)
This course explores the causes and implications of violence in
our homes and communities. Conflict management strategies
and techniques are reviewed to see how they have served as
policy solutions, as agents of change or in maintaining the
status quo. Prerequisite: POL 60701.

POL 60704/70704
THEORIES OF CRIME AND DELINQUENCY (3)
Examination of major theoretical concepts in criminology that
have been utilized to explain criminal behavior and juvenile
delinquency. Includes discussion of social/policy implications.

POL 70702
JUSTICE INSTITUTIONS (3)
Cross-listed with JUS 66770.
This course introduces students to various institutions related
to the U.S. criminal justice system. Students examine tech-
niques for conducting institutional commissions and apply these
techniques to law enforcement, judicial and correctional
institutions.

POL 70705
COMPARATIVE JUSTICE INSTITUTIONS AND POLICY (3)
Cross-listed with JUS 66774.
Cross-cultural analysis of crime and the justice institutions/
justice policies of various countries. The developmental back-
grounds, structure and functioning of the systems are com-
pared. Important issues in international justice are con-

POL 70706
VICTIMOLOGY (3)
Cross-listed with JUS 66772.
Patterns of victim-offender relationship. Role of victims in the
justice studies process. Problems of adjustment to victimiza-
tion and compensating the victim.

POL 70707
LAW, JUSTICE AND SOCIETY (3)
Cross-listed with JUS 66761.
Course reviews the origins, structure and functioning of law
in relation to social context and process. Topics to be covered
include theories of law and society, law as a form of social con-
trol and the use of law and legal institutions to address societal
problems.

Electives

POL 69091/79091
SEMINAR: PUBLIC POLICY METHODS (3)
This course focuses on select topics in public policy methods,
perticularly qualitative methods, Q-methodology or advanced
applied policy analysis. More than one seminar may be offered.
Repeat registration permitted.

Public Administration (PADM)

PADM 60038/POL 70038
MANAGERIAL ACCOUNTING FOR PUBLIC ADMINISTRATION
(3)
Managerial uses of accounting information for planning and
control. Emphasis on decision-making in public sector and role
of information in making rational choices.

PADM 60198/POL 70198
RESEARCH (2-15)
Research or individual investigation for master's-level gradu-
ate students. Credits earned may be applied toward meeting
requirements if department approves. Prerequisite: Permission.

PADM 60199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours
in a single semester, distributed over several semesters if
desired. S/U grading; IP permissible. Prerequisite: Permission
of advisor.

PADM 60299
THESIS II (2)
Thesis students must continue registration each semester until
all degree requirements are met. S/U grading; IP permissible.
Prerequisite: PADM 60199.
PADM 60370/POL 70370
PUBLIC MANAGEMENT CONCEPTS AND PRACTICES (3)
Introductory course for all M.P.A. students. Focus is on "macro-level" understanding of government agencies: institutional context, agency-environment linkages, internal dynamics, role in public policy.

PADM 60372/POL 70372
ADMINISTRATIVE THEORY AND BEHAVIOR (3)
Behavioral, bureaucratic, neoclassical and contemporary theories of organization and management are reviewed in an examination of the environment of public agency managers. Prerequisite: PADM 60370 or POL 70370.

PADM 60373/POL 70373
PUBLIC BUDGETING (3)
Study of politics, theories, practices and techniques of public budgeting and financing. Budgeting includes process of preparation, adoption and execution of operating, and capital budgets.

PADM 60374/POL 70374
PUBLIC FINANCIAL MANAGEMENT (3)
Advanced study of the functions of the local government financial management agency and how these functions enhance the productivity and decision-making capacity of the organization.

PADM 60375/POL 70375
PUBLIC PERSONNEL ADMINISTRATION (3)
Study of public personnel systems, including underlying system values and current problems, with emphasis on skill development and understanding of techniques for public personnel managers.

PADM 60376/POL 70376
LABOR MANAGEMENT RELATIONS IN THE PUBLIC SECTOR (3)
This course focuses on issues peculiar to public sector labor relations, including the impact of public employee unionism on traditional merit systems and personnel policy decision processes. Prerequisite: PADM 60375.

PADM 60378/POL 70378
MUNICIPAL MANAGEMENT AND ADMINISTRATION (3)
Detailed analysis of metropolitan complex. Emphasis given to administrative, political, fiscal and legal problems in governing cities.

PADM 60379/POL 70379
PROGRAM EVALUATION I (3)
Introduction to evaluation of government programs. Emphasis on familiarizing students with the theory and, specifically, the techniques utilized under different evaluation formats.

PADM 60380/POL 70380
PROGRAM EVALUATION II (3)
Advanced course on theoretical issues and methods in program evaluation; design, data interpretation, evaluation formats currently employed by agencies and management of evaluations.

PADM 60381/POL 70381
METHODS IN PUBLIC ADMINISTRATION (3)
This course is a graduate-level introduction to statistical methods and their use in public administration.

PADM 60382/POL 70382
SEMINAR IN PUBLIC ADMINISTRATION (3)
Study of selected problem areas in public service organizations with emphasis on understanding the factors contributing to them, their solution, and literature bearing on the problems. Prerequisite: Advanced graduate status.

PADM 60384/POL 70384
PUBLIC AGENCY MANAGEMENT (3)
This course is designed to acquaint advanced master’s and doctoral candidates majoring in public administration with the operation and management of bureaucratic organizations.

PADM 60385/POL 70385
ADVANCED STUDIES SEMINAR IN PUBLIC ADMINISTRATION (3)
This seminar is designed at each offering to meet the individualized needs of advanced doctoral candidates majoring in public administration. Prerequisite: Advanced standing in a doctoral program and permission.

PADM 60392/POL 70392
INTERNSHIP — PUBLIC ADMINISTRATION (2-6)
Provides an opportunity for students to gain practical experience and be exposed to processes of public decision-making and policy development. Prerequisite: Permission.

PADM 60470/POL 70470
CRITICAL ISSUES IN PUBLIC ADMINISTRATION (3)
Course deals with basic questions of value and ethics associated with public service roles in a democratic society and with major contemporary issues in the field. Prerequisite: PADM 6/70370 and 6/70372 or equivalent.

PADM 60473/POL 70473
GOVERNMENTAL FINANCIAL ANALYSIS (3)
A laboratory in techniques of governmental financial analysis. Course focuses on how to analyze current financial position to develop financial plans for upcoming years.

PADM 60474/POL 70474
HEALTH CARE REIMBURSEMENT (3)
This is an introductory course to familiarize students with private and public sector reimbursement operations and regulations in the United States health care industry.
**Research, Thesis, Dissertation**

POL 61098
RESEARCH (1-15)
Research or individual investigation for master’s-level graduate students. Credits may be applied toward meeting degree requirements if department approves and a letter grade is given. Repeat registration permitted. IP permissible.

POL 61199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

POL 61299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: POL 61199.

POL 81098
RESEARCH (1-15)
Research or individual investigation for doctoral students who have not yet passed their candidacy examination. Credits may be applied toward degree if department approves and if letter grade given. Repeat registration permitted. S/U grading; IP permissible.

POL 81199
DISSERTATION I (15)
Doctoral dissertation, for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. IP permissible. Prerequisite: Admission to candidacy for doctoral degree.

POL 81299
DISSERTATION II (1 or 15)
Continuing registration required for doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: POL 81199.

**General**

POL 61094/71094
COLLEGE TEACHING IN POLITICAL SCIENCE (1)
Staff training and experience in college teaching; colloquia on professional ethics and responsibilities of political scientists. Maximum of 4 hours applicable toward Ph.D. requirements (with Graduate Studies Committee approval).
PSYCHOLOGY

Janis H. Crowther, Chair
144D Kent Hall
330-672-2167
jcrowthe@kent.edu

Maria S. Zaragoza, Coordinator of Graduate Studies
303 Kent Hall Annex
330-672-2372
mzaragoz@kent.edu

The Department of Psychology offers programs leading to the Master of Arts and Doctor of Philosophy degrees. The Master of Arts is an intermediate degree required of students in the doctoral program. Doctoral training is provided within the general experimental and clinical areas of psychology. Specialization is available through course selection, doctoral dissertation topic and faculty supervision. Most students in the general experimental program specialize in biological, child, cognitive, health or social assessment psychology. Students in the clinical program may specialize in child/family, health or psychopathology. The clinical training program is fully accredited by the American Psychological Association’s Committee on Accreditation (CoA). The committee can be contacted at apaaccred@apa.org.

Visit the departmental Web site at http://dept.kent.edu/psychology for more information.

Master of Arts

ADMISSION

Applications for admission to the graduate program are encouraged from promising undergraduates (regardless of undergraduate major) who aspire to the Ph.D. in psychology. Students interested in a terminal M.A. degree are not admitted. Limitations of staff and space require that admissions be restricted to the most promising applicants. In addition to regular application requirements of the university, departmental requirements include:

1. A broad undergraduate preparation.
2. A junior-senior scholastic average of 3.0.
3. 18 semester hours in psychology that include a course in statistics and a broad background in psychology.
4. Submission of satisfactory scores on the Graduate Record Examination general test.
5. Favorable recommendations from former professors.
6. A statement of goals and motivations for pursuing a career in psychology.
7. Research experience.

Applications for admission are accepted only from holders of the baccalaureate degree who aspire to the doctorate. In exceptional cases, applicants with fewer than 18 semester hours in psychology may be admitted.
Only applications for full-time enrollment will be considered. Applicants are accepted for admission only for the fall semester, and the deadline for all application materials is January 1.

PROGRAM REQUIREMENTS
Requirements for the M.A. degree are at least 32 semester hours, which include a basic core of required courses and a thesis. Additional courses are selected with the aid of an advisor. A limited number of courses outside the department may be credited toward the degree. No 50000-level psychology courses may be applied toward degree requirements for psychology majors.

Students must complete at least 18 semester hours of course credits within an academic year.

**Concentration in Gerontology**

Although the Department of Psychology does not offer a terminal master’s degree, a student may develop a specialty in gerontological studies through the interdisciplinary program in gerontology as part of her or his course of study leading to the Master of Arts degree in psychology in preparation for doctoral work. In addition to departmental requirements for the degree in psychology, a student may complete the core courses in gerontological studies as elective hours.

<table>
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<tr>
<th>Core Requirements</th>
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<tr>
<td>GCOL 60120</td>
<td>3</td>
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<tr>
<td>BSCI 50020</td>
<td>3</td>
</tr>
<tr>
<td>ELS 60610</td>
<td>3</td>
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<tr>
<td>PSYC 60610</td>
<td>3</td>
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<tr>
<td>SOC 62877</td>
<td>3</td>
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</tbody>
</table>

Students must complete two quantitative methods courses appropriate to their areas of specialization within psychology. Students must also complete five departmental core courses selected from four areas (biological bases of behavior, cognitive and affective bases of behavior, social bases of behavior, individual behavior). Specific courses vary according to students’ areas of specialization within psychology.

The master’s thesis must be empirical in nature. It will be presented and defended before a committee of graduate faculty members, at least two of whom will be members of the faculty in gerontological studies.

One member of the thesis committee must be from another department participating in the gerontological studies program. The thesis and its defense must meet the requirements of the Department of Psychology.

**Doctor of Philosophy**

ADMISSION
Applications for admission to the doctoral program are accepted from students who have completed the M.A. or M.S. in psychology. Limitations of staff and space require that admissions be restricted to the most promising applicants. In addition to regular admission procedures, departmental requirements include:

1. A baccalaureate degree.
2. A junior/senior scholastic average of 3.0, and/or a grade point average of 3.5 during pre-M.A. studies.
3. Satisfactory scores on the Graduate Record Examination general test.
4. Favorable recommendations from former professors.
5. A statement of goals and motivations for pursuing a career in psychology.

Only applications for full-time enrollment will be considered. Typically applicants are accepted for admission only for the fall semester, and the deadline for application materials is January 1.

PROGRAM REQUIREMENTS
The doctoral program, with the M.A. as an intermediate degree, requires a minimum of four years of full-time attendance for holders of the baccalaureate degree. All doctoral students in psychology (regardless of area of specialization) complete a program of basic core courses, select additional courses and seminars with the aid of a faculty advisor, and complete a master’s thesis and a doctoral dissertation. A limited number of undergraduate and graduate courses outside the department may be credited toward graduation. No 50000-level psychology courses may be applied to the degree program for psychology majors.

Students who have been admitted into the doctoral program will be considered for Ph.D. candidacy after they have met all requirements for the M.A. and have passed a qualifying examination in a major area of specialization in psychology. In addition, the department reserves the right to separate from the program a student who, in the opinion of a duly constituted departmental committee, is not likely to succeed professionally despite earning acceptable grades. Proficiency in a foreign language is not a requirement for a doctoral degree in psychology.

Training facilities and laboratories of the Department of Psychology are freely available to graduate students; selected students may receive specialized training at selected research and professional installations.

Clinical psychology students must complete a supervised traineeship in a faculty-approved mental health facility outside the department, which involves a minimum of 1,000 hours. Additionally, a 2,000-hour internship in a setting approved by the American Psychological Association is required.
The doctoral program in psychology is strongly research-oriented. Students are encouraged to become engaged in a variety of research projects before they begin dissertation work. The program requires full-time continuous enrollment including summers.

Doctoral program aspirants who do not hold the M.A. must complete all the requirements for the master's degree.

<table>
<thead>
<tr>
<th>Courses (PSYC)</th>
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<tbody>
<tr>
<td><strong>PSYC 50111</strong> ABNORMAL PSYCHOLOGY (3) Diagnostic characteristics, causes and treatment of behavior disorders. Mild, moderate and severe types of disturbances illustrated by cases and research studies.</td>
</tr>
<tr>
<td><strong>PSYC 50563</strong> COMPARATIVE PSYCHOLOGY (3) Introduction to animal behavior and its development mechanisms, evolutionary history and adaptive significance. Both learned and innate behaviors are treated.</td>
</tr>
<tr>
<td><strong>PSYC 50974</strong> HISTORY OF PSYCHOLOGY (3) History of psychology in 18th, 19th and 20th centuries upon emergence of modern experimental psychology.</td>
</tr>
<tr>
<td><strong>PSYC 51282</strong> PERSONALITY (3) Introduction to major theories and research in personality.</td>
</tr>
<tr>
<td><strong>PSYC 51363</strong> BIOPSYCHOLOGY (3) Introduction to the physiological, biochemical and neurological foundations of behavior. Special attention to central nervous system and its relation to behavior.</td>
</tr>
<tr>
<td><strong>PSYC 51532</strong> SOCIAL PSYCHOLOGY (3) Study of interpersonal and group behavior, focusing on such topics as attraction, attitude change, helping, aggression and conformity.</td>
</tr>
<tr>
<td><strong>PSYC 51993</strong> VARIABLE TITLE WORKSHOP IN PSYCHOLOGY (1-6) Variable topics offered as need arises to train in specific area of field. Specific topics will be announced in Schedule of Classes. S/U grading. Prerequisite: Permission.</td>
</tr>
<tr>
<td><strong>PSYC 60110/70110</strong> INTRODUCTION TO PSYCHOPATHOLOGY: CHILD (3) Introduction to psychopathology from a developmental perspective. Covers models of classification and specific disorders of childhood.</td>
</tr>
<tr>
<td><strong>PSYC 60111/70111</strong> DEVELOPMENTAL DISABILITIES (3) Introduction to issues related to persons with developmental disabilities. Topics include definition, diagnosis, assessment, treatment, daily living issues and ethics in research. Prerequisite: PSYC 6/70110.</td>
</tr>
<tr>
<td><strong>PSYC 60170/70170</strong> INTRODUCTION TO PSYCHOPATHOLOGY: ADULT (3) An examination of the etiology, symptomology and theoretical models of adult psychopathology. Prerequisite: Graduate status in psychology or permission.</td>
</tr>
<tr>
<td><strong>PSYC 60171/70171</strong> FAMILY INTERACTION AND PSYCHOPATHOLOGY (3) Introduction to the study of family interaction as it relates to the etiology and maintenance of psychopathology. Theory, methodology and research relevant to specific behavioral disorders will be covered. Prerequisite: PSYC 6/70170.</td>
</tr>
<tr>
<td><strong>PSYC 60172/70172</strong> SEXUAL DYSFUNCTION AND DEVIATION (3) Review of theories and research on sexual functioning with emphasis on how these theories and research pertain to sexual dysfunction and deviation. Physiological, cognitive, affective and developmental approaches to sexual behavior with respect to the clinical assessment and treatment of sexual problems. Prerequisite: PSYC 50111 or equivalent.</td>
</tr>
<tr>
<td><strong>PSYC 60192/70192</strong> INTEGRATION PRACTICUM (1-3) Integration of assessment, psychopathology and psychotherapy coursework. Emphasis on learning how to conceptualize cases in general, and from differing theoretical perspectives. IP permissible. Prerequisite: PSYC 6/70292 and 6/70792.</td>
</tr>
<tr>
<td><strong>PSYC 60272/70272</strong> INTRODUCTION TO PSYCHOLOGICAL ASSESSMENT (3) Introduction to psychological assessment as a process for solving important clinical problems. Theoretical, methodological and research issues are emphasized. Students will also become familiar with major psychological tests.</td>
</tr>
<tr>
<td><strong>PSYC 60273/70273</strong> ADVANCED PSYCHOLOGICAL ASSESSMENT: ADULT (3) Examines psychodiagnosis within a context of “personality-as-a-coherent-whole.” Emphasizes an ideographic approach with a theoretical framework, which organizes and gives meaning to observations. Prerequisite: PSYC 6/70272.</td>
</tr>
<tr>
<td><strong>PSYC 60274/70274</strong> ADVANCED PSYCHOLOGICAL ASSESSMENT: CHILD (3) Interviewing, developmental and intellectual assessments, personality evaluations, behavioral assessments, and assessment of special child populations. Emphasis on the rationale and integration of research relevant to appropriate use and interpretation. Prerequisite: PSYC 6/70272 and 6/70292.</td>
</tr>
</tbody>
</table>
PSYC 60275/70275
BEHAVIORAL ASSESSMENT (3)
Considers behavioral assessment from an empirical as well as an applied perspective. Intended for persons familiar with general assessment, psychopathology and psychotherapy issues. Prerequisite: PSYC 6/70272 and 6/70292.

PSYC 60276/70276
NEUROPSYCHOLOGICAL ASSESSMENT (3)

PSYC 60292/70292
PSYCHOLOGICAL ASSESSMENT PRACTICUM (1-3)

PSYC 60313/70313
COMMUNITY PSYCHOLOGY (3)
Introduction to conceptualizations and findings in community psychology. Special emphasis on the application of community approaches in various settings.

PSYC 60314/70314
ASSESSMENT OF ORGANIZATIONS AND INTERVENTION STRATEGIES (3)
A psychological examination of how individuals and groups function in social systems. Assessment and intervention strategies will be related to their counterparts in traditional clinical psychology. Prerequisite: PSYC 6/70313.

PSYC 60324/70324
PROFESSIONAL ISSUES AND ETHICS IN CLINICAL PSYCHOLOGY (3)
Review of professional concerns in the field, including training, ethics, client rights, economics, legal issues, relationship to other professions, and professional organization and policy.

PSYC 60325/70325
FORENSIC PSYCHOLOGY (3)
Consideration of the interface of psychology and the law with focus on activities in which clinical psychologists are likely to participate in relation to the legal system.

PSYC 60326/70326
CLINICAL ASPECTS OF HEALTH PSYCHOLOGY (3)
Consideration of psychosocial influences on health status that are relevant to the clinician. Attention is given to interventions on both individual and community levels. Emphasis on approaches to prevention, treatment and public policy.

PSYC 60371/70371
INTRODUCTION TO PSYCHOLOGICAL THERAPY (3)
Introduction to psychotherapy with special emphasis on psychodynamic and phenomenological approaches with theory, technique and major research findings considered. Prerequisite: PSYC 6/70170 and 6/71260.

PSYC 60372/70372
PSYCHOTHERAPY FOR SPECIFIC DISORDERS (3)
Review of conceptual and empirical literature relating to psychotherapeutic treatment of various behavior disorders. A variety of theoretical orientations will be included. Prerequisite: PSYC 6/70371 and 6/70792.

PSYC 60373/70373
FAMILY THERAPY (3)
Consideration of major theories, approaches and research in family therapy. Practical experience in conducting family therapy through supervision and discussion of ongoing cases. Prerequisite: PSYC 6/70371 and 6/70792.

PSYC 60374/70374
GROUP PSYCHOTHERAPY (3)
Introduction to group psychotherapy with emphasis on theories, techniques and research findings. Prerequisite: PSYC 6/70371 and 6/70792.

PSYC 60375/70375
COGNITIVE BEHAVIOR THERAPY (3)

PSYC 60376/70376
CHILD PSYCHOTHERAPY (3)
Consideration of various aspects of child psychotherapy, including general issues, traditional therapies, behavior and cognitive-behavior therapies, and child therapy research. Emphasis on integration of theory, technique and research. Prerequisite: PSYC 6/70371 and 6/70792.

PSYC 60377/70377
ADVANCED TOPICS — CLINICAL PSYCHOLOGY (1-6)*
Advanced-level consideration of selected content areas in assessment, psychotherapy, psychopathology, professional issues and community psychology. Specific topics will be announced in Schedule of Classes. Prerequisite: Permission.

PSYC 60453/70453
INTRODUCTION TO COGNITIVE PSYCHOLOGY (3)
Information-processing approaches to human thought. Focus on processes used to transform, store, manipulate and retrieve sensory input. Topics include attention, pattern recognition, memory and language.
PSYC 60610/70610
PSYCHOLOGY OF ADULTHOOD AND AGING (3)
Examines psychological theory and research related to the
psychology of adulthood through old age. Surveys current cog-
nitive, social, developmental and clinical work on later life.

PSYC 60661/70661
DEVELOPMENTAL PSYCHOLOGY (3)
Discussion and critical evaluation of current theoretical positions
and research findings in developmental psychology, with special
attention to topics of life span research methods, cognitive
development and social development.

PSYC 60792/70792
PSYCHOTHERAPY PRACTICUM (1-3)
Basic training in applied aspects of psychotherapy. Through
didactic and experiential methods students learn basic listening
and communication skills that are then applied to specific tech-
niques, situations and issues. IP permissible. Prerequisite: PSYC

PSYC 60895/70895
ADVANCED TOPICS — EXPERIMENTAL PSYCHOLOGY (1-6)*
Advanced-level consideration of selected content areas in
experimental psychology. Specific topics will be announced in
Schedule of Classes. Prerequisite: Permission.

PSYC 60950/70950
HISTORY AND CONTEMPORARY SYSTEMS (3)
Relationships between historical antecedents and the major
contemporary systems and theories of psychology.

PSYC 61054/71054
LEARNING AND CONDITIONING (3)
Introduction to basic conditioning processes. Emphasis on
Pavlovian and instrumental learning phenomena, particularly as
these are exemplified in animal models of behavior.

PSYC 61133/71133
SENSATION AND PERCEPTION (3)
Introduction to basic sensory and perceptual processes of vision
and audition.

PSYC 61199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours
in a single semester, distributed over several semesters if desired.
S/U grading; IP permissible. Prerequisite: Permission.

PSYC 61260/71260
THEORIES OF PERSONALITY (3)
Consideration of major theoretical orientations including
psychoanalysis, phenomenology and those stressing learning.
Emphasis on principal concepts; deals less with research
methods and findings.

PSYC 61299
THESIS II (2)
Thesis students must continue registration each semester until
all degree requirements are met. S/U grading; IP permissible.
Prerequisite: PSYC 61199.

PSYC 61350/71350
PHYSIOLOGICAL PSYCHOLOGY (3)
Neurophysiological, neurochemical and neuroanatomical
factors in the control of cognitive processes, motivation and
behavior. Emphasis is on the broad coverage of major topics in
the field.

PSYC 61496
INDIVIDUAL INVESTIGATION (3)
Intensive pursuit of a subject matter beyond normal course
coverage with possibility of associated research. IP permissible.
Prerequisite: Permission.

PSYC 61498
RESEARCH (1-15)*
Research or individual investigation for master’s-level graduate
students. Credits may be applied toward meeting degree re-
quirements if department approves and if letter grade or “S” is
given. IP permissible. Prerequisite: Graduate standing (master’s
level) and permission.

PSYC 61548/71548
PSYCHOLOGY OF GENDER AND MINORITIES (3)
This course will be an in-depth study of the methodology and
current research and theory on gender and minorities. The
course will be concerned with gender differences and inter-
and intracultural differences and similarities.

PSYC 61580/71580
SOCIAL PSYCHOLOGY (3)
Introduction to empirical research and theories on the psy-
chological processes related to interpersonal and small group
behavior.

PSYC 61651/71651
STATISTICAL INFERENCE IN PSYCHOLOGY (3)
Rationale of statistical inference, analysis of variance and non-
parametric techniques.

PSYC 61654/71654
PSYCHOMETRIC METHODS (3)
Introduction to correlational methods and measurement tech-
niques. Prerequisite: PSYC 6/71651 or equivalent.

PSYC 61684/71684
EXPERIMENTAL DESIGN AND METHOD (3)
Critical analysis of research design in psychology. Advanced
topics in univariate and multivariate data analyses. Prerequi-
site: PSYC 6/71651.
CONSIDERATION OF RESEARCH METHODOLOGIES RELEVANT TO CLINICAL PSYCHOLOGY WITH EMPHASIS ON STRENGTHS AND WEAKNESSES OF RESEARCH DESIGNS AND ISSUES RELATED TO COLLECTION AND EVALUATION OF DATA.

TRAINING AND EXPERIENCE IN COLLEGE TEACHING. MAY BE REPEATED TO TOTAL OF 6 HOURS.

VARIABLE TOPIC OFFERED AS NEED ARISES TO TRAIN IN PARTICULAR AREA OF FIELD. SPECIFIC TOPICS WILL BE ANNOUNCED IN SCHEDULE OF CLASSES.

S/U Grading.

BEGINNING PRACTICUM IN PSYCHOLOGICAL CLINIC INVOLVING SELECTION, ADMINISTRATION AND EVALUATION OF TESTS OF ABILITY AND PERSONALITY. IP PERMISSIBLE. PREREQUISITE: PERMISSION.


THE EFFECT OF BRAIN INJURY AND ANOMALOUS NEUROLOGICAL DEVELOPMENT ON COGNITIVE SKILLS SUCH AS LANGUAGE, PERCEPTION AND MEMORY ARE EXPLORED.

STUDY OF RELATION BETWEEN LANGUAGE AND ITS SPEAKER/LISTENERS. SPECIAL EMPHASIS PLACED ON SENTENCE AND PROSE COMPREHENSION AND LANGUAGE ACQUISITION.

CRITICAL REVIEW OF CONTEMPORARY RESEARCH AND THEORY IN MEMORY AND COGNITION. PREREQUISITE: PSYC 6/70453.
PSYC 71498  
SELECTED LITERATURE REVIEW (3)  
Comprehensive literature survey and review prepared by graduate student in area of interest. May be repeated to total of 6 hours.

PSYC 71506  
SOCIAL COGNITION (3)  
Explores both historical and current developments in cognitive social psychology including theory and research, social attention and memory, judgment and decision-making, cognitive views of the self, and current debates regarding the relationship.

PSYC 71507  
PSYCHOSOCIAL ASPECTS OF HEALTH PSYCHOLOGY (3)  
Examines concepts of disease and their implications for health. Emphasizes psychosocial stress in disease, etiology and psychological factors influencing illness recovery.

PSYC 71513  
PSYCHOLOGY OF ALCOHOL ABUSE (3)  
Critical review of theories and empirical research on the use and abuse of alcohol.

PSYC 71656  
FACTOR ANALYSIS (3)  
Survey of major types of factor analytic methods employed in psychology. Prerequisite: PSYC 6/71654.

PSYC 71657  
FIELD RESEARCH METHODS AND PROGRAM EVALUATION (3)  
Focus is on research designs used in field research and on threats to valid causal inference. Measurement and analytical issues are also examined.

PSYC 71688  
COMPUTER APPLICATIONS IN PSYCHOLOGY (3)  
Programming applications in psychology. Prerequisite: PSYC 6/71651 and 6/71654.

PSYC 80391  
SEMINAR IN CLINICAL PSYCHOLOGY (3)*  
Seminar devoted to detailed study of various topics in field of clinical psychology. Specific topics will be announced in Schedule of Classes. Prerequisite: Advanced graduate standing and permission.

PSYC 80491  
SEMINAR IN COGNITIVE PSYCHOLOGY (3)*  
Seminar on current research in cognitive psychology. Specific topics will be announced in Schedule of Classes. Prerequisite: Advanced graduate standing and permission.

PSYC 80691  
SEMINAR IN CHILD AND DEVELOPMENTAL PSYCHOLOGY (3)*  
Seminar on current research in child and developmental psychology. Specific topics will be announced in Schedule of Classes. Prerequisite: Advanced graduate standing and permission.

PSYC 81091  
SEMINAR IN LEARNING AND BIOPSYCHOLOGY (3)*  
Seminar on current research in learning and biopsychology. Specific topics will be announced in the Schedule of Classes.

PSYC 81199  
DISSERTATION I (15)  
Doctoral dissertation, for which registration in at least two semesters is required, the first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible. Prerequisite: Admission to candidacy for doctoral degree and permission.

PSYC 81299  
DISSERTATION II (1 or 15)  
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: PSYC 81199.

PSYC 81498  
RESEARCH (1-15)*  
Research or individual investigation for doctoral students. Credits may be applied toward degree if department approves and letter grade or “S” is given. IP permissible. Prerequisite: Admission to doctoral study and permission.

PSYC 81591  
SEMINAR IN PERSONALITY AND SOCIAL PSYCHOLOGY (3)*  
Seminar on current research in areas of social psychology. Specific topics will be announced in Schedule of Classes.

PSYC 81691  
SEMINAR IN QUANTITATIVE METHODS (3)*  
Seminar on applications of quantitative methods within various content areas of psychology. Specific topics will be announced in Schedule of Classes. Prerequisite: Advanced graduate standing and permission.

*Repeat registration permitted.
The Department of Sociology offers graduate programs leading to the Master of Arts and Doctor of Philosophy degrees. The Master of Arts degree program in sociology provides a foundation for a variety of career lines or for further graduate study. The general objective of the Ph.D. program at Kent State University is to develop sociologists with specialized backgrounds in sociology that permit a variety of teaching and research opportunities. Specialty areas include: (1) sociology of health and health care; (2) social inequality; (3) social psychology.

By writing the coordinator of graduate studies in the department, you will receive a student guide outlining the requirements of the graduate program. You may also visit our Web site at http://dept.kent.edu/sociology.

### Master of Arts

#### ADMISSION

Applications for admission are encouraged regardless of undergraduate major. In addition to regular application requirements of the university, admission to the Master of Arts program requires the following:

1. Grade point average (overall, junior/senior years, sociology or related courses) of 3.2 (A=4.0) or better.
2. Submission of scores on the Graduate Record Examination or Miller Analogies Test.
3. Recommendations from three former professors.
4. One- or two-page statement of career interests and goals.

#### PROGRAM REQUIREMENTS

Requirements for the degree are 34 semester hours. This includes 10 hours of required courses, 6 hours for the project and 18 hours of electives for the specialty. Courses appropriate to the student’s specialty may be selected from other academic units.

The curriculum consists of a core of required courses: SOC 62002, 62100, 62211, 62217 and 62199 or 62885; elective courses from which the student, together with the faculty advisor, develops a specialty area of concentration, and a project that may be in either a thesis or nonthesis format. The required courses provide foundations in social theory, research methods and data analysis. The elective courses allow for specialization in several areas. Among these are sociology of health and health care, social inequality and social psychology. The project may be an empirical research study, theoretical project or student-contracted field internship in an agency.

No more than two 50000-level courses may be applied toward the M.A. degree without approval of the student’s advisor. No more than 12 hours may be taken in any outside department for credit toward the M.A. degree.
The Master of Arts program in sociology with a concentration in gerontology provides a foundation for a variety of career lines for further graduate study. In the case of this particular program the student uses elective hours to specialize in the substantive area of gerontology, which is interdisciplinary in nature. Requirements for this degree include 24 hours of required courses, 6 hours of thesis and 3 hours of elective courses.

Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>GCOL 60210</td>
<td>3</td>
</tr>
<tr>
<td>BSCI 50020</td>
<td>3</td>
</tr>
</tbody>
</table>
or
| ELS 60610  | 3     |
| PSYC 60610 | 3     |
| SOC 62877   | 3     |

Research Methodology

<table>
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<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SOC 62211</td>
<td>3</td>
</tr>
<tr>
<td>SOC 62217</td>
<td>3</td>
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</tbody>
</table>

In addition to the interdisciplinary gerontology core of coursework, students will be expected to meet the requirements for the M.A. degree in sociology:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SOC 62002</td>
<td>1</td>
</tr>
<tr>
<td>SOC 62100</td>
<td>3</td>
</tr>
</tbody>
</table>

A master's thesis encompassing original research will be presented and defended before a committee of graduate faculty members, at least two of whom will be members of the faculty in gerontological studies. There is no nonthesis option. The thesis and its defense must also meet the requirements of the department.

Doctor of Philosophy

AKRON/KENT JOINT PROGRAM IN SOCIOLOGY

The Departments of Sociology of Kent State University and The University of Akron offer a joint program leading to the Ph.D. degree. Faculty and students engaged in the joint Ph.D. program are for all intents and purposes regarded as one single graduate department. Coursework is offered at both campuses, and faculty and students interchange freely.

ADMISSION

In addition to regular application procedures of the university, admission to the Doctor of Philosophy program requires the following:

1. Applying with a completed master's degree or equivalent, or
2. Applying to the Ph.D. program after at least one year of full-time coursework or equivalent (18 hours) in the sociology M.A. program at either university. The coursework must include the M.A. core sequence. This type of admission is limited to students whose records clearly indicate both scholarly and research potential to do doctoral-level work.
3. Submission of scores on the Graduate Record Examination or Miller Analogies Test.
4. Submission of three letters of recommendation from professors or others who can adequately evaluate the applicant's work.
5. Submission of a one- or two-page statement of career interests and goals.

PROGRAM REQUIREMENTS

In addition to meeting the general requirements of the university, students working toward the Doctor of Philosophy degree program in sociology must meet the following requirements:

1. One doctoral-level course in theory: SOC 72105.
2. One doctoral-level course in methods/statistics: SOC 72218.
3. Complete a substantive specialty: 12 credits.
4. Take the following doctoral-level courses: SOC 72002 and 72894.
5. Complete a minimum total of 34 semester hours of coursework.
6. Pass the doctoral comprehensive examination. This examination will include an evaluation of methodology, theory and other areas relevant to the specialty area.
7. Register for 30 credit hours of Dissertation I (SOC 82199).
8. Complete a dissertation and successfully defend it in an oral examination.

Courses (SOC)

SOC 52010
DEATH AND DYING (3)
Theoretical perspectives and research in human death and dying. Emphasis on applied concerns in medical and helping professions. Topics include social death, death environments, ethics and suicide.

SOC 52093
VARIABLE TITLE WORKSHOP IN SOCIOLOGY (1-6)
Concentrates on professional or disciplinary concerns. Specific content to vary according to needs of client groups. S/U grading.

SOC 52095
SPECIAL TOPICS IN SOCIOLOGY (3)
Offered irregularly when unusual resources and/or opportunities permit. Topic will be announced when scheduled. Majors may receive maximum of 12 hours credit. Prerequisite: SOC 12050 or permission.
SOC 52126  
SOCIOLOGICAL THEORIES (3)  
An examination of classical, modern and postmodern approaches to social theory. Prerequisite: SOC 12050 or permission.

SOC 52224  
INTERPRETING SOCIAL DATA (3)  
Emphasis on organizing, analyzing and interpreting actual sociological research data making use of basic descriptive and inferential statistics and computer programs. Prerequisite: SOC 32210 or 32220 and permission.

SOC 52315  
SOCIOLOGY OF CHANGING GENDER ROLES (3)  
An examination of the institutions, institutional linkages and social processes that contribute to change and stability of traditional gender roles and the consequences of changes. Prerequisite: SOC 12050 or permission.

SOC 52359  
SOCIAL MOVEMENTS (3)  
Examination of various types and natures of social movements. Will treat with origins, developmental characteristics, and purposes of classic and contemporary movements. Prerequisite: SOC 12050 or permission.

SOC 52400  
SELF AND IDENTITY (3)  
Examines theories and research on the origin and behavioral consequences of identities, self-concept and self-esteem; also examines the relationships between identities and emotions and between self-concept and mental health. Prerequisite: SOC 12050 or permission.

SOC 52421  
CHILDHOOD IN SOCIETY (3)  
Societal definitions of childhood, socialization of children: child-centered, child-oriented and child-dominated systems, relationships with other siblings and social categories. Prerequisite: SOC 12050 or 62001 or permission.

SOC 52478  
ADOLESCENCE IN SOCIETY (3)  
Consideration of the social, cultural and historical forces that shape the experience of this period of the life cycle. Includes examination of gender, class and race differences in adolescence, the significance of youth movements with an emphasis on music as a dominant expression of youth culture. Prerequisite: SOC 12050 or permission.

SOC 52558  
WEALTH, POVERTY AND POWER (3)  
Sociological examination of economic stratification; focuses on the translation of class into power via politics, education and collective struggle. Prerequisite: SOC 12050 or permission.

SOC 52561  
RELIGION: SACRED AND SECULAR PERSPECTIVES (3)  
Social context of religions and their ideologies and structures with special reference to religion in America. Prerequisite: SOC 12050 or permission.

SOC 52563  
SOCIOLOGY OF HEALTH AND HEALTH CARE (3)  
Sociological analysis of health and illness behavior, utilization of health care, professions, and the organizational, community and societal systems that deal with health and illness. Prerequisite: SOC 12050 or permission.

SOC 52564  
BUREAUCRATIC ORGANIZATIONS (3)  
Analysis of structure and functioning of complex organizations in their cultural context.

SOC 52568  
RACE AND ETHNIC STUDIES (3)  
Sociological principles underlying racial and ethnic relations in the United States; emphasis on social factors of prejudice, discrimination and assimilation affecting all groups. Prerequisite: SOC 12050 or permission.

SOC 52575  
FAMILY PATTERNS: A WORLD PERSPECTIVE (3)  
Cultural variability with respect to courtship, family relationships, child-rearing and other patterns in primitive and literate societies. Prerequisite: SOC 12050 or permission.

SOC 52577  
SOCIOLOGY OF FAMILY VIOLENCE (3)  
Sociological analysis of theories, research and social policy concerning family violence: child abuse and neglect, spouse abuse, elderly abuse, marital rape, sexual abuse of children. Prerequisite: SOC 12050 or permission.

SOC 52665  
SOCIOLOGY OF ARCHITECTURE AND PLANNING (3)  
Examines the relationship between built environments and behavior with the focus on the impact of environments. Designed for both students of design professions and behavioral sciences. Prerequisite: SOC 12050 or permission.

SOC 52870  
INTERDISCIPLINARY SEMINAR IN SOCIAL GERONTOLOGY (3)  
Examines the particular role of the practitioner unique to gerontology using case study, cross-cultural comparisons and research analysis.

SOC 52879  
AGING IN SOCIETY (3)  
Analysis of demographic, sociological and sociopsychological dimensions of aging. Prerequisite: SOC 12050 or permission.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 53200</td>
<td>SOCIAL STRUCTURE AND INDIVIDUAL LIVES (3)</td>
<td>Examines conceptualizations for and evidence concerning the effects of social structure on various dimensions of individual lives. Prerequisite: SOC 12050 or permission.</td>
</tr>
<tr>
<td>SOC 62002/72002</td>
<td>PRO-SEMINAR IN SOCIOLOGY (1)</td>
<td>Designed to introduce the entering graduate student to the major areas of study and research in sociology and other important facets of the professional dimension of sociology. Prerequisite: SOC 12050 or permission.</td>
</tr>
<tr>
<td>SOC 62093/72093</td>
<td>VARIABLE TITLE WORKSHOP IN SOCIOLOGY (1-6)</td>
<td>Concentrates on professional or disciplinary concerns. Specific content to vary according to needs of client groups. S/U grading. Prerequisite: Permission.</td>
</tr>
<tr>
<td>SOC 62100/72100</td>
<td>EARLY SOCIOLOGICAL THEORY (3)</td>
<td>An examination of the contributions by pre-1930 social thinkers to contemporary sociological theory. Prerequisite: SOC 52126 or 52104 or permission.</td>
</tr>
<tr>
<td>SOC 62105/72105</td>
<td>SEMINAR IN SOCIOLOGICAL THEORY (3)</td>
<td>Intensive critical analysis of current scholarship in a broad range of contemporary sociological theories. Virtually all required reading will be from primary sources. Prerequisite: SOC 6/72191 or permission; or 3850:722 at The University of Akron. Akron 3850:723.</td>
</tr>
<tr>
<td>SOC 62106/72106</td>
<td>CONTEMPORARY THEORIES (3)</td>
<td>Covers major contemporary theories and theorists. Emphasis on functionalism, conflict, exchange, interactionism and systems theory. Neofunctionalism, Neo-Marxism, structuration theory and other recent trends are treated. Prerequisite: 6/72100 or permission.</td>
</tr>
<tr>
<td>SOC 62159/72159</td>
<td>EARLY SOCIOLOGICAL THOUGHT (3)</td>
<td>An examination of the contributions of pre-mid-20th century thinkers to contemporary sociological theory. Prerequisite: SOC 52104, 6/72106 or permission. Akron 3850:722.</td>
</tr>
<tr>
<td>SOC 62199</td>
<td>THESIS I (2-6)</td>
<td>Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible. Prerequisite: Permission.</td>
</tr>
<tr>
<td>SOC 62209/72209</td>
<td>QUANTITATIVE DATA ANALYSIS (3)</td>
<td>Study of statistical procedures necessary for understanding the design and analysis of sociological research. Emphasis on interpretation of quantitative methods used in social research. Prerequisite: Introductory statistics or permission.</td>
</tr>
<tr>
<td>SOC 62210/72210</td>
<td>LABORATORY QUANTITATIVE DATA ANALYSIS (2)</td>
<td>A course in conjunction with SOC 6/72209 involving application of statistical techniques to available data banks. Experience gained in use of computer hardware and software. Prerequisite: SOC 6/72209 and permission.</td>
</tr>
<tr>
<td>SOC 62211/72211</td>
<td>RESEARCH DESIGN AND METHODS (3)</td>
<td>Study of methods for quantitative and qualitative research: role of theory, research designs, sampling, measurement and instrumentation, data collection, data analysis and interpretation, ethical issues. Akron 3850:603, 604.</td>
</tr>
<tr>
<td>SOC 62216/72216</td>
<td>ADVANCED TECHNIQUES IN RESEARCH (1-3)</td>
<td>Seminar on innovations in research techniques. Prerequisite: Permission. Akron 3850:708.</td>
</tr>
<tr>
<td>SOC 62217/72217</td>
<td>MULTIVARIATE TECHNIQUES IN SOCIOLOGY (3)</td>
<td>Advanced multivariate techniques and methodological problems in the analysis of sociological data. Topics include nonexperimental causal analysis such as recursive and non-recursive path analysis. Prerequisite: SOC 6/72209 or permission. Akron 3850:706.</td>
</tr>
<tr>
<td>SOC 62218/72218</td>
<td>ADVANCED DATA ANALYSIS (3)</td>
<td>Critical examination of data analytic techniques having particular relevance to research problems in sociology, with particular emphasis on multivariate inferential statistics. Prerequisite: SOC 6/72217 or permission. Akron 3850:709.</td>
</tr>
<tr>
<td>SOC 62219/72219</td>
<td>QUALITATIVE METHODOLOGY (3)</td>
<td>Study of qualitative methods including interviewing, observation, use of personal documents, archival data, and special problems of recording and analyzing qualitative data. Prerequisite: SOC 6/72209 or permission. Akron 3850:714.</td>
</tr>
<tr>
<td>SOC 62220/72220</td>
<td>SURVEY RESEARCH METHODS (3)</td>
<td>An in-depth study of the design and administration of social surveys. Prerequisite: SOC 6/72209 or permission. Akron 3850:711.</td>
</tr>
</tbody>
</table>
SOC 62299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: SOC 62199.

SOC 62323/72323
SOCIOLOGY OF HEALTH CARE (3)
The sociological study of health and illness, therapy and rehabilitation, and the organization of health care. Prerequisite: SOC 12050 or permission.

SOC 62324/72324
EPIDEMIOLOGIC METHODS IN HEALTH RESEARCH (3)
Strategies and methods for the design and solution of health care problems focusing on techniques of clinical epidemiology. Prerequisite: Graduate-level statistics or research methods, HED 64072 or equivalent, and permission of the instructor.

SOC 62325/72325
SOCIOLOGY OF HEALTH BEHAVIOR (3)
Sociological analysis of the major theories and research on health and illness, and the utilization of health services. Prerequisite: SOC 6/72323 and permission.

SOC 62326/72326
SOCIOLOGY OF MENTAL HEALTH AND MENTAL DISORDERS (3)
Sociological examination of the social processes that affect mental health, that frame cultural ideas of normality and illness, and that define clinical pathology. Prerequisite: SOC 6/72323 and permission.

SOC 62327/72327
SOCIOLOGY OF OCCUPATIONS, PROFESSIONS AND HEALTH CARE (3)
Sociological examination of the organization of work in the health care field with emphasis on occupations, professions and health care delivery. Prerequisite: SOC 6/72323 and permission.

SOC 62328/72328
STRATIFICATION AND HEALTH (3)
Race, social class and gender differences in physical and mental health status, help-seeking behavior and health care. Race, class and gender stratification of health care workers. Prerequisite: SOC 6/72323 and permission.

SOC 62329/72329
COMPARATIVE HEALTH SYSTEMS (3)
Comparison of history, social epidemiology, sociocultural structure and environment of health systems, in particular international systems, but including rural and urban structures within the United States. Prerequisite: SOC 6/72323 and permission.

SOC 62430/72430
SOCIAL PSYCHOLOGY (3)
Examination of social psychological theory and research, both classic and contemporary. Provides student with background and working knowledge of social psychological aspects of social phenomena. Prerequisite: SOC 12050 or permission. Akron 3850:631.

SOC 62433/72433
PERSONALITY AND SOCIAL SYSTEMS (3)
Examination of contemporary theory and research on linkages between personality and society. Emphasis will be on the dynamics of those linkages and their effects on both individuals and social structures. Prerequisite: SOC 12050 or permission. Akron 3850:634.

SOC 62434/72434
SOCIOLOGY OF COMMUNICATION (3)
This course provides a general survey of the micro aspects of social communication. The concentration is on the sociolinguistic orientation to analysis of human communication. Prerequisite: SOC 12050 or permission. Akron 3850:635.

SOC 62435/72435
SOCIOLOGY OF SENTIMENTS AND EMOTIONS (3)
A sociological perspective is employed to analyze and understand the production, distribution and utilization of socially created sentiments and emotions. Prerequisite: SOC 12050 or permission.

SOC 62540/72540
SOCIAL ORGANIZATION (3)
In-depth treatment of theories of social organization and their applications at both micro and macro levels of analysis in organizations and societies. Prerequisite: SOC 12050 or permission. Akron 3850:645.

SOC 62542/72542
SOCIOLOGY OF WORK (3)
Examination of work as behavioral phenomenon in human societies; contrasts with nonwork and leisure; significance of occupations, professions and work types in organization of work. Prerequisite: SOC 12050 or permission. Akron 3850:649.

SOC 62543/72543
FAMILY ANALYSIS (3)
Analysis of actual and theoretical patterns of family systems; current research in family in relation to theories of family and theories of social systems. Prerequisite: SOC 12050 or permission. Akron 3850:677.
SOC 62546/72546
SOCIAL STRATIFICATION (3)
Examination of social inequality—cause and consequences of social class and caste; power structures and elites; mobility patterns, class consciousness. Special reference to United States. Prerequisite: SOC 12050 or permission. Akron 3850:646.

SOC 62760/72760
DEVIANCE (3)
Examination of nature, types and controls of deviance; analysis of conceptual levels, theoretical contributions, processes in social labeling and self-labeling, case studies, social consequences and problems. Prerequisite: SOC 12050 or permission. Akron 3850:663.

SOC 62870/72870
RACE RELATIONS (3)
Course in the culture of black Americans. Particular emphasis will be given to the relationship between social structure and particular patterns of race relations. Prerequisite: SOC 12050 or permission. Akron 3850:651.

SOC 62877/72877
SOCIAL GERONTOLOGY (3)
Impact of aging upon individuals and society. Reactions of individuals and society to aging. Prerequisite: SOC 12050 or permission. Akron 3850:678.

SOC 62885/72885
INTERNSHIP IN APPLIED SOCIOLOGY (3-8)
Student-negotiated project in specific human-service setting for practitioner; program designing; research; in-service training; writing a grant proposal. IP permissible. Prerequisite: Permission.

SOC 62894/72894
COLLEGE TEACHING OF SOCIOLOGY (3)
Preparation for college teaching. Maximum of 3 hours applicable toward master's degree requirements (with departmental approval). Hours do not count toward the doctoral degree. Prerequisite: Permission.

SOC 62895/72895
SPECIAL TOPICS (3)
Offered irregularly when unusual resources and/or opportunities permit. Topic will be announced when scheduled. Prerequisite: SOC 12050 or permission.

SOC 62896/72896
INDIVIDUAL INVESTIGATION (1-3)
Readings and/or research supervised by graduate faculty. IP permissible. Prerequisite: Completed 24 semester hours of graduate work, permission of instructor and graduate coordinator. Akron 3850:797,798.

SOC 62898/72898
RESEARCH (1-15)
Research or individual investigation. Credits may be applied toward meeting degree requirements if department approves. Repeat registration permitted. Prerequisite: Permission.

SOC 82199
DISSERTATION (15)
Doctoral dissertation, for which registration in at least two semesters is required, first of which will be semester in which dissertation is begun and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: Permission. Akron: 3850:899.

SOC 82299
DISSERTATION II (1 or 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: SOC 82199.
COLLEGE OF BUSINESS ADMINISTRATION AND GRADUATE SCHOOL OF MANAGEMENT

George E. Stevens, Dean
500 Business Administration Building
330-672-1101
gstevens@kent.edu

Donald R. Williams, Associate Dean
310A Business Administration Building
330-672-2282
dwilliam@kent.edu

The programs in the Graduate School of Management at Kent State University prepare students for management and staff positions in regional, national and international organizations. Curricular and cocurricular emphases are on ethical leadership, teamwork, creative problem-solving, global perspectives and skillful applications of information technology.

The following programs are offered in the Graduate School of Management:

Master’s degree programs—
- Master of Business Administration (M.B.A.)
- Executive M.B.A.
- Master of Science in Financial Engineering
- Master of Science in Accounting
- Master of Arts in Economics

Doctoral degree program—
- Doctor of Philosophy (Ph.D.) in Business Administration

Dual-degree programs are available in the following areas:
- Master of Business Administration/Master of Science in Nursing
- Master of Business Administration/Master of Library and Information Science
- Master of Business Administration/Master of Architecture

All graduate programs of the school are accredited by AACSB International—The Association to Advance Collegiate Schools of Business. With the exception of the Ph.D. and M.S.F.E. programs, most of the degree programs may be completed on a part-time or full-time basis.

All doctoral and master’s students in management should obtain a current copy of the relevant Graduate Student Handbook. This guide contains the most up-to-date information concerning degree requirements and is available in the Graduate Office, Room 310A, Business Administration Building.

Persons seeking information on graduate nondegree status should consult the Graduate School of Management, Room 310A, Business Administration Building, 330-672-2282, or visit http://business.kent.edu/grad.

The Master of Business Administration seeks to prepare students for responsible leadership positions in public, private and nonprofit organizations. Regardless of undergraduate education, the candidates will find a challenging program designed to meet their specific backgrounds and needs. The Graduate School of Management offers three M.B.A. options: the full-time day program; the professional (part-time) evening program (PMBA); and the executive program (EMBA). This section of the catalog addresses the full-time and professional programs; the EMBA program is described in a later section. In addition, those students who hold undergraduate business degrees are eligible for the accelerated M.B.A. program on either a full-time or a part-time basis.

CONCENTRATIONS
The student has the option of selecting a field of concentration, which must be a minimum of 12 hours, or taking a general
M.B.A. with electives from a number of areas. With approval, some electives may be taken outside the Graduate School of Management.

The following concentrations are currently offered:
- Accounting
- Finance
- Human Resources Management
- Information Systems
- International Business
- Marketing

Students who are graduates of undergraduate business programs accredited by the AACSB may be able to reduce their M.B.A. programs from 54 hours of required coursework to as low as 39 hours of coursework. Students from undergraduate business programs that are not accredited also may be eligible for reduced programs. In all cases, waiver of coursework is determined on a case-by-case basis. The student must have received a grade of “B” or better in courses considered for waiver. Courses taken as “Pass-Fail” are not eligible for waiver.

ADMISSION
Admission to the M.B.A. program requires a baccalaureate degree from an accredited college or university with a minimum undergraduate grade point average of 2.75 (A=4.0), plus a better than average score on the general aptitude test known as the Graduate Management Admission Test (GMAT). In rare instances, a student who does not meet the minimum grade point average requirement but has other indices of ability to handle graduate-level work may be considered for admission. In such cases, a strong performance on the Graduate Management Admission Test, a student’s junior-senior grade point average in his or her major, and significant, relevant experience subsequent to receiving a bachelor’s degree are weighed.

Arrangements for taking the Graduate Management Admission Test should be made concurrently with application for the M.B.A. program.

The GMAT is a computer-adaptive test in North America and selected international locations. Testing content includes quantitative and verbal questions and an essay-style writing assessment.

The GMAT is offered on a continuous basis by appointment at approximately 400 computer-based testing centers. Test-takers may schedule appointments by calling a toll-free number or by directly contacting a local test center.

For complete information on the computer-adaptive GMAT, registration, fees and testing sites, please contact the Educational Testing Service by telephone, fax or e-mail:

GMAT
Educational Testing Service
P.O. Box 6103
Princeton, NJ 08541-6103
Phone: 609-771-7330
Fax: 609-883-4349
E-mail: gmat@ets.org
Web site: http://MBA.com

This test must be taken by all applicants and the scores received prior to admission to the graduate program.

In addition to the above admissions requirements, applicants will be expected to demonstrate an acceptable level of preparation in two areas: basic computer skills and quantitative analysis. Such preparation may be demonstrated in a number of ways.

Students lacking preparation may still be admitted into the M.B.A. program but are encouraged to take remedial college coursework prior to or concurrently entering the program.

PROGRAM REQUIREMENTS
The courses in the management core present advanced material in business using a variety of teaching approaches. Areas covered include: accounting, economics, finance, human resources management, information systems, marketing, operations and statistics.

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Hours</th>
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<tbody>
<tr>
<td>B AD 63037</td>
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<td>ECON 62022</td>
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</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

Executive Modules, Integrative Management Courses and Electives ............. 24
Program Total .................................................................. 54

Executive M.B.A. Program

The Executive M.B.A. program provides a unique and exciting approach to the study of business management for executives. The program is structured so that students take all their classes together, study in teams and interact with senior business faculty. The result is an educational experience unlike the more traditional M.B.A. program. Upgrades in technology allow students access to the Internet, state-of-the-art computer facilities and the use of the Goodyear Electronic Classroom as well as
Business Administration and Management

other executive classrooms equipped to facilitate multimedia presentations.

The EMBA program is offered on the weekends in a concentrated 19-month format. Classes are held three Saturdays per month. An additional class is conducted online allowing the class members to participate from home, their office or wherever they are traveling throughout the world. The program begins each year in mid-August.

The curriculum emphasizes leadership and management in a global environment using state-of-the-art technology. A seven- to ten-day International Business Experience is included midway through the program, providing participants with an applied learning experience abroad.

The Kent State University EMBA program is a highly personalized, adult-oriented and interactive educational experience. The program is academically enriching, comprehensive and challenging. Since its introduction in 1978, the EMBA program has proudly graduated more than 1000 students.

One competitively priced program fee includes all course materials, tuition, textbooks, international business trip, residencies, food service and parking for the entire duration of the program. To accommodate the schedules of busy professionals, all administrative functions such as disseminating textbooks and instructional material, scheduling and registering for classes and securing parking permits are conveniently arranged for the students.

ADMISSION
Admission to this program requires a minimum of five years of professional experience in a responsible position. In addition, applicants must have an acceptable undergraduate record from an accredited college, a satisfactory score on the Graduate Management Admission Test (GMAT) and a personal interview with the director of the EMBA program. The applicant and employer must make a firm commitment to the program for 19 months. This program has a fee structure and class schedule that is different from that of the university. For additional information and brochure, please contact: Graduate School of Management, Kent State University, P.O. Box 5190, Kent, OH 44242-0001, phone (330) 672-3622.

The EMBA courses are reserved exclusively for students admitted to the Executive M.B.A. program.

Master of Science in Accounting

The Master of Science in Accounting program is designed for students interested in specializing in accounting and auditing. Students are prepared for responsible leadership positions in public, private, nonprofit and government accounting. The combination of coursework with the option of an internship provides students with a strong theoretical foundation in accounting, as well as an understanding of the practical applications of the discipline.

Upon completion of the program, students will meet the educational qualifications for the CPA, CMA and other professional examinations, including the 150-semester-hour requirement for the CPA in Ohio.

The program is designed to meet the needs of students with a variety of undergraduate backgrounds, ranging from liberal arts majors to business majors to accounting majors. As described below, the degree requirements for the program differ somewhat depending upon each student’s background. Nonetheless, the focus of the program is the same: to provide students with a high-quality master’s program in accounting. Students in the M.S. in Accounting program take courses in the various business disciplines along with the core accounting courses, allowing them to become well-rounded professionals. The M.S.A. program calls for students to select from among three accounting concentrations: Financial Reporting and Assurance Services (including external and internal auditing); Controllership and Accounting Systems; and Taxation. The program also emphasizes the development of communication, interpersonal and analytical problem-solving skills through the use of case studies, team and individual projects, and computers for accounting applications and auditing.

ADMISSION
Admission requirements are the same for all students, regardless of educational background. Admission to the program requires acceptable scores on the Graduate Management Admission Test (GMAT), an above-average overall grade point average, an above-average accounting grade point average (if applicable) and an interview. An admissions committee also evaluates each applicant’s communication skills, work experience and recommendations provided by instructors, colleagues and supervisors. Proficiency in algebra and calculus is required.

The admissions committee must receive GMAT test scores before it can make any final admissions decisions.

PROGRAM REQUIREMENTS
There are two tracks of study leading to the M.S. in Accounting, depending on the student’s prior preparation. The first track, described below, is for those students who hold undergraduate degrees in accounting. A program of study of 33 hours is required. Students may elect an internship option during one term. All accounting courses are 3 credit hours.

M.S. in Accounting Program for Undergraduate Accounting Majors

A total of six graduate accounting courses are needed, including five required accounting courses and one elective accounting course. International accounting undergraduate students may have a few deficiencies to make up.
**REQUIRED ACCOUNTING COURSES (18 HOURS)**

Select one of the three specialization tracks. Note that ACCT 53014, 53020, 53033 and B AD 63022 are common to all three tracks.

**Financial Reporting and Assurance Services**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
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<tr>
<td>ACCT 53014</td>
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<tr>
<td>ACCT 53020</td>
<td>3</td>
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<tr>
<td>ACCT 53033</td>
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<td>B AD 63022</td>
<td>3</td>
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<tr>
<td>B AD 63031</td>
<td>3</td>
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**Controllership and Accounting Systems**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ACCT 53013</td>
<td>3</td>
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<tr>
<td>ACCT 53014</td>
<td>3</td>
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<tr>
<td>ACCT 53020</td>
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<tr>
<td>ACCT 53033</td>
<td>3</td>
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<tr>
<td>B AD 63022</td>
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</tbody>
</table>

**Taxation**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ACCT 53014</td>
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<tr>
<td>ACCT 53020</td>
<td>3</td>
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<tr>
<td>ACCT 53033</td>
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<td>B AD 63022</td>
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<tr>
<td>B AD 63042</td>
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</tbody>
</table>

**Elective Accounting Courses**

Select one of the following courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 53013</td>
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<tr>
<td>ACCT 53034*</td>
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<td>B AD 63028</td>
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<td>3</td>
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<tr>
<td>B AD 63098</td>
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</tbody>
</table>

*For students in the Financial Reporting and Assurance concentration, this course must be included as an accounting elective if not included in the student’s undergraduate accounting major program.

**Without an Undergraduate Accounting Major**

This track of study is a program for students with either a liberal arts undergraduate degree or with a business (but not accounting) major. These full-time or part-time students must complete an undergraduate accounting core. The core courses are required regardless of any work experience within the accounting profession. After completing the undergraduate core courses, students generally complete the same 33-hour program described above to obtain the M.S.A. degree.

**M.S. Program for Students Without an Undergraduate Accounting Major**

The normally required nonaccounting graduate business courses are normally selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>B AD 64005</td>
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<td>B AD 64270</td>
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<tr>
<td>B AD 64041</td>
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<td>B AD 66061</td>
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<tr>
<td>ECON 62022</td>
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</tbody>
</table>

During the admission evaluation, some or all of the above courses might be waived by the M.S.A. advisor depending on the related undergraduate courses the student has taken before. The student would then choose other nonaccounting graduate-level business courses to make up the required minimum 15 hours of nonaccounting graduate business courses.

**Total hours required for M.S. in Accounting** 33
Business Administration and Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>B AD 64041</td>
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<td>ECON 62022</td>
<td>3</td>
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<tr>
<td>*FIN 36072</td>
<td>3</td>
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</tbody>
</table>

NOTE: Total hours depends on waivers, if any, for the business, economics and statistics courses listed. For students with an undergraduate degree in business, the minimum hours most likely will be required, and some substitutions may be approved by the M.S. in Accounting coordinator.

*FIN 36072 is an undergraduate course that is required for all accounting majors.

Master of Science in Financial Engineering

The interdisciplinary Master of Science in Financial Engineering Degree (MSFE) is designed for students with strong quantitative backgrounds who have goals of becoming risk management officers, derivatives analysts or traders. The program is a demanding one, and it requires the completion of 36 credit hours of coursework, including an industry-based project. It combines strong quantitative skills from mathematics, including probability theory and numerical computing, with risk management and dynamic valuation skills from finance. The program emphasizes applied skills in the area of financial engineering, while still providing the necessary theoretical background. The suggested coursework fits within the guidelines established by the International Association of Financial Engineers.

Kent State has an on-campus electronic Financial Engineering Trading Floor which allows students to receive hands-on experience in derivatives trading and risk management. Kent State has the only derivatives-oriented trading floor in an academic institution with direct connections to the futures exchanges. The trading floor is equipped with the same software used by major investment banking firms. Live exchange data feeds and real-time market information allow students to simulate real trading. The software includes Trading Technologies X Trader, Patsystems, SunGard Futures Systems' AudiTrack and SunGard's MicroHedge options analytical product. Data feeds from CQG and Reuters provide continuous news and pricing information. At the front of the trading floor is a data board that provides real-time pricing information on derivatives. Students use this information and the information from the two streaming ticker boards to assess market conditions for trading tendencies. Live satellite feeds are shown on plasma displays.

This unique trading floor is an integral part of the MSFE program at Kent State University. Since students use the same data feeds and trading software that are used by major investment banking firms, the trading floor allows them to replicate dynamic trading strategies and derivative security analyses.
An industry-based project will be assigned to each student in the last term as part of the required field experience. The project will involve direct interaction with a contributing firm. The student will undertake an eight-week internship to complete the required project with a firm from the financial community. The project will be presented to the program faculty for final evaluation. Prior participating firms include the Chicago Board of Trade, Eurex, Prebon Yamane, State Street Research, KeyBank, SunGard and FirstEnergy.

ADMISSION

Students apply to the Graduate School of Management. The MSFE program committee will make an assessment of the candidate’s background and skills. A joint committee with faculty from the Department of Mathematics, the Department of Finance and the Department of Economics will consider highly ranked applicants for admission. Applicants will need to submit GRE or GMAT scores along with three letters of recommendation and official transcripts. Prior financial industry experience will enhance an applicant’s record.

The primary tools used to evaluate candidates will be:
1. GRE or GMAT
2. GPA at the undergraduate and, if available, graduate level
3. TOEFL score (for foreign students)
4. Transcripts for all prior degrees
5. Letters of reference
6. Statement of purpose
7. Resume

All guidelines regarding nondiscrimination policies are adhered to in the selection process.

PROGRAM REQUIREMENTS

The MSFE program requires the completion of 36 semester hours of coursework. The quantitative prerequisites for students applying to the program are:
2. Linear Algebra: matrices, vectors, determinants, linear systems of equations, linear independence, bases, eigenvalues, eigenvectors.
3. Ordinary Differential Equations: 1st-order ODEs, solution techniques, initial value problems, exponential growth/decay, logistic model equilibrium, steady state 2nd-order linear constant-coefficient ODEs.
4. Probability: continuous and discrete distributions, multivariate distributions and independence, ordinary and conditional expectations, Central Limit Theorem.
5. Statistics: regression analysis including detection of and solutions to various violations of classic regression assumptions (heteroskedasticity, autocorrelation, multicollinearity and simultaneity).
6. Computer Programming: programming ability in a high-level language such as C, C++, Fortran (77 or 90/95), Basic, Visual Basic or Matlab.
7. Economics: basic micro- and macroeconomic topics including supply and demand functions, market structure and the role of money.

If students have not completed these requirements, summer workshops are offered through the College of Continuing Education that cover the topics of Probability, Ordinary Differential Equations and Economics. Qualified students can be conditionally admitted on the basis of completing these summer workshops.

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
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</table>

Master of Arts in Economics

The Master of Arts program in economics provides excellent preparation for a career in economic research in government or the private sector, and for doctoral study. One distinct advantage of the M.A. in Economics program at Kent State is its focus on the development of strong analytical and quantitative skills. Students are well trained in the application of economic theory and methods of statistical analysis. Two tracks are offered in the program. The first, in Economic Analysis, is the general track intended for students who wish to pursue careers with government agencies, in the private sector, and/or pursue a doctoral degree in economics. The second, in Financial Economics, is primarily designed for students who wish to pursue careers in the financial services industry, including commercial banking, investment banking, insurance, real estate and financial advising.

ADMISSION

Each student must submit a complete application to the Graduate School of Management including the following information:
- an essay describing goals and objectives;
- a resume showing work experience;
- results of the Graduate Record Examination or Graduate Management Admission Test.

PROGRAM REQUIREMENTS

The M.A. program requires the completion of 30 semester hours of coursework, or a minimum of 24 hours of coursework and a thesis or internship.
Students entering the program will be expected to have completed undergraduate courses in intermediate microeconomic and macroeconomic theory, differential calculus and statistics. Any deficiencies must be made up before the start of the program. These background courses do not count toward the 30 hours required for the degree.

Both the Financial Economics and Economic Analysis tracks are built upon a set of core courses in economic theory and econometrics. The student then takes elective courses in areas such as international economics, economic development, monetary economics, labor economics, public sector economics, or several courses in the Department of Finance, depending on the track chosen.

**Economic Analysis Track**

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<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ECON 62050</td>
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<tr>
<td>ECON 62051</td>
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<tr>
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<td>3</td>
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<tr>
<td>ECON 64004</td>
<td>3</td>
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</tbody>
</table>

Total: 12

Electives: 18

Program Total: 30

For elective courses, students may select any M.A.- or Ph.D.-level economics courses subject to the following restrictions: All choices must have the approval of the graduate coordinator. No more than 6 hours may be at the 50000 level, and the student must complete at least 15 hours of economics courses other than those in independent study and research (62096, 62098, etc.).

A student may also select, with departmental approval, a limited number of courses outside the Department of Economics.

**Financial Economics Track**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ECON 62050</td>
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<td>ECON 62051</td>
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<td>ECON 62054</td>
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<tr>
<td>B AD 66061</td>
<td>3</td>
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<tr>
<td>B AD 66062</td>
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</tbody>
</table>

Total: 18

Electives: 12

Program Total: 30

For elective courses, students may select any M.A.- or Ph.D.-level economics courses subject to the following restrictions: All choices must have the approval of the graduate coordinator; no more than 3 hours may be at the 50000 level; and the student must complete at least 15 hours of economics courses other than those in independent study and research (62096, 62098, etc.).

The Master of Science in Nursing and Master of Business Administration (M.S.N.//M.B.A.) dual-degree program is designed for experienced nurses whose career goals include assuming middle or executive management positions in health services agencies or in health-related companies, or who are interested in starting their own business. It combines the strengths of nursing with the practical management knowledge needed to develop patient-responsive organizations.

The M.S.N.-M.B.A. dual degree is a demanding program requiring the fulfillment of 64 credit hours of coursework. Practicum experiences, an integral part of the program, provide a combined management and nursing focus. A management internship near the end of the program enables students to practice new leadership skills within a challenging health-care setting. Coursework in nursing and management is integrated and concurrent, thereby providing synergistic learning between the two disciplines.

**ADMISSION**

Students apply to both the College of Nursing and to the Graduate School of Management. Each program makes an independent admission decision. Admission is determined based upon undergraduate grade point average, Graduate Record Examination (GRE) or GMAT scores, three letters of reference, an essay addressing the applicant’s career direction, and prior nursing experience (a minimum of two years’ clinical practice is strongly preferred).

**PROGRAM REQUIREMENTS**

At 64 credit hours for the dual degree, students save 32 credit hours from master’s requirements by not pursuing the two degrees independently. There are 19-35 credit hours in the M.S.N. (normally 36-40) and 39-45 credit hours in the M.B.A. (normally 54). This program includes 34 credit hours of core courses, 6-10 hours of practicum experience, 6-12 hours of theory and research, 9 hours of executive and international courses, and 9 hours of integration and capstone courses. By taking three courses per semester, the dual-degree program can be completed within two years full time, or at two courses per semester, within three and one-half years on a part-time basis. Student learning needs and previous coursework may create individual variation in the dual-degree curriculum.

**Master of Library and Information Science/ Master of Business Administration**

The Master of Library and Information Science and Master of Business Administration (M.L.I.S.-M.B.A.) dual-degree program is designed for managers of large libraries and information centers. Individuals in these positions need knowledge pertaining to planning, organizing, staffing, directing and controlling. Advanced education to obtain knowledge and learn skills
related to these management functions enables students to take advantage of career opportunities both in library settings and other information settings, both in the profit and nonprofit sectors.

**ADMISSION**

Students apply to both the School of Library and Information Science and to the Graduate School of Management. Each program makes an independent admission decision. Admission is determined based upon undergraduate grade point average, strong performance on the Graduate Record Examination, three letters of reference, and an essay regarding the applicant’s career direction.

**PROGRAM REQUIREMENTS**

At 69-70 credit hours for the dual degree, students save 26-27 credit hours by not taking the two master’s degrees independently. There are 33-34 credit hours in business (normally 54 hours) and 25 hours in library and information science (normally 36 hours).

The M.L.I.S.-M.B.A. dual-degree curriculum includes 33 hours of M.B.A. coursework, 24 hours of library science courses, 6 hours of executive modules, and 12 hours from either business or library science.

**Master of Architecture/ Master of Business Administration**

Graduate students interested in advanced preparation in architecture and in business administration may apply for admission to the M.Arch. and M.B.A. dual-degree program, offered jointly by The School of Architecture and Environmental Design (SAED) and the Graduate School of Management (GSM). This program is designed for architects or undergraduate architectural students whose career goals include assuming middle or executive management positions in architectural practices, or who are interested in starting their own businesses.

**ADMISSION**

The program is available to those holding a preprofessional degree in architecture (B.S. or B.Arch.) with undergraduate coursework equivalent to the Kent State University Bachelor of Science degree (see the Kent State University Undergraduate Catalog or visit the SAED Web site). Conditional admission may be granted with specific additional coursework, including a Comprehensive Building Design and Technology Studio.

Applicants must also hold an undergraduate minimum GPA of 2.75 (A=4.0).

Students need to apply to both SAED and the Graduate School of Management (GSM) following the respective application guidelines.

For SAED, in addition to Kent State University regular application requirements, admission to the program is administered through the Graduate Studies Committee and requires:

1. Letters of reference (at least three, one of which is from a nonacademic source);
2. Statement of purpose;
3. Portfolio of design work, clearly indicating applicant’s role and group projects;
4. GRE scores.

Items (1), (2) and (3) should be mailed directly to the graduate secretary.

Each school will make an independent decision and the student will be notified in one letter of the decisions made in both programs.

**PROGRAM REQUIREMENTS**

Students in the M.Arch./M.B.A. dual-degree program must earn at least a total of 71 credit hours, 32 from the M.Arch. program and 39 from the M.B.A. program. As per Kent State University regulations, a minimum GPA of 3.0 must be maintained.

The required core courses are the following:

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<thead>
<tr>
<th>Core Courses</th>
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<tbody>
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<td>ARCH 55093</td>
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</table>

Actual offerings and schedule will vary from year to year and SAED and GSM will jointly provide a preapproved Recommended Courses of Study. Students who wish to take a different course of study need to obtain separate approvals from SAED and GSM graduate coordinators. Contact the SAED graduate secretary for details on coursework registration.
M.B.A. students who wish to study abroad may apply for the M.B.A. exchange program with Groupe Ecole Superieure Commerce de Rennes (Groupe ESC Rennes) in France. If students are able to spend a full year abroad, they may be able to satisfy the master's requirements at both institutions and thereby earn dual master's degrees.

Kent State M.B.A. students who are able to take and pass their final examinations in French will receive the M.B.A. from Rennes in addition to an M.B.A. from Kent State. If they instead take their examinations in English, they can receive the M.A. in International Business. Students who elect to spend a single semester at Ecole Superieure Commerce de Rennes will receive the certificate in International Business upon successful completion of requirements, along with the Kent State M.B.A.

Dual-Degree Cautionary Note
Students will be cautioned that those admitted to any dual-degree program must satisfy all program requirements as specified. Should a student decide to leave one of the programs and pursue a single degree, he or she will be informed that program requirements will then be the same as those normally needed for a single degree.

Doctor of Philosophy
Doctoral study in business administration prepares highly qualified candidates for positions of professional responsibility in university teaching, research, and administration or research careers in governmental and private agencies. The Ph.D. is a scholarly degree. Its purpose is to develop the intellectual potential of the student through emphasis on specific areas within the framework of the major business disciplines.

ADMISSION
Admission to the Ph.D. program is limited to persons who show outstanding potential for doctoral study and for later professional achievement. The Ph.D. program is designed for full-time study only. By definition, a full-time graduate student is one registered for 8 to 16 hours in any one semester, with 16 hours being the maximum number that may be carried per semester.

Applicants for admission to the Ph.D. program must meet the standards of the College of Business Administration. Among the factors considered for admission are the applicant’s previous academic record, scores on the Graduate Management Admission Test and professional experience and recommendations. Most students have earned master's degrees in business or related fields, and many have prior teaching and/or business experience. Applicants whose native language is not English must take the Test of English as a Foreign Language (TOEFL) and have an official test result submitted to Kent State University. The Test of Spoken English (TSE) for all international doctoral applicants from non-English-speaking countries is also required. All applicants are encouraged to visit the school to learn more about the program and meet the professors in their areas of interest.

Concentrations are available in the following areas:
- Accounting
- Finance
- Management Systems
- Marketing

In addition to the above areas, minor fields may also be chosen from the following areas:
- Applied Statistics
- Economics/Public Policy
- Information Systems
- International Business
- International Economics

PROGRAM REQUIREMENTS
The Ph.D. program consists of five phases: proficiency requirements, supportive coursework, concentration and minor coursework, comprehensive examinations and dissertation. The course requirements in the proficiency phase are roughly equivalent to an AACSB-accredited M.B.A. degree, and certain courses may be waived based upon completed graduate and undergraduate coursework.

The Ph.D. program calls upon the student to complete a minimum of six courses in quantitative analysis, economic theory and other analytical courses supportive of the student’s area of concentration; five courses in his or her major area; and a four-course minor.

After completion of the coursework, each student must pass comprehensive examinations in his or her major area. No universal language requirement for the Ph.D. degree in business administration is necessary.

Successful completion of the comprehensive examinations and approval of a dissertation topic shall constitute admission to candidacy for the Ph.D. degree. The final phase of the Ph.D. program is the preparation of the Ph.D. dissertation. Upon completion, the dissertation is defended before a committee of the graduate faculty.

Course Numbering System
Courses offered primarily for students in the Master of Business Administration, Master of Science in Accounting and Doctor of Philosophy programs have the Business Administration (B AD) prefix.

Graduate courses offered by the Department of Economics leading to the Master of Arts degree are listed under ECON.
Courses offered by the Department of Finance, leading to the M.S. in Financial Engineering, are listed under FIN. Business administration courses in the 50000 series are intended primarily for nonbusiness graduate students. Those B AD courses in the 60000 series are intended primarily for students in the M.B.A. and M.S. in Accounting programs. Courses numbered B AD 60000 are open to master's students who have completed less than 34 hours of graduate coursework. Courses numbered B AD 70000 are open to master's students with more than 34 hours of graduate coursework, to students who already possess a master's degree and to doctoral students. Courses numbered B AD 63021 through 63036 and 63039 through 63098 are offered for the Master of Science in Accounting program; these courses are open to M.B.A. students with permission. Courses numbered B AD 80000 are open to doctoral students only.

Graduate courses in other departments of the university may be taken by graduate students in business administration with the consent of the instructor and approval by the associate dean of the Graduate School of Management.

Occasionally, graduate students in nonbusiness programs are interested in taking coursework in the Graduate School of Management as electives. The school limits this to M.B.A. courses for which the student meets all prerequisites. Courses classified as executive module or integrative management are limited to students admitted to the Graduate School of Management.

### ACCOUNTING (B AD & ACCT)

**ACCT 53013**
ADVANCED MANAGEMENT ACCOUNTING (3)
Advanced techniques and issues in costing and accounting measurement for management planning, decision-making and control. Professional accounting research and teamwork skills emphasized. Prerequisite: ACCT 33010 and 33012.

**ACCT 53014**
ADVANCED ACCOUNTING SYSTEMS (3)
Readings and cases in the analysis, design and implementation of accounting information systems. Advanced spreadsheet and database applications.

**ACCT 53020**
CORPORATE ACCOUNTING III (3)
Business combinations; consolidated financial statements; specialized disclosures; foreign currency impacts; intercorporate investments. Verbal communication and working-in-teams skills are emphasized. Prerequisite: B AD 63016 and 63049 or equivalents.

**ACCT 53033**
INCOME TAXATION II (3)
Advanced federal income tax concepts for individuals and corporations, including property transactions, alternative minimum tax, international tax and passive losses. Prerequisite: B AD 63049 or equivalent.

**ACCT 53034**
NONPROFIT ACCOUNTING AUDITING (3)
Unique nonprofit, financial reporting, managerial accounting, and financial and operating audits for government and nonprofit entities. Professional accounting research and teamwork skills are emphasized. Prerequisite: ACCT 33012 or permission of the instructor.

**ACCT 53095**
SPECIAL TOPICS ACCOUNTING (1-3)
Special topics course that will be offered periodically with different topics and different faculty involved each time the course is offered.

**B AD 63004**
INTRODUCTION TO ACCOUNTING SYSTEMS (2)
Study of accounting information systems with emphasis on internal controls. Design and application of spreadsheets are integrated throughout the course. Microcomputer skills in accounting are emphasized.

**B AD 63010**
AUDITING THEORY AND CONTROL (2)
Integration of concepts and practical aspects of auditing. The importance of strong controls is stressed. Prerequisite: B AD 63012 and 63013 or equivalents.

**B AD 63012**
FINANCIAL ACCOUNTING THEORY AND PRACTICE I (3)
Accounting for sales, receivables, inventory, current liabilities and fixed assets. Written communication skills are emphasized. Prerequisite: B AD 63004 and 63019 or equivalents.

**B AD 63013**
COST ACCOUNTING (2)
Cost accounting for manufacturing and service organizations including cost determination, cost analysis and reporting costs for decision-making, planning and control. Microcomputer skills in accounting are emphasized. Prerequisite: B AD 63004 and 63019 or equivalents.

**B AD 63016**
FINANCIAL ACCOUNTING THEORY AND PRACTICE II (3)
Accounting for long-term liabilities, debt and equity investments, leases, pensions and other postretirement benefits, income tax allocation and owners' equity; statement of cash flows. Verbal communication skills in accounting emphasized. Prerequisite: B AD 63012 and 63013 or equivalents.
B AD 63019/73019
FUNDAMENTALS OF ACCOUNTING FOR MANAGERS (2)
Introduction to the fundamental tenets and processes of accounting systems for financial statements and managerial reports; manufacturing, costing, budgeting and use of valuation techniques; role of the accountant.

B AD 63022/73022
PROFESSIONAL ISSUES IN ACCOUNTING (3)
Issues in accounting for partnerships and other specialized entities; accounting services versus auditing engagements; specialized industries; fair value determinations; disclosure versus measurement; and other current issues. Prerequisite: B AD 63010 and 63016 or equivalent for 63022, and B AD 63010 and 63016 or permission of instructor for 73022.

B AD 63028/73028
NONPROFIT MANAGERIAL ACCOUNTING (3)
Course focuses on use of accounting information for managerial decision-making in nonprofit organizations, including government entities, school districts, universities, hospitals and other nonprofits (museums, zoos, orchestras, health and welfare, and charitable organizations). Prerequisite: B AD 63004 and 63019 or equivalents for 63028, and B AD 63004 and 63019 or permission of instructor for 73028.

B AD 63030/73030
INTERNATIONAL ACCOUNTING (3)
Study of reporting in United States capital markets for domestic and foreign firms; evaluation of differences in accounting, auditing and financial reporting between nations; impact of international operations on accounting for decision-making. Prerequisite: B AD 63010 and 63016 or equivalent for 63030, and B AD 63010 and 63016 or permission of instructor for 73030.

B AD 63031/73031
ADVANCED AUDITING THEORY AND PRACTICE (3)
Advanced conceptual and practical understanding of audit methodology, focusing on the role of the independent auditor and use of professional judgment in applying generally accepted auditing standards. Professional accounting research and teamwork. Prerequisite: B AD 63010 or equivalent for 63031, and B AD 63010 or permission of instructor for B AD 73031.

B AD 63032/73032
ACCOUNTING THEORY (3)
Survey of history of accounting and development of principles, followed by intensive study of theoretical problems related to determination of income and presentation of financial position. Prerequisite: B AD 63016 for 63032, and B AD 63016 or permission of instructor for 73032.

B AD 63037/73037
FINANCIAL ACCOUNTING—MANAGERIAL ACTION (3)
In-depth study of financial accounting concepts and basic financial statements. Examination of significant accounting issues affecting financial reporting and their impact on analysis and interpretation of financial information for decision-making. Prerequisite: B AD 6/73019.

B AD 63038/73038
ACCOUNTING FOR MANAGERIAL ACTION AND EVALUATION (3)
Review of cost accounting concepts and cost behavior. In-depth study of analyzing costs for pricing and product mix decisions; activity-based cost systems; budgeting; planning and control issues; methods of remaining competitive in a global environment; compensation issues. Prerequisite: B AD 6/73037.

B AD 63042
TAXATION OF CORPORATIONS AND SHAREHOLDERS (3)
An in-depth study of tax law that pertains to corporations and shareholders; corporate organizations; liquidation; reorganization; and subchapter S. Prerequisite: ACCT 43033 and B AD 63041.

B AD 63043
TAXATION OF PARTNERSHIPS AND PARTNERS (3)
An in-depth study of formation, operation, termination and liquidation and other special problems of partnerships. Prerequisite: ACCT 43033 and B AD 63041.

B AD 63044
FEDERAL ESTATE AND GIFT TAXATION (3)
Examines federal estate, trust and gift taxation code section; application of the code to cases involving estate planning will be an extensive portion of the course. Prerequisite: ACCT 33031, 43033 and B AD 6/73041.

B AD 63045
TAX PLANNING (3)
Tax planning; tax accounting practice; administrative procedure; research methodology and problems. Prerequisite: ACCT 33031.

B AD 63046
ADVANCED TAX ISSUES (3)
Advanced tax coverage of C and S corporations and partnerships. The Internal Revenue Code, Treasury Regulations and case law will be utilized in problem-solving. Verbal communicating and negotiating skills will be stressed. Prerequisite: B AD 63041.

B AD 63049
INCOME TAXATION (2)
In-depth exposure to selected topics in federal taxation. Topics will vary depending upon instructor and topic of current interest. Prerequisite: B AD 63004 and 63019 or equivalent.
Business Administration and Management

B AD 63092
INTERNSHIP (3)
Supervised practical experience with public accounting firm or industrial firm. Periodic reports required. S/U grading. Prerequisite: Enrollment in the M.S. in Accounting program; ACCT 33010 and 33012.

B AD 63093/73093
VARIABLE TITLE WORKSHOP IN ACCOUNTING (1-3)
To be determined when a specific course is proposed for a particular term. S/U grading. Prerequisite: To be determined when course is offered.

B AD 63098/73098
RESEARCH IN ACCOUNTING (1-3)
Individually selected topic is investigated and reported in formal paper. May extend beyond one semester. IP grade permissible. Prerequisite: Graduate or doctoral standing, major in accounting or equivalent.

B AD 72056
TIME SERIES ANALYSIS (3)
Covers various kinds of time series models, including ARIMA, GARCH, unit roots and cointegrations, and vector autoregressive models. Students will gain hands-on experience with all models learned in the course. Prerequisite: Permission.

B AD 83031
AUDITING ISSUES (3)
A seminar designed to provide doctoral students with the opportunity to broaden their understanding of financial and operational auditing theory and research. Prerequisite: ACCT 43010.

B AD 83033
MANAGERIAL ACCOUNTING ISSUES (3)
Library research and discussion will cover basic areas in cost/managerial accounting. Coverage will include a thorough understanding of the areas, the role of mathematical models, and emerging issues/problems. Emphasis will be placed on integrating the topical areas.

B AD 83037
FINANCIAL ACCOUNTING ISSUES (3)
Capstone theory course in which accounting conventions, principles and concepts of a currently controversial nature are explored and debated. Emerging issues in financial accounting, reporting and research are examined. Prerequisite: Doctoral standing.

B AD 83038
BASIC ACCOUNTING RESEARCH METHODOLOGY (3)
Examination of basic research methodology and how the methodology is applied in accounting research. Introduction to statistical packages and databases. Research paper required; IP permissible. Prerequisite: Doctoral standing.

B AD 83091
SEMINAR — SELECTED ACCOUNTING TOPICS (3-6)
Topics vary with each offering, usually from the following: auditing, taxation, fund accounting, accounting systems and accounting education issues. Repeat enrollment for different topics permitted. Prerequisite: Varies with topic; will be indicated in the Schedule of Classes each semester.

Management and Information Systems (B AD)

ECON 64004/B AD 74004
QUANTITATIVE METHODS IN BUSINESS ADMINISTRATION I (3)
Introduction to fundamentals of matrix algebra, differential calculus and linear programming. Both algebraic and transcendental functions are included in discussion.

B AD 64005/74005
STATISTICS FOR MANAGEMENT (3)
This course uses computer capabilities to use and understand a variety of statistical techniques and applies these techniques to business problems. Prerequisite: Admission to M.B.A. program.

B AD 64007/74007
INFORMATION TECHNOLOGY (3)
Overview of database and advanced information processing technologies and their integration. Emphasis is placed on the use of the application to the manufacturing and service industries. Prerequisite: Graduate or doctoral standing and permission of instructor.

B AD 64011/74011
SYSTEMS SIMULATION (3)
Techniques and applications of computer simulation of existing or proposed real-world systems. Use of simulation language, simulations studies, analysis of interpretation and of results. Prerequisite: Graduate or doctoral standing and permission of instructor.

B AD 64012/74012
SCHEDULING AND PLANNING (3)
An introduction to production planning and scheduling models used to solve real-world problems. Included are aggregate planning; nonlinear cost; production and workforce smoothing; adaptive, multistage models and pull systems (JIT, OPT). Prerequisite: B AD 6/74003.

B AD 64013/74013
NONPARAMETRIC STATISTICS (3)
This course is a presentation of statistically sound techniques for analysts who want to adopt nonparametric procedures to their specific analytic needs. Prerequisite: B AD 6/74005.
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<tr>
<th>Course Code</th>
<th>Title</th>
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<td>BAD 64015/74015</td>
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<td>LINEAR STATISTICAL MODELS AND APPLICATIONS (3)</td>
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<td>BAD 64045/74045</td>
<td>SYSTEM DEVELOPMENT METHODOLOGIES (3)</td>
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<tr>
<td>BAD 64046/74046</td>
<td>SEMINAR IN COMPUTER-SUPPORTED COLLABORATIVE WORK (3)</td>
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<tr>
<td>BAD 64047/74047</td>
<td>MANUFACTURING TECHNOLOGY AND STRATEGY (3)</td>
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<tr>
<td>BAD 64080/74080</td>
<td>EMERGING HARDWARE AND SOFTWARE TECHNOLOGIES (3)</td>
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DATA COMMUNICATIONS AND NETWORKING IN BUSINESS (3)
An introduction to telecommunications and computer networks. Topics include telecommunications technologies and services, communication standards and protocols, local area networks and network management. Prerequisite: Graduate or doctoral standing and permission of instructor.

DATABASE MANAGEMENT SYSTEMS (3)
In-depth investigation of intelligent database management systems in support of business decision-making. An understanding of relational databases is assumed. Object-oriented and semantic database will be explored. Prerequisite: Permission.

INFORMATION SECURITY: A MANAGERIAL PERSPECTIVE (3)
Introduction to the information security areas that managers must understand in order to deal with today's security threat-laden environment. The emphasis is on the important principles and concepts that managers utilize to develop effective security risk management programs. Prerequisite: Admission to the M.B.A. program or admission to the M.S. program in Information Architecture and Knowledge Management.

ADVANCED TOPICS IN HUMAN RESOURCES MANAGEMENT AND ORGANIZATIONAL BEHAVIOR (3)
Intensive investigation of selected topics in human resources management and/or organizational behavior. Students will be expected to undertake a research project on a topic jointly determined by the student and the instructor. Prerequisite: Graduate or doctoral standing and permission of instructor.

LEADERSHIP AND MANAGERIAL ASSESSMENT (3)
Develop understanding and skills in self-management and team leadership using assessment instruments, role playing and organizational incidents. IP permissible.

LEADERSHIP AND ORGANIZATIONAL CHANGE (3)
Develop understanding of the theories and techniques needed for the successful management of significant organizational change with emphasis on discussion, exercises and case studies.

HIGH PERFORMANCE ORGANIZATIONS (3)
Considers the traits of organizational leaders and the processes they use to implement changes in organizations.

INTERNATIONAL BUSINESS (3)
Study of the business firm in a global context. Application of theory and practice of American business administration to international operations of firms. Prerequisite: B AD 6/75051 and 66061.

BUSINESS STRATEGY (3)
Integrative approach to the study of policy formulation and implementation. Formalized planning systems reviewed; case analysis of actual business situations helps student further develop analytical and communication skills. Prerequisite: Completion of M.B.A. core.

STRATEGIC DECISION-MAKING AND HUMAN RESOURCE MANAGEMENT (3)
Provides a graduate-level introduction to the fundamental concepts of HRM/OB and strategic decision-making. Prerequisite: Graduate or doctoral standing and permission of instructor.

EMPLOYEE SELECTION AND APPRAISAL (3)
This course will focus primarily on issues associated with the person-job-matching process in modern organizations related to the selection and appraisal of employees. Prerequisite: B AD 64271.

ORGANIZATIONAL ANALYSIS (3)
Theoretical basis and research findings are discussed, permitting the student to analyze and understand complex work organizations. Data provided prepares the student to analyze, design and solve organizational problems within the work environment. Prerequisite: Foundation courses.

HUMAN RESOURCES MANAGEMENT (3)
Explores the management of a firm's human resources from practical and theoretical perspectives of managing people at work. Prerequisite: Admission to M.B.A. program.

STRATEGIC GLOBAL MANAGEMENT (3)
Strategic global management explores microlevel concepts and strategic managerial alternatives within the context of current global business operations in the political, economic and cultural environment facing today's manager. Prerequisite: Completion of M.B.A. core.

MICRO-ORGANIZATIONAL ANALYSIS: INDIVIDUAL BEHAVIOR (3)
An examination of theory and research on individual behavior in organizations. Special attention is given to theories of motivation, job satisfaction, goal setting, task design and feedback systems.
B AD 64285/74285
MANAGING HIGH TECHNOLOGY (3)
This course will cover tools and processes for anticipating and implementing high technologies to assure maximum return on investment for long-term competitive advantage. Prerequisite: B AD 6/74007 and 6/74049.

B AD 74262
COMPETITIVE STRATEGIC ANALYSIS (3)
Develops an understanding of the critical factors involved in formulating industry-analytic, competitive strategy and evaluating its effectiveness. Prerequisite: Graduate or doctoral standing and permission of instructor.

B AD 84007
INFORMATION TECHNOLOGY (3)
Overview of information technologies and their management. Emphasis is placed on current issues in each of the IS technology types and business issues on their acquisition, management and value. Prerequisite: Doctoral standing.

B AD 84012
SCHEDULING AND PLANNING (3)
An introduction to production planning and scheduling models used to solve real-world problems. Included are aggregate planning, nonlinear cost, production and workforce smoothing, adaptive, multistage models and pull systems (JIT, OPT). Prerequisite: Doctoral standing.

B AD 84015
STOCHASTIC MODELS (3)
Mathematical modeling of systems involving one or more random variables: basic probability theory, Poisson process, Markov chain and Markov process, with applications to production, inventory, reliability and queuing systems. Prerequisite: Doctoral standing and permission.

B AD 84020
ADVANCED STATISTICAL MODELS (3)
This is a special-focus course for which the topics will vary. It will generally include sampling techniques, experimental designs, other advanced statistical models, internal, external validity and reliability issues, and time series analysis. Prerequisite: Doctoral standing.

B AD 84031
QUALITY AND RELIABILITY SYSTEMS (3)

B AD 84045
SYSTEM DEVELOPMENT METHODOLOGIES (3)
Critical comparative analysis of various technological and organizational methods for design, construction and maintenance of information systems. Survey of contemporary technologies and extrapolation to possible futures. Prerequisite: Doctoral standing.

B AD 84047
MANUFACTURING TECHNOLOGY AND STRATEGY (3)
This course provides the student with an introduction to modern techniques in manufacturing and the necessary strategic concepts to implement them. A similar discussion of service industries is also included. Prerequisite: Doctoral standing and permission.

B AD 84080
EMERGING HARDWARE AND SOFTWARE TECHNOLOGIES (3)
Investigation of selected emerging hardware and software technologies such as parallel processing systems, computer languages and operations systems, artificial intelligence, neural networks and chaos theory. Prerequisite: Doctoral standing.

B AD 84081
DATA COMMUNICATIONS AND NETWORKING IN BUSINESS (3)
An introduction to telecommunications networks, services and regulations. Topics include transmission media, communications standards and protocols, local and wide area networks, and network management and security. Prerequisite: Doctoral standing.

B AD 84082
DATABASE MANAGEMENT SYSTEMS (3)
In-depth investigation of intelligent database management systems in support of business decision-making. An understanding of relational databases is assumed. Object-orientation and other advanced database concepts will be explored. Prerequisite: Doctoral standing.

B AD 84083
INFORMATION INFRASTRUCTURE SECURITY (3)
A course in infrastructure security. In-depth examination of current issues in this field including network vulnerability, privacy and legal issues and government agencies. Pre- or corequisite: B AD 84112.

B AD 84108
ADVANCED TOPICS IN HUMAN RESOURCE MANAGEMENT AND ORGANIZATIONAL BEHAVIOR (3)
Intensive investigation of selected topics in human resources management and/or organizational behavior. Students will be expected to undertake a research project on a topic jointly determined by the student and the instructor. Prerequisite: Doctoral standing.
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Economics (ECON)

ECON 52040
INTRODUCTION TO ECONOMETRICS (3)
Application of economic models, probability distributions, estimation, estimators, and regression and correlation as tools in economic analysis.

ECON 52045
MATHEMATICAL ECONOMICS (3)
Systematic exposition of mathematical techniques and their application to economic analysis. Among topics that may be covered are: sets, relations/functions, matrix algebra, differential and integral calculus and optimization techniques.

ECON 52065
PROBLEMS OF MONETARY AND FISCAL POLICY (3)
Analysis of objectives, techniques and economic effects of monetary and fiscal policies.

ECON 52068
INDUSTRIAL ORGANIZATION AND PUBLIC POLICY (3)
Theoretical, empirical and critical examination of structure, operation and performance of industrial markets in American economy.

ECON 52073
COMPARATIVE ECONOMIC SYSTEMS (3)
Comparisons of economic systems and their theories: West Europe, East Europe and Russia, other continents, and United States. Critique of Marxian theory and Russian communism.

ECON 52076
ECONOMIC DEVELOPMENT (3)
Analysis of nature and significance of barriers to and future potential for economic development of a nation. Special emphasis on theories and strategic factors pertaining to economic growth.
ECON 52078
ECONOMIC HISTORY OF TECHNOLOGICAL AND INDUSTRIAL DEVELOPMENT (3)
Historical survey of major economic and technological developments in Western countries from the Middle Ages to the 20th century.

ECON 52080
REGIONAL ECONOMICS (3)
Examines techniques of regional economic analysis to promote understanding of interregional disparities in developed nations and suggests policy alternatives for alleviating problems arising from disparities.

ECON 52081
URBAN ECONOMICS (3)
Application of economic principles to urban spatial patterns, economic development, and public policy in housing, transportation, pollution, welfare, etc.

ECON 52083
HISTORY OF ECONOMIC THOUGHT (3)
Economic thought from Mercantilist Period to early 20th century, especially emphasizing theories of Classical school, Marginalists, Marx and Neoclassicists.

ECON 52086
ECONOMICS HEALTH CARE (3)
Overall objective is to use economic analysis to understand and evaluate what has and is happening to the health care profession and current health care policies under consideration. Topics include issues such as Medicare, health care reform, HMOs and increasing costs in health care. Prerequisite: ECON 62022 or equivalent or permission.

ECON 52087
LAW AND ECONOMICS (3)
A study of the economic foundations of the legal system and the impact of legal systems on market behavior. Prerequisite: Permission.

ECON 52291
VARIABLE CONTENT SEMINAR IN ECONOMICS (1-4)
Various special seminars will be announced in the Schedule of Classes under this course number. Repeatable for a total of 12 hours. Prerequisite: Permission.

ECON 52293
VARIABLE TOPIC WORKSHOP IN ECONOMICS (1-6)
Various special workshops will be announced in the Schedule of Classes under this course number. Repeatable for a total of 18 hours. S/U grading. Prerequisite: Permission.

ECON 52295
SPECIAL TOPICS IN ECONOMICS (3)
Various special topics will be announced in the Schedule of Classes under this course number. Repeatable for a total of 9 hours. Prerequisite: Permission.

ECON 52297
VARIABLE TOPIC COLLOQUIUM IN ECONOMICS (1-3)
Various special colloquia will be announced in the Schedule of Classes under this number. Repeatable for a total of 9 hours. Prerequisite: Permission.

ECON 62010/B AD 72010
SURVEY OF ECONOMICS (3)
Survey of basic economic concepts and methods of analysis of both micro- and macroeconomics. Emphasis is placed on the use and relevance of economic concepts and tools in business decision-making.

ECON 62015
ECONOMICS OF INFORMATION (3)
Introduction to microeconomic theory and decision-making and its applications to the information economy. Overview of the economics of information. Consumer behavior and production theory; the demand for information; information as a factor of production; information cost and pricing. Case studies in the information industry.

ECON 62021/B AD 72021
BUSINESS CONDITIONS ANALYSIS AND PUBLIC POLICY (3)
Analysis of forces determining economic growth, employment, inflation and international competitiveness, with emphasis on understanding the business cycle and government stabilization policies. Prerequisite: B AD 64005 (may be taken concurrently).

ECON 62022/B AD 72022
MANAGERIAL ECONOMICS (3)
Uses economic theory and quantitative methodologies to develop decision-making skills that enable managers of local, national and multinational companies to evaluate problems and allocate resources efficiently. Prerequisite: B AD 64005; M.B.A. proficiency in calculus.

ECON 62050/B AD 72050
MICROECONOMIC THEORY I (3)
Comprehensive analysis of methodology of economics, consumer behavior, production and costs, the firm, markets and welfare economics. Prerequisite: ECON 62022 or equivalent. (It would be useful if the student had some facility in integral and differential calculus.)
ECON 62051/B AD 72051
MACROECONOMIC THEORY I (3)
Analysis of the determination of the level of income, employment, inflation, economic growth, consumption, investment, money demand and supply, the international sector, and economic policy are discussed. Prerequisite: ECON 62021 or equivalent; ECON 62022 or equivalent.

ECON 62052/B AD 72052
MICROECONOMIC THEORY II (3)
Selected topics in microeconomic theory. Prerequisite: ECON 62050.

ECON 62053/B AD 72053
MACROECONOMIC THEORY II (3)
Selected topics in macroeconomic theory. Prerequisite: ECON 62050 and 62051.

ECON 62054/B AD 72054
ECONOMETRICS I (3)
Introduction to problems and methods of the empirical estimation of economic relationships.

ECON 62055/B AD 72055
ECONOMETRICS II (3)
Covers generalized linear regression, mixed estimation, simultaneous equation systems, their identification and estimation by single equation and systems estimation. Prerequisite: ECON 62054.

ECON 62056
TIME SERIES ANALYSIS (3)
Covers various kinds of time series models, including ARIMA, GARCH, unit roots and cointegration and vector autoregressive models. Students will gain hands-on experience with all models learned in the course. Prerequisite: Permission.

ECON 62061/B AD 72061
MONETARY THEORY AND POLICY (3)
A study of the nature and definition of money, its relationship to prices, output, employment and interest rates, and problems related to the conduct of monetary policy. Prerequisite: ECON 62021 or equivalent.

ECON 62071/B AD 72071
LABOR ECONOMICS (3)
Theoretical and applied analyses of wage determination, the supply of skills, labor market discrimination, and the effects of trade unions and government policies. Prerequisite: ECON 62022 or equivalent.

ECON 62075/B AD 72075
INTERNATIONAL TRADE (3)
Study of modern international trade theory and policy, including free trade areas, international trade organizations, current issues in international trade, and the effect of international trade on domestic policy. Prerequisite: ECON 62021 or equivalent; and ECON 62022 or equivalent.

ECON 62076/B AD 72076
INTERNATIONAL FINANCE (3)
Study of the international monetary relations between nations, including the determination of exchange rates, managed exchange rate policies, balance of payments crises, optimum currency areas and international capital flows. Prerequisite: ECON 62021 or equivalent.

ECON 62077/B AD 72077
ECONOMIC PROBLEMS OF DEVELOPING AREAS (3)
In-depth analysis of selected topics and issues in development economics. Prerequisite: ECON 52076 or permission.

ECON 62078/B AD 72078
SEMINAR IN INTERNATIONAL ECONOMICS (3)
Analysis of recent contributions and current problems in international trade and finance. Prerequisite: ECON 62075 and 62076 or permission.

ECON 62092
INTERNSHIP IN ECONOMICS (3-6)
Supervised practical experience in economics. Eligibility requirements available from the internship coordinator. S/U grading. Prerequisite: Admission to the M.A. in Economics program and permission.

ECON 62096
INDEPENDENT STUDY (1-3)
Independent study on a particular project or sequence of subjects. Maximum of 6 semester hours of work may be earned in independent study, although no more than 3 hours in any one semester. IP permissible. Prerequisite: 12 hours of superior quality work, with permission of the chair of the Department of Economics.

ECON 62098
RESEARCH (1-15)
Research for master's students. May apply toward degree requirements if approved in advance by department. Repeat registration permitted.

ECON 62180/B AD 72180
REGIONAL ECONOMICS (3)
Examines techniques of regional economic analysis with the object of promoting understanding of interregional disparities in developed nations and policies for alleviating problems arising from disparities.

ECON 62182/B AD 72182
PUBLIC EXPENDITURE AND COST BENEFIT ANALYSIS (3)
Theoretical and applied aspects of public expenditure and cost benefit analysis. Uses economic theory to appraise public expenditure alternatives in advanced and developing countries. Prerequisite: ECON 62022 or equivalent.
### Business Administration and Management

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 62184/B AD 72184</td>
<td>PUBLIC FINANCE (3)</td>
<td>Analysis of market failure including the theory of public goods and externalities. An examination of the incidence and output effects of various taxes.</td>
</tr>
<tr>
<td>ECON 62199</td>
<td>THESIS I (2-6)</td>
<td>Thesis students must register for total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible. Prerequisite: Permission of adviser.</td>
</tr>
<tr>
<td>ECON 62299</td>
<td>THESIS II (2-6)</td>
<td>Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: ECON 62199.</td>
</tr>
<tr>
<td>ECON 64004/B AD 74004</td>
<td>QUANTITATIVE METHODS IN BUSINESS ADMINISTRATION I (3)</td>
<td>Introduction to fundamentals of matrix algebra, differential calculus and linear programming. Both algebraic and transcendental functions are included in discussion.</td>
</tr>
<tr>
<td>B AD 82024</td>
<td>SEMINAR IN APPLIED ECONOMIC ANALYSIS (3)</td>
<td>Discussion and analysis of selected current economic problems confronting the economy and the business sector. Emphasis will be on applied analysis.</td>
</tr>
</tbody>
</table>

#### Executive M.B.A. Program (B AD)

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Description</th>
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</thead>
<tbody>
<tr>
<td>B AD 67007/77007</td>
<td>COMPUTER SYSTEMS — EMBA (2)</td>
<td>An introduction to the use of computers in business decision-making. Prerequisite: EMBA admission.</td>
</tr>
<tr>
<td>B AD 67010/77010</td>
<td>EXECUTIVE COMMUNICATIONS — EMBA (2)</td>
<td>Analysis and practice of written, verbal and nonverbal communication skills as they apply to managerial and workgroup productivity and quality of work life.</td>
</tr>
<tr>
<td>ECON 67021/B AD 77021</td>
<td>BUSINESS CONDITIONS ANALYSIS AND FORECASTING — EMBA (2)</td>
<td>Presentation and analysis of the factors that determine real Gross National Product, employment and unemployment, and inflation, with emphasis on application and forecasting.</td>
</tr>
<tr>
<td>ECON 67022/B AD 77022</td>
<td>MANAGERIAL ECONOMICS — EMBA (2)</td>
<td>Analysis of managerial decision-making within the economic environment with emphasis on the firm’s economic decisions under different market and business conditions.</td>
</tr>
<tr>
<td>B AD 67031/77031</td>
<td>FINANCIAL REPORTING FOR EXECUTIVES — EMBA (2)</td>
<td>Study of basic principles, concepts and financial reporting for external users and the impact this will have on executive decisions.</td>
</tr>
<tr>
<td>B AD 67032/77032</td>
<td>ACCOUNTING INFORMATION FOR EXECUTIVE ACTION — EMBA (2)</td>
<td>Study of managerial decision-making through planning and control techniques. Major emphasis will be on profit planning, responsibility accounting, cost behavior patterns, and application of accounting data to basic planning and control decisions.</td>
</tr>
<tr>
<td>B AD 67040/77040</td>
<td>OPERATIONS MANAGEMENT — EMBA (2)</td>
<td>This course is designed for executives who have minimal experience with the production or operations phase of business. In this course, they will develop skill in defining operating problems, in identifying alternative solutions and selecting the most viable solution.</td>
</tr>
<tr>
<td>B AD 67041/77041</td>
<td>APPLIED STATISTICAL ANALYSIS — EMBA (2)</td>
<td>An analysis of univariate and multivariate statistical models and the use of these models to solve practical problems. A comparison of classical and neoclassical statistical approaches is also conducted.</td>
</tr>
<tr>
<td>B AD 67042/77042</td>
<td>MANAGEMENT INFORMATION SYSTEMS — EMBA (2)</td>
<td>Synthesis of computer/information technology organization behavior and functional aspects of business to enhance decision-making and strategic planning skills of the manager.</td>
</tr>
<tr>
<td>B AD 67043/77043</td>
<td>DYNAMICS OF LEADERSHIP FOR EXECUTIVES — EMBA (2)</td>
<td>Leadership skills including: team development, conflict resolution, negotiation, communications and project development. These skills along with ethical considerations are developed to enhance business decision-making. Prerequisite: Graduate standing for 67043, doctoral standing for 77043.</td>
</tr>
<tr>
<td>B AD 67051/77051</td>
<td>MARKETING MANAGEMENT — EMBA (2)</td>
<td>The various elements comprising marketing strategy are studied as components of integrated programs directed toward industrial and consumer markets.</td>
</tr>
<tr>
<td>B AD 67058/77058</td>
<td>MARKETING STRATEGY AND PLANNING — EMBA (2)</td>
<td>Focuses on integration of marketing planning into the strategic planning process. Deals mostly with marketing strategy at the level of senior management rather than operations.</td>
</tr>
</tbody>
</table>
B AD 67061/77061
FINANCIAL PLANNING AND STRATEGY — EMBA (2)
Problems and approaches to financial decision-making in business enterprises: controlling the allocation of funds among both current and fixed assets, assessing financial needs, and planning the mix and methods of financing.

B AD 67062/77062
MONEY AND CAPITAL MARKETS — EMBA (2)
Analysis and evaluation of the structure, functions and characteristics of domestic and international money and capital markets as the financing mechanism for business and nonbusiness systems.

B AD 67070/77070
ORGANIZATIONAL ANALYSIS AND DESIGN — EMBA (2)
The course is concerned with the development of both theoretical and practical concepts related to complex work organizations.

B AD 67071/77071
HUMAN RESOURCE MANAGEMENT — EMBA (2)
The course will deal with some of the major areas of interest to the management of human resources. Special emphasis will be placed on areas of staff planning, such as job analysis and selection.

B AD 67082/77082
LEGAL AND SOCIAL IMPACT ON MANAGERIAL DECISION-MAKING — EMBA (2)
Managerial decision-making is examined in terms of the real and potential impacts of the legal, political and social environment of business.

B AD 67084/77084
MULTINATIONAL BUSINESS MANAGEMENT — EMBA (2)
The course covers the management of multinational corporations, including environmental and cultural aspects and the financial, marketing, production and personnel functions of international operations. (Elective)

B AD 67085/77085
EXECUTIVE POLICIES AND PLANNING — EMBA (2)
The course concentrates on the determination of corporate strategy in the business firm and its implementation through appropriate organizational arrangements and procedures.

B AD 67090/77090
APPLIED RESEARCH DESIGN — EMBA (1)
Introduction to research design in management. The course deals with the applications of the scientific method to solving organizational problems with a decision-making context.

B AD 67091/77091
SEMINAR IN EXECUTIVE SKILLS DEVELOPMENT — EMBA (1-2)
A series of seminars developing managerial skills such as communications, leadership, teamwork, project and time management, etc. Offered primarily in first year of program.

B AD 67096/77096
APPLIED RESEARCH PROJECT — EMBA (3)
A research project based on an applied business or economic problem will be conducted under the direct supervision of a participating faculty member in the EMBA program.

B AD 67191/77191
SEMINAR IN CURRENT ISSUES FOR EXECUTIVE DEVELOPMENT — EMBA (1-2)
A series of seminars on current managerial, technological or economic problems facing the executive in today's society. Emphasis on global issues.

B AD 67291/77291
EMBA RESIDENCY SEMINAR (1-2)
A two- to-three-day intensive introduction to basic concepts and integration of EMBA program content. Emphasis on group analysis and/or simulation.

## Finance (B AD & FIN)

B AD 66040/76040
FINANCIAL CONCEPTS (3)
An in-depth study of the principles and processes for making financial decisions in the firm. The investment, financing, dividend and working capital management decisions are structured from the standpoint of their impact on firm value. Detailed treatment is also devoted to advanced financial analysis as well as integrative financial planning and strategy. Prerequisite: ECON 6/72010 and B AD 6/73037.

B AD 66050
THE LEGAL AND ETHICAL ENVIRONMENT OF MANAGEMENT DECISIONS (3)
This course examines the impact that various laws and regulations as well as ethical considerations in society exert on the business managerial decision-making process.

B AD 66061/76061
FINANCIAL MANAGEMENT I (3)
Study of financial decision-making processes within a firm. Emphasis on applications and strategic planning in investment, financing, dividend and working capital decisions. Prerequisite: B AD 63037 and 63038; ECON 62021.

B AD 66062/76062
FINANCIAL MANAGEMENT II (3)
Advanced treatment of financial topics with focus on current issues of strategic importance. Case and project intensive. Prerequisite: B AD 6/76061.
B AD 66063/76063
FINANCIAL MARKETS AND INSTITUTIONS (3)
Study of money and capital markets and institutions and their managerial and environmental problems, including regulation and supervision by government. Prerequisite: B AD 6/76061.

B AD 66064/76064
INTERNATIONAL FINANCIAL MANAGEMENT (3)
Problems facing financial management of multinational firms including environmental problems, organizing for optimal results, sources and uses of funds, accounting, tax and control problems. Prerequisite: B AD 6/76061.

B AD 66065/76065
COMMERCIAL BANK MANAGEMENT (3)
Application of financial concepts to management of commercial banks. Emphasizes decision-making and problem-solving techniques. Prerequisite: B AD 6/76063.

B AD 66066/76066
ADVANCED SECURITY AND INVESTMENT THEORY (3)
Integrated investment analysis with portfolio analysis and management. Coverage of the leading portfolio and capital asset models. Prerequisite: B AD 66061.

B AD 66067
RISK MANAGEMENT AND DERIVATIVES (3)
Theory and practice of financial valuation, computation and analysis. Valuation of derivative financial instruments, diffusion models, systematic risk analysis, and optimal multicity, multi-asset attribution analysis for global portfolio management. Prerequisite: B AD 66061.

B AD 66069/76069
REAL ESTATE (3)
A study of real estate valuation, financing, investment and brokerage. Emphasis is in both theoretical and pragmatic terms with regard to land use and development.

FIN 66075
LEGAL ASPECTS OF FINANCIAL ENGINEERING (3)
Coverage of the legal, regulatory and compliance aspects of derivative use and the current legal standing of derivatives and regulatory issues associated with derivatives. Issues of risk measurements and risk transparency of derivatives markets and disclosure issues are covered. Prerequisite: FIN 66080.

FIN 66080
DERIVATIVES I (3)

FIN 66081/76081
DERIVATIVES II (3)
Coverage of exotic options, discrete and continuous pricing models and pricing techniques. Develops the economic foundations of the theory of derivatives and a mathematical tool kit to analyze standard instruments and “dissect” exotic ones. Prerequisite: FIN 66080, B AD 66061.

FIN 66084/76084
FINANCIAL ENGINEERING (3)
Coverage of VaR, hedging techniques, synthetic assets and volatility trading. Risk management and risk control models are covered. Surveys, standard approaches to measuring and modeling financial risk from the risk manager perspective. Prerequisite: FIN 66080, B AD 66061.

FIN 66085/76085
FIXED INCOME MARKETS (3)
Provides a quantitative approach to fixed income instrument use. Covers the mathematics of bond pricing, term structure analysis and pricing of credit risk. Trees and Monte Carlo methods of evaluation are presented. Prerequisite: FIN 66080, B AD 66061.

B AD 86061
THEORIES OF FINANCIAL DECISION-MAKING (3)
Object is to discuss how individuals and firms allocate resources through time. Basic emphasis on optimal investment decisions under conditions of certainty and uncertainty.

B AD 86062
THEORY OF CORPORATE FINANCE (3)
A study of the theory and empirical evidence from a global perspective regarding corporate financial management. IP permissible.

B AD 86064
INTERNATIONAL FINANCIAL MARKETS, INSTITUTIONS AND MANAGEMENT (3)
This course presents an intense examination of the major global issues and underlying theories concerning the financial management of international business firms and the financial markets and institutions that facilitate such operations. Reading assignments will consist of the leading journal articles in this area. IP permissible.

B AD 86066
INVESTMENT THEORY (3)
A study of the theory and empirical evidence from a global perspective regarding investment analysis, valuation and portfolio selection. IP permissible.

B AD 86097
SEMINAR IN FINANCE (3)
An examination of selected current developments in the literature of finance.
B AD 86098
RESEARCH IN FINANCE (3)
Research area of current interest. This structured course is
designed to enable the doctoral candidate to complete an ac-
tceptable dissertation proposal in the field of finance.

Marketing (B AD)

B AD 65050/75050
MODERN ENTREPRENEURIAL MANAGEMENT (3)
Analysis and application of the key elements of both entrepre-
nreuship (new business starts) and entrepreneurship in exist-
ing companies. Prerequisite: Completion of M.B.A. core.

B AD 65053/75053
PROMOTION MANAGEMENT (3)
All elements of the promotional mix — advertising, sales,
promotion, publicity, public relations and personal selling —
will be considered as part of an integrated communications
strategy. Primary emphasis will be placed on advertising. A
comprehensive set of analytical frameworks will be developed
covering a range of topics from the firm's marketing strategy
to the message strategy embodied in a single advertisement.
These analytic frameworks will be applied to a series of case
studies throughout the course. Prerequisite: B AD 65051.

B AD 65054/75054
INTERNATIONAL MARKETING
This course focuses on the types of marketing decisions facing
the international marketing manager or vice president in the
multinational firm. Prerequisite: B AD 65051 and 65184.

B AD 65057/75057
MARKETING RESEARCH (3)
Examination of the research process as applied to decision-
making. Course focuses on steps in problem formulation, the
research process, application of techniques, and basic data
analysis using SPSS-PC. Prerequisite: B AD 65051.

B AD 65060/75060
MARKETING STRATEGY AND PLANNING (3)
Focuses on integration of marketing planning into the strate-
gic planning process. Deals mostly with marketing strategy
at the level of senior management rather than operations.
Prerequisite: B AD 65051.

B AD 65063/75063
ANALYTICAL METHODS IN MARKETING RESEARCH (3)
Application of statistical techniques in marketing research. Prerequisite: B AD 6/74003 and 6/75051.

B AD 65064/75064
BUYER BEHAVIOR (3)
An analysis of the concepts of buyer/consumer behavior, focusing
on the behavioral sciences theories underlying marketing
models and their application to marketing strategies. Prerequi-
site: B AD 6/75051.

B AD 65066/75066
MARKETING THEORY (3)
Examination of the evolution of marketing thought and phi-
osophy of science concepts as the foundations for evaluating
theoretical constructs in marketing. Prerequisite: 6/75051.

B AD 65068/75068
MARKETING STRATEGY AND PLANNING FOR NONPROFIT
ORGANIZATIONS (3)
Focuses on the development and implementation of market-
ing plans in the private and public nonprofit organizations.
Prerequisite: B AD 6/75051.

B AD 85057
MARKETING RESEARCH (3)
Focuses on the construction of a conceptual framework; the
design of an experiment/sampling plan; data collection meth-
ods and the application of statistical techniques. IP permis-
sible.

B AD 85063
ANALYTICAL METHODS IN MARKETING RESEARCH (3)
Application of multivariate statistical techniques in marketing
research. IP permissible.

B AD 85064
BUYER BEHAVIOR (3)
An analysis of extant and emerging theories, models and con-
cepts of buyer/consumer behavior and their development and
testing. IP permissible.

B AD 85066
MARKETING THEORY (3)
The central objective of the course is to develop the doctoral
student's background in marketing theory, theory construction
and the creation of marketing knowledge. IP permissible.

B AD 85091
ADVANCED INTERNATIONAL MARKETING SEMINAR (3)
This course covers the theoretical research development of the
field of international marketing. IP permissible.

B AD 85097
SEMINAR IN MARKETING (3)
Investigation of selected topics in marketing.

B AD 85098
RESEARCH IN MARKETING (3)
Designed to assist students in developing dissertation topics
or to provide an opportunity to study material or topics not
covered elsewhere in the program.
Advanced Independent Coursework (B AD)

B AD 60092/70092
INTERNSHIP (3)
Practical experience with a commercial or nonprofit organization under the guidance of a professor who is a member of the graduate faculty. Periodic progress reports are required with a graduate-level-quality paper and possible presentation at the end of the course. Prerequisite: 30 hours of M.B.A. program, internship form, no previous internship.

B AD 60093/70093
VARIABLE TITLE WORKSHOP (1-6)
Workshops on selected business administration subjects designed to meet needs of special groups. S/U grading.

B AD 60095
SPECIAL TOPICS IN BUSINESS ADMINISTRATION (1-3)
In-depth exposure to selected topics in business administration. Topics will vary depending on instructor and topic of current interest. Repeat enrollment for different topics permitted.

B AD 60096
INDIVIDUAL INVESTIGATION (2-3)
For M.B.A., M.S. or M.A. candidates who have completed a minimum 12 hours of work of superior quality, with permission of the director, Graduate School of Management. Prerequisite: 12 hours of graduate study and permission.

B AD 60098
RESEARCH (1-15)
Research or individual investigation for master's-level graduate students. Credits earned may be applied toward meeting degree requirements if the department approves.

B AD 60199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

B AD 60299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: B AD 60199.

B AD 61094/71094
COLLEGE TEACHING (1-2)

B AD 68050/78050
FIELD STUDY (3)
Analysis and solution of a corporate institutional problem. A group of students will work together under the supervision of a professor. Prerequisite: Completion of the first year of M.B.A.

B AD 70198
RESEARCH (1-15)
Research or individual investigation for doctoral-level students, or master's students with at least 34 hours of graduate coursework.

B AD 80091
DOCTORAL SEMINAR (1)
A continuing seminar for all students in the Ph.D. program that cuts across all areas of functional specialization. Prerequisite: Admission to Ph.D. program.

B AD 80098
RESEARCH (1-3)
Research or individual investigation for doctoral students who have not yet passed their candidacy examination. Usually research applied toward dissertation. Prerequisite: Ph.D. standing, permission.

B AD 80199
DISSERTATION I (10-15)
Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible. Prerequisite: Admission to candidacy for doctoral program.

B AD 80299
DISSERTATION II (1 OR 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: B AD 80199.
The College of Communication and Information consists of four schools whose missions share complementary concerns and emphasize different aspects of communication and information theory, research, use and practice. They all focus on scholarly investigations regarding the elements and means of creating, managing, using and evaluating messages, and on information components and processes that underpin communication interaction.

The college includes graduate programs in each of the four schools as well as housing the interdisciplinary graduate program in Information Architecture and Knowledge Management.

**Master’s Degree Programs**

Master’s degree programs are available in each of the following disciplines:

- Communication Studies (M.A.);
- Information Architecture and Knowledge Management (M.S.);
- Journalism and Mass Communication (M.A.);
- Library and Information Science (M.L.I.S.);

**Doctor of Philosophy**

The Doctor of Philosophy Degree is offered in:

- Communication Studies.

Information regarding individual graduate programs is provided on the following pages. Prospective students may obtain more information by visiting http://www.kent.edu/cci or by contacting the individual schools.

Application for admission is made to the College of Communication and Information. General admission requirements are listed earlier in this catalog. There also may be additional requirements for certain programs; please consult individual school sections in this catalog.

Persons seeking information on graduate nondegree status or graduate certificate programs should consult the Division of Research and Graduate Studies, Office of Graduate Program Services, 330-672-2661.
The School of Communication Studies offers programs of graduate study leading to the Master of Arts and Doctor of Philosophy degrees. The M.A. degree program is intended to provide a broad spectrum of knowledge about human communication. It is intended for those who wish to continue graduate study in communication beyond the master's level, to teach at the secondary, community college or small-college level, to continue preparation for professional careers, or to prepare for nonacademic careers in which a broad understanding of communication theory and research is desirable. The Ph.D. degree is designed to prepare the recipient for a lifetime of teaching and research as a college or university professor, scholar and communication specialist. The degree requires both comprehensive knowledge and methodological skills needed for generating and applying knowledge about human communication.

The graduate programs focus on the social and behavioral study of communication theory and research. Students may pursue work in health, instructional, intercultural, interpersonal, mediated, new technologies, organizational, mass and public communication.

For more information, visit the school's Web site at http://www.kent.edu/comm.
International students must also achieve a minimum score of 600 on the TOEFL examination. Applicants for the Ph.D. program are normally expected to have completed a thesis in their master’s program.

PROGRAM REQUIREMENTS
A typical Ph.D. program contains 45 semester hours of graduate credit beyond the master’s degree. Core courses include COMM 75000 for those who have not completed a master’s thesis, COMM 75020, 75060, 75652 and 75794 for those with graduate assistantships who have not taught a communication class at the college level previously.

The doctoral program is flexibly structured. It is designed to provide both a broad core of knowledge about communication theory and research and individualized concentrations in communication. In consultation with their advisor and the Graduate Studies Committee, students develop an approved program of study to match their interests once they have completed 8 credits in the doctoral program.

Doctoral students are expected to have satisfactorily completed a master’s-level course in social and behavioral research methods. As part of their doctoral coursework, they are also expected to complete research and statistics courses appropriate to their programs of study. There is no universal foreign language requirement for the doctoral degree in communication studies.

CANDIDACY
To achieve candidacy, doctoral students must write a satisfactory preliminary paper, complete a 10-hour written and two-hour oral comprehensive examination, and meet a two-semester residency requirement.

Courses (COMM)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 55007</td>
<td>FREEDOM OF SPEECH</td>
<td>(3)</td>
<td>Examines historic and contemporary instances relating to freedom of speech; study of limits, rights, responsibilities and sociolegal-rhetorical issues.</td>
</tr>
<tr>
<td>COMM 55095</td>
<td>SPECIAL TOPICS</td>
<td>(2-4)</td>
<td>Offered when resources permit a topic different from existing courses. Topic will be announced when scheduled.</td>
</tr>
<tr>
<td>COMM 55459</td>
<td>COMMUNICATION AND CONFLICT</td>
<td>(3)</td>
<td>Examination of issues related to managing conflict in communication. Critique and synthesis of conceptual approaches and research pertaining to conflict in interpersonal, organizational and public communication settings.</td>
</tr>
<tr>
<td>COMM 55960</td>
<td>HEALTH COMMUNICATION</td>
<td>(3)</td>
<td>Examines communication processes and research related to health and health care from the perspectives of public, professional and primary.</td>
</tr>
<tr>
<td>COMM 65000</td>
<td>FOUNDATIONS OF COMMUNICATION INQUIRY</td>
<td>(3)</td>
<td>Philosophy of science, epistemological and theory construction principles, which are the foundation of inquiry into the process of communication.</td>
</tr>
<tr>
<td>COMM 65020</td>
<td>QUANTITATIVE RESEARCH METHODS IN COMMUNICATION</td>
<td>(3)</td>
<td>An examination of basic quantitative social scientific research methods and procedures for the study of communication.</td>
</tr>
<tr>
<td>COMM 65040</td>
<td>QUALITATIVE RESEARCH METHODS IN COMMUNICATION</td>
<td>(3)</td>
<td>Exploration of qualitative methods in human communication research. Focus on the nature of qualitative data, participant-observation and archival strategies of data collection, and interpretive and interactionist approaches to data analysis.</td>
</tr>
<tr>
<td>COMM 65060</td>
<td>COMMUNICATION MEASUREMENT AND ANALYSIS</td>
<td>(3)</td>
<td>A survey of self-report, observational and psychological instruments used in communication research. Uses of the computer in analyzing data obtained in communication research.</td>
</tr>
<tr>
<td>COMM 65091</td>
<td>SEMINAR IN PERSUASION</td>
<td>(3 or 4)</td>
<td>Examination of selected areas of persuasion research. Emphasis on synthesizing research results and formulating explanatory models of persuasive behavior. Prerequisite: Permission.</td>
</tr>
</tbody>
</table>
COMM 65096/75096
INDIVIDUAL INVESTIGATION (1-6)
Independent study of area or problem to be selected in consultation with graduate staff. May be repeated for maximum of 6 credit hours. S/U grading; IP permissible.

COMM 65591/75591
SEMINAR IN SMALL GROUP COMMUNICATION (3 or 4)
Research theories and findings in small group communication. Prerequisite: COMM 35550 or permission.

COMM 65652/75652
THEORIES OF COMMUNICATION (3)
Introduction to approaches in the study of human communication. Focuses on differing views of interaction, from theory-building and research-generation perspective.

COMM 65655/75655
NONVERBAL COMMUNICATION (3)
Examination of a range of nonverbal functions including: relationship development, immediacy and deception. Emphasis on research and theory.

COMM 65656/75656
COMMUNICATIVE USES OF LANGUAGE (3)
Examination of approaches to studying verbal symbol use in human communication processes. Major theories and methods of language analysis will be applied to current research.

COMM 65660/75660
POLITICAL COMMUNICATION (3)
Cross-listed with JMC 65660.
An examination of political communication theory and research. Content includes approaches to political communication, role of the media in politics and analysis of political messages.

COMM 65661/75661
COMMUNICATION IN AN INFORMATION SOCIETY (3)
Examines how the development and use of newer communication technologies have influenced human communication. Considers the evolution, social and psychological impact, culture of newer communication technologies such as the Internet, and how research adapts to these newer media.

COMM 65662/75662
MASS MEDIA EFFECTS (3)
Examines perspectives on media effects, the impact media have on individuals and societies, and how individual, societal and communication elements influence media uses and effects. Explores issues such as media portrayals, campaigns, violence and children and the media.

COMM 65665/75665
PERSONAL AND MEDIATED COMMUNICATION (3)
Examination of the interface of interpersonal and mediated communication in everyday life. Includes topics such as parasocial interaction, talk radio, TV co-viewing, cell phones, teleconferencing, computer-mediated relationships and media portrayals.

COMM 65670/75670
INTERPERSONAL COMMUNICATION (3)
Survey of recent theoretical developments and research in interpersonal communication. Topics include relationship development, interaction, interpersonal traits, compliance, conversational analysis and research methods.

COMM 65680/75680
INTERCULTURAL/INTERNATIONAL COMMUNICATION (3)
Examination of theoretical perspectives, research issues and the rhetorical analyses of intercultural and international communication.

COMM 65690/75690
SEMINAR IN COMMUNICATION THEORY (3 or 4)
Examination of selected conceptual orientations to the study of human communication and pertinent research. Emphasis on behavioral science research results.

COMM 65791/75791
SEMINAR IN INSTRUCTIONAL COMMUNICATION (3 or 4)
Intensive study of selected problems in instructional communication.

COMM 65794/75794
TEACHING OF COLLEGE COMMUNICATION (2-4)
Training and experience in college teaching. Maximum of 3 hours applicable toward master's degree requirements. Letter grade or S/U grading is given at department's option.

COMM 65807
SPEECH FOR PROFESSIONALS (2)
Functions of speech communication on organizational structure, principles of effective speech communication, skill development for individuals.

COMM 65851/75851
ORGANIZATIONAL COMMUNICATION (3)
Structure, methodology and application of communication theory in industrial and organizational settings.

COMM 65891/75891
SEMINAR IN ORGANIZATIONAL COMMUNICATION (3 or 4)
Theories and problems of human communication within, between and/or among formal organizations. Prerequisite: Permission.
COMM 55093/75093
VARIABLE TITLE WORKSHOP IN COMMUNICATION STUDIES
(1-6)
S/U grading.

COMM 60199
THESIS I (2-6)
Thesis student must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

COMM 60299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: COMM 60199.

COMM 65098
RESEARCH (1-15)
Research or individual investigation for master's-level graduate students. Credits may be applied toward meeting degree requirements if school approves. Repeat registration permitted. S/U grading; IP permissible.

COMM 80199
DISSERTATION I (15)
Doctoral dissertation for which registration in at least two semesters is required, first of which will be the semester in which dissertation work is begun, and continuing until the completion of 30 hours. S/U grading; IP permissible.

COMM 80299
DISSERTATION II (1 or 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: COMM 80199.

COMM 85098
RESEARCH (1-15)
Research or individual investigation for doctoral students who have not yet passed their candidacy examination. Credits may be applied toward degree if school approves. Repeat registration permitted. S/U grading; IP permissible. Prerequisite: Admission to doctoral study.
Information Architecture and Knowledge Management

INFORMATION ARCHITECTURE AND
KNOWLEDGE MANAGEMENT

Thomas J. Froehlich, Director
316 Library
330-672-5840
tfroehli@kent.edu
http://iakm.kent.edu

Master of Science

The Master of Science degree in information architecture and knowledge management is a multidisciplinary degree that provides opportunities for students interested in graduate studies and research in the broad range of information-related disciplines and professions. The major faculties contributing to the degree are the School of Communication Studies, the Department of Computer Science, the School of Journalism and Mass Communication, the School of Library and Information Science, the Graduate School of Management and the School of Visual Communication Design. Courses are available in other disciplines, such as in the Departments of Economics and Political Science. The program entails an extensive set of core courses that provide a broad and solid foundation. By use of concentrations the program offers focus and flexibility for students to fashion courses of study that suit their interests or career objectives. This flexibility is essential to the nature of the program because of the transdisciplinary character of information, the emerging and evolving roles for information professionals, and the rapid and dynamic growth of information technologies, products, systems, services and networks.

While information architecture and knowledge management have emerged as fields of study and career concentrations, their use in the degree title is intended to designate significant points on a spectrum of current and emerging information and knowledge professions and to draw upon and balance the strengths of the participating disciplines. Information architecture is the art and science of organizing information and interfaces to help information seekers solve their information needs efficiently and effectively, primarily within networked and Web-based environments. Knowledge management is a discipline that turns an organization’s intellectual assets, including its recorded information, its memory and the expertise of its employees, into greater productivity and increased competitiveness.

All students are required to take an eight-course, 24-credit-hour core. This core will provide students with an overview
of the information-related professions and of information and information technology research. It furnishes competencies in the following areas: intellectual technologies, such as knowledge organization, packaging and transformation; information technologies, such as hardware and software applications; knowledge of information users, uses and needs; knowledge of information-intensive contexts, such as in business and government; and knowledge of information processes such as strategic planning and project management. It will emphasize the collaboration of intellectual technologies and computer-based technologies and the importance of the user perspective, professional standards and the role of research.

The Master of Science degree is offered in three concentrations: information architecture, information use and knowledge management. Each of these involve 24 credits additional to the core: four courses (12 credits) in the chosen area of concentration, three courses outside the concentration (at least one from each of the other areas), plus at least 3 credits in a thesis or master's project.

**Information Architecture**

Information architecture, the first concentration, has two interrelated aspects: (1) the use of graphic or multimedia design to facilitate communication; and (2) the use of intellectual technologies, such as site and content organization, needs analysis, usability studies, metadata application and programming, to make an information interface or source easy to locate, comprehend, navigate and use. Given a particular information-user population, there are many information structures that could be deployed to provide efficient and easy access to information or information sources. For such an information-seeking space, the information architect designs and implements a specific system and interface, based on organizational requirements and aesthetic and usability considerations in ways similar to the ways an architect deploys a building in physical space concentrating on aesthetic, functional and usability goals.

**Information Use**

In the second concentration, information use, information ergonomics is central. It is adapting the information system or sources to fit the environment of users and information needs so as to achieve goals of maximum access, usability, efficiency and effectiveness. This concentration entails four key areas: (1) users, their needs and experience; (2) communication processes and strategies within and across organizations and systems; (3) information content creation, development and deployment; and (4) the interoperability of information systems for the sharing of knowledge.

**Knowledge Management**

The concentration in knowledge management is intended for students with interest in knowledge management activities in organizations. Knowledge management is a discipline that takes a comprehensive, systematic approach to the information assets of an organization by identifying, capturing, collecting, organizing, indexing, storing, integrating, retrieving and sharing them. Such assets include (a) explicit knowledge of databases, documents, environmental knowledge, policies, procedures and organizational culture; and (b) tacit knowledge of employees, their expertise, their practical work experience, and their beliefs about the organizational culture. It strives to make the collective knowledge, information and experiences of the organization available to individual employees for their use and to motivate them to contribute their knowledge to the collective assets.

The degree is administered through the School of Library and Information Science. Students can apply through the Office of the Master of Science Program in Information Architecture and Knowledge Management or online at http://iakm.kent.edu.

**ADMISSION**

In addition to the regular application requirements of the university, admission to the Master of Science degree requires the following: a minimum undergraduate grade point average of 3.0 (A=4); satisfactory scores on the Graduate Record Examination and/or appropriate professional experience (the Graduate Record Examination is recommended because admission is selective and strong scores from the Graduate Record Examination may improve one's standing in the selection process); computer literacy; three letters of recommendation from those in a position to evaluate academic performance and graduate potential; a resume; and a statement of purpose about how the program will realize the applicant's career and/or research goals. With respect to computer literacy, an applicant's record and experience will be assessed. If the level of literacy does not appear adequate to the demands of the core course of study, the applicant's advisor will suggest workshops, courses or other appropriate methods. Credits for workshops or courses for satisfying such background requirements will not apply to the degree. A background knowledge of statistics and economics is highly desirable.

**PROGRAM REQUIREMENTS**

A minimum of 48 credit hours in accordance with the program plan is required for the degree. An eight-course, 24-credit core is required of all students. Based on the student's education and/or experience, and with appropriate and adequate evidence, he/she may petition to substitute one or more of the core courses with electives. Courses equivalent to the core may be submitted with the approval of the program director and the student's advisor. Cognate and elective courses in related departments must be selected and approved by the program director and the student's advisor. Students are expected to develop a course of study in conjunction with their advisor that will realize their career objectives.
### Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CS 61001</td>
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</tr>
<tr>
<td>ECON 62019</td>
<td>3</td>
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<tr>
<td>IAKM 60001</td>
<td>3</td>
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<td>IAKM 60002</td>
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<tr>
<td>IAKM 60003</td>
<td>3</td>
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<tr>
<td>IAKM 60005</td>
<td>3</td>
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<tr>
<td>IAKM 60006</td>
<td>3</td>
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</tbody>
</table>

Select from one of the following:
- COMM 65020
- ECON 64004
- JMC 60007
- LIS 60604

Students will be expected to take four courses in one concentration, plus three courses from the other concentrations (at least one from each of the other two), and submit a thesis or a master's project for a total of 24 credits in the concentrations. Students are encouraged to complete the core as much as possible before working on a concentration. Students expecting to pursue doctoral study or research should choose the thesis option. Students seeking professional employment should take the master's project.

For each concentration, students must select 12 credits from the appropriate list below in consultation with their advisor. No more than four hours of workshops may be taken. For many courses, students will be expected to have personal access to a computer whose technological level is relatively current and sophisticated. Students are expected to buy software to complete the requirements of various courses, the master's project or the thesis.

#### Concentration in Information Architecture

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tr>
<td>B AD 60095</td>
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<td>B AD 64007</td>
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<td>B AD 64011</td>
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<td>B AD 64042</td>
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<td>B AD 64046</td>
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<td>B AD 64080</td>
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<td>B AD 64081</td>
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<td>B AD 64082</td>
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<td>CS 63995</td>
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<td>LIS 60640</td>
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#### Concentration in Knowledge Management

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<th>Course</th>
<th>Hours</th>
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<tr>
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<td>POL 60001</td>
<td>3</td>
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<tr>
<td>POL 68091</td>
<td>3</td>
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</tbody>
</table>

### Multiple Degrees Option

Students can concurrently pursue the Master of Arts in Journalism and Mass Communication and the Master of Science in Information Architecture and Knowledge Management or a Master of Library and Information Science and a Master of Science in Information Architecture and Knowledge Management. Students apply to both the master's program in Information Architecture and Knowledge Management and to the School of Journalism and Mass Communication or to the
School of Library and Information Science. Each program or school makes an independent admission decision. If approved for admission by both the program and the school, students may doubly count up to 28 credits for each degree, although, based on the combination of the concentrations taken in each degree, the actual number will range from 12 to 28.

Many job opportunities in Library and Information Science require a Master of Library and Information Science degree from an accredited school of library and information science. The Master of Library and Information Science enjoys such accreditation from the American Library Association (ALA). However, students may find that their IAKM skills could be applied in a library or information center. For them to secure jobs more easily in such settings, an ALA-accredited degree is almost always demanded. In addition, courses in the IAKM program will provide enhanced employment options and a more diverse education that will allow them to pursue jobs beyond the traditional settings for students in Library and Information Science.

Similarly, students working on a master’s degree in Journalism and Mass Communication may also wish to seek traditional careers for majors in Journalism and Mass Communication, such as newspaper reporters, editors or media managers. Having a master’s degree in this area would provide clear credentials for these jobs. Having the multiple degrees will provide additional and enhanced skills and additional employment opportunities.

**Courses (IAKM)**

**IAKM 60001**  
**FOUNDATIONS OF INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT I**  
(3)  
Introduction to Information Architecture and Knowledge Management Information sciences, systems and professionals in the information society; organization of knowledge for computer storage, source access and information retrieval; user information needs analysis; communication processes and telecommunications.

**IAKM 60002**  
**FOUNDATIONS OF INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT II**  
(3)  
Information technology and information packaging, design and display; mediamorphosis; information requirements analysis and information use environments; cybermedia; law, ethics, policy and information; organizational information flows, sources and transformations; managers as information processors.

**IAKM 60003**  
**INFORMATION DESIGN IN THE DIGITAL AGE**  
(3)  
Examines the influence of digital technologies on the structure and presentation of information. Provides a cultural and technological context for understanding the information design process. Introduces practical design principles for digital media, flowing from information requirements analysis, specification development and evaluation.

**IAKM 60005**  
**SURVEY OF INFORMATION TECHNOLOGIES**  
(3)  
Telecommunications devices, media and systems; network configurations, topologies and protocols, network applications and management; database architecture and design; Web database integration; client server database design; data warehouses and datamining; electronic commerce; enterprise resource planning.

**IAKM 60006**  
**STRATEGIC INFORMATION MANAGEMENT**  
(3)  
Fundamental concepts of strategy, resource management and systems theory are explored and then applied to diverse problems in information technology management. Specific information technology studied includes information systems analysis and design, telecommunications, data management and emerging artificial intelligence resources. Both theory and technologies are examined with a particular emphasis on their relevance to emerging problems of electronic commerce.

**IAKM 60010**  
**ORGANIZATIONAL KNOWLEDGE MANAGEMENT**  
(3)  
Course reviews the history, theories and models of organizational management. Implementation strategies for human resources, organizational processes and technology are explored. The organizational knowledge management activities of knowledge acquisition, generation, formalization, deployment, utilization, measurement and evaluation are presented.

**IAKM 60198**  
**MASTER’S PROJECT**  
(3)  
Students must register for this course during the semester of their Information Architecture and Knowledge Management project. Not repeatable. S/U grading; IP permissible. Prerequisite: Permission.

**IAKM 60691**  
**SEMINAR IN INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT**  
(1-3)  
Advanced research by small groups of students who are qualified to examine problems of certain special areas in information architecture, information usability or knowledge management.
IAKM 60692
PRACTICUM IN INFORMATION ARCHITECTURE AND KNOWLEDGE MANAGEMENT (2-3)
Supervised work experience in Information Architecture, Information Use or Knowledge Management of a professional nature of not less than 100 clock hours with directed readings and preparation of a paper. Not repeatable. IP permissible.

IAKM 60693
VARIABLE TITLE WORKSHOP INFORMATION ARCHITECTURE, INFORMATION USE OR KNOWLEDGE MANAGEMENT (1-3)
Intensive examination of special topics of interest to those involved in Information Architecture, Information Use or Knowledge Management. Maximum number of workshop credits for the MS-IAKM degree is 4 semester hours. S/U grading.

IAKM 60792
INTERNSHIP IN INFORMATION ARCHITECTURE, INFORMATION USE OR KNOWLEDGE MANAGEMENT (1-3)
Supervised work experience of an advanced professional nature that concentrates on developing skills in Information Architecture, Information Use or Knowledge Management. IP permissible. Prerequisite: Graduate standing and director’s approval.

IAKM 61095
SELECTED TOPICS IN INFORMATION ARCHITECTURE, INFORMATION USE OR KNOWLEDGE MANAGEMENT (1-3)
Offered irregularly as resources and/or opportunities permit. Topics could include current or emerging issues in Information Architecture, Information Use or Knowledge Management. Specific topics will be announced in the Schedule of Classes booklet.

IAKM 61096
INDIVIDUAL INVESTIGATION IN INFORMATION ARCHITECTURE, INFORMATION USE OR KNOWLEDGE MANAGEMENT (1-3)
Research or individual investigation for master’s-level students. Maximum credit per registration: 3 hours. Maximum credit towards master’s degree: 6 hours. IP permissible. Prerequisite: Permission.

IAKM 61199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

IAKM 61299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible.
JOURNALISM AND MASS COMMUNICATION

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330-672-8285
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The School of Journalism and Mass Communication offers professionally oriented graduate study in Journalism and Mass Communication leading to the Master of Arts degree. This program prepares students for careers in a media marketplace characterized by free enterprise and freedom of expression.

Three concentrations are available: reporting/editing for both print and broadcast media, media management and an individualized program of study. Students may emphasize cybermedia in any concentration. The program is designed to provide professional preparation and enhancement both for students who have undergraduate degrees and/or professional experience in journalism and mass communication and for those without such background and experience. While the emphasis of the program is professional, students who wish to structure their M.A. program to provide a foundation for future study of journalism and mass communication at the doctoral level may do so through the individualized program of study.

More information on the program and on application procedures is available from the graduate coordinator, School of Journalism and Mass Communication. Visit the school's Web site at http://www.jmc.kent.edu for more information.

Master of Arts

ADMISSION
In addition to regular application requirements of the university, admission to the Master of Arts program requires a 3.0 (A=4.0) undergraduate grade point average; three letters of recommendation; submission of scores on the Graduate Record Examination; submission of a statement of purpose; and submission of a resume to the School of Journalism and Mass Communication. GRE scores may be waived for significant professional experience as determined by the graduate studies committee.

PROGRAM REQUIREMENTS
Students must successfully complete a minimum of 33 semester hours of graduate credit. All students complete a common core of conceptual courses in addition to required professional courses for each concentration. Approved electives include theoretical, conceptual and professional courses in journalism and mass communication. Electives from other academic units of the university may be approved through consultation with the student’s academic advisor. Students choose among master’s professional project, thesis and comprehensive exam options in meeting their capstone requirement.
Students without journalism and mass communication backgrounds and/or professional experience will be required to complete basic skill-building prerequisite coursework before beginning their graduate programs.

**Multiple Degrees Option**

Students can concurrently pursue the Master of Arts in Journalism and Mass Communication and the Master of Science in Information Architecture and Knowledge Management. Each program makes an independent admission decision. If approved for admission by both the program and the school, students may doubly count up to 28 credits for each degree. For further information about the master’s program in Information Architecture and Knowledge Management, see the Information Architecture and Knowledge Management section of the catalog.

**Courses (JMC)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 50001</td>
<td>FUNDAMENTALS OF MEDIA MESSAGES (3)</td>
<td></td>
<td>Working with messages for print, broadcast, electronic and new media outlets. Course may not be taken for credit nor applied toward any requirements by a JMC major. Prerequisite: Permission.</td>
</tr>
<tr>
<td>JMC 50002</td>
<td>REPORTING FOR MASS MEDIA (3)</td>
<td></td>
<td>Theory and practice in newswriting and reporting; news values and news judgment; lead and story development; techniques of gathering information and dealing with sources of news; writing for deadline. Hours do not count toward degree. Prerequisite: Permission. Special course fee: $30 per semester (subject to change).</td>
</tr>
<tr>
<td>JMC 50003</td>
<td>EDITING FOR MASS MEDIA (3)</td>
<td></td>
<td>Theory and practice in copy editing, headline writing, picture selection and online editing, newspaper design and layout, special sections and management problems. Hours do not count toward degree. Prerequisite: JMC 50002 or permission. Special course fee: $30 per semester (subject to change).</td>
</tr>
<tr>
<td>JMC 50006</td>
<td>LAW OF MASS COMMUNICATION (3)</td>
<td></td>
<td>Libel and slander; privacy, copyright, obscenity; regulation of advertising and broadcasting; antitrust law and mass media; legal problems reporting courts, legislatures; taxation, licensing. Prerequisite: Graduate standing.</td>
</tr>
<tr>
<td>JMC 50007</td>
<td>REVIEWING THE ARTS (2)</td>
<td></td>
<td>Reviewing and criticism of performing, visual and literary arts. Emphasis on books, film, TV and theatre. Prerequisite: Permission.</td>
</tr>
<tr>
<td>JMC 50193</td>
<td>VARIABLE TITLE WORKSHOP IN JOURNALISM AND MASS COMMUNICATION (1-3)</td>
<td></td>
<td>Intensive study of professional issues and problems in various areas of mass communication, utilizing the expertise of faculty and professionals in the field. S/U grading. Prerequisite: Permission.</td>
</tr>
<tr>
<td>JMC 57003</td>
<td>TEACHING HIGH SCHOOL JOURNALISM (3)</td>
<td></td>
<td>Methods and materials for teaching journalism in high school. Prerequisite: Permission. Special course fee: $30 per semester (subject to change).</td>
</tr>
<tr>
<td>JMC 58002</td>
<td>PUBLIC RELATIONS TACTICS (3)</td>
<td></td>
<td>Planning and preparation of face-to-face public relations tactics, including spokesperson training for on- and off-camera appearances, special-event planning, speeches and presentations with visual support and other applications of “writing for the ear.” Special course fee: $30 per semester (subject to change).</td>
</tr>
<tr>
<td>JMC 60000</td>
<td>INTRODUCTION TO GRADUATE STUDIES IN JOURNALISM AND MASS COMMUNICATION (1)</td>
<td></td>
<td>An introductory survey of the various areas of professional and scholarly concentrations in the fields of journalism and mass communication. Consideration of the relationship between professional practice and scholarly activity in those fields. S/U grading; IP permissible.</td>
</tr>
<tr>
<td>JMC 60001</td>
<td>THEORY OF MASS COMMUNICATION (3)</td>
<td></td>
<td>An introductory survey of the various areas of professional and scholarly concentrations in the fields of journalism and mass communication. Consideration of the relationship between professional practice and scholarly activity in those fields. S/U grading; IP permissible.</td>
</tr>
<tr>
<td>JMC 60002</td>
<td>LEGAL PROBLEMS IN MASS COMMUNICATIONS (3)</td>
<td></td>
<td>Case studies related to the First Amendment, libel, invasion of privacy, regulation of broadcasting and new media, copyright and access to information. Course focus will be the theories underlying these issues, as well as practical application of the legal concepts. Prerequisite: Permission.</td>
</tr>
<tr>
<td>JMC 60003</td>
<td>ETHICS OF MASS COMMUNICATIONS (3)</td>
<td></td>
<td>Study of ethical problems of mass media in society; analysis of media policies; performance evaluation. Prerequisite: Permission.</td>
</tr>
<tr>
<td>JMC 60007</td>
<td>RESEARCH METHODS IN MASS COMMUNICATION (3)</td>
<td></td>
<td>Introduction to methods of social science research that are applicable to study of mass communication. Prerequisite: Permission.</td>
</tr>
</tbody>
</table>
JMC 6009
SOCIAL ROLE OF THE MASS MEDIA (3)
Application of professional, theoretical, historical, economic and political perspectives to examine the role of mass media in society both in terms of structure and function. Prerequisite: Permission. Special fee: $18 per semester.

JMC 60096
INDIVIDUAL INVESTIGATION IN MASS COMMUNICATION (1-3)
Individual investigation of selected area or problem approved by graduate faculty. Repeatable for maximum of 6 hours. IP permissible. Prerequisite: Permission.

JMC 60098
RESEARCH (1-15)
Research or individual investigation for master's-level graduate students. Credits earned may be applied toward meeting degree requirements if school approves. Repeat registration permitted. Maximum of 3 hours may be applied to degree if school approves. Prerequisite: Permission.

JMC 60195
SPECIAL TOPICS SEMINAR (1-3)
Study of important topics in mass communication. Offered irregularly in response to existing interests and opportunities. Prerequisite: Permission.

JMC 60196
READINGS IN MASS COMMUNICATIONS (1-3)
Student pursues course of readings approved by instructor to cover subject specialty student cannot obtain from formal course offerings. IP permissible. Prerequisite: Permission.

JMC 60199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible. Prerequisite: Permission.

JMC 60295
SPECIAL TOPICS IN COMPUTER LAB (1-3)
Selected topics of special interest not covered in depth in existing courses; offered as resources permit. Prerequisite: Permission. Special fee: $10 per semester hour.

JMC 60299
THESIS II (2)
Thesis student must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: JMC 60199.

JMC 60296
ADVANCED READINGS IN JOURNALISM AND MASS COMMUNICATION (3)
Consolidation and synthesis of learning experiences in the graduate program. Application of graduate study to future professional careers. Updates on latest developments in the fields of JMC and their impact on the future of academic study and professional practice in the discipline. S/U grading; IP permissible. Prerequisite: Permission.

JMC 60396
MASTER'S PROFESSIONAL PROJECT (3)
Completion and defense of a substantial professional project in one of the fields of journalism and mass communication. S/U grading; IP permissible. Prerequisite: Permission.

JMC 65660
POLITICAL COMMUNICATION (3)
Cross-listed with COMM 65660.
An examination of political communication theory and research. Content includes approaches to political communication, role of the media in politics and analysis of political messages.

JMC 66092
INTERNSHIP IN JOURNALISM AND MASS COMMUNICATION (1-3)
Experience in a department or company involving supervised professional responsibilities in journalism and mass communication. Minimum of 150 hours of work for each hour of credit. S/U grading; IP permissible. Prerequisite: JMC 50002 or permission (subject to change).

JMC 67094
COLLEGE TEACHING OF JOURNALISM (1-3)
Staff training and experience in college teaching. Only 3 hours may be applied toward master's degree. Prerequisite: Permission.

JMC 50004
COMPUTER-ASSISTED REPORTING (3)
Computer analysis of large data sets focusing on government, court, police records, for preparation of news stories; basics of online searching; software and databases. Prerequisite: Permission. Special course fee: $30 per semester (subject to change).

JMC 50005
FEATURE WRITING (3)
Researching, writing and placement of feature stories in publications. Prerequisite: JMC 50002 or permission. Special course fee: $30 per semester (subject to change).
JMC 50012
ONLINE JOURNALISM (3)
Study and evaluation of online news and news sites; reporting and writing for online news media; design, production and maintenance of an online news site; ethical, legal and economic issues related to online news. Prerequisite: JMC 50002 or permission. Special course fee: $30 per semester (subject to change).

JMC 55051
REPORTING BROADCAST NEWS (3)
Gathering and preparing broadcast news, with emphasis on unique style and presentation methods of broadcast media. Use of both audio and video recorders and editing equipment. Prerequisite: JMC 50002 or permission. Special fee: $10 per semester.

JMC 56000
NEWSPAPER DESIGN (3)
Design of newspapers from small inside pages to elaborate feature pages. News judgment. Basic information graphics and photo editing. Prerequisite: JMC 50003 or permission. Special course fee: $30 per semester (subject to change).

JMC 56001
INFORMATION GRAPHICS (3)
Cross-listed with VCD 53007. Introduction to shapes, color, type and combinations of these for computer-designed news graphics: maps, charts, graphs and diagrams. Prerequisite: Graduate standing and/or permission.

JMC 56006
EDITORIAL WRITING (3)
Structure and purpose of editorial and column writing; study of editorial page; practice in writing editorials. Prerequisite: JMC 50002 or permission.

JMC 56007
REPORTING IN DEPTH (3)
Techniques involved in researching, interviewing and writing in-depth news articles and analyses. Prerequisite: JMC 50002 or permission.

JMC 56009
REPORTING PUBLIC AFFAIRS (4)
Instruction and practice in reporting all areas of public affairs, including government and the courts. Use of precision journalism techniques. Prerequisite: JMC 50002 or permission. Special course fee: $40 per semester (subject to change).

JMC 56016
MAGAZINE PUBLISHING (3)
Overview of magazine publishing, editorial, advertising, circulation and production. Analysis of magazines. Prerequisite: Permission. Special course fee: $30 per semester (subject to change).

JMC 56020
MAGAZINE DESIGN (3)
Marriage of words and visuals for designing magazine layouts and covers in desktop publishing. Prerequisite: JMC 50002, 50003 and 56016. Special course fee: $30 per semester (subject to change).

JMC 56021
MAGAZINE WRITING AND EDITING (3)
Research, interviewing, writing and marketing of major magazine articles. Also editing techniques for magazines. Prerequisite: JMC 50002 and 50003 or permission. Special course fee: $30 per semester (subject to change).

JMC 56052
ADVANCED BROADCAST NEWS PRACTICES (3)
Study of investigative news stories, newsroom operations, editing and producing broadcast news programs. Advanced projects in broadcast news. Prerequisite: JMC 55051 or 56054 or permission. Special course fee: $45 per semester (subject to change).

JMC 66005
PROFESSIONAL NEWS EDITING (3)
Professionally oriented work at the advanced level in selecting, editing and displaying stories and photographs in print journalism; role and responsibility of editors. Prerequisite: JMC 50003 or permission.

JMC 66010
SPECIALIZED REPORTING (3)
Newsgathering techniques in specialty areas such as politics, labor, medicine, business and technology; techniques of team reporting. Prerequisite: JMC 56009; JMC 55015 or permission.

JMC 66015
ROLE OF THE EDITOR (3)
The role of the supervising editor in a news operation. How to plan coverage, generate story ideas, work with reporters and other editors and deal with community issues. Prerequisite: JMC 50002 and 50003 or permission. Special fee: $15 per semester.

JMC 66020
PRECISION JOURNALISM (3)
Professional application of social science research methods and statistics to the news industry. Writing stories on public opinion polls, public records and field experiments. Prerequisite: JMC 50002 or permission.

Media Management

JMC 50015
MEDIA MANAGEMENT (3)
A study of administrative problems, methods, procedures in the management of media corporations.
JMC 53042
VIDEO STUDIO PRODUCTION (3)
Study of producing and direction of various types of television studio programs. Lecture 2 hours, laboratory 2 hours weekly. Prerequisite: Permission. Special course fee: $45 per semester (subject to change).

JMC 58002
PUBLIC RELATIONS TACTICS (3)
Planning and preparation of face-to-face public relations tactics, including spokesperson training for on- and off-camera appearances, special-event planning, speeches and presentations with visual support and other applications of “writing for the ear.”

JMC 60015
ADVANCED MEDIA MANAGEMENT (3)
Theory and practice of management operations and problem-solving techniques specifically related to media companies. Emphasis will be using case studies from the media. Prerequisite: JMC 50015.

JMC 64072
ADMINISTRATIVE PROBLEMS IN RADIO AND TELEVISION (3)
Advanced study of management topics in radio, television, cable and corporate television settings. Case studies and individual projects. Prerequisite: JMC 50015.

JMC 68001
PUBLIC RELATIONS MANAGEMENT (3)
Perspectives, skills needed to manage an organization’s PR function, particularly strategic planning, implementation and evaluation. Emphasis on managerial aspects of negotiating organizational relationships with public. Prerequisite: JMC 50015.

Professional Elective Courses

JMC 50037
SCRIPTWRITING FOR VIDEO AND FILM (3)
The emphasis of the course is on writing dramatic scripts for broadcast or motion pictures. The course also includes current perspectives on market needs. Prerequisite: Permission.

JMC 56054
BROADCAST DOCUMENTARY (3)
Development of the documentary form for radio/TV; analysis, production of radio/TV documentary; utilization of audio/video recording/editing. Prerequisite: JMC 55051 or permission. Special course fee: $45 per semester (subject to change).

JMC 59021
CORPORATE VIDEO (3)
The use of video in the legal, medical and corporate environments. Emphasis is placed on the structure and function of the medium within each environment. Prerequisite: Permission. Special course fee: $60 per semester (subject to change).
Library and Information Science

LIBRARY AND INFORMATION SCIENCE

Richard E. Rubin, Director
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Mary Stansbury, Interim Coordinator of Graduate Studies
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The school offers a graduate program, accredited by the American Library Association, which leads to a Master of Library and Information Science (M.L.I.S.) degree. An American Library Association-accredited master's degree is the basic requirement for professional employment in most libraries and information centers.

The School of Library and Information Science (SLIS) prepares students for positions of leadership in librarianship and the information professions. The master's and advanced certificate programs emphasize the preparation of students for professional service in academic, public, special and school libraries and other types of information agencies.

For more information about the School of Library and Information Science, prospective students may request an information packet by writing to the School of Library and Information Science or by consulting the school's Web site at http://www.slis.kent.edu.

Master of Library and Information Science

ADMISSION
Applicants who have an undergraduate grade point average of 3.0 or higher are considered for regular admission. Applicants who do not meet the grade point average requirements must submit scores on the Graduate Record Examination to be considered for conditional admission. All undergraduate courses, including postbaccalaureate classes, are considered in the calculation of the undergraduate grade point average. International students whose first language is not English must achieve a TOEFL score of 600 or higher to be considered for regular admission.

Prospective students should complete the application process no later than January 15 for admission for the summer and no later than March 15 for the fall semester. For further details on admission procedures and deadlines, prospective students should consult the school's Web site at http://www.slis.kent.edu.

PROGRAM REQUIREMENTS
The Master of Library and Information Science degree requires a minimum of 36 hours. All M.L.I.S. students must take four core courses: LIS 60001, LIS 60002, LIS 60600 and LIS 60604. Students are encouraged to complete the core requirements during their first 18 hours of enrollment. In addition, all students must choose between a 3-hour culminating experience (LIS 60670) or a 6-hour master's thesis to meet degree requirements.

Students must also select at least one elective from each of these areas: (1) Access to Information, (2) Organization and Representation of Knowledge, and (3) Administration and Management.

Access to Information electives include LIS 60601, LIS 60606, LIS 60611, LIS 60612, LIS 60620, LIS 60621, LIS 60622, LIS 60623, LIS 60625, LIS 60626, LIS 60628, LIS 60629, LIS 60630 and LIS 60643.

Organization and Representation of Knowledge electives include LIS 60602, LIS 60603, LIS 60611, LIS 60624, LIS 60641, LIS 60642, LIS 60645, LIS 60646, LIS 60648 and LIS 60649.
Administration and Management electives include LIS 60607, LIS 60608, LIS 60610, LIS 60613, LIS 60615, LIS 60616, LIS 60640, LIS 60644, LIS 60652, LIS 60654 and LIS 60661.

The Graduate Program Statement Form, available at http://www.slis.kent.edu, provides the complete list of electives, including LIS 60691 seminars and LIS 61095 selected topics courses, which have been approved for each of the three areas.

### Multiple Degrees Option

A master’s degree in a subject area in addition to the master’s degree in library and information science is a desirable credential for some kinds of professional employment, especially in large research institutions. Students may apply to a second master’s degree program offered by Kent State University and work simultaneously or sequentially on the two degrees.

Courses may be shared between the two degrees, as determined by the graduate department(s), but in no case may they exceed 12 credit hours. Two exceptions to this limit within the school are the Master of Library and Information Science/Master of Business Administration dual-degree option and the Master of Library and Information Science/Master of Information Architecture and Knowledge Management multiple degrees option.

### Master of Library and Information Science and Master of Business Administration

The Master of Library and Information Science and Master of Business Administration dual-degree program is designed for managers of large libraries and information centers. Individuals in these positions need knowledge pertaining to planning, organizing, staffing, directing and controlling. Advanced education to obtain knowledge and learn skills related to these management functions enables students to take advantage of career opportunities in both library settings and other information settings, in both the profit and nonprofit sector.

Students apply to both the School of Library and Information Science and to the Graduate School of Management. Each program makes an independent admission decision. Admission is determined based upon undergraduate grade point average, strong performance on the Graduate Record Examination, three letters of reference, and an essay regarding the applicant’s career direction.

Students may doubly count up to 28 hours in the Master of Library and Information Science and Master of Business Administration dual-degree option. For specifics about the curriculum for this program, please see the College of Business Administration section of the graduate schools catalog.

### Master of Library and Information Science and Master of Science in Information Architecture and Knowledge Management

Prospective students interested in a multidisciplinary approach to graduate studies in the information-related disciplines and professions may also consider pursuing the Master of Library and Information Science and Master of Science in Information Architecture and Knowledge Management multiple degrees option. Administered through the School of Library and Information Science, the Master of Science degree in Information Architecture and Knowledge Management is a flexible degree program that combines graduate courses from these major contributing faculties: the Department of Management and Information Systems, the Department of Computer Science, the School of Communication Studies, the School of Journalism and Mass Communication, the School of Library and Information Science and the School of Visual Communication and Design.

Students interested in this multiple-degrees option must apply to both the Master's Program in Information Architecture and Knowledge Management and to the School of Library and Information Science. Each program makes an independent admission decision. If approved for admission by both the program and the school, students may doubly count up to 28 credits for each degree. The actual number of shared hours typically ranges from 21 to 28, depending on the area of concentration selected for each degree.

For further information about the Master of Science degree in Information Architecture and Knowledge Management or the multiple degrees option, please see the Information Architecture and Knowledge Management section of the graduate schools catalog or consult the program Web site at http://iakm.kent.edu.

### Master of Library and Information Science plus School Library Media Specialist Licensure

A course of study leading to the Master of Library and Information Science degree and multi-age licensure in school library media is offered in cooperation with the instructional technology program in the College of Education, Health and Human Services, Department of Educational Foundations and Special Services. The licensure program requires completion of at least 39 hours including 9 hours in instructional technology (ITEC) and LIS 60670, the culminating practicum. Conferral of a school library media specialist license also requires successful completion of the Praxis examination in library media. Candidates must also hold or be eligible for a teacher’s license.

For additional details on the courses required for the M.L.I.S./School Library Media Specialist Licensure program, please refer to the Graduate Program Statement Form for School Library Media at http://www.slis.kent.edu.
Certificate of Advanced Study

The school offers a "sixth-year" program as an opportunity for librarians and information specialists already in the field to update and upgrade professional skills. The program offers a multidisciplinary approach tailored to those who hold master's degrees in library and information science and are interested in expanding their professional skills in various areas of library and information science. A minimum of 24 graduate hours is required for the Certificate of Advanced Study in Library and Information Science, to be completed within four years.

Prospective students must hold a master's degree in library and information science from an institution accredited by the American Library Association (or equivalent degree from schools in other countries, in the case of international students). Ideally, advanced certificate students have had at least two years of professional experience since earning their master's degree.

Certificate of Advanced Study in K-12 School Library Media

The school offers an advanced certificate program as an opportunity for school library media specialists already in the field to update and upgrade their professional skills. This program is tailored to those school library media specialists who hold an M.L.S./M.L.I.S. degree (or another approved graduate degree in education), school library media licensure and standard teaching credentials. The certificate is aimed at those who are interested in expanding their administrative and technology skills. Each program is individually designed and leads to a certificate in the advanced study of school librarianship. Students will be awarded the "Certificate of Advanced Study in K-12 School Library Media" upon successful completion of 18 semester hours of coursework.

Courses (LIS)

LIS 50693
VARIABLE TITLE WORKSHOP — LIBRARY AND INFORMATION SCIENCE (1-3)
Maximum workshop credit accepted for MLIS degree is 4 semester hours. Intensive examination of special topics of interest to practicing librarians. Repeat registration permitted. S/U grading.

LIS 60001
ACCESS TO INFORMATION (3)
Examination of information access issues. Topics include discussion of information needs plus use of bibliographic and electronic records; automation and information technologies; computerized reference resources, reference tools (print, electronic, Internet and Web-based) and online computerized library catalog.

LIS 60002
ORGANIZATION OF INFORMATION (3)
Introduction to the theory and practice of organizing information in traditional libraries and in the Internet environment. Familiarity with principles, standards, tools and current systems relating to organization of information.

LIS 60199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible. Prerequisite: Candidacy status, LIS 60604 and director's approval.

LIS 60299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: LIS 60199.

LIS 60600
FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE (3)
Social, philosophical and historical foundations; information technology and the library; types of libraries and services, nationally and internationally; professional issues, research, literature, associations and education.

LIS 60601
INFORMATION SOURCES AND REFERENCE SERVICES (3)
Introduction to use and evaluation of basic sources of reference information, computerized and noncomputerized; reference interview and question-negotiation techniques; administration of reference and information services. Prerequisite: LIS 60001. Special fee: $20.

LIS 60602
CATALOGING AND CLASSIFICATION I (3)
Principles of cataloging with emphasis on Dewey Decimal and Library of Congress Classification systems, Library of Congress subject headings, online cataloging and administration. Prerequisite: LIS 60002. Special fee: $20 per semester (subject to change).

LIS 60603
CATALOGING AND CLASSIFICATION II (3)
Theory and practice of providing description and access to library materials. Examples and assignments will be taken from all types of library materials, print and nonprint. Prerequisite: LIS 60002 and 60602. Special fee: $20 per semester (subject to change).
LIS 60604  
RESEARCH FOR DECISION-MAKING IN LIBRARIES AND INFORMATION CENTERS (3)  
Research techniques for collecting, analyzing and presenting data to decision makers. Developing research proposals. Critical review of evaluation studies in library and information science. IP permissible. Prerequisite: 6 hours of LIS coursework.

LIS 60606  
ADVANCED REFERENCE AND BIBLIOGRAPHY (3)  
Reference service in support of research; creation of reference tools; study of foreign reference sources; select problems in reference service; introduction to historical bibliography. Prerequisite: LIS 60001 and 60601.

LIS 60607  
SCHOOL LIBRARY MEDIA CENTER (3)  
Management of school library media centers K-12. Prerequisite: LIS 60600 recommended. Enrollment limited to those pursuing K-12 licensure or those in the School Library Media Program.

LIS 60608  
THE PUBLIC LIBRARY (3)  
Analysis of the historical, sociopolitical, technological, fiscal and organizational factors affecting American public librarianship. Includes evaluation, planning, networking, funding, automation, buildings and censorship. Prerequisite: LIS 60600.

LIS 60610  
LIBRARY MANAGEMENT (3)  
Theories and principles of strategic planning applied to libraries (decision-making, budgeting, staff, marketing, evaluating). Impact of environmental and technological change in library structure and management.

LIS 60611  
GOVERNMENT DOCUMENTS (3)  
Library treatment of U.S. government publications, with brief attention to municipal and state publications, and major documents of Great Britain, Canada and the United Nations. Will not include materials covered in LSCI 60601. Prerequisite: LIS 60001.

LIS 60612  
LIBRARY MATERIALS AND SERVICES FOR ADULTS (3)  
Recent investigations of group and individual reading habits; advisory services in various types of libraries; library programs for adult education; projection of library materials toward community.

LIS 60613  
INFORMATION USES AND SERVICES (3)  
Analysis of information and communication theory as it relates to adults’ information needs and use; interface issues, electronic information resources and information use; technological methods for designing and using information systems, telecommunications and networks, and consideration of planned communication strategies. Prerequisite: LIS 60001 or permission. LIS 60604 recommended.

LIS 60614  
SELECTION AND ACQUISITION OF LIBRARY MATERIALS (3)  
Factors affecting selection in public, academic, school and special libraries (reading habits, censorship, publishing trends); community analysis, selection policies and process; selection sources; acquisitions.

LIS 60615  
THE ACADEMIC LIBRARY (3)  
Governance, administration and services of libraries in institutions of postsecondary education. Prerequisite: LIS 60600.

LIS 60616  
THE SPECIAL LIBRARY (3)  
The formation of special libraries. Libraries in special subject fields and in organizations: corporations, government agencies, hospitals, etc. Internal organization and administration, collection development and services. Prerequisite: LIS 60600.

LIS 60620  
HEALTH INFORMATION RESOURCES (3)  
Cross-listed with HED 64010. Identifies print and electronic sources of health information with emphasis on electronic sources. Medical patient and consumer health information is presented. This course is designed for the health educator, librarian, nurse or other health care professional.

LIS 60621  
SOCIAL SCIENCES INFORMATION SOURCES AND SERVICES (3)  
Content, bibliographic structure and communication patterns in the social sciences with emphasis on information sources and services in sociology, history, education, political science, anthropology, related disciplines. Prerequisite: LIS 60001 and 60601 (may be taken concurrently).

LIS 60622  
SCIENCE/TECHNOLOGY INFORMATION SOURCES AND SERVICES (3)  
Content, bibliographic structure and communication patterns in the sciences with emphasis on pure and applied fields, e.g., mathematics, biology, physics. Prerequisite: LIS 60001.
LIS 60623
BUSINESS/FINANCE INFORMATION SOURCES AND SERVICES (3)
Historical development; applications to current business, labor, governmental, educational and sociological information needs; interpretation to executives and others; printed sources and databases. Prerequisite: LIS 60001.

LIS 60624
CATALOGING FOR SCHOOL LIBRARY MEDIA CENTERS (3)
Organization and administration of print and nonprint materials in school library media centers. Application of appropriate descriptive cataloging rules, subject headings and classification policies for children's, young adult and educational materials K-12. Prerequisite: Enrollment limited to those pursuing K-12 licensure or those in the School Library Media Program. LIS 60002 recommended.

LIS 60625
LIBRARY MATERIALS AND SERVICES FOR VERY YOUNG CHILDREN (3)
Selection and utilization of materials in relation to needs, abilities and interests of the very young child.

LIS 60626
LIBRARY SERVICES TO YOUNG ADULTS (3)
Selection and utilization of books and materials in relation to needs, abilities and interests of young adults.

LIS 60628
HUMANITIES INFORMATION SOURCES AND SERVICES (3)
Philosophy, literature, fine and performing arts. Prerequisite: LIS 60001 and 60601 (may be taken concurrently).

LIS 60629
LIBRARY MATERIALS AND SERVICES FOR SCHOOL-AGE CHILDREN (3)
Selection and utilization of materials in relation to needs, abilities and interests of school-age children.

LIS 60630
REFERENCE SOURCES AND SERVICES FOR YOUTH (3)
Organization and administration of information sources and information services for children and young adults (K-12). Evaluation, selection and utilization of print and electronic sources. Prerequisite: LIS 60001 recommended.

LIS 60634
ETHNIC LIBRARY AND INFORMATION SERVICES AND COLLECTIONS (3)
Library services to ethnic communities. Types of ethnic materials. Selection and evaluation of ethnic publications. The role of ethnic libraries and archives in preservation of ethnic cultural heritage.

LIS 60640
LIBRARY AUTOMATION (3)
Analysis, design and selection of automated library systems. Considers system analysis and requirements, networking technologies, database management systems, multimedia and hypermedia, and client-serving computing. Also, proposals to vendors, contract negotiation, implementation, staffing, training, system maintenance and evaluation. Prerequisite: LIS 60002 or permission. Special fee: $20.

LIS 60641
INFORMATION STORAGE AND RETRIEVAL SYSTEMS (3)
Fundamentals of information storage and retrieval systems: components, models, file structure, information representation, human-computer interaction, standards, protocols and evaluation of system performance. Design and evaluation of information storage and retrieval including contributions from artificial intelligence and cognitive research. Prerequisite: LIS 60002 or permission. Special fee: $20.

LIS 60642
IMPLEMENTATION OF INFORMATION STORAGE AND RETRIEVAL SYSTEMS (3)
Course has dual tracks: conceptual frameworks and basic technical skills. Covers all major aspects and latest advancements of an information retrieval system and their applications. Technical skills include Unix/Linux, PERL and CGI programming. Prerequisite: LIS 60002 and familiarity with telnet, FTP, HTML and Web browsers. Some computer programming experience helpful.

LIS 60643
ONLINE INFORMATION SYSTEMS (3)
Use of information technologies to search for and retrieve electronic information, primarily through the Internet. Analysis of database structures and electronic records; search principles and heuristics; database system producers; system interfaces; and evaluation of results. Prerequisite: LIS 60001 or permission. Special fee: $30.

LIS 60644
INFORMATION SCIENCE (3)
Focal areas of information science: information retrieval systems, bibliometrics, citation analysis, systems analysis and evaluation, information technologies, information theory, information architecture, knowledge management and user experience.

LIS 60645
DATABASE SYSTEMS (3)
Characteristics and concepts of database systems; types of database models; conceptual database design and implementation; the relational database model and its application: key issues, principles and techniques; current database technologies. Prerequisite: Familiarity with Windows 95/98/2000, Microsoft Office applications and Web browsers.
LIS 60646
USER INTERFACES FOR INFORMATION RETRIEVAL SYSTEMS (3)
Hardware considerations and programming for the implementation of user interfaces of computerized information retrieval systems, primarily for Web interfaces but also for online public access catalogs and other networked, client-server systems. Interface analysis, evaluation and design; project design and implementation. Special fee: $30.

LIS 60647
NETWORK AND SOFTWARE RESOURCES FOR INFORMATION SYSTEMS (3)
Study, use and evaluation of current and emerging information technologies; network and software resources for libraries and information centers, including network analysis and management, standards, protocols and client-server technologies; and techniques for accessing and evaluating such technologies and resources. Special fee: $20.

LIS 60648
ELECTRONIC PUBLISHING ON THE WEB (3)
Students gain the knowledge and skills to participate professionally in current electronic publishing activities, especially Web publishing, and to contribute to future developments in an innovative, socially responsible way.

LIS 60649
INDEXING AND ABSTRACTING (3)

LIS 60650
INFORMATION POLICY (3)
Political, economic, cultural and legal issues regarding the production, distribution and use of information (print, electronic and Web). Policy-making process, standards and protocols, intellectual property, information economy, impact of computers on access and policy, privacy rights, transnational flow of information and the Internet and the World Wide Web. Prerequisite: LIS 60600 or permission.

LIS 60652
FOUNDATIONS AND ADMINISTRATION OF ARCHIVES (3)
Theoretical and historical foundations, organizational patterns of archives, form of archival material, and development of the archival profession in the United States. Basic administration in archival repositories and overview of special problems in archives. Includes field trips where practicable. Prerequisite: LIS 60001.

LIS 60654
PRESCRIPTION MANAGEMENT (3)
Types and causes of deterioration of various kinds of materials, storage and preventive maintenance, preservation through photographic reproduction and microforms, restoration of rare materials.

LIS 60661
TECHNICAL SERVICES (3)
Principles, problems and current issues of acquiring, processing and preserving/conserving materials in libraries and information centers. Prerequisite: LIS 60002.

LIS 60665
RARE BOOK LIBRARIANSHIP (3)
Study of the theory and practice of rare book librarianship through lectures, readings, discussion and practical exercises.

LIS 60666
ETHICAL CONCERNS OF LIBRARY AND INFORMATION PROFESSIONALS (3)
Analysis of ethical concerns of information professionals: codes of ethics, intellectual freedom, free access, privacy, confidentiality, computer issues and relations with management, clients and colleagues. Prerequisite: LIS 60600 or permission.

LIS 60670
CULMINATING EXPERIENCE (3)
Under advisement of a faculty member, students will complete a project that serves as a culminating experience for the M.L.I.S. degree. The project may be a research paper, individual project or culminating practicum. S/U grading; IP permissible. Prerequisite: LIS 60001, 60002, 60600 and 60604.

LIS 60691
SEMINAR IN LIBRARY SCIENCE (1-3)
Advanced research by small groups of students who are qualified to examine problems of certain special areas.

LIS 60692
PRACTICUM — LIBRARIES AND INFORMATION CENTERS (2-3)
Supervised library or information center work experience of a professional nature of not less than 100 clock hours, directed readings and preparation of paper. May not be repeated. IP permissible. Prerequisite: Appropriate type-of-library or type-of-service course.
LIS 60693
VARIABLE TITLE WORKSHOP — LIBRARY AND INFORMATION SCIENCE (1-3)
Intensive examination of special topics of interest to practicing librarians. May be repeated. Maximum workshop credit accepted for M.L.I.S. degree is 4 semester hours. S/U grading.

LIS 60694
COLLEGE TEACHING OF LIBRARY SCIENCE (2-3)
Staff training and experience in college teaching. Repeat registration permitted up to 10 hours. Maximum of 2 hours applicable toward master's degree requirements (with dean's approval). S/U grading; IP permissible. Prerequisite: Permission.

LIS 60695
SPECIAL PROBLEMS IN LIBRARY SCIENCE (1-10)
Individual research at high levels of specialization. Intended for persons in sixth-year program. Repeat registration permitted. IP permissible. Prerequisite: Master's degree and dean's approval.

LIS 60792
INTERNSHIP IN LIBRARY SUPERVISION AND MANAGEMENT (2-10)
Supervised library work experience of an advanced professional nature that concentrates on developing skills in supervision and management. Intended for persons in the sixth-year program. IP permissible. Prerequisite: Master's degree, two years of professional experience and dean's approval.

LIS 61095
SELECTED TOPICS IN LIBRARY SCIENCE (1-3)
Offered irregularly as resources and/or opportunities permit. Topics will be announced in the Schedule of Classes.

LIS 61096
INDIVIDUAL INVESTIGATION (1-2)
Research or individual investigation for master's-level graduate students. Maximum credit per registration: 2 hours. Maximum credit toward master's degree: 4 hours. IP permissible. Prerequisite: Permission.
The School of Visual Communication Design offers graduate study leading to the Master of Arts and Master of Fine Arts degrees. The programs are 32 semester hours and 60 semester hours respectively. The School of Visual Communication Design is accredited by the National Association of Schools of Art and Design.

SPECIAL PROGRAMS
Each year, the School of Visual Communication Design conducts special summer programs that are available for graduate credit. The KSUCDA program is co-sponsored by Kent State University’s School of Visual Communication Design and the University & College Designers Association, an international organization of designers and design educators that promotes excellence in visual communications for institutions of higher education. The VCD-KSUCDA program was developed specifically for working professionals and/or students at the graduate level. The variable length, variable credit workshops provide studio experiences, lectures and seminars on the Kent State University campus during summers, and off campus at sites throughout the United States during other times of the year. Accredited and taught by Kent State University faculty, in concert with nationally and internationally noted experts as guest faculty, the credits may be applied toward the M.A. or the M.F.A. degree programs if accepted into the graduate program in the Kent State University School of Visual Communication Design. Previous guest faculty includes: Kenneth Hiebert, Rudolph de Harak, Michael Bierut, McRay Magleby, Bruno Monguzzi, Michael Patrick Cronan, Mervyn Kurlansky, Clement Mok, Alan Cober, Michael Manwaring, Michael Vanderbyl, Gary Kelley, Woody Pirtle, Christopher Pullman, April Greiman, Ken Carbone, Lance Hidy, Craig Frazier and Rudi Ruegg. Interested persons should write or call the School of Visual Communication Design or visit the Web site at http://vcd.kent.edu.

ADMISSION
In addition to regular application requirements of the university, admission to Master of Arts or Master of Fine Arts programs requires the following:

1. An undergraduate degree in graphic design or illustration (3.0 major GPA).
2. Three letters of recommendation from persons who are themselves in the applicant’s proposed field of study or a closely related area.
3. A portfolio that shows an emphasis in the proposed area of studio interest. The portfolio is typically 15-20 35mm color slides, numbered and signed and in a plastic slide sheet. They should be accompanied by a numbered slide list that indicates medium, process, size, year and any other appropriate information. Applicants must also submit a 250-word autobiographical statement along with their slide portfolio. A Mac-compatible CD (not PC) may be substituted for the slide portfolio.

Visits to the School of Visual Communication Design preceding the application are recommended.

Two deadlines are in effect: February 15 for the three summer sessions and fall semester admissions, and October 15 for the spring semester admissions. All materials referred to above must be received by these deadlines.

PROGRAM REQUIREMENTS
The Master of Arts degree program requires the successful completion of 32 semester hours of graduate credit including a thesis. Students may choose the option of 25 studio hours and an M.A. project instead of the thesis.

The Master of Fine Arts program requires the successful completion of 60 semester hours of graduate credit and requires a thesis.
**ADVISING**
After a person is admitted to the program and notifies the graduate coordinator of his or her intention to enroll, a graduate advisor is assigned to help plan a course of study and to familiarize the student with the procedures of the school. The Graduate Program Handbook, which describes the routine procedures of the school, may be obtained from the graduate coordinator's office. To help in the planning of the student's program of study, the newly admitted student should share examples of his or her work with the graduate advisor.

**CANDIDACY REVIEW EXAMINATION**
Successful completion of the Candidacy Review Examination VCD 65009 is a requirement in every School of Visual Communication Design graduate program for both M.A. and M.F.A. students.

Successful completion of the examination designates the student as a candidate for the degree.

**THESIS**
The thesis is a significant project or body of work done independently of other coursework. Students are expected to demonstrate the ability to conduct research or produce a significant, original project in a discriminating and disciplined manner. The thesis topic should be one that will further the student's knowledge and ability in the specialty by demonstrating skill as a researcher or professional designer/illustrator. The outcome should be an effort that serves as a foundation for the pursuit of independent work when the graduate program is completed. At this stage, students are expected to work in close consultation with their thesis advisor.

The thesis is mandatory for M.F.A. candidates. M.A. candidates may choose to complete either a 6-credit-hour M.A. thesis or a 4-credit-hour M.A. project with an additional 2 credit hours of coursework in the major.

**FINAL EXAMINATION**
The final examination is at the completion of the studio or research thesis. The final examination is the presentation and defense of the thesis and is also an examination of the graduate student's general comprehension of the visual communication design. Graduate students are expected to follow the university schedule of deadlines for taking the final examination and presenting thesis materials.

**LABORATORY FEES**
Laboratory fees are assessed for some courses. The graduate student should seek updated information from the School of Visual Communication Design office on course fees.

**STUDIO FACILITIES**
Limited studio space is available on campus for graduate students.

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**Combined Baccalaureate/Master's Program**
Superior undergraduate students majoring in Visual Communication Design may apply for a combined Bachelor of Science and Master of Arts degree program. The B.S./M.A. in Visual Communication Design is a five-year program with optional concentrations in 2-D graphic design, 3-D graphic design and illustration. To be considered for the combined degree program, students must pass a portfolio review, have completed at least 96 semester hours demonstrating excellence in formal organization and conceptual problem-solving abilities and technical skills, have maintained at least a 3.0 overall grade point average with a 3.25 in the major, and have faculty approval.

Option: The combined B.S./M.A. degree program allows the selection of completing a 6-credit-hour M.A. thesis or a 4-credit-hour M.A. project with the addition of 2 credit hours of coursework in the major.

The B.S. degree will not be awarded separately from the combined B.S./M.A. in Visual Communication Design. In the unusual circumstance that students are unable to complete the combined degree program after acceptance and completion of coursework toward the degrees, they will be required to complete either the B.A. or the B.F.A. degree. All courses taken in pursuit of the combined degree program may be applied to either of these degrees except the 2 semester credit hours of Individual Investigation 40096 and any thesis credit hours. All other requirements for either degree must be completed.

After admittance to the combined B.S./M.A. degree program, a student may change to a combined Bachelor of Science/Master of Fine Arts degree program with the permission of the VCD school director, the school graduate coordinator and dean of the college through submission of a Change of Degree Program form.

The combined B.S./M.F.A. degree program requires an additional 28 semester credit hours of graduate work, which includes a 6-credit-hour M.F.A. thesis, beyond the 32 required for the B.S./M.A. degree program.

**Courses (VCD)**

VCD 50000
BASIC COMPUTER GRAPHIC DESIGN/ILLUSTRATION (2)
An introduction to the use of the computer as a tool in graphic design and illustration. Exploration of the relationship and integration of various hardware configurations and software solutions to meet the demands of today's designers/illustrators. IP permissible.
VCD 50003
INTERMEDIATE COMPUTER DESIGN — GD & I VARIOUS SOFTWARE (2)
Addresses the issues of page layout and design, digital manipulation and vector graphic illustration for graphic design professionals. Prerequisite: VCD 50000 or permission. Special fee: $36 per semester.

VCD 50025
PROFESSIONAL PORTFOLIO IN GRAPHIC DESIGN & ILLUSTRATION (1)
Development of a professional portfolio in graphic design and/or illustration through selection and refinement of previously completed classroom work and/or development of projects in areas of deficiency with emphasis on organization and presentation. Special fee: $12 per semester.

VCD 50052
GRAPHIC DESIGN — TRAVEL AND FIELD EXPERIENCE (1-6)
Development of awareness and understanding in the practical application of graphic design and communication through directed field trip experience. Repeatable for a total of 16 credit hours. Prerequisite: Permission.

VCD 50053
GRAPHIC DESIGN STUDIO — GLYPHIX (1-6)
Professional experience through an internal design studio. Involves responsibilities and procedures for the production of communication materials for off-campus clients including nonprofit organizations, charities, arts groups and selected on-campus groups and departments. Repeatable for a total of 12 credit hours. IP permissible. Special fee: $12 per semester hour.

VCD 50092
INTERNSHIP — GRAPHIC DESIGN AND ILLUSTRATION (1-6)
Experience in design studio, agency or company involving design responsibilities and procedures to broaden a student’s understanding of the profession through a real job situation. S/U grading; IP permissible.

VCD 50095
SPECIAL TOPICS GRAPHIC DESIGN/ILLUSTRATION (1-4)
To broaden the course offerings into specialized areas of study in graphic design and illustration taught by experts in the profession as guest faculty. May use S/U or letter grade depending on orientation of course—lecture or studio. IP permissible. Primarily used to fulfill electives in graphic design or illustration. Repeatable for a total of 16 credit hours. Special fee: $12 per semester hour.

VCD 52000
ADVANCED ILLUSTRATION/MEDIA (2)
Discussions and practice of media and grounds as they pertain to the illustration field. Discussion will also center around the problems in developing work of reproduction.

VCD 52002
EDITORIAL ILLUSTRATION (2)
Exploration and discussion of various illustration techniques and their application in the publishing field. Emphasis is placed on client needs, concept and intended audience.

VCD 52003
ADVERTISING ILLUSTRATION (2)
Exploration and discussion of various illustration techniques and their application in advertising. Emphasis is placed on client need, concept of solution and intended audience.

VCD 52004
COMPUTER ILLUSTRATION (2)
An introductory course on the use of the computer as an illustration tool. The class will cover the necessary computer applications for advertising, editorial and book illustration.

VCD 52051
CALLIGRAPHY AND LAYOUT (2)
Development of creative techniques and technical proficiency in calligraphy as applied to illustration and graphic design.

VCD 53000
ADVANCED STUDIO SKILLS/GD & I — ELECTRONIC PREPRESS PRODUCTION (2)
A technical lecture course designed to teach the fundamental techniques and processes of electronic prepress and printing production. This material is presented through a series of lectures, demos, written tests and field trips.

VCD 53001
KINETIC AND SEQUENTIAL GRAPHIC DESIGN (2)
The exploration of the use of the computer in kinetic and sequential graphic design, 3-D modeling and sound. Prerequisite: Graduate standing and ART 43001; or ART 53001; or equivalents. Special fee: $28 per semester.

VCD 53002
TYPOGRAPHIC/PHOTOGRAPHIC GRAPHIC DESIGN (2)
The use of typography (rather than visual imagery) as the primary design form in solving graphic communication problems. Special fee: $32 per semester.

VCD 53003
CORPORATE IDENTITY/GRAphIC DESIGN (2)
Use of graphic design forms (typography, photography and illustration) in the development of corporate identification for total advertising programs. Special fee: $28 per semester.

VCD 53004
ISSUES FOR GRAPHIC DESIGN BUSINESSES (2)
Designed to familiarize students with the basic business, marketing, legal and ethical standards in the graphic design industry. Prerequisite: Permission.
### Visual Communication Design

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCD 53005</td>
<td>3-D GRAPHIC DESIGN — DIRECT MAIL/PACKAGING/POINT OF PURCHASE</td>
<td>2</td>
<td>Use of typography and visual images, photography and illustrations, in the structure of information for communication on three-dimensional surfaces: direct mail, packaging and point-of-purchase display. Special fee: $28 per semester.</td>
</tr>
<tr>
<td>VCD 53007</td>
<td>INFORMATIONGRAPHICS</td>
<td>3</td>
<td>Cross-listed with JMC 56001. Introduction to shapes, color, type and combinations of these for computer-designed news graphics; maps, charts, graphs and diagrams. Prerequisite: Graduate standing and/or permission.</td>
</tr>
<tr>
<td>VCD 53051</td>
<td>EXPERIMENTAL TYPOGRAPHY</td>
<td>2</td>
<td>Investigation of form, pattern and texture in typographic usage. Emphasis on linking traditional letterform technology and computer-generated forms. Special fee: $24 per semester.</td>
</tr>
<tr>
<td>VCD 56000</td>
<td>WEB DESIGN AND PROGRAMMING I</td>
<td>2</td>
<td>Course focus is on Web concepts and high-quality Web design: computer science and visual communication design principles, tools, architecture, presentation, design and creation of Web sites through teamwork. Course is jointly taught by computer science and visual communication design. Special fee: $10 per credit hour (subject to change).</td>
</tr>
<tr>
<td>VCD 56001</td>
<td>WEB DESIGN AND PROGRAMMING II</td>
<td>2</td>
<td>Advanced course in Web technologies and multimedia Web design: Web servers, security, advanced design, Java servlets, applets, database connectivity, site maintenance, relation of actual Web sites by teamwork. Course is jointly taught by computer science and visual communication design. IP permissible. Special fee: $10 per credit hour (subject to change).</td>
</tr>
<tr>
<td>VCD 56003</td>
<td>DIGITAL TYPOGRAPHY</td>
<td>2</td>
<td>Applying typographic rules in digital environments. Organizing large amounts of text in complex architectures.</td>
</tr>
<tr>
<td>VCD 56005</td>
<td>VISUAL FORM AND KINETICS GRAPHICS</td>
<td>2</td>
<td>Visual communication design course on intermediate to advanced layout techniques focusing on kinetic graphics and video. Emphasis on creating specific messages with form; typography, color, space and sound. IP permissible. Prerequisite: Permission.</td>
</tr>
<tr>
<td>VCD 56053</td>
<td>WEB DESIGN AND PROGRAMMING STUDIO</td>
<td>2</td>
<td>A joint project course (Department of Computer Science and School of Visual Communication Design) exploring advanced aspects of Web design and programming. Student may pursue individually defined projects or team projects for real clients. Limited enrollment. IP permissible. Prerequisite: Permission.</td>
</tr>
<tr>
<td>VCD 60009</td>
<td>CANDIDACY REVIEW/GRAPHIC DESIGN &amp; ILLUSTRATION</td>
<td>1</td>
<td>A formal review of the work completed in the first 12 semester credit hours of graphic design and/or illustration courses for both M.F.A and M.A. S/U grading; IP permissible. Prerequisite: Permission.</td>
</tr>
<tr>
<td>VCD 60053</td>
<td>GRAPHIC DESIGN STUDIO MANAGEMENT — GLYPHIX</td>
<td>1-6</td>
<td>Professional studio management experience through internal design studio GLYPHIX. Involves responsibilities for coordinating undergraduate student designers, clients and vendors. Oversight of scheduling, production and quality control. Repeatable for a total of 12 credit hours. Special fee: $12 per semester hour.</td>
</tr>
<tr>
<td>VCD 60095</td>
<td>SPECIAL TOPICS IN GRAPHIC DESIGN/ILLUSTRATION</td>
<td>1-4</td>
<td>To broaden course offerings into specialized areas of study in graphic design and illustration taught by experts in the profession as guest faculty. Used to fulfill primary studio requirements in graphic design and/or illustration. Repeatable for a total of 16 credit hours. May use S/U or letter grade depending on orientation of course (lecture or studio). IP permissible. Special fee: $12 per semester hour.</td>
</tr>
<tr>
<td>VCD 60096</td>
<td>INDIVIDUAL INVESTIGATION IN GRAPHIC DESIGN AND ILLUSTRATION</td>
<td>1-16</td>
<td>Individual investigation related to topics of graphic design and illustration approved and under the direction of a faculty member. IP permissible. Special fee: $12 per semester hour.</td>
</tr>
<tr>
<td>VCD 60098</td>
<td>RESEARCH</td>
<td>1-15</td>
<td>Independent research under the direction of a faculty member in the division of Design/Illustration. Prerequisite: Permission.</td>
</tr>
<tr>
<td>VCD 60099</td>
<td>M.A. PROJECT GD &amp; I</td>
<td>4</td>
<td>A research project for nonthesis-option M.A. students approved in consultation with the faculty advisor that culminates in a visual project, exhibition and formal presentations. IP permissible.</td>
</tr>
<tr>
<td>VCD 63220</td>
<td>GRAPHIC DESIGN STUDIO SEMINAR</td>
<td>2-10</td>
<td>Experience in design studio, agency or company involving design responsibilities and procedures in area related to students’ particular interests.</td>
</tr>
</tbody>
</table>
Thesis students must register for a minimum of 6 hours, 2-6 hours in a single semester or distributed over several semesters if desired. S/U grading; IP permissible.

Prerequisite: VCD 68199.

VCD 68199
M.A. THESIS I (2-6)
Thesis students must register for a minimum of 6 hours, 2-6 hours in a single semester or distributed over several semesters if desired. S/U grading; IP permissible.

VCD 69199
M.F.A. THESIS I (2-6)
Thesis students must register for a minimum of 6 hours, 2-6 hours in a single semester or distributed over several semesters if desired. S/U grading; IP permissible.

VCD 68299
M.A. THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: VCD 68199.

VCD 69299
M.F.A. THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: VCD 69199.
COLLEGE AND GRADUATE SCHOOL OF EDUCATION, HEALTH AND HUMAN SERVICES

David A. England, Dean
408 White Hall
330-672-2202
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Awilda Hamilton, Associate Dean for Administrative Affairs and Graduate Education
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SPECIAL NOTE: Effective Fall 2005, the College of Education is renamed the College and Graduate School of Education, Health and Human Services (EHHS). Effective Fall 2006, the following schools and degree programs will be moving from the College of Fine and Professional Arts to the new College and Graduate School of Education, Health and Human Services: School of Exercise, Leisure and Sport; School of Family and Consumer Studies; School of Speech Pathology and Audiology; Bachelor of Science in Integrated Health Studies and the Master’s of Public Health.

The College and Graduate School of Education, Health and Human Services offers a full range of graduate programs resulting in the Doctor of Philosophy, Educational Specialist, Master of Education, Master of Arts and Master of Arts in Teaching degrees.

The M.Ed. degree is available in a wide variety of program areas. Many of the programs lead to licensure through the Ohio Department of Education. The M.A. degree is similar to the M.Ed. degree with the addition of a thesis requirement. This option is favored by students who are seeking an opportunity to become involved in empirical or library-based research during
their master’s studies. The M.A.T. degree is designed to prepare school teachers. It is a selective, full-time program serving individuals who have never held a teaching license.

The Educational Specialist degree is available in the areas of counseling, curriculum and instruction, educational administration, rehabilitation counseling, school psychology, intervention specialist and career-technical teacher training.

The Doctor of Philosophy degree is available in education with majors in counseling and personnel services education, curriculum and instruction, educational administration, educational foundations and intervention specialist.

Courses and workshops are also made available to professional educators who are not seeking advanced degrees and to students of the other graduate schools of Kent State University.

The College of Education, Health and Human Services is accredited by the National Council for the Accreditation of Teacher Education for the preparation of early childhood teachers, middle childhood teachers, adolescence to young adult teachers, intervention specialist teachers, vocational teachers and school service personnel at the baccalaureate, master’s, educational specialist and doctoral levels. Accreditation is also provided by the American Psychological Association, the Commission on Rehabilitation Education, the Council on Accreditation of Counseling and Related Educational Programs, the National Council on Education for the Deaf and the Ohio Department of Education.

Visit http://www.educ.kent.edu for more information.

THE OFFICE OF GRADUATE STUDENT SERVICES
Nancy Miller
308 White Hall
330-672-0557
nmiller1@kent.edu
http://oas.educ.kent.edu

The Office of Graduate Student Services performs the following functions:

1. Serves as the admissions office for the College and Graduate School of Education, Health and Human Services.
2. Disseminates information regarding College and Graduate School of Education, Health and Human Services programs of study and corresponding graduate admission requirements and procedures.
3. Maintains graduate student academic records.
4. Monitors graduate students’ programs and degree progress.
6. Provides information regarding licensure standards in the state of Ohio.

Persons seeking information on graduate nondegree status or graduate licensure programs should consult the Office of Graduate Student Services at the location listed above.

The Office of Graduate Student Services welcomes prospective students who seek guidance in identifying an appropriate program area or who have general questions regarding the College of Education, Health and Human Services. Office hours are Monday through Friday, 7:30 a.m. to 5 p.m. Information and the online admission application can also be obtained from the Web site: http://oas.educ.kent.edu.

Master’s Degree Programs

ADMISSION
In addition to observing regular application requirements of the university, applicants must provide the following:

1. The appropriate master’s degree application directly to the Office of Graduate Student Services;
2. A minimum of two recommendations;
3. Satisfactory scores on the general knowledge portion of the Graduate Record Examination, if required; and
4. Two current official transcripts from each college or university in which 8 semester hours (12 quarter hours) or more were earned;
5. Have earned a 2.75 undergraduate grade point average (a 3.0 grade point average required for Educational Administration). Postbaccalaureate or prior graduate study will be taken into consideration when interpreting grade point average.

Certain program areas have additional admissions test requirements. Please note that initial licensure programs do require students to be admitted directly into the degree program. Please contact the Graduate School of Education, Health and Human Services admissions specialist at (330) 672-2576 for specific information.

Students seeking licensure in teaching, pupil personnel and administration must be able to attest to good moral character, i.e., never pled guilty to or been convicted of any felony or misdemeanor, other than traffic offenses in Ohio or another state. In addition, they must be able to answer no to the following questions: Have you ever been convicted of, found guilty of or pled guilty to any misdemeanor other than traffic offenses? Have you ever been convicted of, found guilty of or pled guilty to any felony? Have you ever had a criminal conviction sealed or expunged? Have you ever had a teaching certificate limited, suspended or revoked? Have you ever surrendered a teaching certificate, license or permit?

Students who cannot attest to the above should immediately contact a program counselor in the Office of Student Services, 306 White Hall, (330) 672-2862. Falsification of information is grounds for dismissal and nonlicensure.
In some instances, students may be admitted at the master’s level on a conditional basis. Students who are admitted conditionally will be prescribed 9 semester hours of coursework, which are to be taken as the first 9 hours at Kent State University. An earned grade below “B” in any of the 9 hours of classes will result in dismissal. The conditional status will be removed and the students will be able to proceed in coursework upon satisfactory completion of the prescribed hours.

The following M.Ed./M.A. degree programs require that applicants hold Ohio Provisional Teaching Certificates/licenses or the equivalent:

- Computer Technology
- Math Specialist
- Middle Childhood Education
- Reading
- School Administration
- Secondary Education
- Transition to Work

The following school-focused specializations are open to applicants who do not hold teaching certificates/licenses:

- Adolescence to Young Adult Education (M.A.T. program)
- Deaf Education
- Early Childhood Education
- Early Childhood Education (M.A.T.)
- Early Childhood Intervention Specialist
- Educational Interpreter
- Gifted Education
- Library/Media
- Middle Childhood Education
- Mild/Moderate Intervention Specialist
- Moderate/Intensive Intervention Specialist
- School Psychology

PROGRAM REQUIREMENTS
The number of semester hours required for completion of a master’s degree varies widely among individual programs depending upon accreditation standards, learned society guidelines and licensure requirements. Although it may be possible for the hours specified in a particular program to be adjusted based upon students’ backgrounds, the minimum number of hours for a master’s degree in the College of Education, Health and Human Services is 32.

UNIVERSAL PROFESSIONAL REQUIREMENTS
Students are strongly encouraged to contact their faculty advisor prior to selecting Universal Professional Requirement coursework. A double major or major in education applied toward either the M.Ed. or M.A. degree must include the following Universal Professional Requirements:

- Students must select one course from the research category. They may substitute a UPR-approved program-area research course.

Students must select one course from the Psychological Foundations or Social and Cultural Foundations categories.

**Research** 3 Hours
EDUC 65510 .......................................................... 3
EDUC 65511 .......................................................... 3

**Psychological Foundations** 3 Hours
EDUC 65520 .......................................................... 3
EDUC 65521 .......................................................... 3
EDUC 65523 .......................................................... 3
EDUC 65524 .......................................................... 3

**Social and Cultural Foundations** 3 Hours
EDUC 65530 .......................................................... 3
EDUC 65531 .......................................................... 3
EDUC 65532 .......................................................... 3

**Master of Arts Degree**

The Master of Arts degree requires a minimum of 32 semester hours of graduate coursework including at least 16 semester hours at the 60000 level or above. A major consisting of 18 or more semester hours in the College of Education, Health and Human Services is required. The Universal Professional Requirements for master’s degree programs and 6 semester hours of Thesis I (60199) must be included in the degree program. The M.A. students have six years from the term of first enrollment to complete the program.

Students are expected to meet with an assigned faculty advisor and file their program prospectus with the Office of Student Services. Ideally, substitutions and waivers of coursework should be noted at the time the prospectus is submitted. Any subsequent changes to the prospectus require a memo from the advisor to the director, Office of Student Services. Waived courses do not count toward satisfaction of minimum hour requirements for graduation.

**Master of Education Degree**

The Master of Education degree requires a minimum of 32 semester hours of graduate coursework including at least 16 semester hours at the 60000 level or above. A major consisting of 18 or more semester hours in the College of Education, Health and Human Services is required. The Universal Professional Requirements for master’s degree programs must be included in the program. M.Ed. students have six years from the term of first enrollment to complete the degree.

Students are expected to meet with an assigned faculty advisor and file their program prospectus with the Office of Graduate Student Services (308 White Hall). Ideally, substitutions and waivers of coursework should be noted at the time the prospectus is submitted. Any subsequent changes to the prospectus require a memo from the advisor to be submitted.
to the Office of Graduate Student Services. Waived courses do not count toward satisfaction of minimum hourly requirements for graduation.

Master of Arts in Teaching Degree

The Master of Arts in Teaching degree in adolescence to young adult education requires a minimum of 44-45 semester hours of coursework, of which at least 39 must be at the graduate level, and a school-based internship. For students who have an appropriate undergraduate background in the subject matter field, the program is designed to be completed in one summer and the following academic year. The general test of the Graduate Record Examination is required. The Graduate Management Aptitude Test may be acceptable. Deadline for application to be completed is February 1. Praxis II tests are required for licensure.

The Master of Arts in Teaching degree in early childhood is a program for students who have a bachelor's degree in an area other than teacher education. This program requires two years of full-time study which begins in June. Students are also required to take the Graduate Record Examination and the math portion of Praxis I for admission. Deadline for application to be completed is March 1. The Praxis II Specialty Test for Early Childhood Education is required for licensure.

Educational Specialist Degree

The Ed.S. degree is a post-master's practitioner program. This is not an interim step between the master's and doctoral degrees, but provides preparation for a specialty position within the field of professional education.

ADMISSION

Educational specialist programs in the College of Education, Health and Human Services practice selective admissions. Requirements include, among other things, evidence of high scholastic achievement, a high level of verbal ability and positive letters of recommendation.

All Ed.S. programs, with the exception of school psychology, require that applicants must have completed or be about to complete their master's degree from an accredited institution.

In addition to observing regular application requirements of the university, applicants must do the following:
1. Submit the appropriate Ed.S. application directly to the Office of Student Services.
2. Submit satisfactory scores on the general knowledge portion of the Graduate Record Examination if required.
3. Submit a minimum of two recommendations for admission to the Ed.S. degree program. One recommendation should be from an employer or other individual who can address the applicant’s ability in a professional work setting.
4. Participate in interviews with selected program-area faculty or the program-area admissions committee as requested.
5. Complete any special procedures mandated by specific program areas.
6. Submit any supplemental information that may assist admissions committees in assessing academic or experiential background. Supplemental information may include such items as professional vita, publications, additional recommendations and a copy of a master's thesis.
7. Have earned a master's grade point average of 3.25 or higher.

PROGRAM REQUIREMENTS

Upon admission to the Ed.S. degree program, students will be assigned an advisor.

Students should also be aware of the following points:
1. An appropriate program should be planned with the assigned advisor early in the semester following official admission. The resulting prospectus must be filed in the Office of Graduate Student Services. Ideally, substitutions and waivers of coursework should be noted at the time the prospectus is submitted. Any subsequent changes to the prospectus require a memo from the advisor submitted to the Office of Graduate Student Services. Waived courses do not count toward satisfaction of minimum hourly requirements for graduation.
2. Ed.S. programs require a minimum of 60 graduate semester hours that include the master's degree coursework.
3. At the time of the awarding of the Ed.S. degree, students who hold a master's degree from Kent State University must have earned at least 60 semester credit hours at Kent State University beyond the baccalaureate degree. Ed.S. degree criteria allow students holding a Kent State University master's degree to apply up to 12 semester hours of credit earned at another institution to the satisfaction of the 60-semester credit hour requirement. The hours transferred may have been included in the master's program or taken at a later date. Students holding a master's degree from another institution must have earned at least 30 graduate semester hours of credit at Kent State University as a part of the Ed.S. program. For such students, no credit earned beyond the master's degree at another institution may be transferred to the Ed.S. program.
4. Ed.S. students have five years from the term of first enrollment to complete the degree.
5. Ed.S. students must complete the Universal Professional Requirements through coursework at Kent State University or must have the courses substituted or waived based on completion of similar coursework at another institution.

UNIVERSAL PROFESSIONAL REQUIREMENTS

Students are strongly encouraged to contact their faculty advisor prior to selecting Universal Professional Requirements coursework. The Universal Professional Requirements are as follows:
- Students must select one course from the Research category. They may substitute a UPR-approved program-area research course.
**Admission**

In addition to the regular application requirements of the university, applicants must do the following:

1. Submit the appropriate Ph.D. application directly to the Office of Graduate Student Services.
2. Submit a minimum of two recommendations for admission to the Ph.D. degree program. Recommendations previously submitted for a prior degree application are not acceptable. Two letters of recommendation should be from former or current professors who can address the applicants’ potential as students.
3. Submit a score from the Graduate Record Examination and any other test required by a particular program. The minimal acceptable verbal score is 550.
4. Schedule a preliminary on-campus interview with the appropriate program coordinator as early as possible in the application process. This initial interview is designed to explain steps for admission, delineate any additional specific department requirements for application, discuss program objectives and requirements, and explore the availability of graduate appointments. It is beneficial for applicants to schedule this interview far in advance of their anticipated entrance.
5. Have earned a master’s grade point average of a 3.50 or higher.
6. Arrange to do one of the following if you are pursuing Curriculum and Instruction, Health Education or Health Psychology: Provide a written response to a professional article provided by the department or provide a sample of written work such as a thesis or published article.
7. Participate in interviews with selected program-area faculty or the program-area admissions committee as requested.
8. Complete any special procedures mandated by specific program areas.
9. Submit any supplementary information that may assist admissions committees in assessing academic or experiential background. Supplementary information may include such items as professional vita, publications, additional recommendations and a copy of a master’s thesis.

Please note: Application deadlines indicated require that all supporting materials be received by that date. Preliminary interviews and one-hour writing samples, if applicable, must be completed well in advance of the application deadline.

**Application Deadlines**

Doctoral programs in counseling and human development services in the College of Education, Health and Human Services select students at specific times of the year. The deadline for completion of all application materials for counseling and human development services is February 15.

The school psychology doctoral program selects students several times per year. The dates of this selection are February 15, June 15 and October 15.

All other doctoral programs review applicants on a continuing basis.

**Program Requirements**

After admission to the Ph.D. degree program, students plan a program of study with their respective faculty advisory committee headed by their advisor. Students’ programs may include at least one appropriate graduate-level minor or cognate as well as the major.

Students are expected to meet with their assigned faculty advisor and file their program prospectus with the Office of Graduate Student Services. Ideally, substitutions and waivers of coursework should be noted at the time the prospectus is submitted. Any subsequent changes to the prospectus require a memo from the advisor to the Office of Graduate Student Services.

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**Research**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
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</thead>
<tbody>
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**Psychological Foundations**

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**Social and Cultural Foundations**

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<thead>
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<th>Course Code</th>
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<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>EDUC 65530</td>
<td>EDUC 65531</td>
<td>3</td>
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</table>

Substitutions and waivers of the Universal Professional Requirements are initiated by students in consultation with their faculty advisor. Students and advisors must complete the UPR Substitution/Waiver Form prior to approval of the prospectus. This form and the guidelines for this procedure are available in the Office of Educational Foundations and Special Services, 405 White Hall.

**TRANSFER AND NONDEGREE CREDIT**

The College and Graduate School of Education, Health and Human Services will allow a total of 12 semester hours of graduate credit to be transferred into a master’s or Ed.S. program. These hours can be transferred from another institution, taken while admitted as a temporary or special nondegree student, or a combination of both. In no case, however, can more than 12 hours be used. Students cannot use more than 4 hours of workshop credit toward a degree program (if the workshops are transferred into Kent State, they must be a grade of “A” or “B”). Also, coursework cannot be more than 6 years old at the time of graduation.
Services. Waived courses do not count toward satisfaction of minimum hourly requirements for graduation.

Although competence in reading a foreign language is not universally required of all students in the College of Education, Health and Human Services, it may be required where the dissertation research demands it.

UNIVERSAL PROFESSIONAL REQUIREMENTS
Students are strongly encouraged to contact their faculty advisor prior to selecting Universal Professional Requirements coursework. The Universal Professional Requirements are as follows:

- Students must take all Basic Research courses.
- Students must select one Advanced Research course.
- Students must take two Foundational courses.

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<tr>
<td>EDUC 85515 ........................................</td>
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<td>EDUC 85516 ........................................</td>
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<thead>
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</tr>
<tr>
<td>or</td>
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<td>EDUC 85518 ........</td>
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<tr>
<td>EDUC 85591</td>
<td>3</td>
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<td>(EDUC 85591 selected from an approved menu)</td>
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Substitutions and waivers of the Universal Professional Requirements are initiated by students in consultation with their faculty advisor. Students and advisors must complete the UPR Substitution/Waiver Form prior to approval of the prospectus. This form and the guidelines for this procedure are available in the Office of Educational Foundations and Special Services in 405 White Hall.

Licensure, Endorsements and Validations

All areas eligible for licensure, endorsement and validation require current teacher certification/licensure unless noted otherwise.

PRAXIS II
Candidates for licensure in Ohio will need to satisfactorily complete the appropriate portion(s) of Praxis II. This applies to persons seeking initial teaching, pupil personnel and administrative licenses, as well as anyone adding an endorsement or validation to an existing certificate/license. Specific licensure tests are being phased in and may not yet be available. Please contact the Office of Student Services, 330-672-2862, for additional information. Individuals applying for initial licensure will also be required to complete a fingerprint check with the Bureau of Criminal Identification and Investigation (BCII). Anyone who has not lived continuously in Ohio for the last five years must also complete an FBI record check. Electronic fingerprinting is available in room 221 White Hall for BCII record checks. Please note: electronic fingerprinting is not an option for the FBI record check. FBI cards can be obtained in 306 White Hall.

Recommendation for licensure by the College of Education, Health and Human Services and clearance of record checks by BCII and FBI (if appropriate) will result in the issuance of the appropriate provisional license.

All students should apply for licensure during the last five weeks of the semester in which they expect to complete all requirements.

Applications will not be processed until a student has successfully completed Praxis II Examinations and all coursework requirements. Once all requirements are completed the application will be processed by the State Department of Education in Columbus. Licenses will be issued by the state once the application is processed (approximately four to six weeks) and the background check by BCII and FBI (if appropriate) is received.

If documentation is requested by a school system prior to issuance of the license, a letter of completion will be issued by the Office of Student Services.

LICENSURE AREAS
The following areas are eligible for Ohio Department of Education teacher licensure through coursework offered by the College of Education, Health and Human Services:

- Early Childhood*
- Early Childhood Intervention Specialist*
- Deaf Education*
- Library/Media*
- Mild/Moderate Intervention Specialist*
- Moderate/Intensive Intervention Specialist*

*Initial licensure available at the graduate level. Requires no prior certification or licensure.

The Master of Arts in Teaching program is available for initial licensure in specific areas of adolescent to young adult education, early childhood, multi-age areas and career-technical teacher education. Major subject area coursework must be completed prior to entry into the program.

The following areas are eligible for Ohio Department of Education educational personnel licensure through coursework offered by the College of Education, Health and Human Services:

- Principal
- School Counselor*
- School Psychologist
- Superintendent
**Education**

- Educational Administrative Specialist with concentrations in the following:
  - Educational Research
  - Pupil Services Administration
  - School Community Relations
  - Staff Personnel Administration
  - Vocational Education Administration, Curriculum, Instruction and Professional Development

**ENDORSEMENTS**
The following areas are eligible as endorsements by the Ohio Department of Education through College of Education, Health and Human Services graduate studies:
- Computer Technology
- Pre-Kindergarten
- Reading
- Transition to Work

**DEPARTMENT OF ADULT, COUNSELING, HEALTH, AND VOCATIONAL EDUCATION**

Donald L. Bubenzer, Chair
316 White Hall
330-672-7977
dbubenze@kent.edu
http://achve.educ.kent.edu

The Department of Adult, Counseling, Health and Vocational Education (ACHVE) devotes its primary attention to degree programs for the preparation of professionals in counseling, health education and promotion and career-technical teacher education.

The Department of Adult, Counseling, Health and Vocational Education houses the following program areas:
- Counseling and Human Development Services (CHDS)
- Health Education and Promotion
- Career-Technical Teacher Education

**Master of Education and Master of Arts**
The M.Ed. or M.A. degree in education is available through the ACHVE department in the following programs:
- Community Counseling
- Health Education and Promotion
- School Counseling*
- Career-Technical Teacher Education

*Initial licensure available at the graduate level. Requires no prior certification or licensure.

**Community Counseling**
The mission, intent and purpose of the Community Counseling Program at Kent State University is to prepare students for employment as counselors in community-based human service agencies (e.g., substance abuse facilities, mental health centers, child and family service agencies, etc.) as well as private counseling facilities.

The Council for Accreditation of Counseling and Related Educational Programs (CACREP) has conferred accreditation to the community counseling program at Kent State University.

**ADMISSION**
A selective admission procedure is used. To be eligible for selection, applicants must attend an orientation and an interview session. The orientation and interview sessions are held three times a year, usually in November, April and July. Deadlines are as follows: For spring admission all materials should be submitted by October 1. For summer admission all materials should be submitted by March 1. For fall admission all materials should be submitted by June 1.

Requirements for admission in Counseling and Human Development Services (CHDS) master’s degree program include:
1. The first requirement of the admission process is that the applicant qualify for graduate standing in the Graduate School of Education, Health and Human Services at Kent State University. The academic criteria include an overall undergraduate grade point average of 2.75.
2. Present satisfactory recommendations from two persons regarding the applicant’s professional experience and potential strengths as a counselor (preferably from counselors and/or professors who know your potential as a graduate student in community counseling).

3. Faculty review of application materials. In reviewing materials and interviewing applicants, the faculty assess the applicants with regard to each applicant’s:
   • potential success in forming effective interpersonal relationships;
   • aptitude for graduate study, including technological competencies and computer literacy (see note below);
   • career goals in relationship to the program;
   • openness to self-examination; and
   • openness to personal and professional development.

Note: Technological competence and computer literacy include using software to develop Web pages, presentations and professional papers; using audiovisual equipment such as video recorders and playback units; using computerized testing programs; using e-mail; helping clients search for various types of counseling-related information via the Internet; being able to subscribe and participate in and sign off counseling-related listservs; and using the Internet for continuing education opportunities in counseling (ACES Technology Interest Network, 1999).

4. Sign endorsement of moral character. The CHDS Program provides informed consent to students regarding the fact that licensing boards and professional liability insurance providers may deny licensure or coverage due to prior felony or some misdemeanor offenses. Please contact the program coordinator if there are questions regarding the endorsement of moral character.

PROGRAM REQUIREMENTS

The M.Ed. or M.A. degree curriculum is a minimum of 60 semester hours, including a 600-hour internship. This program is designed to fulfill the educational requirements for licensure as a Professional Clinical Counselor in the state of Ohio. The program may be pursued on a part-time or full-time basis, although some full-time study is urged.

For information contact:
Jason McGlothlin
Community Counseling Program
310 White Hall
330-672-2662
jmcgloth@kent.edu
http://chds.educ.kent.edu

Health Education and Promotion

The health education and promotion program offers the M.Ed. and M.A. degree in health education and promotion with a concentration either in Community Health or School Health Licensure.

The Community Health concentration provides background for persons who will be involved in positions of leadership in a wide variety of health-related community settings as well as for persons who will proceed to doctoral work in fields related to health education and health promotion.

The School Health Licensure concentration leads to a pre-K-12 licensure in health for those individuals currently holding a certificate/license in another area.

PROGRAM REQUIREMENTS

Community Health Concentration: This concentration’s requirements include the College of Education, Health and Human Services’ Universal Professional Requirements, foundations of health education and promotion, health information resources, epidemiology, health behavior, strategies in health education, needs assessment and program planning in health promotion, evaluation of health promotion programs, communication and marketing in health education and promotion, and administration and grant writing in health promotion programs.

Electives within and outside the health education and promotion program are available. Students electing the Master of Arts degree complete a thesis. The program requires the completion of 36 hours.

School Health Licensure Concentration: This concentration requires the courses listed above (except administration and grant writing) and the following: administration of school health programs, developmental approach to content and resources in health education, classroom management I, drug abuse and violence prevention or sexual health promotion, and an individual investigation. A student would need to take the Praxis II in the health content field but would not need to do additional student teaching. This concentration requires 41 hours and leads to an M.Ed. and a pre-K-12 license in health.

For information contact:
Program Coordinator
Health Education and Promotion
316 White Hall
330-672-7977
cdtoth@kent.edu

Concentration in Gerontology

This interdisciplinary concentration emphasizes research and theory in preparing individuals for professional positions that
require knowledge of gerontology in the development, design and evaluation of health, vocational and rehabilitation education programs. Graduates will be prepared to assume leadership positions in a variety of community agencies and health maintenance organizations as well as proceed to doctoral work in one of the disciplines related to gerontological studies.

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<th>Core Requirements</th>
<th>Hours</th>
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**DEPARTMENTAL REQUIREMENTS**

In addition to the interdisciplinary gerontology core of coursework, students will be expected to meet the requirements for the M.A. degree in this department and in the Graduate School of Education, Health and Human Services. These will be determined in conjunction with their thesis committee.

**THESIS**

A master’s thesis encompassing original research will be presented and defended before a committee of graduate faculty members, at least two of whom will be members of the faculty in gerontological studies. There is no nonthesis option. The thesis and its defense must also meet the requirements of the department.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HED 60199</td>
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</tr>
</tbody>
</table>

For information contact:
Program Coordinator
Health Education and Promotion
316 White Hall
330-672-7977
cdtoth@kent.edu

**ADMISSION**

A selective admission procedure is used. To be eligible for selection, applicants must attend an orientation and interview session. The orientation and interview sessions are held three times a year, usually in November, April and July. Deadlines are as follows:

- Spring admission: All materials should be submitted by October 1;
- Summer admission: All materials should be submitted by March 1;
- Fall admission: All materials should be submitted by June 1.

Requirements for admission in CHDS master's degree program include:

1. The first requirement of the admission process is that the applicant qualify for graduate standing in the Graduate School of Education, Health and Human Services at Kent State University. The academic criteria include an overall undergraduate grade point average of 2.75.

2. Present satisfactory recommendations from two persons regarding the applicant’s professional experience and potential strengths as a counselor (preferably from counselors and/or professors who know your potential as a graduate student in community or school counseling).

3. Faculty review of application materials. In reviewing materials and interviewing applicants the faculty assess the applicants with regard to each applicant’s:
   - potential success in forming effective interpersonal relationships;
   - aptitude for graduate study including technological competencies and computer literacy (see note below);
   - career goals in relationship to the program;
   - openness to self-examination; and
   - openness to personal and professional development.

Note: Technological competence and computer literacy include using software to develop Web pages, presentations and professional papers; using audiovisual equipment such as video recorders and playback units; using computerized testing programs; using e-mail; helping clients search for various types of counseling-related information via the Internet; being able to subscribe and participate in and sign off counseling-related listservs; and using the Internet for continuing education opportunities in counseling (ACES Technology Interest Network, 1999).

4. Sign endorsement of moral character. The CHDS Program provides informed consent to students regarding the fact that licensing boards and professional liability insurance providers may deny licensure or coverage due to prior felony or some misdemeanor offenses. Please contact the program coordinator if there are questions regarding the endorsement of moral character.
**Program Requirements**
The M.Ed. or M.A. degree curriculum is a minimum of 49 semester hours, including a 600-hour internship. This program is designed to fulfill the educational requirements for school counselor in Ohio. Students must have successfully passed the Praxis II specialty area test in school guidance and counseling in order to be licensed. The program may be pursued on a part-time or full-time basis, although some full-time study is urged.

For information contact:
Jason M. McGlothlin
Program Coordinator
School Counseling Program
310 White Hall
330-672-2662
jmcgloth@kent.edu
http://chds.educ.kent.edu

**Career-Technical Teacher Education**
The M.Ed. or M.A. degree in career-technical teacher education is available with concentrations in the following:
- Teaching
- Special Needs

The teaching concentration is designed to serve individuals who desire to continue as classroom and/or laboratory instructors in one of the career-technical service areas. A minimum of 11 semester hours of coursework is required in the service area selected.

Available options in career-technical teacher education include integrated business education, marketing education, family and consumer science education, and trade and industrial education.

The special-needs concentration focuses on coursework and professional experiences related to the study of special-needs populations in career-technical education. A minimum of 32 semester hours is needed to complete the degree.

For information contact:
Patrick J. O’Connor
Career-Technical Teacher Education
316 White Hall
330-672-7977
poconnor@kent.edu

**Educational Specialist Degree**
The Ed.S. degree in education is available through the ACHVE department in Counseling and Human Development Services.

**Counseling and Human Development Services**
The Ed.S. program can be highly individualized to meet the needs of students having interest in a variety of school or community settings. The degree is an advanced-level practitioner’s degree, and the focus is on practical knowledge and skill.

**Admission**
Applicants to an Ed.S. program in counseling will be requested to submit an application, two official transcripts, two letters of reference and participate in an interview. Application deadlines are as follows:
- Spring admission: All materials should be submitted by October 1;
- Summer admission: All materials should be submitted by March 1;
- Fall admission: All materials should be submitted by June 1.

For information contact:
Program Coordinator
Counseling and Human Development Services
310 White Hall
330-672-2662

**Doctor of Philosophy**
The Ph.D. degree in education is available through the Department of Adult, Counseling, Health and Vocational Education with majors in Counseling and Human Development Services and in Health Education and Promotion.

**Health Education and Promotion**
The Ph.D. major in Health Education and Promotion emphasizes the interaction between the theoretical, empirical and applied nature of health education and promotion utilizing a social-ecological multilevel model of intervention. Although the program is designed for persons whose primary identity is that of a health educator and health promoter, applicants are drawn from a variety of fields, including health education, nursing, nutrition, the medical technologies and social sciences. The program is particularly appropriate for persons seeking employment in higher education and career advancement within the broad area of health education and promotion.

The Ph.D. major in Health Education and Promotion reviews applicants for admission on a scheduled basis two times a year and accepts part-time as well as full-time students. Deadlines are September 15 and February 15.
Counseling and Human Development Services

Doctoral study in CHDS in the College and Graduate School of Education, Health and Human Services at Kent State University is designed to provide advanced-level preparation for counselors in various public and private human service and mental health settings as well as preparing individuals for the counselor education professoriate in colleges and universities. The CHDS doctoral program is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) and is approved by the State of Ohio Counselor, Social Worker, and Marriage and Family Therapist Board (CSW&MFTB). Individuals applying to the Ph.D. program typically possess or are about to complete a master’s degree in counseling and, so, the faculty works to identify and extend a doctoral student’s knowledge, skills and attitudes required to become advanced practitioners and counselor educators. The faculty members believe that to perform effectively, doctoral-level counselors and counselor educators need to have an understanding of educational, supervisory and counseling processes, competence in scholarly inquiry and maturity in self-development. The faculty believes it is important to acculturate students into the high standards of professional behavior. As a result, educational requirements for the psychology license are not to be met while pursuing a Ph.D. degree in the CHDS doctoral program.

ADMISSION

The Ph.D. major in Counseling and Human Development Services accepts part-time as well as full-time students. At least one year of full-time study, as defined by the university, is required.

In reviewing materials and interviewing applicants, the faculty assess the applicants with regard to:

- potential success in forming effective interpersonal relationships;
- aptitude for graduate study, including technological competencies and computer literacy (see note below);
- career goals in relationship to the program;
- openness to self-examination; and
- openness to personal and professional development.

Note: Technological competence and computer literacy include using software to develop Web pages, presentations and professional papers; using audiovisual equipment such as video recorders and playback units; using computerized testing programs; using e-mail; helping clients search for various types of counseling-related information via the Internet; being able to subscribe and participate in and sign off counseling-related listservs; and using the Internet for continuing education opportunities in counseling (ACES Technology Interest Network, 1999).

Applicants must sign an endorsement of moral character. The Counseling and Human Development Services program provides informed consent to students regarding the fact that licensing boards and professional liability insurance providers may deny licensure or coverage due to prior felony or misdemeanor offenses. Please contact the program coordinator if there are questions regarding the endorsement of moral character.

The Counseling and Human Development Services doctoral program selects students during the spring of each year. The deadline for application materials is February 1.

For information contact:
John D. West
Counseling and Human Development Services
310 White Hall
330-672-2662
jwest@kent.edu

DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND SPECIAL SERVICES

Paul N. Zionts, Chair
405 White Hall
(330) 672-2294
pzionts@kent.edu
http://efss.educ.kent.edu

The Department of Educational Foundations and Special Services contains the following program areas:

- Cultural Foundations
- Educational Psychology
- Evaluation and Measurement
- Instructional Technology
- Rehabilitation Counseling
- School Psychology
- Special Education

Master of Education and Master of Arts

The M.Ed. and M.A. degrees in education are offered through the Educational Foundations and Special Services department within the following programs: (1) cultural foundations; (2) educational psychology; (3) evaluation and measurement; (4) instructional technology; (5) rehabilitation counseling; (6) school psychology; and (7) special education.
Education

Cultural Foundations
Study in the Cultural Foundations of Education Program is oriented toward a critical understanding of broad normative and interpretive issues in education and human service professions. Course offerings apply traditional humanistic and social science modes of inquiry to theories and practices of education broadly conceived. Foundational study explores the often-conflicting demands placed upon educational institutions and examines a wide range of responses to them.

The master’s degree program offers students an overview of educational issues and policies emerging from a world increasingly dominated by technology and such concerns as poverty, social and political marginalization and environmental degradation. Coursework examines theories of society, morality and politics as these relate to the study of education. Classes focus on topics such as the political and moral dimensions of education and educational policy formation; the nature of multicultural and international education; the engagement of academic and public knowledge; and ideas of nature and education.

For information contact:
Kim Sebaly
405 White Hall
330-672-2294
kpsebaly@kent.edu
http://cp.educ.kent.edu

Instructional Technology
The instructional technology program offers a core of courses designed to prepare students to use a variety of technologies in many different settings. Electives in the program may be used to concentrate on areas such as classroom teaching in two- or four-year colleges, business, industry, governmental organizations, K-12 schools, allied health professions or other settings.

There are two licensure areas possible within the master’s degree: school library/media and computing/technology. Individuals applying for the computer and technology licensure area must hold a teaching certificate/license.

The school library/media licensure is designed to prepare students for positions in school media centers. It is offered in conjunction with the School of Library and Information Science. In addition to the College of Education, Health and Human Services master’s degree program requirements, students take coursework in the following areas: selection and utilization of media; educational computing; reference and cataloging; children’s literature; and organization and administration of the media centers and information literacy.

For information contact:
Kim Sebaly
405 White Hall
330-672-2294
kpsebaly@kent.edu
http://cp.educ.kent.edu

Educational Psychology
The educational psychology program provides advanced study in the psychological aspects of human learning and development. Students will acquire a broad, basic knowledge of educational psychology and evaluation procedures and will develop competencies for addressing problems of learning and development in educational settings. The flexibility of the program, with respect to course equivalencies, thesis and elective options, makes it appropriate for classroom teachers, professionals in alternative educational settings and students wishing to pursue doctoral-level training in educational psychology.

For information contact:
David Dalton
405 White Hall
330-672-9079
ddalton@kent.edu
http://www.itecksu.org

Evaluation and Measurement

The purpose of this program is to prepare professionals in the fields of test development, research and data analysis. It is anticipated that specialists prepared by this program will work in research units of central offices in larger school systems; as advisors to teachers and other educators regarding test construction and research design; and as liaison staff members operating between school personnel and computer installation operators. Positions in business/industry are also appropriate, as are research associate-level positions in connection with university-based research. The program also provides an opportunity to develop evaluation and measurement skills generally helpful to educators.

For information contact:
Shawn Fitzgerald
507 White Hall
330-672-0583
smfitzge@kent.edu
http://em.educ.kent.edu

For individuals who do not have a teaching certificate or license, a master’s degree program is available to provide an initial multi-age license for library/media that does require the Graduate Record Examination for admission. In addition to the master’s degree requirements and the library/media requirements, students take core educational courses in reading, special education and classroom instruction.
For information contact:
David Dalton
405 White Hall
330-672-9079
ddalton@kent.edu
http://www.itecksu.org

Rehabilitation Counseling

The rehabilitation counseling program features an interdisciplinary approach that focuses on the inclusion of persons with disabilities into the life of the community. The Master of Education program in rehabilitation counseling is accredited by the Council of Rehabilitation Education. Graduates of the program are eligible to sit for the national Certified Rehabilitation Counselor examination. Electives in the program may be used to concentrate on areas such as job development and placement, psychiatric rehabilitation, deafness or to pursue Ohio counselor licensure.

Professional identity is developed through early involvement with rehabilitation agencies, interactions with practitioners and consumers in varied settings, and the Kent State University Chapter of the Ohio Rehabilitation Association. The rehabilitation counseling program faculty are also affiliated with the Center for Disability Studies and the Center for Innovation in Transition and Employment, two interdisciplinary institutes that administer numerous federally funded research, demonstration and training projects in such fields as rehabilitation counseling, school psychology and special education.

Graduates of the program are employed in vocational rehabilitation settings, mental health and developmental disabilities agencies, drug and alcohol rehabilitation, public and private hospitals, comprehensive rehabilitation centers, correctional facilities, community-based programs, private industry, proprietary rehabilitation, and in student disability services within education institutions.

PROGRAM REQUIREMENTS
Rehabilitation counseling is open to students with any undergraduate major. The program requires two years of study culminating in a semester-long internship under the field supervision of a certified rehabilitation counselor. Paid internships are available on a competitive basis and are arranged by program faculty. Faculty members advise students in the development of a curriculum plan that includes foundation and elective courses. Early and continued exposure to rehabilitation practice is provided as students progress through the program with the integration of counseling, case management, evaluation and placement skills being the goal of didactic and experiential curriculum components.

Full- and part-time study is possible with courses scheduled during late afternoon and evening hours. Applications are accepted throughout the year. A program application and an interview are required prior to admission.

For information contact:
Lynn Koch
Rehabilitation Counseling
405 White Hall
330-672-0577
lkoch@kent.edu

School Psychology

Students entering the school psychology program at Kent State are expected to complete either an Ed.S. or a Ph.D. degree.

Applicants with bachelor’s degrees will be admitted initially into the M.Ed. program. Upon successful completion of the M.Ed., students will either matriculate to the Ed.S. program or can apply for admission to the Ph.D. program.

Applicants with master’s degrees may apply for admission to either the Ed.S. or the Ph.D. program in school psychology. For information contact:
Cathy Telzrow
405 White Hall
330-672-2294
telzrow@kent.edu
http://spsy.educ.kent.edu

Special Education Intervention Specialist

The degree programs in special education offer advanced study in the field of special education, which focuses on educating learners with exceptionalities in grades K-12. Seminars are designed to provide intellectual depth to practitioners’ skills and knowledge in special education. In addition to the degree requirements, programs can be tailored to meet intervention-specialist licensure requirements for experienced teachers as well as for those persons seeking an initial license. Intervention-specialist licensure requirements can be met for the following areas:

• Deaf Education
• Early Childhood Intervention Specialist
• Gifted Education
• Mild/Moderate Educational Needs
• Moderate/Intensive Educational Needs

For information contact:
Penny Griffith or Lyle Barton
405 White Hall
330-672-2294
pgriffith@kent.edu or lbarton@kent.edu
http://sped.educ.kent.edu

Licensure in the following area is designed to prepare interpreters to work with children and adults who are deaf or hard of hearing (D/HH) in an educational setting. Graduates of the
program will be eligible for licensure in educational interpreting (K-12) but not licensure for teaching.

- **Educational Interpreter**

  For information contact:
  Leah Subak
  405 White Hall
  330-672-2294
  lsubak@kent.edu

In addition to licensure programs, students who hold current state teaching certification or licensure may complete requirements for an endorsement in the following area:

- **Transition to Work**

  For information contact:
  Robert Flexer
  319 White Hall
  330-672-2294
  rfllexer@kent.edu

Programs may also be tailored to include KSU certificates in two areas. The certificate programs are offered through multidisciplinary training:

- **Behavior Intervention Specialist**
  The Behavior Intervention Specialist certificate combines Special Education and School Psychology coursework. This certificate is available to currently certified or licensed teachers or school psychologists or those currently enrolled in graduate programs that will lead to licensure in those areas.

  For information contact:
  Melody Tankersley
  405 White Hall
  330-672-2294
  mtankers@kent.edu

- **Pervasive Developmental Disorders Specialist**
  The Pervasive Developmental Disorders Specialist (Autism) certificate is a combined program offering graduate-level coursework from Special Education and Speech Pathology and is available to currently licensed teachers or speech-language pathologists, or to individuals enrolled in graduate programs that will lead to licensure in either program. Students completing this certificate will gain specialized knowledge and skills necessary to collaborate with parents and other professionals to provide services for children, youth and adults with Pervasive Developmental Disorders (Autism Spectrum Disorders).

  For information contact:
  Penny Griffith
  405 White Hall
  330-672-2294
  pgriffith@kent.edu

### Educational Specialist Degree

The Educational Specialist degree is available within the following programs:

- Rehabilitation counseling
- School psychology
- Special education

### Rehabilitation Counseling

The Educational Specialist degree in rehabilitation counseling services is an advanced-level practitioner’s degree, and the program is designed to meet national preparation standards.

For information contact:
Lynn Koch
405 White Hall
330-672-0577
lkoch@kent.edu
http://dept.kent.edu/rehab

### School Psychology

The school psychology Ed.S. program prepares students to work effectively with school personnel, parents and children to resolve learning and behavioral problems. Requirements for licensure reflect those of national organizations and the Ohio Department of Education. For Ohio Department of Education licensure to practice in Ohio schools, a score on the Praxis II Specialty examination that meets or exceeds the established Ohio requirements is necessary. Graduates are eligible for licensure as school psychologists by the Ohio State Board of Psychology following additional experience and examinations.

Students typically complete course requirements over a two-year period including two full summer sessions, followed by a nine-month internship under supervision of the faculty and a qualified school psychologist in public schools. Course requirements need to be successfully completed prior to the internship.

Applicants must submit application materials beyond those required by the Graduate School of Education, Health and Human Services. For published application deadlines, visit the Web site at http://spsy.educ.kent.edu. Admission is selective.
Education

For information contact:
Cathy Telzrow
405 White Hall
330-672-2294
cTELZROW@KENT.EDU
http://SPSY.EDUC.KENT.EDU

Doctor of Philosophy

The Ph.D. degree in education is offered through the EFSS department within the following programs: (1) cultural foundations; (2) educational psychology; (3) evaluation and measurement; (4) school psychology; and (5) special education.

A concentration in instructional technology is available in educational psychology.

Cultural Foundations

Study in the Cultural Foundations of Education Program is oriented toward a critical understanding of broad normative and interpretive issues in education and human service professions. Course offerings apply traditional humanistic and social science modes of inquiry to theories and practices of education broadly conceived. Foundational study explores the often-conflicting demands placed upon educational institutions and examines a wide range of responses to them.

Doctoral study in the Cultural Foundations of Education Program is designed for educational practitioners wanting to further their understanding of education in public and private organizations, including those who aspire to leadership roles in them, and those who wish to become scholars in the field. Required courses and electives selected from the specific disciplines of philosophy, history and sociology of education are structured to emphasize interdisciplinary approaches in contemporary educational theory and practice. Students are encouraged to enroll in courses throughout the university in such related fields as history, philosophy, sociology, and political science and anthropology as part of their program plan.

Interprofessional collaboration within the Graduate School of Education, Health and Human Services also provides opportunities for studying the nature of discovery and traditions in educational problem solving.

For information contact:
Averil McClelland
405 White Hall
330-672-2294
amcclell@kent.edu
http://CF.EDUC.KENT.EDU

Educational Psychology

The Ph.D. degree program in educational psychology provides for advanced study and research in the psychological aspects of the educational enterprise. Emphases include human learning and development and instructional technology.

Participants in this program will acquire a broad understanding of educational psychological theory and principles. Graduates of this program are qualified to teach at the university level and are also prepared for professional leadership, instructional...
design, research and other activities in a variety of school and alternative educational settings.

Admission to the program is based, in part, upon sufficient graduate-level preparation for the advanced courses in psychology and education.

For information contact:
David Dalton
405 White Hall
330-672-9079
ddalton@kent.edu
http://www.itecksu.org

### Evaluation and Measurement

The Ph.D. program in evaluation and measurement provides advanced study in the areas of statistics, psychometrics, quantitative and qualitative research design and the evaluation of educational programs.

Research and data analysis experiences are provided through the Bureau of Educational Research and Development.

Within the program there are four distinct areas of specialization:
- Quantitative and Qualitative Research Design
- Educational Statistics
- Educational Measurement
- Educational Evaluation

The program seeks to develop professionals who have the theoretical base and application skills to teach courses at the college level in research design, statistics, measurement and evaluation; conceptualize, design and evaluate a wide variety of research methodologies; choose appropriate analyses for questions and designs that have been proposed; communicate effectively with educators and other professionals in the development and application of research and psychometric materials; and develop and evaluate programs and follow through with written reports.

For information contact:
Shawn Fitzgerald
405 White Hall
330-672-0583
smfitzge@kent.edu
http://em.educ.kent.edu

### Special Education

The Ph.D. program in special education is designed to prepare highly qualified, experienced persons for leadership roles as teacher educators and researchers. The individualized nature of the program enables students to master a comprehensive field of emphasis in special education, employ and disseminate intellectual and innovative methods for addressing the needs of exceptional children, youth and adults, and acquire a breadth of understanding of related disciplines that focus on the professional roles of college teaching, research, administration and clinical/educational/agency-based services for individuals with exceptionalities.

The Ph.D. program includes common advanced and noncategorical course and seminar requirements. The substantive specialization and emphasis is defined by the individual student's total program prospectus, including a minor or cognate area; specialized internships; advanced coursework; individually directed research; and the dissertation. In addition to conceptualizing, designing, implementing and interpreting research, all doctoral students are expected to demonstrate competence in teaching at the college level in the course of their doctoral training.

For information contact:
Program Coordinators: Penny Griffith or Lyle Barton
405 White Hall
(330) 672-2294
sped.educ.kent.edu

### School Psychology

The school psychology doctoral program provides advanced training to work as a professional psychologist in schools and other settings. The Ph.D. program is committed to a scientist-practitioner model of training, which conceptualizes school psychologists as data-oriented problem-solvers and transmitters of psychological knowledge and skill.

The program exceeds the requirements of the National Association of School Psychologists, is fully accredited by the American Psychological Association (APA) and is accepted by the National Register of Health Providers. For Ohio Department of Education licensure, a score on the Praxis II examination that meets or exceeds the established Ohio requirements is necessary. Graduates are eligible for licensure as psychologists by the Ohio Board of Psychology.

Applicants must submit materials beyond those required by the Graduate School of Education, Health and Human Services. For published application deadlines visit the Web site at http://spsy.educ.kent.edu. Admission is selective.

For information contact:
Cathy Telzrow
405 White Hall
330-672-2294
ctelzrow@kent.edu
http://spsy.educ.kent.edu
### DEPARTMENT OF TEACHING, LEADERSHIP AND CURRICULUM STUDIES

Kenneth Teitelbaum, Chair  
404 White Hall  
330-672-2580  
kteitelb@kent.edu  
http://tlcs.educ.kent.edu

The Department of Teaching, Leadership and Curriculum Studies contains the following programs:  
- Curriculum and Instruction  
- Early Childhood Education  
- Educational Administration  
- Middle Childhood Education  
- Secondary Education (Adolescence/Young Adult)

### Master of Education and Master of Arts

The M.Ed. or M.A. degree in education is available in the following programs:  
- Curriculum and Instruction  
- Early Childhood Education

### Curriculum and Instruction

The Curriculum and Instruction (C&I) Program area offers a General Curriculum Master’s with six advised concentrations:  
- Curriculum and Teaching Studies  
- English/Language Arts Education  
- Mathematics Education  
- Middle Childhood Education  
- Science Education  
- Social Studies Education

For information contact:  
James G. Henderson  
404 White Hall  
330-672-0631  
jhenders@kent.edu  
http://ci.educ.kent.edu

### Mathematics Specialist Program

The National Council of Teachers of Mathematics (NCTM) has provided a vision of the future of mathematics education in *Principles and Standards for School Mathematics*. A key factor in the implementation of the NCTM standards will be mathematics leadership in individual schools. The Mathematics Specialist Program is especially tailored to help develop mathematical leadership in K-12 teachers. Graduate courses and practicum provide necessary knowledge of mathematics, learning theory, child development, research principles and intervention techniques to graduate students who strive to provide leadership in mathematics education. Courses are all offered during evenings and summers for the convenience of students. Students must meet minimum mathematics requirements in order to complete this program. A minimum of 15 semester hours of undergraduate or graduate mathematics courses as a prerequisite or corequisite to complete the program is required. Please note that courses in mathematics education and computer science do not count toward the 15-hour minimum. Please see your faculty advisor regarding any questions.

For information contact:  
Trish Koontz  
404 White Hall  
330-672-2580  
tkoontz@kent.edu

### Reading Specialization

The reading and language arts/literacy education program prepares educators to teach students at all age levels, K-adult, in general education and content area instructional situations. The program focuses on both students who progress typically...
and those who struggle with learning to read. The program meets all International Reading Association Standards for Classroom Professionals and Specialized Reading Professionals.

State of Ohio Endorsement in Reading is attained as part of the core requirements of the program. For this reason, students who enter the program must hold a valid teaching certificate or license.

For information contact:
Nancy D. Padak
Reading/Writing Development Center
402 White Hall
330-672-2836
npadak@literacy.kent.edu

Early Childhood Education

The M.Ed. and M.A. degrees are intended to prepare experienced early childhood professionals for leadership in schools and agencies serving young children, 0-8, and their families. Upon admission, candidates complete a self-assessment based on the core standards and essential professional tools outlined by the National Association for the Education of Young Children. Students are then guided by faculty in the development of a program of study that satisfies both individual professional goals and expectations of the department, college and university. All students are expected to complete an exit project that involves a practicum, action research project or thesis (M.A.).

The Early Childhood license (age three-grade three) as a second license, Preschool Endorsement and Early Education of the Handicapped Endorsement are available to qualified applicants as part of the master’s program. The Early Childhood Intervention Specialist license is offered through the Department of Educational Foundations and Special Services. Reading Endorsement and an Early Childhood Mathematics Specialist Program are available through the Curriculum and Instruction Program.

Students must take no less than 16 hours at the 60000 level or higher for the master's degree. See Master of Arts in Teaching for initial licensure at the master's level.

For information contact:
Carol Bersani
404 White Hall
330-672-2559
cbersani@kent.edu
http://ec.educ.kent.edu

PRE-K-12 LEADERSHIP

Most of the individuals seeking a master's degree in the Pre-K-12 leadership concentration will be licensed teachers who wish to obtain principalship licensure in Ohio. Forty-eight semester hours of planned graduate study are required to receive the principalship license. A master's degree is awarded at the successful completion of 33 semester hours of prescribed graduate study.

For information contact:
Autumn Tooms
401 White Hall
330-672-0645
atooms@kent.edu
http://edgad.educ.kent.edu

HIGHER EDUCATION ADMINISTRATION AND STUDENT PERSONNEL

The master's degree requires the successful completion of 45 semester hours of approved graduate study. Graduates are prepared to work as staff and administrators in campus life, career services, judicial affairs, resident services, alumni, admissions, academic success, academic advising, honors college, institutional advancement, upward bound, student disability services, student multicultural center and undergraduate and graduate studies. Some also enter college teaching, although a Doctor of Philosophy is typically required.

For information contact:
Mark Kretovics
411 White Hall
330-672-0642
mkretov1@kent.edu
http://hied.educ.kent.edu

Secondary Education

The secondary education program is designed for secondary or middle school teachers who wish to continue as classroom instructors rather than obtain licensure in areas such as administration, supervision or counseling. Separate master’s curricula especially planned for classroom teachers are available in all secondary teaching fields at Kent State University. Students, in close consultation with their faculty advisor, plan a semistructured program corresponding to experiential backgrounds and personal interests.

The major of 20-26 hours consists of the core courses required of all master’s degree candidates; coursework in methodology in the teaching field; and selected professional courses that would be of primary interest to the classroom teacher.

Each teaching field offers courses in theory and practice, curriculum trends and instructional resources related to the specific discipline or comprehensive teaching field. Improvement of instruction and current developments in teacher education, including technology, are emphasized. Other courses in
professional education may be included in consultation with the advisor. The remainder of the program consists of a minor of 6-12 semester hours in the academic field. The M.A. program culminates with a master’s thesis.

**SCIENCE EDUCATION**

A program with concentrations in science education can be designed for teachers who desire to improve their teaching competencies. Seminars are offered in environmental education, metrication and other areas as needs demand.

For information contact:
Matthew Weinstein
404 White Hall
330-672-0653
mweinste@kent.edu

**SOCIAL STUDIES**

A program with concentrations in social studies education is available by combining coursework in professional education and history/social science content areas for the classroom teacher, supervisor, curriculum coordinators and social studies specialists. This program may be planned to culminate in a terminal M.Ed. or M.A. degree or to serve as a preliminary step leading to the Ph.D. degree in curriculum and instruction. The basic course is SEED 677232, Secondary Social Studies.

For information contact:
Alicia Crowe
401 White Hall
330-672-0634
acrowe@kent.edu

**MATHEMATICS**

A program with a concentration in mathematics education is available for those teaching mathematics in grades 7-12. Courses in both professional education and in graduate mathematics are included.

For information contact:
Michael Mikusa
401 White Hall
330-672-0647
mmikusa@kent.edu

**FOREIGN LANGUAGE**

A program with a concentration in foreign language education can be designed for teachers who aspire to improve their knowledge of innovative approaches in the teaching of foreign languages. Courses will be offered as needs demand.

For information contact:
Peg Haas
308D Satterfield Hall
330-672-1816
mhaas@kent.edu

**ENGLISH LANGUAGE ARTS**

The English language arts education concentration is designed for classroom teachers and English language arts curriculum specialists. This program may be also planned to serve as a preliminary step leading to the Ph.D. degree in curriculum and instruction. All graduate programs in English education combine coursework in theory and research in the teaching of English with coursework from fields such as English, speech, journalism, classics and coursework in professional education.

For general information/information on journalism and mass communication contact:
Nancy McCracken
404 White Hall
330-672-2580
nmcc@kent.edu

**Master of Arts in Teaching**

**Adolescence/Young Adult**

This program serves individuals who have never held a teaching certificate or license and requires full-time study beginning in the summer and continuing through the academic year.

The Master of Arts in Teaching degree requires a minimum of 44 semester hours of credit, of which at least 39 must be at the graduate level, and includes a school-based internship. For students who have an appropriate undergraduate background in the subject matter field, the program is designed to be completed in one summer and the following academic year. Applicants should follow the application procedures for the Master of Arts in Teaching degree. In addition, the applicants will be asked to participate in on-campus interviews with university faculty.

For information contact:
Judith A. Melillo
401 White Hall
330-672-0615
jmelillo@kent.edu

**Early Childhood Education**

The Master of Arts in Teaching degree is designed for qualified persons who possess at least a baccalaureate degree in a discipline other than teacher education. This program leads to Ohio licensure for teaching children age three through grade three.

This is a selective admissions program. Factors considered in this process include scores on the Graduate Record Exam and Praxis I: Mathematics, undergraduate grade point average, and performance on an essay and in an interview. All students are expected to have basic competence in the use of technology before beginning the program.
Students in this program have intensive field experiences in preschool, kindergarten and primary programs including those in urban settings. (This program is temporarily suspended for the 2005-6 academic year).

For information contact:
Carol Bersani
404 White Hall
330-672-2559
cbersani@kent.edu
http://ec.educ.kent.edu

**Educational Specialist Degree**

The Ed.S. degree in education is available in curriculum and instruction and educational administration.

**Curriculum and Instruction**

The program in curriculum and instruction provides comprehensive advanced preparation for practitioners who wish to hold leadership positions such as director of instruction or special subject/area coordinator or supervisor.

Curriculum and instruction program concentrations include early childhood education, reading, English language arts education, secondary education, supervision and staff development, vocational education, and emphases in curriculum and instructional development in subjects such as art, business, English, foreign languages, industrial arts, mathematics, music, science and social studies.

Ed.S. degree programs are composed of general core courses, professional education courses, liberal education electives and a supervised internship.

For information contact:
James F. Henderson
404 White Hall
330-672-0631
http://ci.educ.kent.edu

**Educational Administration**

The Educational Specialist degree in educational administration is designed to provide a planned program of preparation for persons who desire advanced professional education but do not wish to pursue a Ph.D. degree. Thirty semester hours of planned graduate study beyond the master's degree is required to receive an Educational Specialist degree.

The Educational Specialist Pre-K-12 degree is particularly desirable for individuals possessing teaching licensure and who wish to obtain an administrative specialist license that will enable them to serve in central office and administrative and supervisory positions. Forty-five semester hours of planned graduate study are required to receive administrative specialist licensure.

For information contact:
Anita Varrati
411 White Hall
330-672-0630
avarrati@kent.edu
http://edad.educ.kent.edu

In addition, individuals possessing principalship licensure and who wish to obtain superintendent licensure also may find this degree advantageous. Superintendent licensure requires 24 semester hours of planned graduate study after obtaining principalship licensure. These hours may be counted toward the 30 semester hours of planned graduate study required to receive the Educational Specialist degree.

For information contact:
Ralph Waltman
404 White Hall
330-672-0668
rwaltman@kent.edu

Moreover, individuals possessing a master's degree may wish to obtain an Ed.S. in Higher Education. This degree requires 30 hours of planned graduate study beyond the master's degree.

For information and application materials contact:
Janice Gerda
411 White Hall
(330) 672-0646
jgerda@kent.edu

**Doctor of Philosophy**

The Ph.D. degree in education is available in curriculum and instruction and educational administration.

**Curriculum and Instruction**

The program in curriculum and instruction provides advanced study and research in curriculum theory, instructional supervision, professional development and teacher education.

Within this framework, students may develop concentrations in early childhood education; international/multicultural education; gifted child education; middle-level education; mathematics education; reading, writing and English language arts education; secondary education; supervision; professional development and teacher education; teaching studies and curriculum leadership; and science.
For application information contact:
James G. Henderson
404 White Hall
330-672-0631
jhenders@kent.edu
http://ci.educ.kent.edu

Educational Administration

The educational administration program is designed to prepare reflective practitioners who can function effectively as leaders in complex educational settings. Graduates are employed in public and private institutions at the Pre-K-12 and higher educational levels and in nonschool settings of both a public and private nature.

Two degrees are available: Pre-K-12 leadership and higher education. Within these concentrations, students may specialize in a variety of areas such as the principalship, the superintendency, higher education administration, student personnel, finance, education law and sport administration (in conjunction with the School of Exercise, Leisure and Sport).

For information and application materials for a Ph.D. degree in Higher Education Administration and Student Personnel contact:
Stephen Thomas
401 White Hall
330-672-0564
sbthomas@kent.edu

For information and application materials for a Ph.D. degree in Pre-K-12 Leadership contact:
Dale Cook
213 Moulton Hall
330-672-0611
dcook@kent.edu

Courses

The College of Education, Health and Human Services courses are listed under the following prefixes:
ADED  Adolescence to Young Adult
CHDS  Counseling and Human Development Services
CPSY  Counseling Psychology
CTTE  Career-Technical Teacher Education
C&I  Curriculum and Instruction
ECED  Early Childhood Education
EDAD  Educational Administration
EDPF  Educational Psychology Foundations
EDUC  Education Universal Professional Requirements
ELED  Elementary Education
HED  Health Education and Health Promotion
ITEC  Instructional Technology
MCED  Middle Childhood Education
RHAB  Rehabilitation Counseling and Training
SEED  Secondary Education
SPED  Special Education
SPSY  School Psychology

Adolescence to Young Adult (ADED)

ADED 52267
IMPROVING MATHEMATICS INSTRUCTION FOR ADED (3)
Methodology and materials for effective teaching of secondary school mathematics.

Counseling and Human Development Services (CHDS)

CHDS 50093/70093
VARIABLE TITLE WORKSHOP IN COUNSELING AND HUMAN DEVELOPMENT SERVICES (1-4)
Workshops and training laboratories in various aspects of counseling, guidance and personnel services for counselors, supervisors, administrators and paraprofessionals. Prospective enrollees not currently admitted to graduate school may obtain special admission for graduate credit in a workshop. Topics are announced in brochures of College of Continuing Studies. Limit of 6 hours with advisor’s permission toward any degree program. S/U grading; IP permissible. May be repeated.

CHDS 60199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

CHDS 60299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: CHDS 60199.

CHDS 64084/74084
BEHAVIORAL SCIENCE IN THE HEALTH PROFESSIONS (1-3)
Behavioral science perspective on individual and social issues that affect medical care delivery. Individually arranged. IP permissible.

CHDS 67530/77530
INTRODUCTION TO COUNSELING (3)
A survey of counseling practice that examines the nature of counseling processes and relationships as described from major theoretical perspectives.

CHDS 67531/77531
INDIVIDUAL COUNSELING PROCEDURES (3)
Didactic and experiential training in basic interviewing and counseling techniques prepares the student for practicum through role playing, videotaped feedback and simulation.
CHDS 67541/77541
FIELD LABORATORY IN COUNSELING AND PERSONNEL SERVICES (2)
Individual or group projects related to counseling and personnel services. Principles and techniques applied to problems that grow out of institutional or individual needs. IP permissible. Prerequisite: Permission.

CHDS 67580/77580
MULTICULTURAL COUNSELING (3)
Seminar focused on information and sensitivities needed to work effectively with the culturally different. Consideration given to such issues as racism and cultural, institutional and political oppression.

CHDS 67591/77591
SEMINAR IN COUNSELING AND HUMAN DEVELOPMENT SERVICES (1-3)
Variable topic seminars considering problems, research and current practices for counselors and personnel workers. Topic to be announced in Schedule of Classes booklet. Prerequisite: Permission.

CHDS 67595/87595
SPECIAL TOPICS IN COUNSELING AND HUMAN DEVELOPMENT SERVICES (1-3)
Presentation of topics of special interest to students in counseling and human development services. Offered irregularly. Topics will be announced in Schedule of Classes booklet. Prerequisite: Permission.

CHDS 67596/87596
INDIVIDUAL INVESTIGATION IN COUNSELING AND HUMAN DEVELOPMENT SERVICES (1-3)
Student investigates one or more topics in counseling under supervision. Review selected literature beyond normal course coverage. Arrangements with instructor must be made prior to registration. Repeat registration permitted. S/U grading; IP permissible. Prerequisite: Permission.

CHDS 67627/77627
APPRAISAL LABORATORY: COMMUNITY COUNSELING (3)
Instruction and experience in utilizing observational, measurement and appraisal methods and instruments relevant to community counseling settings. Special fee: $15 per semester.

CHDS 67628/77628
DIAGNOSIS IN COUNSELING (3)
To develop diagnostic skills in interviewing and use of appropriate nosology in counseling diagnosis.

CHDS 67636/77636
PRACTICUM I: COMMUNITY COUNSELING (3)
Enrollees begin supervised practice of counseling with clients, primarily in the Counseling and Human Development Center. Individual supervision and seminar discussion are used for the development of counseling skills, strategies and professional role. Open to admitted community counseling students only. S/U grading; IP permissible. Prerequisite: CHDS 6/77530, 6/77531, 6/77820, 6/78126 and 6/78182. Special fee: $30 per semester.

CHDS 67637/77637
PRACTICUM II: COMMUNITY COUNSELING (1-3)
This involves individual counseling and group work with appropriate populations. Caseload geared toward preparation for internship. Controlled registration. May be repeated. Open to admitted community counseling students only. S/U grading; IP permissible. Prerequisite: CHDS 6/77636. Special fee: $10 per credit hour.

CHDS 67663/77663
COMMUNITY COUNSELING (3)
Attention is given to the identity, professional standards and organizations and employment settings of the community counselor. Models of problem definition, administrative structure and service delivery will be explored.

CHDS 67664/77664
ADDICTIVE BEHAVIOR AND TREATMENT ISSUES (3)
Current controversies in the study of addiction and drug abuse with an emphasis on implications for treatment and prevention.

CHDS 67665/77665
SUBSTANCE ABUSE COUNSELING (3)
Provides students with practical knowledge/procedures in assessing suspected substance abuse/chemical dependence and determining appropriate intervention techniques, treatment strategies and counseling.

CHDS 67695/77695
SPECIAL TOPICS IN COMMUNITY COUNSELING (1-3)
Presentations of special interest to students. Offered irregularly. Topics will be announced in Schedule of Classes booklet. Prerequisite: Permission.

CHDS 67698/77698
INDIVIDUAL RESEARCH IN COMMUNITY COUNSELING (1-9)
Student pursues research project on selected aspect of community counseling under supervision of instructor. Arrangements with instructor must be made prior to registration. Credit hours to be fixed at registration time. Repeat registration permitted. Prerequisite: Permission.
Education

CHDS 67810/77810
GROUP PROCESS AND ANALYSIS (3)
Experiential/didactic study of group dynamics to gain familiarity with group dynamics research and application with an emphasis on task groups.

CHDS 67815/77815
LABORATORY IN INTERPERSONAL ENCOUNTER (1)
A personal growth experience emphasizing openness and awareness, while developing skills in building human relationships in small groups. S/U grading; IP permissible.

CHDS 67820/77820
GROUP WORK: THEORY AND TECHNIQUES (3)
This is an experiential and didactic course designed to provide both an overview of groups and a basic group experience. Involvement in a group is part of this course.

CHDS 67835/77835
INTERPERSONAL GROUP DYNAMICS IN ORGANIZATIONS (3)
Cross-listed with EDAD 66733/76733. Participants work in task groups, learning about interpersonal, group and intergroup dynamics in organizations through lectures, discussions and analysis of their in-group experiences.

CHDS 67836/77836
SMALL GROUP PRACTICUM (3)
Supervised practice in conducting small groups for counseling, personal growth, psychoeducation, clinical supervision and task groups. Controlled registration. S/U grading; IP permissible. Prerequisite: CHDS 6/77820. Special fee: $30 per semester.

CHDS 67839/77839
ANALYZING HUMAN SERVICE ORGANIZATIONS (3)
Analysis of theory and research regarding structure and process phenomena in forming understandings of educational and other types of human service organizational systems.

CHDS 67840/77840
THEORIES AND METHODOLOGY OF ORGANIZATION DEVELOPMENT (3)
Cross-listed with EDAD 66740/86740. Study of theorists/practitioners in organization development. Involves exploration of consultant role, intervention theory and methods of systems change applied to groups and organizations. Prerequisite: Three of the following: CHDS 6/77810, 6/77835, 77838 and 6/77839.

CHDS 67841/77841
FIELD LABORATORY IN ORGANIZATION DEVELOPMENT (3)
Supervised application of organization development skills and techniques to task groups in educational and human service organizations. Includes diagnosis, analysis and intervention. Off-campus activities included. Repeat registration permitted. IP permissible. Prerequisite: CHDS 6/77840.

CHDS 67850/77850
GROUP DEVELOPMENT THEORY (2)
Analysis of theories of small group development, including both task and personal growth groups. Prerequisite: CHDS 6/77810.

CHDS 67858/77858
SEMINAR: GROUP COUNSELING (2)
Study and experience of various theoretical and methodological and practical approaches to group counseling. Includes experience as counselor and participant in peer counseling group. Prerequisite: Permission.

CHDS 67898/77898
INDIVIDUAL RESEARCH IN ORGANIZATION DEVELOPMENT (1-9)
Student pursues research project on selected aspect of organization development under supervision of instructor. Arrangements with instructor must be made prior to registration. Credit hours and course level to be fixed at time of registration. Repeat registration permitted. S/U grading. Prerequisite: Permission.

CHDS 68000/78000
GUIDANCE OF "AT RISK" YOUTH (3)
Counselors will be provided information that helps them identify individual(s) with highest potential for "at riskness," understand the causal factors for "at riskness," and recognize the behaviors that place individuals "at risk." Prerequisite: CHDS 6/78068.

CHDS 68011/78011
GUIDANCE AND PUPIL SERVICES (3)
Foundation course in school counseling. Focuses on the role and function of school counselors and other pupil-service personnel and on the development of written guidance programs.

CHDS 68015/78015
INDIVIDUAL COUNSELING IN SCHOOLS (3)
Survey course designed for persons who wish to improve their human relations and communications skills but do not plan to become professional counselors. Includes foundations of counseling process and skill training through role playing. Not to be substituted for CHDS 6/77530 or 6/77531.

CHDS 68025/78025
GROUP COUNSELING IN SCHOOLS (3)
Emphasizes practical, procedural aspects of group counseling in schools (K-12), covering types of groups, approaches, stages, processes, forces, techniques, resistances, ethical standards and developmental considerations for children, pubescents and adolescents. Prerequisite: CHDS 6/77530, 6/77531, 6/77815 and 6/78068, or equivalent.
CHDS 68027/78027  
**APPRaisal LABORATORY: SCHOOL COUNSELING (2)**  
A laboratory experience in selecting, administering and interpreting psychological, vocational and educational appraisal instruments. Prerequisite: CPSY 6/78126 (may be taken concurrently). Special fee: $15 per semester.

CHDS 68036/78036  
**SCHOOL COUNSELING PRACTICum (4)**  
Supervised counseling practice in the Counseling and Human Development Center and/or in the schools. Engage in counseling with children, teachers and colleagues. Direct observation and audio-video recording and supervisory critiques used for counseling skills. S/U grading; IP permissible. Prerequisite: CHDS 6/77530, 6/77531, 6/77820, 6/78069 and permission. Special fee: $30 per semester (subject to change).

CHDS 68041/78041  
**FIELD LABORATORY IN SCHOOL COUNSELING (3)**  
Individual or group projects related to counseling and guidance applications in schools. Principles and techniques applied to problems that grow out of institutional or individual needs. IP permissible. Prerequisite: CHDS 6/78068.

CHDS 68042/78042  
**FIELD EXPERIENCE: SCHOOL SOCIAL WORK (3)**  
On-site visits to various community agencies serving children and youth for purpose of obtaining data, understanding referral systems, networking and systems' functions; weekly seminar to discuss findings. IP permissible. Prerequisite: 30 semester hours completed in school social work curriculum.

CHDS 68046/78046  
**MANAGEMENT OF SCHOOL GUIDANCE PROGRAMS (2)**  
Preparation for organization, implementation coordination and administration of counseling, testing, consulting and guidance services provided in single and/or multiple school assignment by school counselor. Legal and ethical issues related to counselor decisions and guidance functions studied.

CHDS 68060/78060  
**PROFESSIONAL SEMINAR IN SCHOOL COUNSELING (3)**  
Development and identity of school counseling, with special emphasis on role, current issues and ethics. Prerequisite: Restricted to students in school counseling program.

CHDS 68066/78066  
**COUNSELING ADOLESCENTS (3)**  
A didactic and experiential seminar focusing on intrapersonal dynamics of adolescents frequently referred to counselors. Counseling procedures, treatment plans and referral for resistant and recalcitrant youth will be covered. Prerequisite: CHDS 6/77530, 6/77531 and counseling practicum.

CHDS 68067/78067  
**COUNSELING CHILDREN (3)**  
Seminar focusing on intra- and interpersonal dynamics of children referred for treatment to counselors. Designed to supplement individual and group counseling skills with play, media. Prerequisite: CHDS 6/77530, 6/77531.

CHDS 68068/78068  
**DEVELOPMENTAL GUIDANCE AND AFFECTIVE EDUCATION (3)**  

CHDS 68069/78069  
**ORIENTATION TO SCHOOL COUNSELING (3)**  
Consideration given to issues that provide an orientation to school counseling. Examples of these issues include professional preparation standards, roles and functions of school counselors, and ethical standards and legal issues.

CHDS 68095/78095  
**SPECIAL TOPICS IN SCHOOL COUNSELING (1-3)**  
Presentations of special interest to students. Offered irregularly. Topics will be announced in Schedule of Classes booklet. Prerequisite: Permission.

CHDS 68098/78098  
**INDIVIDUAL RESEARCH IN SCHOOL COUNSELING (1-9)**  
Student pursues research project on a selected aspect of school counseling under the supervision of instructor. Arrangements with instructor must be made prior to registration. Credit hours and course level to be fixed at registration time. Repeat registration permitted. S/U grading. Prerequisite: Permission.

CHDS 68126/78126  
**PRINCIPLES OF MEASUREMENT AND APPRAISAL (3)**  
Instruction and experience in utilizing observational, measurement and appraisal methods and instruments relevant to community and school counseling settings. Measurement theory and concepts related to the appraisal process will be presented.

CHDS 68127/78127  
**LAB: INDIVIDUAL APPRAISAL OF ABILITY, ACHIEVEMENT AND APTITUDE (3)**  
Laboratory experience in selecting, administering, scoring and interpreting tests of intellectual ability, achievement and aptitude. Instruments such as WAIS-R, Stanford Binet and WRAT-R will be used. Prerequisite: Permission.
CHDS 68128/78128
INDIVIDUAL APPRAISAL OF PERSONALITY/INTEREST/MOTIVATION (3)
A laboratory experience in selecting, administering and interpreting measures of personality, interest and motivation. Instruments such as the MMPI-2, PAI, MCMI-III, MACI, BPI, PIC and/or PIY will be covered. Prerequisite: Permission. Special fee: $15 per semester.

CHDS 68130/78130
PSYCHOPATHOLOGY FOR COUNSELORS (3)
This course covers the etiology and treatment of various disorders covered in the current DSM System. Assessment, treatment and psychopharmological aspects of treatment are considered.

CHDS 68150
THEORIES OF BLACK PERSONALITY (3)
Focus on research and current literature in relation to black personality development. Comparison of Eurocentric versus Afrocentric modes of behavior. Prerequisite: Permission.

CHDS 68165/78165
CAREER COUNSELING (3)
An analysis of the major approaches to career counseling, including use of diagnosis, test interpretation and occupational information. Prerequisite: 6/78182 or permission.

CHDS 68166/78166
ISSUES IN COUNSELING WOMEN (3)
Development of skills and awareness of issues involved in counseling women, including sex role stereotypes, career choice, legal questions, crisis intervention and support systems.

CHDS 68181/78181
GESTALT THERAPY (3)
Introductory course on theory and techniques of Gestalt Therapy.

CHDS 68182/78182
CAREER DEVELOPMENT AND GUIDANCE (3)
The world of work, theories of career choice, techniques in career guideance. An introductory course in the career area for practitioners in education, helping services, human resources and personnel.

CHDS 68529/78529
COUPLES THERAPY: THEORY AND TECHNIQUES (3)
Study of selected marriage therapy theories. Focus on concepts and techniques and their application in the therapeutic setting. CHDS 6/78525 and/or permission; doctoral standing.

CHDS 68531/78531
PREPRACTICUM: MARRIAGE AND FAMILY THERAPY TECHNIQUES (3)
Focuses on gaining and integrating observational, conceptual and therapeutic skills of family therapy in a "learning by doing" atmosphere. Utilizing videotape, simulation and initial interviewing of families, students will acquire basic family therapy skills. IP permissible. Prerequisite: CHDS 6/78529, 6/78533 or permission.

CHDS 68533/78533
FAMILY THERAPY: THEORY AND TECHNIQUES (3)
Explores systemic family therapy utilizing various philosophical orientations, theoretical concepts and techniques in a didactic, experiential and applied atmosphere. Prerequisite: CHDS 6/78525 and/or permission.

CHDS 68535/78535
ASSESSMENT AND RESEARCH IN MARRIAGE AND FAMILY THERAPY (3)
Utilization of assessment skills, techniques and instruments relevant to the practice of marriage and family therapy will be focused upon. Critical judgment regarding research design and findings will be emphasized. Special fee: $15 per semester.

CHDS 68536/78536
PRACTICUM IN MARRIAGE AND FAMILY THERAPY (3)
An intensive-extensive supervised experience in the practice of marriage and family therapy. Live, video and audio supervisory processes may be utilized to assist with skill development. S/U grading; IP permissible. Repeat registration permitted. Controlled registration. Prerequisite: CHDS 6/78529 and 6/78533 or permission. Special fee: $30 per semester.

CHDS 68538/78538
ADVANCED MULTICULTURAL COUNSELING (3)
This course is designed to assist helping professionals in enhancing the knowledge and skill components of multicultural counseling. Cultural and multicultural counseling experiences with constructive feedback are provided. Prerequisite: CHDS 6/77531 and 6/77580.

CHDS 68591/78591
SEMINAR: MARRIAGE AND FAMILY (3)
Focuses on issues of concern to the marriage and family therapist: family violence, sexuality, divorce, blended families, chronic illness, etc. Relevance to issues raised in practicum will be stressed.
CHDS 77584
WRITING FOR PROFESSIONAL PUBLICATIONS (3)
Seminar experience designed to prepare professionals to publish research findings, conceptualizations and professional field experiences in refereed journals and books. Elements of grant writing also treated.

CHDS 77692
INTERNSHIP IN COMMUNITY COUNSELING (2-10)
Assignment to community and/or college counseling center for extensive and intensive applications appropriate for counseling, consulting and coordinating. Supervision of internships shared jointly by counseling center and university instructor. Placement is full time for one semester or longer. Credit hours to be fixed at registration time. May be repeated. S/U grading; IP permissible. Prerequisite: Completion or near completion of all coursework. Open to admitted community counseling students only.

CHDS 77838
PLANNING AND IMPLEMENTING ORGANIZATIONAL CHANGE (3)
An introduction to basic conceptions of schools and human service organizations as complex organizations and to frameworks useful in conceptualizing organizational change.

CHDS 78080
INTEGRATING EXPERIENCE IN SCHOOL COUNSELING (2)
A seminar designed to assist practicing counselors in integrating school counseling concepts with their practice in the field. The format involves small group discussions as well as formal presentations. Prerequisite: M.Ed. School Counseling; CHDS 78092 (may be taken concurrently).

CHDS 78092
INTERNSHIP IN SCHOOL COUNSELING (2-6)
Assignment to a school for extensive and intensive applications appropriate for school counseling, consulting and coordinating. S/U grading; IP permissible. Prerequisite: Permission.

CHDS 80090
DOCTORAL RESIDENCY SEMINAR IN COUNSELING AND HUMAN DEVELOPMENT SERVICES (3)
Focus on professional identity, current issues and trends, and involvement in professional activities. Restricted to students admitted to doctoral program in CHDS. S/U grading; IP permissible.

CHDS 80199
DISSERTATION I (15)
Doctoral dissertation, for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible.

CHDS 80299
DISSERTATION II (1 or 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: CHDS 80199.

CHDS 87571
ADVANCED INDIVIDUAL COUNSELING PRACTICUM (3)
Supervised experience in counseling. Students meet for individual supervision and in seminar groups to assess their effectiveness in helping relationships. May be repeated. Controlled registration. S/U grading; IP permissible. Prerequisite: CHDS 6/77636, 6/77637 and 88166 or permission. Special fee: $30 per semester.

CHDS 87871
ADVANCED PRACTICUM IN SMALL GROUP WORK (4)
Supervised experience in group counseling, training, facilitation and/or leadership in field setting or Counseling and Human Development Center. Students meet in small groups to assess their work, obtain feedback from observers and integrate these learnings into better facilitative behavior. Repeat registration permitted. Controlled registration. S/U grading; IP permissible. Prerequisite: CHDS 6/77636. Special fee: $30 per semester.

CHDS 88166
ADVANCED COUNSELING THEORIES (3)
Consideration in depth of major counseling theories, with special emphasis on comparative analysis. Original readings used. Prerequisite: Basic counseling practicum or permission.

CHDS 88167
ADVANCED COUNSELING PROCEDURES (3)
Development of understanding of more in-depth and complex counseling processes and advanced skills for intervention. Didactic and role-playing methods will be used. Prerequisite: Basic counseling practicum or permission.

CHDS 88180
RESEARCH IN COUNSELING PROCESS AND OUTCOME (3)
Review of classic and current studies in counseling process and outcome, research trends and issues, design strategies and assessment procedures. Focus is on thorough understanding, critique skills and synthesis. Prerequisite: Master’s in counseling and human development services and EDPF 60098, 68706, 78716, 78898 and permission.
CHDS 88281
RESEARCH SEMINAR IN COUNSELING AND HUMAN DEVELOPMENT SERVICES (3)
Topics or problems of current concern in counseling and human development services. Review of significant studies, design strategies, instrumentation, data analysis and research issues. Topic to be announced in Schedule of Classes booklet. May be repeated. Prerequisite: EDPF 60098, 68706, 78716 and 78898.

CHDS 88284
SUPERVISION OF COUNSELING (3)
This seminar focuses on supervisory processes in terms of theoretical perspectives and practices of supervision. Reviews relevant literature related to the roles, functions and settings of clinical supervisor. Includes supervisory experiences.

CHDS 88285
PRACTICUM IN COUNSELOR SUPERVISION (2)
Supervision of students in introductory practica provides learning activity to implement supervisory approach. Repeat registration permitted. S/U grading; IP permissible. Prerequisite: CHDS 88284.

CHDS 88286
DEVELOPMENT OF COUNSELOR EDUCATION PROGRAMS (3)
Review of the planning, implementation and evaluation process in counselor education curricula. Skill development is fostered by simulation, case study and discussion of program design and review. Prerequisite: Students admitted to doctoral program in counseling and human development services.

CHDS 88292
INTERNSHIP IN COUNSELING AND HUMAN DEVELOPMENT SERVICES (3-6)
Professional service in field setting appropriate for counseling, consulting and personnel work, under supervision. May be repeated. Credit hours to be fixed at registration time. S/U grading; IP permissible. Prerequisite: Completion of program course requirements.

CHDS 88294
COLLEGE TEACHING IN COUNSELING AND HUMAN DEVELOPMENT SERVICES (3)
Application of planning, instructional and evaluation skills. Doctoral students lead skill-training groups, lecture a large class and guide group discussion with faculty supervision. Arrangements for this experience to be made before semester begins. Prerequisite: Permission.

CHDS 88298
INDIVIDUAL RESEARCH IN COUNSELING AND HUMAN DEVELOPMENT SERVICES (1-3)
Individual research on selected aspect of counseling and human development services under supervision of instructor. Arrangements with instructor must be made prior to registration. Repeat registration permitted. S/U grading.

CHDS 88584
MARRIAGE AND FAMILY SUPERVISION/CONSULTATION (3)
Focus placed on epistemologic articulation of one's therapeutic and training approach and development of conceptualization and intervention skills of supervision. Prerequisite: CHDS 6/78536 or permission and doctoral standing. Special fee: $30 per semester.

Counseling Psychology (CPSY)

CPSY 68195/78195
SPECIAL TOPICS IN COUNSELING PSYCHOLOGY (1-3)
Specialized offerings in response to emerging or selected program needs in counseling psychology.

CPSY 68196/78196
INDIVIDUAL INVESTIGATION IN COUNSELING PSYCHOLOGY (1-3)
Independent reading and/or research directed by a graduate faculty member. IP permissible.

CPSY 80199
DISSERTATION I (15)
Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible. Prerequisite: Doctoral standing.

CPSY 80299
DISSERTATION II (1 or 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: Completion of Dissertation I.

Career-Technical Teacher Education (CTTE)

CTTE 50093/70093
VARIABLE TOPIC WORKSHOP IN CAREER TECHNICAL EDUCATION (1-5)
Topics of special interest to students desiring to intensify their knowledge in a particular area or areas of career technical education. S/U grading. Prerequisite: Permission.

CTTE 54618
ELEMENTS EXPERIENCE-BASED EDUCATION (3)
Examination of various aspects of experience-based education. Includes exploratory, observation, laboratory and paid work experiences.

CTTE 55372
ISSUES IN CAREER TECHNICAL EDUCATION SUBJECTS (3)
Exploration of issues and trends unique to specific career-technical education subjects.
CTTE 55374  
STRATEGIES FOR TEACHING PERSONAL SELLING  (3)  
A study of the nature of selling activities and the knowledge,  
skills and attitude needed in order to teach salesmanship in  
career-technical education programs.

CTTE 55376  
ENTREPRENEURSHIP IN EDUCATION  (3)  
Study of structure and changing environment of service  
marketing; special emphasis on the qualities/characteristics  
needed to start and operate a service business. Course in-  
cludes 30 field/clinical hours.

CTTE 55377  
CAREER AND TECHNICAL EDUCATION: ADVANCED  
METHODOLOGIES (3)  
Selection, organization and presentation of subject matter  
pertaining to specific subjects in career and technical educa-  
tion. Emphasis on methods and techniques through theory  
and practice. Course includes 30 field/clinical hours.

CTTE 56001  
ORGANIZATION OF CAREER AND TECHNICAL EDUCATION  (3)  
Study of the principles and subject areas related to career  
and technical education at middle school, secondary and adult  
education levels.

CTTE 56002  
IN-SERVICE TEACHING I (2)  
Overview of teaching process in career technical teacher  
education. Emphasizes techniques of skill development and  
assessment, includes organizing for instruction, individual  
behavior, organizational relationships and application steps.  
Prerequisites: Must be admitted into the professional develop- 
ment program for teachers recruited from business/industry.

CTTE 56003  
IN-SERVICE TEACHING II (1)  
Continuation of CTTE 56002. Involves professional develop- 
ment, licensure preparation for career technical instructors  
and organized class instruction. Prerequisite: Must be admit- 
ted into the professional development program for teachers  
recruited from business/industry.

CTTE 56005  
PRINCIPLES OF CAREER TECHNICAL EDUCATION (3)  
Study of the concept, basic principles and current practices in  
contemporary career technical education. Includes review of  
history and programs, methodology, instructional materials  
and funding.

CTTE 56015  
METHODS OF CAREER AND TECHNICAL EDUCATION (3)  
Organization and management of classroom and laboratory;  
includes purchasing equipment and supplies, safety instruc- 
tion planning, establishing policies, maintaining records, and  
individual and group instructional strategies.

CTTE 56017  
YOUTH ORGANIZATIONS IN CAREER TECHNICAL EDUCATION  
(3)  
Study of youth organizations in career technical education  
with emphasis on the organization and purposes and advisor  
role.

CTTE 56018  
DISADVANTAGED YOUTH IN CAREER TECHNICAL EDUCATION  
(3)  
Developing an understanding of disadvantaged youth stress- 
ing their characteristics as they pertain to career technical  
education programs.

CTTE 56019  
COORDINATION OF CAREER TECHNICAL COOPERATIVE EDUCU- 
ATION PROGRAMS (3)  
Reviews duties, problems, techniques of home, school and  
work coordination. Internship site selection, job development,  
servicing the job station, coordinating classroom and work ex- 
perience. A study of important linkage to local business/indus- 
try and education support agencies for career and technical  
development.

CTTE 56020  
CURRICULUM GUIDE: DESIGN AND APPLICATION (3)  
Methods and techniques involved in developing and utilizing  
a curriculum guide in career and technical education subjects.  
This course includes 15 field/clinical hours.

CTTE 56031  
STUDENT TEACHING IN CAREER TECHNICAL EDUCATION  
(8-10)  
Provides a 10-12 week student teaching experience in a career- 
technical program setting. See “Student Teaching” section in  
this catalog. S/U grading; IP permissible. Prerequisite: Eligible  
for admission to student teaching. Corequisite: CTTE 59525.

CTTE 56092  
INTERNSHIP, PRACTICUM AND FIELD EXPERIENCE IN CAREER  
TECHNICAL EDUCATION (2-5)  
Supervised internship, practicum or field experience in specific  
occupations. S/U grading. Prerequisite: Permission.

CTTE 56095  
SPECIAL TOPICS IN CAREER TECHNICAL EDUCATION (1-3)  
Specialized offerings in response to emerging or selected  
program needs in career-technical education. Prerequisite:  
Permission.

CTTE 56096  
INDIVIDUAL INVESTIGATION IN CAREER TECHNICAL EDUCA- 
TION (1-3)  
An individual investigation into problems and topics in career  
technical education. The investigation is pursued on an indi- 
vidual basis with an assigned faculty member. S/U grading.  
Prerequisite: Permission.
CTTE 56192
PRACTICUM: OCCUPATIONAL (1-6)
Supervised work experience in occupation to obtain initial experience or to update skills. S/U grading. Prerequisite: Permission.

CTTE 59525
INQUIRY INTO PROFESSIONAL PRACTICE (3)
Interdisciplinary inquiry into career/technical teaching as a professional practice in education; emphasis on teacher as disciplined investigator. Final course of four. Combination of themes; utilization of teaching/learning technologies.

CTTE 60199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible. Prerequisite: Permission.

CTTE 60299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: CTTE 60199.

CTTE 66001
PRINCIPLES AND PRACTICES IN CAREER TECHNICAL EDUCATION (3)
Study of principles, current practices and trends relating to modern programs of career-technical education and relationships to the total plan of public education.

CTTE 66003
ANALYSIS OF HUMAN RESOURCE DEVELOPMENT (3)
Provides analysis of human resource development from global, national, state and local perspectives including social, economic, political and demographic influences. Includes the application of the contemporary workforce to engage in life-long learning to keep career and technical skills updated.

CTTE 66004
PROGRAM EVALUATION IN CAREER TECHNICAL EDUCATION (3)
Designed to provide the skills and knowledge necessary to evaluate the effectiveness and efficiency of career-technical education curriculum programs personnel.

CTTE 66005
SPECIAL POPULATIONS IN CAREER TECHNICAL EDUCATION (3)
A study of the special populations student in career technical education programs emphasizing characteristics, curriculum modification, instruction and job placement.

CTTE 66008
ORGANIZATION AND ADMINISTRATION OF ADULT PROGRAMS IN VOCATIONAL EDUCATION (3)
Procedures for the development, organization and administration of adult vocational education programs.

CTTE 66091/76091
VARIABLE TOPIC SEMINAR IN VOCATIONAL EDUCATION (1-4)
Variable topic seminar for study in specialized areas and topics related to vocational education. Normally designed around research and theory applied to practice.

CTTE 66095/76095
SPECIAL TOPICS IN VOCATIONAL EDUCATION (1-3)
Specialized offerings in response to emerging or selected program needs in vocational education.

CTTE 66096/76096
INDIVIDUAL INVESTIGATION IN VOCATIONAL EDUCATION (1-3)
An investigation into problems and topics in vocational education. The investigation is pursued on an individual basis with an assigned faculty member. S/U grading. Prerequisite: Permission.

CTTE 66098/86098
ADVANCED RESEARCH IN VOCATIONAL EDUCATION (1-15)
Student pursues an individual research project on a specialized vocational education topic with approval and under the direction of an instructor. S/U grading; IP permissible. Prerequisite: Permission.

CTTE 66292
PRACTICUM: VOCATIONAL SUPERVISION (2-5)
Field-based experience in supervision in a vocational setting. S/U grading. Prerequisite: CTTE 66007 and permission.

CTTE 66392
PRACTICUM: VOCATIONAL ADMINISTRATION (2-5)
Field-based experience in administration in a vocational setting. S/U grading. Prerequisite: CTTE 66006 and permission.

CTTE 76092
ADVANCED INTERNSHIP, PRACTICUM AND FIELD EXPERIENCE IN VOCATIONAL EDUCATION (1-5)
Supervised internship, practicum or field experience in vocational education. S/U grading. Prerequisite: Permission.

CTTE 86091
VARIABLE TOPIC SEMINAR: VOCATIONAL EDUCATION (1-4)
Variable topic seminar for study in specialized areas and topics. Normally designed around research and theory applied to practice.

Curriculum and Instruction (C&I)

C&I 50093/70093
VARIABLE TITLE WORKSHOP IN CURRICULUM AND INSTRUCTION (1-5)
Variable topic workshop designed to respond to curriculum trends and issues and specialized needs. S/U grading.
C&I 57330
READING AND WRITING IN ADOLESCENCE/ADULTHOOD (3)
Understanding of literacy learning in adolescence and adulthood (ages 12-21) with an emphasis on strategies for text learning, literacy in electronic environments and teaching students who struggle as readers and writers.

C&I 60199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

C&I 60299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: C&I 60199 and graduate standing.

C&I 61130/71130
MULTICULTURAL EDUCATION: STRATEGIES (3)
Teachers will be provided with knowledge and strategies for teaching children to function effectively in a pluralistic society.

C&I 61133/71133
ISSUES AND TRENDS IN ELEMENTARY SCIENCE (3)
New discoveries in science, including issues in society with direct science content. Emphasis is on practical and simple classroom applications. Prerequisite: Two years of teaching experience.

C&I 67001/77001
FUNDAMENTALS OF CURRICULUM (3)
Orientation to the curriculum field. Theoretical examination of foundations, elements, design and development of school, college and nonschool curricula.

C&I 67002/77002
TEACHER LEADERSHIP (3)
The course provides a critical overview of current teacher leadership policies and practices. Specific teacher leadership topics, including professional accountability, teaching artistry and collegial relations, are carefully examined.

C&I 67003/77003
TEACHER EDUCATION (3)
This course is designed to provide a broad overview of teacher education, including curriculum, organization, governance and policy.

C&I 67004/77004
PROFESSIONAL DEVELOPMENT IN TEACHING (3)
This course is designed to provide a broad overview and conceptual framework for professional development, including its historical, cultural, psychological and social contexts.

C&I 67010/77010
CURRICULUM EVALUATION (3)
Students will focus on designing program evaluation related to assessment, development and implementation of curricula, critique of national and local curricular programs, application elements of evaluation models.

C&I 67091
SEMINAR IN CURRICULUM AND INSTRUCTION (1-4)
A detailed exploration of the implications of current research and professional recommendations for teaching mathematics and designing mathematics curricula will be conducted. IP permissible. Prerequisite: C&I 6/77225 or permission.

C&I 67092/77092
ADVANCED PRACTICUM IN CURRICULUM AND INSTRUCTION (3)
S/U grading.

C&I 67095/77095
SPECIAL TOPICS IN CURRICULUM AND INSTRUCTION (1-5)
Specialized offerings in response to emerging or selected program needs in curriculum design, development and implementation.

C&I 67096/77096
INDIVIDUAL INVESTIGATION IN CURRICULUM AND INSTRUCTION (1-5)
Directed independent reading and/or research of special interest or need in student's program. Planned with and directed by a graduate faculty member. S/U grading; IP permissible.

C&I 67098/77098
RESEARCH IN CURRICULUM AND INSTRUCTION (1-15)
Students pursue an individualized research project on a specialized topic with approval and under direction of instructor. S/U grading; IP permissible.

C&I 67105/77105
IMPROVING CLASSROOM INSTRUCTION (3)
Emphasizes motivation, varied materials and methods, individual needs and sources of teacher help. Class members define goals and means.

C&I 67107/77107
CURRICULUM AND ORGANIZATION IN THE MIDDLE GRADES (3)
History, philosophy, curriculum and organization of schools serving children ages 8-15. Emphasis on development of programs and curriculum that are responsive to the needs of early adolescents.

C&I 67108/77108
TEACHING AND LEARNING IN THE MIDDLE GRADES (3)
Pedagogical theories and practices; approaches to instruction, relationship of teaching to learning and development for children ages 8-15.
C&I 67191/87191  
SEMINAR IN SUPERVISION (1-4)  
Variable topic seminar for advanced study of specialized areas and topics. Normally designed around research and theory applied to practice. S/U grading.

C&I 67192/77192  
ADVANCED PRACTICUM AND INTERNSHIP IN SUPERVISION (1-10)  
Planned field experience in supervision designed to provide opportunity to apply supervisory principles and techniques. Required for state of Ohio supervisor certificate. S/U grading.

C&I 67195/77195  
SPECIAL TOPICS IN SUPERVISION (1-5)  
Specialized offerings in response to emerging or selected program needs in supervision.

C&I 67196/77196  
INDIVIDUAL INVESTIGATION IN SUPERVISION (1-5)  
Directed independent reading and/or research of special interest or need in student's program. Planned with and directed by a graduate faculty member. S/U grading; IP permissible.

C&I 67198/87198  
RESEARCH IN SUPERVISION (1-15)  
Students pursue an individualized research project on a specialized topic with approval and under direction of instructor. S/U grading; IP permissible.

C&I 67210/77210  
PROBLEMS IN EARLY CHILDHOOD CURRICULUM (3)  
Issues, problems, trends and approaches in early childhood curriculum are discussed with current curriculum theory applied to problems in curriculum development. Prerequisite: C&I 6/77001.

C&I 67224  
TEACHING MATHEMATICS USING COMPUTERS AND CALCULATORS (3)  
The purpose is to develop knowledge of research and theories regarding teaching and learning mathematics via computing devices. Further to develop proficiency in the use of computing devices and software that would be used in the teaching and learning of mathematics. Prerequisite: Advanced standing or master's program and mathematics courses through MATH 22005.

C&I 67225/77225  
RESEARCH IN MATHEMATICS EDUCATION (3)  
Current research theory, methodology and results in mathematics education will be investigated. Implications for instructional practice and curriculum design will be examined.

C&I 67226/77226  
IMPROVING MATHEMATICS INSTRUCTION IN MIDDLE CHILDHOOD (3)  
Instructional psychology and materials including technology for the effective teaching of mathematics in grade three through eight with a theoretical emphasis on cognitive development.

C&I 67227/77227  
ASSESSMENT IN MATHEMATICS EDUCATION (2)  
Investigation of standards and practices in mathematical assessments as recommended by NCTM and current research. Prerequisite: Completion of two of the following: ADED 52267, C&I 67224, C&I 67226 or ECED 50147.

C&I 67228/77228  
INTERVENTION IN MATHEMATICS INSTRUCTION (2)  
Investigation of alternative methods of teaching mathematics to diverse learners who experience difficulties in learning mathematics. Prerequisite: Completion of two of the following: ADED 52267, C&I 67224, C&I 67226 or ECED 50147.

C&I 67230/77230  
PROBLEMS IN SECONDARY SCHOOL CURRICULUM (3)  
Application of curriculum theory to contemporary problems and issues in secondary curriculum. Opportunities for students to study a specific curriculum problem in depth. Prerequisite: C&I 6/77001.

C&I 67240/77240  
INTRODUCTION TO ENVIRONMENTAL EDUCATION (2)  
Survey emphasizing current developments with respect to materials and methodology. Illustrative activities accompany presentation of topics. Designed for teachers K-12 regardless of science background.

C&I 67250  
FOREIGN LANGUAGE CURRICULUM, MEDIA AND TESTING (3)  
Cross-listed with MCLS 60663. Information about classroom methods and materials. Special emphasis on use of films, tapes, videos, software. Current methods of testing and available standardized tests examined.

C&I 67251/77251  
PROGRAM PLANNING AND EVALUATION OF ADULT LEARNING (3)  
Emphasis on translating the principles of how to teach adults into a process for planning and evaluating a comprehensive adult-learning program.
C&I 67252/77252
METHODS AND TECHNIQUES OF INSTRUCTION FOR ADULTS (3)
Emphasis on teaching strategies, techniques and methodologies for adults in multiple educational settings (school and nonschool).

C&I 67292/77292
CLINICAL PRACTICUM IN MATHEMATICAL ASSESSMENT (2)
Experience in designing and administering both formal and informal assessments. Prerequisite: Completion of two of the following: ADED 52267, C&I 67224, C&I 67226 and ECED 50147.

C&I 67310/77310
THEORY AND PRACTICE IN THE TEACHING OF READING (3)
Nature and development of reading, approaches to instruction, relation to learning and development.

C&I 67311/77311
INTEGRATED LANGUAGE ARTS INSTRUCTION (3)
Issues and trends in instruction in listening and in oral and written expression.

C&I 67312/77312
TEACHING WRITING AS A PROCESS (3)
Emphasizes a process approach to writing instruction in grades K-12. Examines the steps and studies of composing, evaluation and components of a schoolwide program.

C&I 67314/77314
SURVEY OF YOUNG ADULT LITERATURE (3)
Presents a survey of selected types of literature appropriate for students in middle school, junior high and high school. Emphasis on evaluating, selecting and teaching.

C&I 67315/77315
SURVEY OF CHILDREN'S LITERATURE (3)
Cross-listed with ENG 6/76052.
Wide reading in children's literature, with particular application to school curriculum and field of reading.

C&I 67316/77316
CRITICISM OF CHILDREN'S LITERATURE (3)
Cross-listed with ENG 6/76053.
A critical study of outstanding children's literature from early times to present. Prerequisite: C&I 6/77315 or permission.

C&I 67317/77317
TEACHING THE READING OF CHILDREN'S LITERATURE (3)
An in-depth study of teaching techniques for using literature with elementary school children within a comprehensive literature program in the elementary school.

C&I 67318/77318
TEACHING DRAMA IN THE CLASSROOM (3)
Presents an in-depth survey of selected types of drama appropriate for elementary- and middle-school children. Theory and practice are emphasized.

C&I 67319/77319
DIAGNOSIS AND REMEDIATION IN READING (3)
Theory and application of diagnostic principles and remedial reading approaches with school-age children. Cultural, linguistic, cognitive and affective factors in diagnosing and remediating reading problems. Prerequisite: C&I 6/77310.

C&I 67320
TEACHER AS LITERACY RESEARCHER (3)
Capstone experience in master's program in literacy in which students pursue an individualized literacy research program. Prerequisite: 24 credit hours toward master's degree including UPR research course.

C&I 67323/77323
CLINICAL PRACTICUM IN CORRECTIVE READING (4)
Application of previous courses includes supervised diagnostic/prescriptive reading work with school-age pupils and diagnostic/remedial reporting. S/U grading; IP permissible. Prerequisite: C&I 67319.

C&I 67330/77330
READING IN CONTENT AREAS (3)
Information and competencies for improving students' reading and studying in the content areas. Focus on intermediate grades through postsecondary years.

C&I 67331/77331
LITERACY LEARNING IN EARLY YEARS (3)
Emphasizes developmental nature of literacy learning in preschool and primary grades; provides techniques for establishing effective reading and writing programs for young children.

C&I 67337/77337
THEORY AND PRACTICE IN TEACHING LITERATURE — SECONDARY AND COLLEGE (3)
This course provides a rationale for and means of relating literary theory to classroom practice and pedagogical research. For secondary and postsecondary English teachers.

C&I 67338/77338
TEACHING BASIC WRITERS — SECONDARY AND COLLEGE (3)
Current theory and practices for teaching linguistically diverse writers at the secondary and postsecondary levels. Foundations for teaching language in the context of writing.

C&I 67339/77339
WRITING ASSESSMENT AND RESPONSE (3)
Exploration of issues in writing assessment, theoretical base for effective formative response to student writing, and design and implementation of writing-assessment measures.
Education

C&I 67345/77345
ORGANIZATION AND SUPERVISION OF READING PROGRAMS (3)
Background and strategies for organizing and supervising reading programs. Emphasis on the state of the field, roles and responsibilities and current issues.

C&I 67350/77350
COLLEGE/ADULT READING INSTRUCTION (3)
Reading strategies for teachers of adult learners with emphasis on the role of the teacher and the development of programs.

C&I 67392/77392
ADVANCED PRACTICUM AND INTERNSHIP IN READING (1-10)
Supervised program requiring application of theory and practices in reading in field settings. Planned with and directed by a graduate faculty member.

C&I 67395/77395
SPECIAL TOPICS IN READING (1-5)
Specialized offerings in response to emerging or selected program needs in reading.

C&I 67396/77396
INDIVIDUAL INVESTIGATION IN READING AND LANGUAGE ARTS (1-5)
Directed independent reading and/or research of special interest or need in student’s program. Planned with and directed by a graduate faculty member. S/U grading; IP permissible.

C&I 67791/77791
SEMINAR IN MATHEMATICS EDUCATION (3)
An in-depth exploration of the theoretical frameworks and methodologies used in current research in mathematics education will be conducted.

C&I 80089
RESIDENCY I (3)
Beginning doctoral seminar. Students begin to explore the field of curriculum and instruction by reading and discussing foundational and current theories and research in the field. Students will begin to identify and explore their research interests in the field. S/U grading.

C&I 80090
RESIDENCY II (3)
Advanced doctoral seminar. This will be a structured opportunity for students to synthesize research from the field, explore research options for their dissertation study, review literature for their research studies, and discuss the development of their research. Prerequisite: C&I 80089.

C&I 80199
DISSERTATION I (15)
Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible.

C&I 80299
DISSERTATION II (1 or 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: C&I 80199.

C&I 87000
THEORY AND RESEARCH IN TEACHING (3)
Focuses on critical study of contrasting approaches to the study of teaching processes. Surveys issues to give students a more critical perspective and to provoke thought about the relationship among theory, research and practice. Required of C&I Ph.D. students.

C&I 87001
THEORY AND RESEARCH IN CURRICULUM (3)
Focuses on historic and contemporary examples of curriculum theory and their application in curriculum design, development and evaluation. Examines modes of inquiry used by curriculum researchers and contemporary curriculum issues. Prerequisite: C&I 6/77001. Required of C&I Ph.D. students.

C&I 87091
DOCTORAL SEMINAR IN CURRICULUM AND INSTRUCTION (1-4)
Variable topic seminar for advanced study of specialized areas and topics. Normally designed around research and theory applied to practice. IP permissible. Prerequisite: Permission.

C&I 87298
RESEARCH IN TEACHING STUDIES (3)
This is a capstone course for a concentration in tracking studies. Students will select an area of inquiry in teaching studies and develop it for possible use in dissertation.

C&I 87340
RESEARCH IN READING (3)
An introduction to a perspective on psychological processes underlying levels of reading from prereading to mature reading with implications for instruction. Prerequisite: Permission.

C&I 87342
SEMINAR IN READING AND LANGUAGE (3)
Exploration of some of the issues, methods and findings on the relationship of reading and language. Examination of selected issues such as dialect, bilingualism, readability, language-based strategies for reading instruction. Prerequisite: Doctoral student or permission.
### Education

**C&I 87343**  
**RESEARCH IN TEACHING OF WRITING (3)**  
Issues and methodologies in research in the teaching of writing. Students will review the literature and conduct research in a significant area of writing instruction.

**C&I 87391**  
**SEMINAR IN READING (1-4)**  
Variable topic seminar for advanced study of specialized areas and topics. Normally designed around research and theory applied to practice.

**C&I 87398**  
**RESEARCH IN READING AND LANGUAGE ARTS (1-15)**  
Students pursue an individualized research project on a specialized topic with approval and under direction of instructor.

**C&I 87791**  
**DOCTORAL SEMINAR IN MATHEMATICS EDUCATION (3)**  
An in-depth exploration of the theoretical frameworks and methodologies used in current research in mathematics education will be conducted. Prerequisite: C&I 6/77225 and doctoral standing in mathematics education.

<table>
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<tr>
<th>ECED 50093/70093</th>
<th>VARIABLE TITLE WORKSHOP IN EARLY CHILDHOOD EDUCATION (1-5)</th>
<th>S/U grading.</th>
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**ECED 50110**  
**EDUCATION IN KINDERGARTEN (3)**  
Developmentally appropriate practice for kindergarten programs; emphasis upon understanding trends and influences affecting kindergarten education.

**ECED 50114**  
**TEACHING SCIENCE IN THE EARLY YEARS (3)**  
This course examines methods of teaching the processes of science. Attention is given to methods, equipment, safety and planning. Prerequisite: ECED 30147. Concurrent with Block IV courses and field experience in M.A.T. program. Special fee: $15 per semester.

**ECED 50142**  
**HOME, SCHOOL AND COMMUNITY RELATIONS (3)**  
Approaches to parent and community involvement in the education and welfare of children. Understanding of role of community agencies and organizations.

**ECED 50145**  
**MUSIC AND RHYTHMS IN PREPRIMARY EDUCATION (3)**  
Comprehensive coverage of music and rhythms for preprimary child. Intended for early childhood education majors or other persons desiring additional work in music with preprimary children. Prerequisite: Permission from instructor.

**ECED 50146**  
**TEACHING WITH MICROCOMPUTERS: EARLY YEARS (3)**  
Developing competency in teaching with microcomputers in pre-kindergarten through grade three. Includes laboratory experience in computerized lessons and management and programming in LOGO, field testing of computer-related materials and a research review.

**ECED 50147**  
**TEACHING MATHEMATICS: EARLY YEARS (3)**  
Instructional psychology and materials for effective teaching of mathematics in pre-kindergarten through grade three with a theoretical emphasis on cognitive development. Special fee: $10 per semester (subject to change).

**ECED 50151**  
**GUIDANCE OF YOUNG CHILDREN (3)**  
Principles and practices of appropriate guidance for young children: intervention strategies, resources and materials for guidance.

**ECED 50153**  
**ORGANIZATION AND SUPERVISION OF EARLY CHILDHOOD CENTERS (3)**  
Basic guidelines for establishing and supervising early childhood settings for infants, preschool and school-age children.

**ECED 60101/70101**  
**CONSTRUCTIVIST TEACHING IN EARLY CHILDHOOD CLASSROOMS (3)**  
Theorists and researchers with a constructivist orientation will be examined in relationship to teacher beliefs. The course will focus on constructivist practices emphasizing child-sensitive curriculum and teaching practices.

**ECED 60102/70102**  
**DEVELOPING A BALANCED LITERACY PROGRAM (3)**  
An examination of own teaching practice focusing on assessment strategies to inform decision-making for individual children and evaluation strategies to fine tune a balanced literacy program.

**ECED 60111/70111**  
**AUXILIARY SERVICES FOR EARLY CHILDHOOD EDUCATION (2)**  
Current public and private programs for young children as resources for preschool and primary teachers. Methods of initiating and implementing new programs.

**ECED 60112/70112**  
**HUMANITIES FOR CHILDREN (2)**  
Relevance of humanities as applied to education of young children.

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**Early Childhood Education (ECED)**

ECED 50093/70093  
**VARIABLE TITLE WORKSHOP IN EARLY CHILDHOOD EDUCATION (1-5)**  
S/U grading.

ECED 50110  
**EDUCATION IN KINDERGARTEN (3)**  
Developmentally appropriate practice for kindergarten programs; emphasis upon understanding trends and influences affecting kindergarten education.

ECED 50114  
**TEACHING SCIENCE IN THE EARLY YEARS (3)**  
This course examines methods of teaching the processes of science. Attention is given to methods, equipment, safety and planning. Prerequisite: ECED 30147. Concurrent with Block IV courses and field experience in M.A.T. program. Special fee: $15 per semester.

ECED 50142  
**HOME, SCHOOL AND COMMUNITY RELATIONS (3)**  
Approaches to parent and community involvement in the education and welfare of children. Understanding of role of community agencies and organizations.

ECED 50145  
**MUSIC AND RHYTHMS IN PREPRIMARY EDUCATION (3)**  
Comprehensive coverage of music and rhythms for preprimary child. Intended for early childhood education majors or other persons desiring additional work in music with preprimary children. Prerequisite: Permission from instructor.

ECED 50146  
**TEACHING WITH MICROCOMPUTERS: EARLY YEARS (3)**  
Developing competency in teaching with microcomputers in pre-kindergarten through grade three. Includes laboratory experience in computerized lessons and management and programming in LOGO, field testing of computer-related materials and a research review.

ECED 50147  
**TEACHING MATHEMATICS: EARLY YEARS (3)**  
Instructional psychology and materials for effective teaching of mathematics in pre-kindergarten through grade three with a theoretical emphasis on cognitive development. Special fee: $10 per semester (subject to change).

ECED 50151  
**GUIDANCE OF YOUNG CHILDREN (3)**  
Principles and practices of appropriate guidance for young children: intervention strategies, resources and materials for guidance.

ECED 50153  
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Basic guidelines for establishing and supervising early childhood settings for infants, preschool and school-age children.

ECED 60101/70101  
**CONSTRUCTIVIST TEACHING IN EARLY CHILDHOOD CLASSROOMS (3)**  
Theorists and researchers with a constructivist orientation will be examined in relationship to teacher beliefs. The course will focus on constructivist practices emphasizing child-sensitive curriculum and teaching practices.

ECED 60102/70102  
**DEVELOPING A BALANCED LITERACY PROGRAM (3)**  
An examination of own teaching practice focusing on assessment strategies to inform decision-making for individual children and evaluation strategies to fine tune a balanced literacy program.

ECED 60111/70111  
**AUXILIARY SERVICES FOR EARLY CHILDHOOD EDUCATION (2)**  
Current public and private programs for young children as resources for preschool and primary teachers. Methods of initiating and implementing new programs.

ECED 60112/70112  
**HUMANITIES FOR CHILDREN (2)**  
Relevance of humanities as applied to education of young children.
ECED 60113/70113
PRESCHOOL EDUCATION (3)
An in-depth study of curriculum development in preschool programs.

ECED 60150
CURRICULUM AND INTERVENTION IN EARLY CHILDHOOD SERVICES (3)
Cross-listed with SPED 63950.
Overview/comparison of early childhood service approaches: history/issues delivering services; developmentally appropriate practice; and environmental arrangement, how to modify curriculum. Prerequisite: Permission.

ECED 60151/70151
SOCIOMORAL ENVIRONMENT IN EARLY CHILDHOOD EDUCATION (3)
Children's social and moral development will be explored in relationship to the context of primary classrooms. Children's social problem-solving, friendship-making, guidance strategies and interventions, building and facilitating classroom communities, and promoting a caring classroom will be the focus of this course.

ECED 60152/70152
APPLICATION OF SELECTED THEORETICAL PRINCIPLES TO THE DEVELOPMENT OF YOUNG CHILDREN (3)
Examination of theories pertaining to child development that have special relevance in understanding and meeting developmental needs of young children. Application of selected theoretical principles to child development.

ECED 60153/70153
PLAY IN CHILDHOOD (3)
Examination of the play of children from various theoretical perspectives, the role of the play in development, strategies for facilitation of children's play in various settings.

ECED 60154/70154
PRACTICAL APPLICATIONS BIRTH TO FIVE (4)
Cross-listed with SPED 6/73953.
Practical application of recommended practices for children birth to five. Observation of children in natural environment. Plan/evaluate intervention with families/professionals. Prerequisite: Permission.

ECED 60155/70155
INFANT AND TODDLER DEVELOPMENT AND EDUCATION (3)
Development from birth through age two. Application of theories to understand infant and toddler behavior and developing infant/toddler programs.

ECED 60156
FOUNDATIONS IN EARLY CHILDHOOD SERVICES (3)
Cross-listed with SPED 63956.
Issues facing children within family/society; history of early childhood services; theoretical perspectives; implications of childhood disabilities; recommended assessment, intervention and evaluation.

ECED 60157
ASSESSMENT/TEACHING EXCEPTIONAL INFANTS AND YOUNG CHILDREN (3)
Cross-listed with SPED 63957.
Examines a range of systems for comparing and observing early childhood services, practices, young children and families: types and purposes of assessment procedures and instruments, monitoring progress. Prerequisite: Permission.

ECED 60159
FAMILY PROFESSIONAL COLLABORATION IN EARLY CHILDHOOD (3)
Cross-listed with SPED 63952.
Examines issues facing families and professionals serving young children who are at risk, disabled and typically developing.

ECED 60160
TYPICAL AND ATYPICAL DEVELOPMENT IN YOUNG CHILDREN (3)
Cross-listed with SPED 63955.
Overview of typical/atypical development pathways age three to grade three: theories of behavior; implications of atypical development on play/learning; development within ecological framework. Prerequisite: Permission.

ECED 60161/70161
PARENTING EDUCATION: SUPPORTING THE PARENTING PROCESS (3)
Exploration of parenting processes through the life span with particular focus on how school and nonschool professionals support families and children.

ECED 60162
PRACTICAL APPLICATIONS FIVE TO EIGHT (4)
Cross-listed with SPED 63954.
Application of recommended practices for children five to eight. Observation of children in natural environment; plan/evaluate intervention collaboratively. 60 clinical/field hours. Prerequisite: Permission.

ECED 60164/70164
APPROPRIATE ASSESSMENT IN EARLY CHILDHOOD EDUCATION (3)
Formative evaluation that informs curriculum planning for children age three to grade three. Seamless assessment of both emergent academic abilities and specific content areas such as math, science and literacy will be examined. Prerequisite: In M.A.T. program concurrent with Block IV field; ECED 60192.
ECED 60165/70165  
PRINCIPLES OF SOCIAL LEARNING APPLIED TO EARLY CHILDHOOD EDUCATION (3)  
Discussion, evaluation and application of contemporary theory and research specifically related to the modification of behavior within the context of the developmental demands of early childhood. Prerequisite: Permission.

ECED 60166/70166  
OBSERVATIONAL ANALYSIS OF CLASSROOM INTERACTIONS (3)  
A practicum in construction and application of pupil observational assessment and procedures. Developmental and social psychology research is used to develop assessment items. 24 clinical/field hours. Prerequisite: Permission.

ECED 60167/70167  
LANGUAGE AND LITERACY: UNDERSTANDING DEVELOPMENT (3)  
The development of language in children from birth through age eight with a focus on the process of typical language development and the diversity of multicultural language. Topics specifically related to classroom teaching include the assessment of language delays and disorders and strategies for connecting oral language to literacy in preschool. Corequisite: ECED 60152.

ECED 60168/70168  
COGNITIVE DEVELOPMENT IN EARLY CHILDHOOD EDUCATION (3)  
Survey of changes in child's systems of processing information from birth through primary school years, and application of these theoretical principles to programs for young children.

ECED 60192  
EARLY CHILDHOOD SERVICES INTERVENTION METHODS/INTERNSHIP (5)  
Integration of specific strategies for working with children birth to eight with intensive needs (cerebral palsy, spina bifida, autism) with internship. 90 field/clinical hours. Prerequisite: Permission.

ECAD 60199  
THESIS I (2-6)  
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

ECAD 60299  
THESIS II (2)  
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: ECED 60199.

ECED 67291/77291  
SEMINAR IN EARLY CHILDHOOD EDUCATION (1-4)  
ECED 67292/77292  
PRACTICUM AND INTERNSHIP IN EARLY CHILDHOOD EDUCATION (1-10)  
S/U grading; IP permissible.

ECAD 67295/77295  
SPECIAL TOPICS IN EARLY CHILDHOOD EDUCATION (1-5)

EDAD 60199  
THESIS I (2-6)  
The thesis must be a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

EDAD 60299  
THESIS II (2)  
The thesis must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: EDAD 60199.
EDAD 66492/76492
INTERNSHIP IN EDUCATIONAL ADMINISTRATION (3-6)
A field-based internship requiring a separate project as designated by the program area faculty. Specific topics are outlined and shared at meetings prior to beginning internship. S/U grading; IP permissible.

EDAD 66515/76515
FACILITIES PLANNING AND ADMINISTRATION (3)
Overview of facilities planning and administration, including architectural/construction management, the educational program, restoration and maintenance.

EDAD 66517/76517
ADMINISTRATION AND SUPERVISION OF SPECIAL EDUCATION (3)
Administration of educational programs for exceptional children: improvement of teacher competencies; function of special education supervisors; and special education operations at a local, state and national level.

EDAD 66518/76518
LAW AND SPECIAL EDUCATION (3)
Constitutional, statutory and case law involving handicapped infants and students; special education teachers, administrators and parents are studied.

EDAD 66520/76520
SCHOOL LAW FOR TEACHERS AND PRINCIPALS (3)
Selected principles of constitutional, statutory, and common law affecting the administration of schools generally and Ohio schools specifically.

EDAD 66521/76521
EMPLOYMENT LAW (3)
Study of the history and legal status of collective bargaining in Ohio and in the nation. Public and private sector bargaining law, establishing bargaining units, ratifying negotiable items and legal issues in the bargaining process are studied. Prerequisite: One law course in education or equivalent.

EDAD 66522/76522
PUBLIC SCHOOL FINANCE AND ECONOMICS (3)
Analysis of national, state and local problems of collection, custody and expenditure of public school funds. Prerequisite: EDAD 6/76501.

EDAD 66524/76524
CENTRAL OFFICE ADMINISTRATION: BUSINESS MANAGEMENT AND SUPPORT SERVICES (3)
Includes both the study of the scope, techniques and procedures of managing school business affairs and the accounting, auditing and fiscal reporting procedures for educational institutions. Prerequisite: EDAD 6/76526 and graduate standing.

EDAD 66525/76525
THE EDUCATIONAL PRINCIPALSHIP (3)
Organizing and administering elementary, middle-level and secondary schools. Must register concurrently for EDAD 6/76592. Prerequisite: EDAD 6/76526.

EDAD 66526/76526
FUNDAMENTALS OF EDUCATIONAL ADMINISTRATION (3)
Examines theory and practice essential for administration. Skills and understanding are developed in theory, goal-setting, staff development.

EDAD 66527/76527
SCHOOL FINANCE FOR BUILDING ADMINISTRATORS (3)
Identification of the responsibilities of the school building administrator related to all financial operations in the school building; included are the budget process and development, student accounts, the purchase order process, and fund-raising and school groups. Prerequisite: Admission to the Graduate Program in EDAD.

EDAD 66528/76528
THE SCHOOL BUSINESS MANAGER AND SCHOOL TREASURER (3)
Identification and description of the roles, responsibilities and activities of the school Business Manager and the school Treasurer; overview of the interface in school district operations. Prerequisite: Graduate standing.

EDAD 66534/76534
THE SUPERINTENDENCY (3)
Focuses on major responsibilities of board of education and superintendent. Prerequisite: EDAD 6/76526.

EDAD 66535/76535
THE ADMINISTRATION OF SCHOOL REFORM (3)
This course is designed to provide students with an understanding of reform movements in American schools both in terms of historical and current contexts. Models for institutions' reform will also be examined. Prerequisite: Admission to an EDAD degree program or permission from the instructor. Graduate standing.

EDAD 66536/76536
THE ADMINISTRATOR'S ROLE IN CURRICULUM DEVELOPMENT (3)
Focusing on the administrative role pertaining to the development, management and evaluation of a quality and effective district/school/classroom curriculum. Prerequisite: Admission to an EDAD degree program or permission from the instructor. Graduate standing.
EDAD 66537/76537
THE PRINCIPAL AS EDUCATIONAL LEADER (3)
Focus on the role of the principal as a leader for understanding the societal and cultural context of education; teaching and learning processes; ethical and moral issues for administrators; and stakeholder empowerment for school improvement. Prerequisite: EDAD 6/76526.

EDAD 66538/76538
ADMINISTRATION OF SCHOOL CULTURE (3)
Provides the future principal an overview of current recommendations for “best practices” in the elementary, middle and secondary school. Also provides a forum for discussion of other pedagogical practices of concern to future principals; constructivism, discipline and multiculturalism.

EDAD 66539/76539
COMMUNICATION SKILLS FOR EDUCATIONAL ADMINISTRATORS (3)
To increase knowledge and skill required to develop and maintain positive relationships between school/university and public served. Skills for effectively dealing with difficult individual conflicts are practiced. Prerequisite: Admission to graduate program.

EDAD 66540/76540
WOMEN IN LEADERSHIP (3)
An interactive study of women's development and its effect on their dispositions toward leadership. Provides theoretical contract to traditional management theory.

EDAD 66542/76542
PRINCIPLES AND TECHNIQUES OF SUPERVISION (3)
Principles and techniques needed by administrative specialists and supervisors are given. Research findings include changing human relations, group processes, communications, observations and conferencing skills.

EDAD 66543/76543
SCHOOL ADMINISTRATION IN URBAN SETTINGS (3)
This course is designed to provide students with opportunities to discuss and investigate the unique challenges of leading inner-city schools. Issues of focus include transportation, staffing, extracurricular support for students and more.

EDAD 66544/76544
COMMUNITY RELATIONS FOR SCHOOL ADMINISTRATORS (3)
Addresses the techniques used by administrators in their efforts to establish positive community relations. Prerequisite: Admission to graduate program.

EDAD 66591/86591
SEMINAR IN EDUCATIONAL ADMINISTRATION (1-4)

EDAD 66594/76594
INTERNSHIP IN COLLEGE TEACHING (3)
Application of course and lesson planning; instructional and evaluation skills under faculty supervision; lecturing, guiding group performance and evaluating performances. Arrangements made on individual basis. IP permissible. Prerequisite: At least 12 hours in educational administration.

EDAD 66595/76595
SPECIAL TOPICS IN EDUCATIONAL ADMINISTRATION (1-3)
Specialized offerings in response to emerging or selected program needs.

EDAD 66596/76596
INDIVIDUAL INVESTIGATION IN EDUCATIONAL ADMINISTRATION (2-4)
IP permissible. Prerequisite: Permission.

EDAD 66598/86598
RESEARCH IN EDUCATIONAL ADMINISTRATION (2-8)
S/U grading. Prerequisite: Permission.

EDAD 66601/76601
PRIVATE LIBERAL ARTS COLLEGE (3)
Explores a unique type of institution in American higher education, the private liberal arts college. Identifies common themes and challenges across institutions, as well as the nature of specific examples of institutions. Prerequisite: Admission to an EDAD program or permission from the instructor. Graduate standing.

EDAD 66650/76650
ORGANIZATION AND ADMINISTRATION OF HIGHER EDUCATION (3)
Provides students with an understanding of organization and structure of institutions of higher education. Content includes study of academic administration and academic advising.

EDAD 66651/76651
STUDENT AFFAIRS FUNCTIONS IN HIGHER EDUCATION (3)
Study of the history, philosophy, practices and organization of student affairs functions in higher education.

EDAD 66652/76652
LAW AND HIGHER EDUCATION (3)
Provides for the examination of major legal aspects of the administration of institutions of higher learning.

EDAD 66653/76653
COLLEGE STUDENT DEVELOPMENT: THEORY AND PRACTICE (3)
Study of theories concerning the development of college students and principles for translating theory into practice.
EDAD 66654/76654
STUDENTS AND THE COLLEGE ENVIRONMENT (3)
Study of the impact of different types of students and college environments on each other within the context of a changing society. Prerequisite: EDAD 6/76653 and permission of instructor.

EDAD 66655/76655
CASE STUDIES IN HIGHER EDUCATION ADMINISTRATION (3)
Study of management responsibilities and leadership issues of student affairs administrators. Prerequisite: EDAD 6/76651.

EDAD 66656/76656
THE COLLEGE CURRICULUM (3)
Introduces perspectives on curriculum development, implementation and assessment in higher education and addresses theoretical, historical, political and contemporary perspectives on higher-education curriculum.

EDAD 66657/76657
LEADERSHIP IN EDUCATIONAL ORGANIZATIONS (3)
By learning to appraise their own leadership styles, students will improve their leadership effectiveness and explore the relationship between leadership and college and university effectiveness.

EDAD 66658/76658
THE COMMUNITY JUNIOR COLLEGE (3)
A study of the foundations, structure, programs and issues of community college education in the United States. Prerequisite: EDAD 6/76650 or equivalent.

EDAD 66660/76660
FACULTY ROLES AND RESPONSIBILITIES (3)
A study of faculty roles and responsibilities in American higher education. Prerequisite: EDAD 6/76650 or equivalent.

EDAD 66662/76662
POLITICS, POLICY AND POWER IN ORGANIZATION (3)
This course is designed to provide a conceptual framework for understanding the multifaceted processes of policy-making that take place in both "internal" and "external" settings. Prerequisite: EDAD 6/76650.

EDAD 66666/76666
FINANCIAL MANAGEMENT IN HIGHER EDUCATION (3)
This course is designed to provide students of higher education with the knowledge of financial issues, sources of funds, economics of education, financial roles of professional and academic administrators and the financial management skills as applicable to institutions of higher education.

EDAD 66667/76667
BUSINESS ADMINISTRATION IN HIGHER EDUCATION (3)
This course introduces students to the administrative and business management of institutions of higher education. The course covers topics such as institutional planning, space management, insurance matters, personnel administration, purchasing and facility management.

EDAD 66668/76668
THE ADMINISTRATION OF DISTANCE AND CONTINUING EDUCATION PROGRAMS IN HIGHER EDUCATION (3)
Develop practical skills for leading continuing and distance education programs as educational institutions seek to meet the needs of students in an era of lifelong learning. Includes planning, managing, budgeting and marketing in an academic environment. Prerequisite: Permission from the instructor. Graduate standing.

EDAD 66669/76669
THE ADMINISTRATION OF STUDENT DISABILITY SERVICES IN HIGHER EDUCATION (3)
Understanding the legal and practical issues regarding the identification, accommodation and matriculation of students with disabilities into colleges and universities.

EDAD 66670/76670
INTERNATIONALIZATION OF HIGHER EDUCATION INSTITUTIONS (3)
The purpose of this course is to introduce local and international perspectives on recent trends in education and developments in the field of international and global education.

EDAD 66671/76671
THE ADMINISTRATION OF MULTICULTURALISM AND DIVERSITY IN HIGHER EDUCATION (3)
This course addresses issues related to multiculturalism and diversity that affect students and the administration of colleges and universities.

EDAD 66672/76672
INTERNATIONAL STUDENTS AND AMERICAN COLLEGES (3)
Bridging theory and application with an emphasis on the latter. The course begins with a national perspective and then concentrates on the various aspects and best practices of recruiting and supporting international students at the institutional level.

EDAD 66733/76733
INTERPERSONAL AND GROUP DYNAMICS IN EDUCATIONAL ORGANIZATIONS (3)
Cross-listed with CHDS 67835/77835. Participants work in task groups learning about interpersonal, group and intergroup dynamics in organizations through lectures, discussions and analysis of their in-group experiences.
EDAD 66740/76740  
THEORIES AND METHODS OF ORGANIZATIONAL DEVELOPMENT (3)  
Cross-listed with CHDS 67840/87840.  
Study of theorists/practitioners in organization development.  
Involves exploration of consultant role, intervention theory, methods of systems change applied to groups and organizations.

EDAD 66747/76747  
PERSONNEL (3)  
Administration of education staff at building and central office levels; scope and depth of supervisory responsibilities; and development of evaluation techniques.

EDAD 66749/76749  
ASSESSMENT AND EVALUATION IN HIGHER EDUCATION (3)  
This course is designed to provide an understanding of current assessment and evaluation methods in higher education settings. Topics will span from individual classroom assessment through institutional accreditation processes.

EDAD 76523  
ADVANCED EDUCATION FINANCE (3)  
Advanced study of alternative plans for financing education, study of comparative educational finance structures (national basis), equity, parity, relationship of finance of higher education and elementary/secondary education, role of the federal government and private enterprise in the financing of education. Prerequisite: EDAD 76522 or 76659.

EDAD 80080  
DISSERTATION PREPARATION SEMINAR (3)  

EDAD 80085  
LEGAL RESEARCH IN EDUCATION (3)  
Prerequisite: Any educational law course.

EDAD 80199  
DISSERTATION I (15)  
Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible.

EDAD 80299  
DISSERTATION II (1 or 15)  
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: EDAD 80199.

EDAD 86521  
ADVANCED EDUCATION LAW (3)  
This doctoral-level course is designed to provide the opportunity for students to gain additional knowledge in the education law area; to improve writing skills; to begin writing for publication; to critically review their own work as well as work of others; and to defend their work before their peers. Prerequisite: EDAD 6/76520, 6/76652 or 6/76518.

EDAD 86558  
ADVANCED EDUCATIONAL LEADERSHIP (3)  
This advanced-leadership seminar is designed to provide the opportunity for students to gain additional knowledge and skills in educational leadership, to improve research, writing and teaching skills; to share and discuss leadership knowledge and insights with their peers and to defend their work before their peers. Prerequisite: EDAD 6/86657.

EDAD 86559  
ADVANCED STUDENT & ADULT DEVELOPMENT (3)  
Helps develop an in-depth understanding of one or more current theories of student or adult development. Students will gain additional knowledge in student development theory and theory creation. Prerequisites: Admission to an EDAD program or permission of the instructor; also EDAD 6/76653 or any prior course in student development; doctoral standing.

EDPF 50093/70093  
VARIABLE TITLE WORKSHOP IN EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS (1-4)  
Offered on request of school system. Enrollment limited to teachers, administrators or supervisors who are employed in sponsoring system and who are accepted to the university. May be repeated once for total maximum credit of 6 hours. S/U grading.

EDPF 52150  
EDUCATIONAL DIMENSION OF LEISURE, RETIREMENT AND AGING (3)  
An intensive inquiry into leisure and its potential for human development and implications for educational practice in both school and nonschool settings.

EDPF 59570  
SOCIAL FOUNDATIONS OF MULTICULTURAL EDUCATION (3)  
Analysis of historical, social and ideological forces that relate to current educational policies and practices in multicultural education, both in school and nonschool settings.

EDPF 60199  
THESIS I (2-6)  
The thesis student must register for total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.
**Education**

EDPF 60299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: EDPF 60199.

EDPF 68710/78710
CLASSICAL TEST THEORY (3)
Students develop an understanding of ideas and procedures related to classical test theory sufficient for test development and meaningful interpretation of results from standardized tests and other assessments. Prerequisite: EDUC 65510.

EDPF 68711/78711
MODERN TEST THEORY: ITEM RESPONSE THEORY (3)
The primary objective of the course is to provide students with knowledge and skills necessary to use item response theory methods and to organize, manipulate, analyze and interpret data from IRT applications. Some of the popular IRT computer programs are introduced. Prerequisite: EDPF 68710.

EDPF 68712/78712
GENERALIZABILITY THEORY (3)
Students develop the knowledge and skills necessary to use Generalizability Theory (GT) methods as well as to organize, manipulate, analyze and interpret data from GT studies. Prerequisite: EDPF 78716 or EDUC 85515.

EDPF 68713/78713
MULTIVARIATE ANALYSIS IN EDUCATIONAL RESEARCH (3)
Objectives are to enable students to select and use multivariate methods appropriately, to develop knowledge/skills necessary to conduct multivariate analyses using various statistical packages (SPSS, SAS), and to develop knowledge and skills necessary for interpreting results of multivariate analysis. Prerequisite: EDUC 65510; EDPF 78716 or EDUC 85515.

EDPF 68714/78714
FACTOR ANALYSIS IN EDUCATIONAL RESEARCH (3)
This course develops the ability of students to conceptualize and apply the logic and techniques of factor analysis. The focus is on both exploratory and confirmatory procedures. Prerequisite: EDUC 65510; EDPF 78716 or EDUC 85515.

EDPF 68795/88795
SPECIAL TOPICS IN EVALUATION AND MEASUREMENT (1-3)

EDPF 68796/88796
INDIVIDUAL INVESTIGATION IN EVALUATION AND MEASUREMENT (1-3)
S/U grading; IP permissible.

EDPF 68798/88798
RESEARCH IN EVALUATION AND MEASUREMENT (1-15)
S/U grading; IP permissible.

EDPF 68807
EVALUATION IN EDUCATION (3)
Study of principles and techniques of evaluation and measurement, and utilization of evidence to improve teaching, learning and implementation of programs.

EDPF 68901
PSYCHOLOGICAL FOUNDATIONS OF EDUCATION I (3)
Overview of human development, particularly adolescence, and implications for educational policy and programming, generally and specifically for secondary schools. Prerequisite: Admission to the M.A.T. program.

EDPF 68902
PSYCHOLOGICAL FOUNDATIONS OF EDUCATION II (3)
Learning theories and principles, individual differences in learning, classroom planning and evaluation; toward an effective instructional psychology of secondary teachers. Prerequisite: Admission to the M.A.T. program.

EDPF 68904
LEARNING THEORIES APPLIED IN EDUCATION (2)
Theories of learning and their application to educative process. Special emphasis on application of learning theories to problems of classroom teaching generally and to classroom management.

EDPF 69091/89091
SEMINAR IN LEARNING AND DEVELOPMENT (1-5)

EDPF 69092/89092
ADVANCED PRACTICUM AND INTERNSHIP IN LEARNING AND DEVELOPMENT (2-6)
Supervised program in field setting involving application of theories, principles and methodology in learning and development. Planned with and supervised by graduate faculty member. S/U grading; IP permissible.

EDPF 69095/89095
SPECIAL TOPICS IN LEARNING AND DEVELOPMENT (1-3)

EDPF 69096/89096
INDIVIDUAL INVESTIGATION IN LEARNING AND DEVELOPMENT (1-3)
S/U grading; IP permissible.
EDPF 69098/89098  
RESEARCH IN LEARNING AND DEVELOPMENT (1-15)  
S/U grading; IP permissible.

EDPF 69543/79543  
HIGHER EDUCATION IN THE UNITED STATES (3)  
Examines the historical, philosophical, social, political and  
economic roots of current programs, policies, practices and  
commitments of institutions of higher education in the United  
States.

EDPF 69560/79560  
MODERN PHILOSOPHICAL THEORIES OF EDUCATION (2)  
Introduction to philosophy of education. Controversies as to  
nature and function of contemporary education.

EDPF 69564/79564  
HISTORY OF AMERICAN EDUCATION (2)  
European origins and American innovations in colonial educa-  
tion, rise of common school, completion of educational ladder.  
Emphasis is on present status and recent developments.

EDPF 69565/79565  
HISTORY OF WESTERN EDUCATION (3)  
Educational ideals and practices of European and Western  
civilizations in their historical contexts. Evaluation of their  
influence on present educational thought and practice.

EDPF 69566/79566  
EDUCATION AND THE PERSONAL DIMENSION (3)  
Examination of effect of interpretive frameworks on process  
of inquiry and bearing of this personal component on goals of  
education. Prerequisite: EDPF 69560 or permission.

EDPF 69568/79568  
GREAT IDEAS IN EDUCATION (3)  
An examination of major influential ideas in education through  
original sources from Plato to Skinner. Prerequisite: Permission  
of instructor.

EDPF 69569/79569  
THE SOCIAL FOUNDATIONS OF ADULT EDUCATION (3)  
The social foundations of adult education focusing upon the  
cultural, ideological and organizational factors that influence  
the development of adult educational policies and practices in  
multiple settings.

EDPF 69570/79570  
MULTICULTURAL EDUCATION: THEORY AND POLICY (3)  
Theoretical foundations of cultural pluralism, structural margin-  
alization processes, knowledge construction, equity peda-  
gogy and praxis in intercultural relations, democratic change  
processes and policy addressing inequities in institu-tional  
practices.

EDPF 69591/89591  
SEMINAR IN CULTURAL FOUNDATIONS (1-5)

EDPF 69592/89592  
ADVANCED PRACTICUM AND INTERNSHIP IN CULTURAL  
FOUNDATIONS (2-6)  
S/U grading; IP permissible.

EDPF 69595/89595  
SPECIAL TOPICS IN CULTURAL FOUNDATIONS (1-3)

EDPF 69596/89596  
INDIVIDUAL INVESTIGATION IN CULTURAL FOUNDATIONS  
(1-3)  
S/U grading; IP permissible.

EDPF 69598/89598  
RESEARCH IN CULTURAL FOUNDATIONS (1-15)  
S/U grading; IP permissible.

EDPF 78716  
EDUCATIONAL STATISTICS II (3)  
Major types of methods used to investigate relationships  
between two or more variables are introduced; includes vari-  
ous analysis of variance designs, analysis of covariance and  
multiple correlations.

EDPF 78728  
EDUCATIONAL STATISTICS III (3)  
Advanced univariate and introductory multivariate techniques  
in education research, including analyses of variance and co-  
variance, multiregression and causal modeling, factor analysis  
and canonical correlation.

EDPF 78898  
COMPARATIVE RESEARCH DESIGN (3)  
The course develops the ability of the student to conceptual-  
ize the design elements of educational research and to write  
results of studies. Prerequisite: EDPF 60098 and 68706.

EDPF 78905  
EDUCATIONAL PSYCHOLOGY (3)  
Analysis and critique of major learning theories, state-of-  
the-art development in theory, research and application to  
educational practice in selected disciplines. Prerequisite: EDPF  
6/78900, 6/78903, 6/78912 or 6/78913.

EDPF 79510  
PHILOSOPHY OF EDUCATION (3)  
Analysis of selected philosophies of education through exami-  
nation of philosophical problems of education. Prerequisite:  
EDPF 6/79560 or 6/79568.

EDPF 79552  
LEGAL FOUNDATIONS OF EDUCATION (3)  
The impact of the federal constitution, statutes and case law  
on public education is studied. Historical intent and current  
application of related laws are included.
EDPF 80085
LEGAL RESEARCH IN EDUCATION (3)
Methods of legal research, case analysis and a “uniform system of citation” are studied. Prerequisite: Any education law course.

EDPF 80090
DOCTORAL RESIDENCY SEMINAR (3)
Advanced doctoral residency seminar for students in all areas of educational foundations. Focus on current and emergent issues, research and trends in education in multiple settings. Prerequisite: Complete one full semester of doctoral study.

EDPF 80091
SEMINAR: GREAT ISSUES IN EDUCATION (1-3)
Interdisciplinary review of current great issues in education that are catalogs for presentation after discussion with membership of the course. Prerequisite: Open to doctoral students from any field.

EDPF 80199
DISSERTATION I (15)
Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible.

EDPF 80299
DISSERTATION II (1 or 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: EDPF 80199.

EDPF 89571
COMPARATIVE AND INTERNATIONAL EDUCATION (3)
Comparative analysis of contemporary educational policies and structures in large- and small-scale societies throughout the world.

EDPF 89582
SOCIAL PERSPECTIVES OF EDUCATION (3)
Examines selected social factors that influence the development of educational policies and patterns of research relating to school and nonschool educational settings.

EDUC 65511
RESEARCH IN EDUCATIONAL SERVICES (3)
Introduction to purposes and practice of qualitative and quantitative research related to educational services. Emphasis on elements of doing research and using products of research to support and enhance practice. Authentic examples used as illustration.

EDUC 65520
CHILD AND ADOLESCENT DEVELOPMENT (3)
Dimensions of human development and learning, causal factors and research findings which carry implications for educators in various settings; focusing on birth through adolescence.

EDUC 65521
ADULT DEVELOPMENT (3)
Essential dimensions of human development and learning, the causal factors, and the research findings which carry implications for educators in various settings; focusing on early through late adulthood.

EDUC 65523
LIFE SPAN DEVELOPMENT (3)
Orientation to human development across life span from conception to death; emphasis on pluralistic determinants of individual growth within changing environmental contexts. Implications for educational and human service practices are emphasized.

EDUC 65524
LEARNING THEORIES (3)
Theories of learning with special emphasis on applications to professional practice. A critical examination of research on human learning processes.

EDUC 65530
FOUNDATIONS OF EDUCATION AND HUMAN SERVICES (3)
Inquiry into the assumptions and implications of educational policies and practices in education and human service settings through the application of historical, philosophical and sociological perspectives.

EDUC 66531
PROFESSIONAL PRACTICE IN A MULTICULTURAL SOCIETY (3)
Interdisciplinary inquiry into issues of pluralism and its influence on professional practice in education and human service settings. Crosscultural interaction will be analyzed; reflection on developing culturally responsive professional practice.

EDUC 65532
ETHICS IN EDUCATION AND HUMAN SERVICES (3)
An examination of ethics in education and human services through foundational study and issue analysis; strong case study and professional application emphasis.
EDUC 85515
QUANTITATIVE RESEARCH DESIGNS AND APPLICATION IN EDUCATIONAL SERVICES (3)
Quantitative research design and application in educational services research. Spiral presentation of methodological principles within a variety of theoretical frameworks and procedures. Strong focus on computer-aided applications. Ordinarily taken early in doctoral course sequence. Prerequisite: EDUC 6/75510 or equivalent.

EDUC 85516
QUALITATIVE RESEARCH DESIGNS AND APPLICATION IN EDUCATIONAL SERVICES (3)
Introduction to theory and practice of qualitative research methods and field studies in educational services. Examination of a variety of strategies including observation, document analysis and interviewing. Ordinarily taken early in doctoral course sequence.

EDUC 85517
ADVANCED QUANTITATIVE RESEARCH IN EDUCATIONAL SERVICES (3)
Advanced quantitative research design and application in educational services. Statistical packages of instructional strategies with methodological principles focus, theoretical models, and practical application of experimental and multivariate research design. Prerequisite: EDUC 85515.

EDUC 85518
ADVANCED QUALITATIVE RESEARCH IN EDUCATIONAL SERVICES (3)
Utilizes qualitative data in educational services. Applications in qualitative methodology (video techniques) and protocol analysis are applied and evaluated. Generate findings; develop applications to theory; reliability and validity considerations. Prerequisite: EDUC 85516.

EDUC 85535
INTERPROFESSIONAL STUDIES (3)
Comprehensive analysis of issues affecting professional practice in education and human service resource settings. Examination of questions related to interprofessional collaboration on policy, research and practice.

EDUC 85591
ADVANCED UPR SEMINAR (3)
A choice of an advanced cross-disciplinary seminar from a menu of UPR-approved options. Repeatable for a total of 9 hours.

Elementary Education (ELED)

ELED 50093/70093
VARIABLE TITLE WORKSHOP IN ELEMENTARY EDUCATION (1-4)
Various topics designed to respond to issues, trends and specialized needs of elementary or secondary schools. S/U grading. Prerequisite: Permission.

ELED 51157
TEACHING WITH MICROCOMPUTERS: ELEMENTARY CLASSROOM (3)
In-depth study of instructional use of microcomputers in the elementary school classroom. BASIC and LOGO will be used in developing and modifying instructional software and courseware. Development and field testing of computer-related material will be a major component.

ELED 51195
SPECIAL TOPICS IN ELEMENTARY EDUCATION (2-4)
Students explore current and/or special topics and concerns related to the professional interests of elementary teachers. Prerequisite: Permission and/or postundergraduate.

ELED 60199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

ELED 60299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: ELED 60199.

ELED 61131/71131
ENHANCING CREATIVITY IN THE CLASSROOM (3)
Classroom teachers will explore, analyze and implement the knowledge available from research and teaching practices that promotes creativity in elementary students.

ELED 61137/71137
MATH EDUCATION: TRENDS AND ISSUES (3)
Current issues in mathematics education will be studied. Topics may include among others: proficiency testing, alternative assessment, algebra (K-12), technology in math ed, inclusion, gifted students in math, professional development or CBLs.

ELED 61191/81191
SEMINAR IN ELEMENTARY EDUCATION (3-4)
Various topics for advanced study. Normally designed around theory applied to practice. Prerequisite: Permission.

ELED 61192/81192
ADVANCED PRACTICUM AND INTERNSHIP IN ELEMENTARY EDUCATION (2-6)
S/U grading; IP permissible.

ELED 61195/81195
SPECIAL TOPICS IN ELEMENTARY EDUCATION (2-4)
ELED 61196/81196
INDIVIDUAL INVESTIGATION IN ELEMENTARY EDUCATION (2-4)
Independent reading and/or research directed by graduate faculty member. S/U grading; IP permissible. Prerequisite: Permission.

ELED 67221/77221
ELEMENTARY SOCIAL STUDIES: THEORY AND PRACTICE (3)
Examines and evaluates “new social studies” curricula, materials and teaching strategies that affect elementary education. Focuses on ethnic studies, value clarification, urban education, controversial issues and other problems and solutions that are of concern to the teacher, supervisor and administrator.

ELED 67224/77224
SCIENCE IN ELEMENTARY EDUCATION (3)
Critical study of current developments in methods, materials and evaluation in science teaching as they affect elementary programs. Will include lectures, discussions, field trips, demonstrations and laboratory work. Prerequisite: ELED 4/51114 or equivalent.

ELED 81198
RESEARCH IN ELEMENTARY EDUCATION (2-5)
Students pursue an individualized research project under direction of instructor. S/U grading; IP permissible. Prerequisite: Permission.

HED 50093/70093
VARIABLE TITLE WORKSHOP IN HEALTH EDUCATION AND PROMOTION (1-3)
Discussion of major issues in health and safety education. Content, emphasis and prerequisites vary depending on workshop. S/U grading.

HED 51561
ENVIRONMENTAL HEALTH (3)
Effects on human health of overpopulation, and various sources of energy and the resultant environmental pollutants.

HED 52041
HEALTH COUNSELING (3)
Techniques of counseling applied to health education. Individual and group approaches relative to personal, family and societal-health issues. The course includes 20 field/clinical hours.

HED 52575
HEALTH AND LEARNING: STRATEGIES FOR STUDENTS AND TEACHERS (3)
Focus on health issues/education/environment policy and practice strategies to respond to threats confronting students utilizing a coordinated school/community strategy to promote health to improve academic outcomes. CPR and first aid certification required for completion of course.

HED 54025
WOMEN’S HEALTH ISSUES (3)
Traditional and feminist analysis of women’s health issues and the health educational responses to those issues.

HED 54095/74095
SPECIAL TOPICS: HEALTH EDUCATION AND PROMOTION (1-3)
Selected topics related to public-health issues facing professionals in communities, schools, health-care settings, and the worksite.

HED 54096/74096
INDIVIDUAL INVESTIGATION IN HEALTH EDUCATION AND PROMOTION (1-3)
Independent reading and/or research directed by a graduate faculty member. S/U grading; IP permissible. Prerequisite: Permission.

HED 54543
ADMINISTRATION OF SCHOOL HEALTH PROGRAMS (3)
Organizational design and administration of a comprehensive school health program including health services, instruction and environment. This course includes 25 field/clinical hours. CPR and first aid certification required for completion of course.

HED 54544
SEXUAL HEALTH PROMOTION PROGRAMS (3)
This course prepares the student to develop, implement and evaluate sexuality education programs in school and community settings.

HED 54550
DRUG ABUSE AND VIOLENCE PREVENTION (3)
Drug abuse and violence prevention from theoretical, philosophical, empirical and practical perspectives. Application of etiological theories to planning prevention programs. Prerequisite: HED 32530 or equivalent.

HED 56052
STRESS: RECOGNITION AND MANAGEMENT (2)
An examination of stress, its role as a predisposing factor for various illnesses and diseases, types of stressors, the body’s reaction to stress, and techniques for recognizing, preventing and reducing stress.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HED 56057</td>
<td>ADVANCED HUMAN SEXUALITY (3)</td>
<td>Selected aspects of human sexuality: history, cross-cultural perspectives, medical/surgical therapy and counseling.</td>
</tr>
<tr>
<td>HED 56060</td>
<td>DEATH EDUCATION (3)</td>
<td>Issues of living with the human experience of death and facilitating understanding with selected client systems in schools and community agencies.</td>
</tr>
<tr>
<td>HED 56070</td>
<td>HEALTH RELATED ASPECTS OF AGING (3)</td>
<td>Theories of biological aging and identification of major health hazards, age-related diseases and age changes, their prevention and control. The health care delivery system for the elderly.</td>
</tr>
<tr>
<td>HED 57070</td>
<td>AIDS: ISSUES, EDUCATION AND PREVENTION (3)</td>
<td>This course provides an extensive overview of the human immunodeficiency virus epidemic as it has developed and exists today. A particular emphasis will be given to AIDS education and prevention issues and strategies.</td>
</tr>
<tr>
<td>HED 57091/77091</td>
<td>CURRENT ISSUES AND TRENDS IN HEALTH EDUCATION AND PROMOTION (1-3)</td>
<td>Topics of critical concern to prospective teachers, administrators and health professionals.</td>
</tr>
<tr>
<td>HED 58092/78092</td>
<td>FIELD EXPERIENCE IN HEALTH EDUCATION AND PROMOTION (1-3)</td>
<td>Observation and participation in educational and promotional activities of a public health agency, school, or health care facility joint university-agency supervision. S/U grading; IP permissible. Prerequisite: Permission.</td>
</tr>
<tr>
<td>HED 60199</td>
<td>THESIS I (2-6)</td>
<td>Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.</td>
</tr>
<tr>
<td>HED 60299</td>
<td>THESIS II (2)</td>
<td>Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: HED 60199.</td>
</tr>
<tr>
<td>HED 64010/774010</td>
<td>HEALTH INFORMATION RESOURCES (3)</td>
<td>Identifies print and electronic sources of health information with emphasis on electronic sources. Medical patient and consumer health information is presented. This course is designed for the health educator, librarian, nurse or other health-care professional.</td>
</tr>
<tr>
<td>HED 64050/74050</td>
<td>HEALTH BEHAVIOR (3)</td>
<td>Analysis of a broad range of theoretical and empirical models of health and illness behavior. Prerequisite: HED 64010, 64061 or permission.</td>
</tr>
<tr>
<td>HED 64051/74051</td>
<td>BIOBEHAVIORAL ASPECTS OF DISEASE (3)</td>
<td>The etiology and pathogenesis of major diseases are studied from a biopsychosocial perspective with an emphasis on implications for disease prevention and health promotion.</td>
</tr>
<tr>
<td>HED 64055/74055</td>
<td>NEEDS ASSESSMENT AND PROGRAM PLANNING IN HEALTH PROMOTION (3)</td>
<td>Students will assess individual and community needs for health promotion programs based on multiple sources of health data. Students will develop a rational plan to meet identified needs. Prerequisite: HED 64010, 64050, 64059, 64061, 64063 and 64072.</td>
</tr>
</tbody>
</table>
HED 64061/74061
FOUNDATIONS OF HEALTH EDUCATION AND PROMOTION (3)
Historical, sociological and philosophical factors that have influenced definitions and the practice of health education and promotion are studied. Professional associations/leadership, government initiatives, standards of practice and accreditations are examined.

HED 64062/74062
ADMINISTRATION AND GRANT WRITING IN HEALTH PROMOTION PROGRAMS (3)
Basic concepts in the administration of health education/promotion programs. Coordination of program services/consultative relationships/management of human and fiscal resources/organizational leadership are addressed. Grant writing and management are reviewed. Prerequisite: HED 64010, 64059 and 64061.

HED 64063/74063
STRATEGIES IN HEALTH EDUCATION AND PROMOTION (3)
Health education and promotion methods, techniques and strategies are presented for a variety of audiences, learning environments and intervention levels. Prerequisite: HED 64010, 64050 and 64061.

HED 64066/74066
HEALTH IN THE DEVELOPING NATIONS (3)
Overview of national development, review of problems, process and strategy of health development.

HED 64070/74070
WORKSITE HEALTH PROMOTION (3)
Program planning and evaluation of health promotion programs in business and industry with an emphasis on the role of health educators.

HED 64072/74072
EPIDEMIOLOGY (3)
Overview of history and nature of epidemiological research: definition of problem, design, collection, analysis and presentation of data relevant to the study of disease distribution. Introduction to the logic of statistical inference. Prerequisite: HED 64010, 64061 or concurrent enrollment.

HED 64082/74082
READINGS IN HEALTH EDUCATION AND PROMOTION (1-3)
Independent study of approved topics in health and safety education related to the student's special interests. Advisor's permission required to repeat registration one time. S/U grading; IP permissible.

HED 64084/74084
BEHAVIORAL SCIENCE IN THE HEALTH PROFESSIONS (1-3)
A behavioral science perspective on individual and social issues that affect medical care delivery. Individually arranged. May include field projects, participation in health-related investigations and presentations and personal development programs. Repeat registration permitted. S/U grading.

HED 64091/74091
SEMINAR IN HEALTH EDUCATION AND PROMOTION (1)
Presentation and discussion of research by faculty and graduate students. Total of 2 credits may be applied toward degree requirements. S/U grading.

HED 64094/74094
COLLEGE TEACHING OF HEALTH EDUCATION AND PROMOTION (2)
Guided experiences in teaching selected undergraduate courses. S/U grading. Prerequisite: Permission.

HED 64098/74098
PROJECT IN HEALTH EDUCATION AND PROMOTION (1-3)
Research or individual investigation for master's-level graduate students. Repeat registration permitted. Prerequisite: Permission.

HED 71250
PUBLIC HEALTH PRACTICE AND HEALTH PROMOTION (3)
The role of public health practice and policy in the promotion of the nation's health. A review of the basis/tools/settings/provision of services/future needs of public health will be addressed in the context of health promotion.

HED 71350
SYSTEMS APPROACH TO HEALTH PROMOTION (3)
This course will address a variety of issues relevant to health promotion, including philosophy, content, strategies, evaluation, national and international perspectives utilizing a socio-ecological framework.

HED 71450
EVALUATION OF PREVENTIVE INTERVENTIONS (3)
A review of evaluation methods used in health education/promotion intervention trials. Emphasis will be placed on data collection procedures, linking program activities to outcomes, participant attrition and reporting of results. Prerequisite: HED 6/74055, 6/74057 or equivalent. UPR research core.

HED 71550
APPLICATION OF THEORY IN HEALTH EDUCATION AND PROMOTION RESEARCH (3)
Examination of theory/models/hypotheses applied to specific health behaviors. Emphasis on operationalization of theoretical constructs. Prerequisite: 6/74050 or equivalent.
HED 80199
DISSERTATION I (15)
Registration for two semesters required, first semester dissertation work begins and continues until completion of 30 hours. S/U grading; IP permissible.

HED 80292
INTERNSHIP IN HEALTH EDUCATION AND PROMOTION (3)
This course is individualized to allow students to meet competencies in the areas of instruction, program development, community development and coalition building, research and evaluation. S/U grading; IP permissible. Prerequisite: Permission.

HED 80299
DISSERTATION II (1 or 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until degree requirements are met. S/U grading; IP permissible.

HED 81100
DOCTORAL RESIDENCY SEMINAR I IN HEALTH EDUCATION AND PROMOTION (3)
Exploration of philosophical, theoretical and empirical issues in health education/promotion. Student will synthesize courses, research and practice in preparation for comprehensives. S/U grading; IP permissible. Prerequisite: Permission.

HED 81150
SEMINAR: PROFESSIONAL DEVELOPMENT IN HEALTH EDUCATION AND PROMOTION (3)
This course focuses on the process, practice and documentation of professional development in health promotion in the areas of instruction, program development, community organization and coalition building, research and evaluation. S/U grading.

HED 81200
DOCTORAL RESIDENCY SEMINAR II IN HEALTH EDUCATION AND PROMOTION (3)
Synthesis and application of health knowledge to development of a philosophical, theoretical and empirical orientation for research. S/U grading; IP permissible. Prerequisite: HED 81100.

HED 81250
PUBLIC HEALTH PRACTICE AND HEALTH PROMOTION (3)
The role of public health practice and policy in the promotion of the nation's health. A review of the basis/tools/settings/provision of services/future needs of public health will be addressed in the context of health promotion.

HED 81350
SYSTEMS APPROACH TO HEALTH PROMOTION (3)
This course will address a variety of issues relevant to health promotion, including philosophy, content, strategies, evaluation, national and international perspectives utilizing a socio-ecological framework.

HED 81450
EVALUATION OF PREVENTIVE INTERVENTIONS (3)
A review of evaluation methods used in health education/promotion intervention trials. Emphasis will be placed on data collection procedures, linking program activities to outcomes, participant attrition and reporting of the results. Prerequisite: HED 6/74055, 6/74057 or equivalent. UPR research core.

HED 81550
APPLICATION OF THEORY IN HEALTH EDUCATION AND PROMOTION RESEARCH (3)
Examination of theory/models/hypotheses applied to specific health behaviors. Emphasis on operationalization of theoretical constructs. Prerequisite: HED 6/74050.

Instructional Technology (ITEC)

ITEC 50093/70093
VARIABLE TITLE WORKSHOP IN EDUCATIONAL MEDIA (1-4)
S/U grading. Prerequisite: Permission.

ITEC 57400
SELECTION AND UTILIZATION OF EDUCATIONAL MEDIA (3)
Discusses principles and techniques in the selection and utilization of media for instructional purposes.

ITEC 57401
DESIGN AND PRODUCTION OF EDUCATIONAL MEDIA (3)
Applies a variety of approaches to the design and production of instructional media. The course develops skills in photography, audio and television.

ITEC 57402
ORGANIZATION AND ADMINISTRATION OF EDUCATIONAL MEDIA PROGRAMS AND CENTERS (3)
Examines the planning, organizing, administering and evaluating of educational media programs and centers.

ITEC 57403
INSTRUCTIONAL DESIGN (3)
Enables participants to systematically design instructional sequences that incorporate media as integral components.

ITEC 57411/77411
DESIGNING VISUALS FOR INSTRUCTION (3)
Investigation of historical, cultural, aesthetic dimensions of instructional visual design. Focus on design of instructional visuals across media, including print, video, computer-based technology. Presentations, lab activities.
ITEC 57413  
DIGITAL VIDEO IN EDUCATION (3)  
Design/production of instructional TV programming. Planning and scripting techniques. Hands-on experience with TV equipment. Students will digitize video footage, learn nonlinear editing techniques, export productions to tape/CD.

ITEC 57427  
TECHNOLOGY AND LEARNING (3)  
Overview of technology used in education. Focuses on implementing and facilitating learner-centered curriculum with computer technology. Students develop Web-based instructional materials.

ITEC 57430  
COMPUTER APPLICATIONS IN EDUCATION (3)  
Preparation for use of computers effectively in variety of educational settings. Students should have some expertise with computers. Focus on advanced applications in education. Macintosh and Windows. Prerequisite: ITEC 4/57427.

ITEC 60199  
THESIS I (2-6)  
Master of Arts students must register for at least one semester of Thesis I under the supervision of an advisor. S/U grading; IP permissible.

ITEC 60299  
THESIS II (2)  
If 6 credits of Thesis I have been completed, M.A. students must continue to register each semester under Thesis II until all degree requirements are met. S/U grading; IP permissible.

ITEC 67409/77409  
TEACHER EDUCATION AND MEDIA (2)  
Considers current and emerging emphases in teacher education, including use of media to support teacher education, development of media competencies and supervision in the media area.

ITEC 67410/77410  
SIMULATION — GAMES IN EDUCATION (3)  
Provides students with opportunities to explore simulation and games as a strategy for learning. Experiences in both group role-playing simulations and computer simulations will be included.

ITEC 67412  
INSTRUCTIONAL TECHNOLOGY IN SECONDARY SCHOOLS (1)  
Investigation of historical, cultural, aesthetic dimensions of instructional visual design. Focus on design of instructional visuals across media, including print, video, computer-based technology. Presentations, lab activities. Prerequisite: Admission to Secondary M.A.T. program.

ITEC 67415/77415  
UTILIZING TELEVISION IN THE CLASSROOM (2)  
Explores the utilization of instructional and commercial television in the classroom.

ITEC 67417/77417  
ADVANCED INSTRUCTIONAL DESIGN (3)  
Compares selected models of instructional design and discusses their advantages and disadvantages for designing instruction. Prerequisite: ITEC 57403.

ITEC 67420/77420  
CURRENT ISSUES IN INSTRUCTIONAL TECHNOLOGY (3)  
Exploration of significant current issues in the field of instructional technology, including latest research findings, use of newest technologies, instructional design issues, present state of the field and future directions.

ITEC 67425/77425  
MANAGING TECHNOLOGICAL CHANGE (3)  
Analysis and evaluation of change process are explored, particularly as they relate to use of instructional technology. Management role for facilitating planned change as studied through communication and management models.

ITEC 67431/77431  
PROGRAMMING FOR EDUCATORS (3)  
Teacher programming of languages utilized in education—BASIC, LOGO, Hypercard, etc.

ITEC 67432/77432  
DESIGNING MULTIMEDIA FOR INSTRUCTION (3)  
Focuses on the design, production and evaluation of computer-assisted instructional materials. Instructional design and research are applied to the development of software. Prerequisite: ITEC 57403, 6/77437.

ITEC 67433/77433  
INTERACTIVE VIDEO (3)  
Involves the design, production and evaluation of interactive video, a hardware configuration that combines computer and video technology. Prerequisites: ITEC 57403, 6/77432.

ITEC 67434/77434  
EMERGING TECHNOLOGIES (3)  
Focus on theoretical foundations, design and development of instructional delivery systems employing leading-edge or emergent technologies. Class presentations, demonstrations and guided hands-on lab activities. Prerequisite: 4/57403, 6/77432, 6/77437 or permission.

ITEC 67435/77435  
VIRTUAL REALITY (3)  
Virtual reality provides promise as a tool for educators. Students will learn to create and evaluate instructional applications. Activities will include actual production of virtual worlds as well as virtual experiences on the Internet.
ITEC 67436/77436
DISTANCE EDUCATION (3)
This course explores various approaches to delivering instruction to distant sites and examines a variety of critical issues, such as planning, choice of technology, cost, teaching strategies, evaluation, etc.

ITEC 67437/77437
AUTHORING SYSTEMS (3)
An introduction to tools and techniques for developing computer-based multimedia programs. Features of authoring systems are compared/contrasted for producing Web-based and stand-alone multimedia. Packing multimedia programs for distribution on delivery systems is emphasized.

ITEC 67438/77438
INSTRUCTIONAL APPLICATIONS OF THE INTERNET (3)
Provides knowledge and skills needed to use the Internet effectively in instruction at all levels. Two major concentrations are computer-mediated communications and instructional Web site development. Prerequisite:ITEC 57403, 57430.

ITEC 67439
PORTFOLIO REVIEW (1)
Students modify projects and products developed in earlier courses to ensure highest quality. Students present results to faculty to show expertise in instructional design, virtual design, multimedia and World Wide Web development. S/U grading; IP permissible. Prerequisite: Permission.

ITEC 67491/77491
SEMINAR: EDUCATIONAL MEDIA (1-4)
Variable topic seminar for advanced study of specialized areas and topics. Normally designed around research and theory applied to practice.

ITEC 67492/77492
ADVANCED PRACTICUM AND INTERNSHIP IN INSTRUCTIONAL TECHNOLOGY (1-10)
Supervised program requiring application of theory and practice in instructional technology in either school or nonschool settings. Planned with and directed by a graduate faculty member. S/U grading; IP permissible.

ITEC 67495/77495
SPECIAL TOPICS IN EDUCATIONAL MEDIA (1-5)
Specialized offering in response to emerging or selected program needs in instructional technology.

ITEC 67496/77496
INDIVIDUAL INVESTIGATION IN INSTRUCTIONAL TECHNOLOGY (1-10)
Directed independent reading and/or research of special interest or need in student's program. Planned with and directed by a graduate faculty member. S/U grading; IP permissible.

ITEC 67498/77498
INDEPENDENT RESEARCH IN INSTRUCTIONAL TECHNOLOGY (1-10)
Students pursue an individualized research project on a specialized topic with approval and under direction of instructor. S/U grading; IP permissible. Prerequisite: EDPF 60098.

MCED 50002
TEACHING SCIENCE IN MIDDLE CHILDHOOD II (3)
Individual and group work develop effective techniques of teaching science concepts to 8 to 14 year olds. Attention given to methods, equipment, safety and planning. This course includes 40 field/clinical hours. Special fee: $15 per semester.

MCED 50003
TEACHING SOCIAL STUDIES IN MIDDLE CHILDHOOD II (3)
Advanced methods course. Examines the purpose of citizenship education and understanding the role of history and the social sciences. Applies the principles of powerful teaching. Includes a major field experience at the student teaching site. Prerequisite: MCED 30002.

MCED 50004
TEACHING READING WITH LITERATURE IN MIDDLE CHILDHOOD (3)
The study of the teaching of reading with literature with middle-childhood students within an integrated language arts approach in a comprehensive literature program. Prerequisite: MCED 30004.

MCED 50005
EFFECTIVE USE OF PHONICS IN READING (3)
The influence of theoretical perspectives on word identification instruction, an examination of the role of phonics in reading and writing, strategies for effective phonics instruction and assessment.

MCED 50006
READING AND WRITING IN MIDDLE CHILDHOOD (3)
Understanding of literacy learning in middle childhood (ages 8-14) with emphasis on the development of reading and writing processes, strategies for text learning, literacy in electronic environments, authentic assessment, and teaching children who struggle as readers.

MCED 50007
TEACHING READING WITH LITERATURE IN MIDDLE CHILDHOOD (2-6)
The study of the teaching of reading with literature with middle childhood students within an integrated language arts approach in a comprehensive literature program. Prerequisite: MCED 50006.
MCED 52358
STUDENT TEACHING IN MIDDLE CHILDHOOD (9)
Full-time student teaching for 12 weeks on an interdisciplinary team in two selected concentrations (mathematics, language arts, social studies, science) and reading in grades 4-9. Prerequisite: Permission of program coordinator.

MCED 60092/70092
ADVANCED PRACTICUM IN MIDDLE CHILDHOOD (2-6)
Teaching and observing in grades 4-9.

Rehabilitation Counseling and Training (RHAB)

RHAB 57712/77712
INTRODUCTION TO REHABILITATION (3)
Introductory course surveys philosophy, history and legislation in rehabilitation, which is defined as a process, social movement and public mandate. Particular emphasis is given to the role and function of the rehabilitation counselor in the private and public sectors.

RHAB 60093/70093
VARIABLE TITLE WORKSHOP IN REHABILITATION COUNSELING (1-4)
S/U grading; IP permissible. Prerequisite: Permission.

RHAB 60199
THESIS I (2-6)
Thesis students must register each semester until all degree requirements are met. S/U grading; IP permissible.

RHAB 60299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: RHAB 60199.

RHAB 67723/77723
MEDICAL INFORMATION FOR REHABILITATION COUNSELORS (3)
Study of the physical impact of disease or injury on individuals; available medical and restorative resources; skills in interpreting medical reports and rehabilitation planning. Special fee: $5 per semester.

RHAB 67725/77725
PSYCHOSOCIAL IMPACT OF DISABILITY (3)
Introduction to major concepts in rehabilitation regarding the impact of disability on the individual, the family and the community. Normalization, stigma and adjustment to loss emphasized.

RHAB 67728/77728
ADJUSTMENT AND TRAINING GROUPS (3)
Groups are studied as intervention for adjustment to disability and skill training through readings, lectures and experiential approaches. Prerequisite: Instructor permission.

RHAB 67729/77729
MEASUREMENT AND APPRAISAL IN REHABILITATION (3)

RHAB 67731/77731
INDIVIDUAL COUNSELING PROCEDURES IN REHABILITATION COUNSELING (3)
Development of belief system as a counselor, skills in communication, interviewing, problem identification, goal-setting and program development are fostered by lecture, video feedback and simulation.

RHAB 67732/77732
OCCUPATIONAL ASPECTS OF DISABILITY (3)
An introduction to a wide range of occupational and vocational analysis through job analysis, job seeking, job placement, job restructuring, work adjustment and independent living approaches. Prerequisite: CPSY 6/7/8182.

RHAB 67736/77736
INDIVIDUAL COUNSELING PRACTICUM IN REHABILITATION (2-4)
Supervised, controlled exposure to rehabilitation clients; examine alternative modes of intervention; group and individual feedback sessions using audio and videotape recordings. S/U grading; IP permissible. Prerequisite: RHAB 6/77731. Special fee: $7.50 per credit hour.

RHAB 67743/77743
PSYCHIATRIC REHABILITATION (3)
Review of psychiatric, alcohol and other drug-related disabilities and their treatment. Topics include psychosocial rehabilitation, case management and psychotropic medication.

RHAB 67744/77744
DRUG AND ALCOHOL REHABILITATION (3)
Review of substance abuse treatments, trends, modalities and community agencies; vocational implications of substance abuse; vocational assessment issues and job placement options.

RHAB 67746/77746
ADMINISTRATION AND COORDINATION OF REHABILITATION SERVICES (3)
Preparation for organization, implementation, coordination and administration of counseling, testing, consulting and guidance services provided in rehabilitation agency. Legal, ethical and management issues related to administrative decisions and agency operations are studied.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHAB 67776/77776</td>
<td>SEMINAR ON RESEARCH IN DISABILITIES (3)</td>
<td>Survey of the research literature in disabilities. Guidelines for evaluating and implementing research findings. Acquaints students with current research. Evaluation of design, statistical analysis and conclusions. Prerequisite: EDUC 66510 or concurrent.</td>
</tr>
<tr>
<td>RHAB 67787/77787</td>
<td>SEMINAR IN GERIATRIC COUNSELING (3)</td>
<td>Acquaints counselors with problem of aged and counseling procedures. Study of consequences of aging as it pertains to changing structures and functions of body tissues to changed relationship of physical and social environments. Offered irregularly.</td>
</tr>
<tr>
<td>RHAB 67791/77791</td>
<td>SEMINAR IN REHABILITATION COUNSELING (1-3)</td>
<td>Study and experience of various theoretical, methodological and practical approaches to special problems.</td>
</tr>
<tr>
<td>RHAB 67795/77795</td>
<td>SPECIAL TOPICS IN REHABILITATION (1-3)</td>
<td>Presentation of special interest to students. Offered irregularly. Topic will be announced in Schedule of Classes booklet. Prerequisite: Permission.</td>
</tr>
<tr>
<td>RHAB 67796/77796</td>
<td>INDIVIDUAL INVESTIGATION IN REHABILITATION COUNSELING (1-3)</td>
<td>Independent reading and/or research directed by a graduate faculty member. IP permissible.</td>
</tr>
<tr>
<td>RHAB 67798/77798</td>
<td>INDIVIDUAL RESEARCH IN REHABILITATION (1-9)</td>
<td>Research project on an aspect of rehabilitation under supervision of instructor. Arrangements with instructor must be made prior to registration. S/U grading; IP permissible. Prerequisite: Permission.</td>
</tr>
<tr>
<td>RHAB 77792</td>
<td>INTERNSHIP: REHABILITATION (6)</td>
<td>Assignment to rehabilitation agency for extensive and intensive applications for rehabilitation counseling, consulting and coordinating. Supervision of internships shared jointly by rehabilitation agency and the university instructor. Credit hours to be fixed at registration time. Repeat registration permitted. Credit hour reduction for prior experience may be granted. S/U grading; IP permissible. Prerequisite: RHAB 6/77736.</td>
</tr>
<tr>
<td>RHAB 88129</td>
<td>ADVANCED ASSESSMENT IN REHABILITATION (3)</td>
<td>Psychological, neurological and vocational assessment; assessment of independent living skills; sensory and cognitive impairments; ethical standards in assessment; theory and issues in research.</td>
</tr>
<tr>
<td>RHAB 88182</td>
<td>PSYCHOLOGICAL ADJUSTMENT TO DISABILITY (3)</td>
<td>Psychosocial aspects of disability; models of adjustment; attitudinal barriers. Prerequisite: RHAB 67725 or equivalent.</td>
</tr>
<tr>
<td>RHAB 88188</td>
<td>HISTORY AND SYSTEMS OF REHABILITATION PSYCHOLOGY (3)</td>
<td>Historical development of rehabilitation programming and psychology; basic philosophy, theoretical systems and process; professional and scientific ethics; professionalization; professional issues and research. Prerequisite: RHAB 67712 or equivalent.</td>
</tr>
<tr>
<td>SEED 50093/70093</td>
<td>VARIABLE TITLE WORKSHOP IN SECONDARY EDUCATION (1-4)</td>
<td>Various topics designed to respond to issues, trends and specialized needs of elementary or secondary schools. S/U grading. Prerequisite: Permission.</td>
</tr>
<tr>
<td>SEED 52157</td>
<td>TEACHING WITH MICROCOMPUTERS: SECONDARY CLASSROOM (3)</td>
<td>In-depth study of instructional use of microcomputers in all subject areas of the secondary classroom. Use of BASIC and LOGO in developing and modifying instructional software. Students will develop and field test computing materials for their classroom.</td>
</tr>
<tr>
<td>SEED 52260</td>
<td>METHODS OF TEACHING FOREIGN LANGUAGES (3)</td>
<td>Introduction to modern techniques and methods of foreign language instruction at the elementary and secondary level. Prerequisites: Foreign language proficiency level for teaching in public schools.</td>
</tr>
<tr>
<td>SEED 52277</td>
<td>TEACHING SCIENCE IN THE SECONDARY SCHOOL (3)</td>
<td>Analysis of teaching materials, demonstrations and participation in science classes appropriate for graduate students seeking certification to teach science in the secondary school. Special fee: $15 per semester (subject to change).</td>
</tr>
<tr>
<td>SEED 57248</td>
<td>TEACHING CRITICAL THINKING (2)</td>
<td>Techniques, procedures and materials for developing skills in application of analysis and thinking processes.</td>
</tr>
<tr>
<td>SEED 60199</td>
<td>THESIS I (2-6)</td>
<td>Thesis students must register each semester until all degree requirements are met. S/U grading; IP permissible.</td>
</tr>
</tbody>
</table>
**Education**

SEED 60299
**THESIS II (2)**
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: SEED 60199.

SEED 62145
**PRINCIPLES OF SECONDARY TEACHING (3)**
Principles of teaching in the secondary schools with emphasis on purposes, curriculum, roles of the teacher, instruction and the adolescent learner in secondary, middle, junior and senior high schools. Prerequisite: Graduate standing.

SEED 62146
**INSTRUCTIONAL STRATEGIES AND CLASSROOM MANAGEMENT (3)**
Enables students to demonstrate proficiency in the selection and application of general strategies for instruction, of appropriate instructional media and materials, and in the accommodation of individual needs and cultural diversity within the secondary instructional setting. Prerequisite: SEED 62145.

SEED 62191/72191
**SEMINAR IN SECONDARY EDUCATION (1-3)**
Study and experience of various theoretical, methodological and practical approaches to special problems.

SEED 62192/82192
**ADVANCED PRACTICUM AND INTERNSHIP IN SECONDARY EDUCATION (1-10)**
S/U grading; IP permissible.

SEED 62195/82195
**SPECIAL TOPICS IN SECONDARY EDUCATION (1-5)**

SEED 62196/82196
**INDIVIDUAL INVESTIGATION IN SECONDARY EDUCATION (1-5)**
Independent reading and/or research directed by a graduate faculty member. S/U grading; IP permissible. Prerequisite: Permission.

SEED 62198/82198
**RESEARCH IN SECONDARY EDUCATION (2-15)**
Students pursue an individualized research project under direction of instructor. S/U grading; IP permissible. Prerequisite: Permission.

SEED 67147
**TEACHING ADOLESCENTS IN THE SECONDARY SCHOOL CULTURE (3)**
Providing for motivation, discipline and instruction of adolescents within the culture of the secondary school. Prerequisite: EDPF 68903.

SEED 67148
**RESEARCH AND THE CLASSROOM TEACHER (3)**
An examination of the teacher as both a researcher and as a consumer of research. Prerequisite: EDPF 60098.

SEED 67231/77231
**TRENDS IN SECONDARY EDUCATION (3)**

SEED 67232/77232
**SECONDARY SCHOOL SOCIAL STUDIES (3)**
General focus is on examining current instructional and curricular trends in teaching social studies. Emphasis is placed on strategies of teaching, developing student's critical thinking skills, role of the computer, use of primary sources, teaching controversial issues and stimulating active citizenship. Prerequisite: Undergraduate special-methods course or teaching certification in one of the social studies.

SEED 67234/77234
**SCIENCE IN SECONDARY EDUCATION (3)**
Analyzes methods, materials, course content and evaluation in secondary school science teaching. Includes lectures, discussions, field trips, demonstrations and laboratory practicum. Prerequisite: Teaching certification in one of the sciences.

**Special Education (SPED)**

SPED 50093/70093
**VARIABLE TITLE WORKSHOP IN SPECIAL EDUCATION (1-5)**
Topics of special interest to students desiring to intensify their knowledge in particular areas. Presenters include faculty members of Kent State University and other institutions. Offered irregularly. S/U grading.

SPED 53010
**FAMILY AND PROFESSIONAL COLLABORATION (3)**
This course provides knowledge and strategies for working with family members of exceptional individuals and members of related professions who provide services to them. Use of collaborative, interdisciplinary, interagency models in special education. 20 clinical and 10 field hours. Prerequisite: SPED 63200.

SPED 53020
**ASSESSMENT IN SPECIAL EDUCATION (3)**
Use/interpretation of normal- and criterion-referenced and informal curriculum-based assessments for students with mild handicapping conditions. Ecological inventories/observation techniques for students with severe conditions. 10 field and 20 clinical hours. Prerequisite: SPED 53030, 63200. Special fee: $20 per credit hour (subject to change).
SPED 53030
CLASSROOM AND BEHAVIORAL MANAGEMENT I: THEORY AND TECHNIQUES (3)
Theory and techniques associated with establishing, implementing, assessing and maintaining procedures for modifying classrooms to enhance learning and behavior of children and youth with disabilities. 25 field hours. Writing intensive. Prerequisite: SPED 63200.

SPED 53031
CLASSROOM AND BEHAVIOR MANAGEMENT II: APPLICATION AND TEACHING SOCIAL SKILLS (3)
Application of theory and techniques introduced in SPED 53030. Uses case-based instruction and field-based experiences to address points of assessment, intervention, adaptation, monitoring and generalizing affective and social behavior. Includes 40 field hours. Prerequisite: SPED 53030, 63200.

SPED 53040
LANGUAGE AND READING IN SPECIAL EDUCATION (3)
Instructional approaches to teaching reading/language arts to students with disabilities. Emphasis on adapting instructional techniques, materials, assessments to meet the needs of learners with disabilities. Contains 15 clinical and 15 field hours. Prerequisites: SPED 53050 or 53051, 63200; ECED 30123, 40105 and 40112 or MCED 40006.

SPED 53050
CHARACTERISTICS OF STUDENTS WITH MILD/MODERATE INTERVENTION NEEDS (3)
Definitions, causes, characteristics; social, educational implications of learning, developmental and emotional/behavioral disorders of students identified with mild/moderate disabilities. Methods of assessment and interventions; current issues. 10 clinical/10 field hours. Prerequisite: SPED 63200.

SPED 53051
CHARACTERISTICS OF STUDENTS WITH MODERATE/INTENSIVE INTERVENTION NEEDS (3)
Overview of specific facets and causes of severe disabilities, physical/psychological aspects, family/societal responses, political trends, etiology and medical implications, educational and vocational programming, assessment and treatment planning, assistive technology. 10 clinical/10 field hours. Prerequisite: SPED 63200.

SPED 53060
CURRICULUM/METHODS CLASSROOM INSTRUCTION: MILD/MODERATE INTERVENTION (3)
Curriculum development, programming, delivery for students with mild to moderate disabilities. Introduction to transition planning. Emphasis on functional curriculum and adapting instructional techniques, materials, assessment to meet needs. 33 field/clinical hours. Prerequisite: SPED 53030, 53050 and 63200; all ECED and MCED methods courses.

SPED 53061
CURRICULUM/METHODS CLASSROOM INSTRUCTION: MODERATE INTENSIVE INTERVENTION (3)
Curriculum programming, instructional strategies, related assessment techniques for functional, academic skills using life-span model. Emphasis on community-based instruction, authentic assessment and ecological evaluations. 35 field hours. Prerequisite: SPED 53030, 53031 and 63200; all ECED and MCED methods courses.

SPED 53062
CURRICULUM METHODS II: MILD/MODERATE (3)
Delivery and adaptation of evidence-based practices for students with mild/moderate disabilities. Emphasis on achievement in general curriculum. Training to mentor other professionals. Prerequisite: SPED 53020, 53030, 53050; Co-requisite SPED 53040, 64192. Graduate standing.

SPED 53063
CURRICULUM METHODS II: MODERATE/INTENSIVE INTERVENTION (3)
Meeting academic socialization, health, motor skills, communication needs in inclusive setting. Working with paraprofessionals to provide community-based instruction, assessment, observation, record-keeping, IEPs and ITPs, lesson plans. Prerequisite: SPED 53020, 53030, 53061, Co-requisite SPED 53040, 64192. Graduate standing.

SPED 53070
PLANNING AND PROGRAMMING FOR TRANSITIONS (3)
This course addresses life-span community participation and the planning, support development and services available to accomplish it. Introduction to community agencies and adult services. 10 clinical/15 field hours. Prerequisite: SPED 53050 or 53051.

SPED 53080
ASSISTIVE TECHNOLOGY FOR STUDENTS WITH DISABILITIES (3)
Examines the application of high- and low-technology assistive devices for students with intensive intervention needs. Analysis of technology needs; selection/development of technology; training/evaluation of technology use by students. 20 clinical hours. Prerequisite: SPED 53050 or 53051.

SPED 53092
DEAF RESIDENTIAL SCHOOL INTERNSHIP (1-3)
Week-long internship at a residential school for the deaf; 24-hour interaction with deaf students and adults. Students stay on campus. Conduct, interaction, sign language skills, maturity, responsibility and performance will be evaluated by staff at the school. Prerequisite: SPED 29201 or ASL 29201 and SPED 53309.
SPED 53100
ISSUES IN EDUCATIONAL INTERPRETING (3)
Issues and concerns facing educational interpreters: legal mandates and constraints, ethical guidelines and their application to educational environments, roles/responsibilities including sign interpreting/translittering, team membership, classroom and building roles, and negotiating the educational environment.

SPED 53101
DEAF CULTURE AND COMMUNITY (3)
Exploration of historical events and figures from deaf community perspective. Life experiences of “typical” deaf individuals as minority culture representatives interacting with majority culture institutions and processes as depicted in narrative story-telling and folklore.

SPED 53102
INTERPRETING PROCESSES DEAF/HARD OF HEARING I (3)
Beginning-level interpreting course addressing voice-to-sign and sign-to-voice processes using simultaneous and consecutive strategies: ASL, SEE, Signed English, Total Communication signing. Preschool, primary, elementary students developmentally delayed through gifted academic levels.

SPED 53103
INTERPRETING PROCESSES DEAF/HARD OF HEARING II (3)
Intermediate-/advanced-level interpreting course addressing voice-to-sign and sign-to-voice processes using simultaneous and consecutive strategies: ASL, SEE, Signed English, Total Communication. Focus on middle school/high school/post-secondary students developmentally delayed through gifted academic levels. Prerequisite: SPED 39201 and 4/53105.

SPED 53104
ADVANCED VOICE-TO-SIGN INTERPRETING (3)

SPED 53105
SIGNED ENGLISH AND MANUALLY CODED ENGLISH SYSTEMS (3)
Receptive and expressive use of English-based sign language systems; ASL root words, prefix/suffix use, simultaneous speaking and signing. Experience with Signing Exact English, Total Communication systems, Pidgin Signed English, contact sign language, Manually Coded English and English signing systems. Prerequisite: SPED 29201 and 4/53101.

SPED 53106
CLASSROOM-SETTING INTERPRETING (3)
Issues and challenges of classroom-based educational interpreting. Mainstreaming, inclusion, resource room, and self-contained academic and nonacademic class preparation and interpreting environments. Off-campus practicum four hours each week to observe and assist with classroom interpreting. Prerequisite: ASL 19201 or SPED 19201 and SPED 4/53100.

SPED 53107
NONCLASSROOM-SETTING INTERPRETING (3)
Issues and challenges of nonclassroom-based educational interpreting. Student participation with IEP-designated related services; professional consultations; assessment interpreting; miscellaneous interpreting. Off-campus practicum four hours per week to observe and assist with classroom interpreting. Prerequisite: SPED 29201 and 4/53100.

SPED 53108
AMERICAN SIGN LANGUAGE LINGUISTICS AND USAGE (3)
Analytical study of American Sign Language syntactic, semantic, morphology and pragmatics; comparison of spoken languages and ASL using the Stokoe system, impact of educational-setting characteristics on linguistic processes. Prerequisite: SPED 29202 and 4/53100.

SPED 53109
CUED SPEECH AND ORAL INTERPRETING (3)
Introduction to Cued Speech using hand shapes and hand positions to differentiate between homophonous sounds; theoretical background and development history; oral interpreting homophonic sounds, synonym selection processes; positioning, lighting, and related concerns and issues. Prerequisite: SPED 29202.

SPED 53192
PRACTICUM: INTERPRETING PROCESS (1-3)
Field-based practicum experience provides preservice educational interpreters with opportunity to participate with currently practicing master educational interpreters. Students placed in education-based settings. University supervisor and teacher-mentor observe and assess student skill.

SPED 53309
INTRODUCTION TO DEAF STUDIES (3)
Introductory survey course provides informational base and understanding of experiences of deaf people as a cultural minority. Includes etiology and prevalence data, service delivery systems, diagnosis and assessment of issues, and communication systems. 20 field hours.
SPED 53310
LANGUAGE INSTRUCTION FOR THE DEAF/HARD OF HEARING STUDENTS (3)
Language problems commonly demonstrated by deaf/hard of hearing students and the educational assessments and intervention strategies that are used to address them. Prerequisite: SPED 53309 (minimum grade B); SP&A 34104. Corequisite: SPED 63392.

SPED 53311
INSTRUCTIONAL STRATEGIES FOR DEAF/HARD OF HEARING STUDENTS WITH SPECIAL NEEDS (3)
IEP and transition-planning strategies and program content for deaf/hard of hearing students with ADHD, BD, DD, VI, DB, LD, CMI, TBI, chronically health impaired/medically fragile, gifted. Curriculum and lesson developed and adapted for impacted areas. Corequisite: 1 hour SPED 63392.

SPED 53313
LITERACY ASSESSMENT AND INTERVENTION FOR DEAF/HARD OF HEARING STUDENTS (6)
Theoretical overview of integrated linguistics curriculum. Reading theories: difficulties for students with significant hearing loss and auditory processing difficulties; instructional planning; materials design; ongoing assessment strategies. Course includes a practicum placement. $8.33/cr fee*. Corequisite: 1 credit hour SPED 63392; SPED 53310 with minimum grade B; MCED 40006 (6) or ECED 30123 (3) or C&l 67310 (3) and ECED 40126 (3), or C&l 67311. SPED/ASL 19201/19202; SPED 47095. Special fee: $25 per semester* (*subject to change).

SPED 53316
PRESCCHOOL EDUCATION OF THE HEARING IMPAIRED (3)
Developing home/clinic training programs for parents and hearing-impaired infants (birth to three years). Teaching speech, language, speech reading, use of residual hearing at preschool level.

SPED 53319
INSTRUCTIONAL APPROACHES AND PLACEMENTS FOR DEAF/HARD OF HEARING STUDENTS (3)
Theory, practice, communication approaches including student/family/staff competencies required for use of oral/aural, total communication and bi-educational programs. Corequisite: 1 credit hour SPED 63392.

SPED 53324
CURRICULUM METHODS AND MATERIALS FOR DEAF/HARD OF HEARING STUDENTS (3)
Strategies to assess, instruct, evaluate conceptually based lessons on social studies, science and mathematics. Adaptations of existing units to address learning and linguistic needs of deaf/hard of hearing students. Corequisite: 1 credit hour SPED 63392.

SPED 53529
NATURE AND NEEDS OF GIFTED CHILDREN (3)
Personal characteristics, abilities and potentialities of gifted children through review of related research. Evaluation of research findings and implications for psychoeducational development. Prerequisite: SPED core.

SPED 53530
INSTRUCTIONAL PROCESSES FOR GIFTED CHILDREN (3)
Discovery and guidance of mentally superior children. Provision for school attention and accommodations. Case studies of gifted children. Selecting appropriate instructional strategies. Prerequisite: SPED 53529 or permission.

SPED 53534
SOCIAL/EMOTIONAL COMPONENTS OF GIFTEDNESS (3)
Affective growth of gifted persons is reviewed through research literature and analysis of case studies. Reviews adjustment problems of gifted youth and adults.

SPED 54161
TRANSITIONAL PROGRAMMING AND SERVICES FOR DISABLED YOUTH (3)
Transition from school to work and community life; vocational exploration/assessment and preparation/placement methods and techniques for secondary and postsecondary disabled youth. Prerequisite: SPED 63000.

SPED 60199
Thesis I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

SPED 60299
Thesis II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: SPED 60199.

SPED 63030/73030
PHARMACOLOGICAL INTERVENTIONS IN SPECIAL EDUCATION (3)
Introduce mechanisms by which drugs act; identify benefits/side effects; implications for delivery/intervention; monitoring in classroom. Classes of drugs examined; issues examined; delineation of responsibilities and prohibitions.

SPED 63031/73031
PROGRESS MONITORING AND PROGRAM EVALUATION FOR BEHAVIORAL INTERVENTIONS (3)
Cross-listed with SPSY 67931/77931. Describes/applies methodology/research to monitor effectiveness of behavioral interventions; evaluating program. Use of tools to evaluate progress/make treatment program decisions. Issues regarding treatment fidelity/program development emphasized. Prerequisite: SPED 53030; SPSY 67920.
SPED 63032/73032
ADVANCED INTERVENTIONS FOR ADDRESSING SEVERE EMOTIONAL AND BEHAVIORAL DISORDERS (3)
Cross-listed with SPSY 67932/77932.
Use/interpret assessments in education to identify interventions for children/youth with severe disorders. Special emphasis on identifying/designing, implementing, assessing effectiveness of advanced interventions/consultation. 20 field hours. Prerequisite: SPED 53030; SPSY 6/77920.

SPED 63092
FIELD EXPERIENCE IN SPECIAL EDUCATION (1-9)
Recreational, therapeutic and academic experience in mild/moderate, moderate/severe, early childhood, gifted and deaf education. Contains 30 field/clinical hours per credit hour. S/U grading; IP permissible. Prerequisite: Permission.

SPED 63101
ADMINISTRATION AND SUPERVISION IN SPECIAL EDUCATION (3)
Administration of educational programs for exceptional children; improvement of teacher competencies; function of special education supervisors; and special education operations at local, state and national levels.

SPED 63200
INTRODUCTION TO EXCEPTIONALITIES (3)
Introduction to exceptionalities of student development. Focus on foundations/theories associated with characteristics and accommodations for human exceptionalities. Collaborative/multidiscipline educational service design. 15 clinical/field hours.

SPED 63201
ISSUES IN SPECIAL EDUCATION (3)
Surveys current research, literature and policy issues that affect identification, assessment and service provision to students with exceptionalities. Prerequisite: SPED 23202 or 63200.

SPED 63202
INSTRUCTING STUDENTS WITH SPECIAL NEEDS IN INCLUSIVE SETTINGS (3)
Students will develop knowledge of models of grouping and instructing students with special needs in inclusive settings, with a focus on curricular adaptations and methods of consulting, teaming and collaborating. Prerequisite: SPED 23000, 63200 or 63201. Special fee: $25 per semester.

SPED 63300
RESEARCH APPLICATIONS IN SPECIAL EDUCATION (3)
Culminating experience in which students apply their content, methods and research skills to develop a final project that addresses an area of special education. Focuses on techniques for answering research questions, developing curriculum and assimilating knowledge through applied projects. IP permissible. Prerequisite: SPED 53030; EDUC 65510 or 65511; completion of 21 hours in required program.

SPED 63392
ADVANCED PRACTICUM IN HEARING IMPAIRED (1-8)
S/U grading; IP permissible. Prerequisite: Permission.

SPED 63531/73531
CURRICULUM DEVELOPMENT FOR GIFTED LEARNERS (3)
Focus on design/development of curriculum for gifted learners; adapt/modify existing curricula; design curricular materials through predetermined process assessment of suitability of materials.

SPED 63532/73532
GIFTED PROGRAM DESIGN AND ADMINISTRATION (3)
Fundamentals of designing gifted programs are reviewed. Topics include student identification, in-service, advocacy, program evaluation, compliance with state standards and teacher preparation. Prerequisite: SPED 53529 and 53530.

SPED 63533/73533
GIFTED SUBPOPULATIONS (3)
The characteristics and needs of intellectually gifted individuals who often are not high academic achievers are studied with consideration of the implications for school practices.

SPED 63535/73535
INTELLIGENCE, ASSESSMENT AND EVALUATION IN GIFTED EDUCATION (3)
Provides examination of historical/contemporary theories of intelligence and influences on definitions/beliefs about giftedness. Alternative models of assessment discussed and implemented. Prerequisite: Permission.

SPED 63537/73537
PROGRAM EVALUATION IN GIFTED EDUCATION (3)
This course is designed to examine the range of methodologies available for gathering information systemically for the evaluation of gifted program effectiveness. Both summative and formative evaluations will be discussed. Prerequisite: SPED 6/73532.

SPED 63538/73538
THE CONSULTING TEACHER IN GIFTED EDUCATION (3)
The purpose of this course will be to provide students with an opportunity to gain knowledge and skills in consultation and collaboration in the field of gifted education. Prerequisite: SPED 4/53529 and 4/53534.

SPED 63950/73950
CURRICULUM AND INTERVENTION IN EARLY CHILDHOOD SERVICES (3)
Cross-listed with ECED 60150.
Overview and comparison of early childhood service approaches, including history and issues in delivering services, developmentally appropriate practice, environmental arrangement and how to modify curriculum. Prerequisite: Permission.
SPED 63952/73952
FAMILY AND PROFESSIONAL COLLABORATION IN EARLY CHILDHOOD (3)
Cross-listed with ECED 60159.
Examines issues facing families and professionals serving young children who are at risk, disabled and typically developing. Prerequisite: Permission for SPED 73952.

SPED 63953/73953
PRACTICAL APPLICATIONS: BIRTH TO FIVE (3)
Cross-listed with ECED 60154.
Practical application of recommended practices for young children birth to five. Observation of young children in natural environments. Plan and evaluate intervention with families and professionals. 60 field hours. Prerequisite: Permission.

SPED 63954/73954
PRACTICAL APPLICATIONS: FIVE TO EIGHT (3)
Cross-listed with ECED 60162.
Application of recommended practices for children five to eight. Observation of children in natural environment; plan/evaluate intervention collaboratively. 60 field hours. Prerequisite: Permission.

SPED 63955/73955
TYPICAL AND ATYPICAL DEVELOPMENT IN YOUNG CHILDREN (3)
Cross-listed with ECED 60160.
Overview of typical/atypical development pathways age three to grade three, including theories of behavior, implications of atypical development on play/learning, early childhood development within ecological framework. Prerequisite: Permission.

SPED 63956/73956
FOUNDATIONS IN EARLY CHILDHOOD SERVICES (3)
Cross-listed with ECED 60156.
Overview of issues facing young children within context of family/society, including history, early childhood services, theoretical perspectives, implications of childhood disabilities, and recommended assessment, intervention and evaluation.

SPED 63957/73957
ASSESSMENT AND EVALUATION OF EARLY CHILDHOOD SERVICES (3)
Cross-listed with ECED 60157.
Examines a range of systems for comparing and observing early childhood services, practices, young children and families: types and purposes of assessment procedures and instruments, monitoring progress. Prerequisite: Permission. Special fee: $25 per semester.

SPED 63958/73958
EARLY CHILDHOOD INTERVENTION METHODS (3)
Specific strategies for working with children birth to eight with intensive needs (e.g., cerebral palsy, spina bifida, autism). 30 clinical hours will provide students with the opportunity to practice newly acquired intervention strategies, knowledge and skills. Prerequisite: Permission.

SPED 63959/73959
MEDICAL ASPECTS OF EARLY CHILDHOOD (3)
Examination of different risk factors and disabling conditions found in early childhood. Description of medical issues facing young children and their families. Prerequisite: Permission.

SPED 63991/73991
SEMINARY IN SPECIAL EDUCATION (1-3)
Seminar in special education. Prerequisite: Permission.

SPED 63992
ADVANCED PRACTICUM IN SPECIAL EDUCATION (2-8)
Graduate student teaching. S/U grading; IP permissible. Prerequisite: Special Education core and permission.

SPED 63995/73995
SPECIAL TOPICS IN SPED (1-3)
Specialized offerings in response to emerging or selected program needs.

SPED 63996/83998
RESEARCH: SPECIAL EDUCATION (1-10)
S/U grading; IP permissible. Prerequisite: Permission.

SPED 63998/83998
FIELD EXPERIENCE FOR MILD/MODERATE INTERVENTION SPECIALIST (2-4)
Field assignments in conjunction with mild/moderate coursework. Evaluates students in personal conduct, communication skills, instructional design and methods, and impact on student learning aligned with CEC standards. Prerequisite: SPED 53020, 53060, 63992. Corequisite SPED 53062, 53040; Graduate standing.

SPED 64092
FIELD EXPERIENCE FOR MODERATE/INTENSIVE INTERVENTION SPECIALIST (2-4)
Field assignments in conjunction with moderate/intensive coursework. Evaluates students in personal conduct, communication skills, instructional design and methods, and impact on student learning aligned with CEC standards. Prerequisite: SPED 53020, 53061, 63992. Corequisite SPED 53063; Co-requisite SPED 53040; Graduate standing.
SPED 80090
DOCTORAL RESIDENCY SEMINAR (3)
Provides students with the opportunity to synthesize courses, research and practice by focusing on diverse issues/topics. Ordinarily, SPED 80090 is taken no earlier than the second year of doctoral studies as a culminating course in the doctoral sequence. Prerequisite: Permission and one full year of doctoral study.

SPED 80199
DISSERTATION I (15)
Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible.

SPED 80299
DISSERTATION II (1 or 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: SPED 80199.

SPED 83952
THE LAW AND SPECIAL EDUCATION (3)
Selected principles of constitutional, statutory, case and common law affecting handicapped and special education students, teachers and administrators are studied.

SPED 83956
BIOMEDICAL ASPECTS OF SPECIAL EDUCATION (3)
Considers neurological, genetic and biochemical factors associated with exceptional children and youth. Discussions focus on development and related issues in serving the exceptional person.

SPED 83991
SEMINAR IN SPECIAL EDUCATION (1-3)

SPED 83992
INTERNSHIP IN SPECIAL EDUCATION (2-8)
S/U grading; IP permissible. Prerequisite: Permission.

SPSY 60162/70162
DEVELOPMENTAL ASSESSMENT (3)
Reviews the educational, family and regulatory forces that influence success at each significant transition for preschool, kindergarten and primary-grade children. 24 clinical/field hours. Prerequisite: Permission.

SPSY 60165/70165
PRINCIPLES OF SOCIAL LEARNING (3)
Cross-listed with ECED 6/70165. The main focus is to provide students with an understanding of behavioral and social-learning principles within the context of the school psychologist's professional practice. 19 clinical/field hours.

SPSY 60191/70191
SEMINAR: SCHOOL PSYCHOLOGY (1-4)
Varied topics. Prerequisite: Permission.

SPSY 67912/77912
ROLE OF THE SCHOOL PSYCHOLOGIST (3)
Study of role and functions of school psychologists in American education. Includes history of school psychology and future orientation. 5 clinical/field hours. IP permissible.

SPSY 67914/77914
FIELD EXPERIENCE IN EDUCATION FOR SCHOOL PSYCHOLOGISTS (2)
Involves minimum of 120 clock hours of observation in public school. Required for those students in school psychology who do not have teaching certificates and have not spent extensive time in public schools. S/U grading; IP permissible. Prerequisite: Permission.
SPSY 67918/77918
PROBLEMS IN RESEARCH INTERPRETATION (3)
An intensive study of problems associated with typical research findings and publications. Issues include research, language, hypothesis testing, cost analysis, etc., as related to decision making.

SPSY 67920/77920
DIAGNOSIS OF CHILDHOOD DISORDERS IN SCHOOLS (3)
Provides overview of diagnosis and treatment of child/adolescent behavior disorders (AD/HD, conduct problems), emotional and social disorders (depression, anxiety, phobias), and developmental/acquired disorders (autism, TBI).

SPSY 67925/77925
INTRODUCTION TO NEUROPSYCHOLOGY FOR SCHOOL PSYCHOLOGISTS (1)
Introduces basic concepts in child neuropsychology with relevance for applied school psychological practice. Topics include biological bases of behavior and implications for educational interventions.

SPSY 67928/77928
GROUP COUNSELING TECHNIQUES FOR REHABILITATION COUNSELORS AND SCHOOL PSYCHOLOGISTS
Cross-listed with RHAB
Review of group counseling techniques for Rehabilitation Counselors and School Psychologists. Skills developed in group process and group leadership. A variety of group interventions will be examined, including techniques for persons with disabilities.

SPSY 67929/77929
INDIVIDUAL COUNSELING TECHNIQUES FOR REHABILITATION COUNSELORS AND SCHOOL PSYCHOLOGISTS
Cross-listed with RHAB
Review of individual counseling techniques applicable to Rehabilitation Counselors and School Psychologists. Skills developed in communication, interviewing, problem identification, goal-setting and program development are fostered by lecture, video feedback and simulation.

SPSY 67931/77931
PROGRESS MONITORING AND PROGRAM EVALUATION FOR BEHAVIORAL INTERVENTIONS (3)
Cross-listed with SPED 63031/73031.
Describes/appplies methodology/research to monitor effectiveness of behavioral interventions; evaluating program. Use of tools to evaluate progress/making treatment program decisions. Issues regarding treatment fidelity/program development emphasized. Prerequisite: SPED 53030; SPSY 67920.

SPSY 67932/77932
ADVANCED INTERVENTIONS FOR ADDRESSING SEVERE EMOTIONAL AND BEHAVIORAL DISORDERS (3)
Cross-listed with SPED 63032/73032.
Use/interpret assessments in education to identify interventions for children/youth with severe disorders. Special emphasis on identifying/designing, implementing, assessing effectiveness of advanced interventions/consultation. 20 field hours. Prerequisite: SPED 53030; SPSY 6/77920.

SPSY 67926/77926
PRACTICUM I IN SCHOOL PSYCHOLOGY
Provides students with supervised experience in educational settings to practice introductory skills in assessment, intervention and professional development. S/U grading; IP permissible. 25 clinical field hours.

SPSY 67927/77927
PRACTICUM II IN SCHOOL PSYCHOLOGY
Provides students with supervised experience in educational settings to practice applied skills in assessment, intervention, consultation procedures and professional development. Two consecutive semesters in same academic year required. S/U grading; IP permissible. 75 clinical field hours.

SPSY 67928
GROUP COUNSELING REHAB
Review of group counseling techniques for rehab counselors and school psychologists. Skills developed in group process and group leadership. A variety of group interventions will be examined, including techniques for persons with disabilities. Prerequisite: Graduate standing, permission.

SPSY 67929
INDIVIDUAL COUNSELING REHAB
Review of individual counseling techniques. Skills developed in communication, interviewing, problem identification, goal-setting and program development are fostered by lecture, video feedback and simulation. Prerequisite: Graduate standing, permission.

SPSY 67936/77936
PRACTICUM IN SCHOOL PSYCHOLOGY (3)
Provides students with supervised experience in educational settings to practice applied skills in assessment, intervention, consultation procedure and in professional development. Two consecutive semesters in same academic year required. 75 clinical/field hours. S/U grading; IP permissible. Prerequisite: Permission.

SPSY 67951/77951
COGNITIVE ASSESSMENT OF CHILDREN IN SCHOOLS (3)
Training and experience in administering, scoring and interpreting cognitive measures for children and adolescents and writing reports. 30 clinical/field hours. Prerequisite: Permission. Special fee: $20 per credit hour.
SPSY 67955/77955
INSTRUCTIONAL ASSESSMENT FOR SCHOOL PSYCHOLOGISTS (3)
Training in administration, scoring and interpretation of academic achievement, adaptive behavior and social emotional/behavior scales and writing psychoeducational and evaluation team reports. 25 clinical/field hours. Special fee: $20 per credit hour.

SPSY 67960/77960
INTERVENTIONS WITH CULTURALLY DIVERSE STUDENTS (3)
Introduces skills to effectively and ethically implement educational and psychological interventions with culturally diverse children in educational settings. 5 clinical/field hours.

SPSY 67965/77965
INSTRUCTIONAL INTERVENTIONS FOR SCHOOL PSYCHOLOGISTS (3)
Describes design and implementation of evidence-based interventions, methods of data collection and progress monitoring for school-based referrals within a problem-solving model. Requires 12 clinical/field hours.

SPSY 67970/77970
LEGAL, ETHICAL AND PROFESSIONAL ISSUES IN SCHOOL PSYCHOLOGY (3)
Legal, ethical and professional issues and standards relevant for school psychologists will be explored. Selected principles of law and policy, ethical standards and codes of professional practice will be addressed.

SPSY 67971/77971
ISSUES AND APPROACHES IN SCHOOL PSYCHOLOGY (3)
This course describes and illustrates contemporary elements and forces that impact professional service in school psychology practice. S/U and IP grading. Prerequisite: Permission.

SPSY 67972/77972
SOCIAL-EMOTIONAL ASSESSMENT FOR SCHOOL PSYCHOLOGISTS (3)
Theory and practicum related to the use of non-normative assessment for designing, implementing and evaluating intervention. 15 clinical/field hours. Special fee: $15 per semester.

SPSY 67973/77973
CONSULTATION IN THE HELPING PROFESSIONS (3)
Students learn consultation skills and processes utilizing a number of professional models such as Caplan's model, behavior and problem-solving models and crisis consultation. 20 clinical/field hours.

SPSY 67974/77974
SOCIAL-EMOTIONAL INTERVENTIONS IN SCHOOL PSYCHOLOGY
Describes design and implementation of social-emotional interventions for childhood disorders. Reviews progress monitoring for school-based social and emotional referrals within an eco-behavioral problem-solving model. Requires 25 clinical field hours.

SPSY 67995/77995
SPECIAL TOPICS IN SCHOOL PSYCHOLOGY (1-3)
Presentations of special interest to students. Offered irregularly. Topics will be announced in Schedule of Classes booklet. Prerequisite: Permission.

SPSY 67996/77996
INDIVIDUAL INVESTIGATION IN SCHOOL PSYCHOLOGY (1-3)
Independent reading and/or research directed by a graduate faculty member. S/U grading; IP permissible.

SPSY 67998/77998
INDIVIDUAL RESEARCH IN SCHOOL PSYCHOLOGY (1-9)
Student pursues research project on selected aspect of school psychology under supervision of instructor. Arrangements with instructor must be made prior to registration. Repeat registration permitted. S/U grading; IP permissible.

SPSY 67980/77980
INTEGRATING EXPERIENCE IN SCHOOL PSYCHOLOGY (2)
This course requires student to research, study and develop expertise in a particular facet of school psychology and to present these findings at the conclusion of his/her training program. 38 clinical/field hours. Restricted to students in school psychology Ed.S. program. S/U grading.

SPSY 67992/77992
SPECIALIST INTERNSHIP IN SCHOOL PSYCHOLOGY (1-6)
One academic year of field experience in schools under supervision of university supervisor and certified school psychologist who is employed by school system. 100 clinical/field hours. Restricted to Ed.S. students in school psychology program. S/U grading; IP permissible. Prerequisite: Permission.

SPSY 80090
DOCTORAL RESIDENCY SEMINAR (3)
Provides students with the opportunity to synthesize courses, research and practice by focusing on diverse issues and topics. Ordinarily SPED 80090 is taken no earlier than the second year of doctoral studies as a culminating course in the doctoral sequence.
SPSY 80192
CLINICAL SUPERVISION PRACTICUM (3)
Provides for supervised experience in clinical supervision of graduate students in school psychology. Experiences include coordinating case intake and assessment planning and providing feedback to graduate students on clinical reports and communication of results to clients/parents. S/U grading. IP permissible.

SPSY 80199
DISSERTATION I (15)
Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible.

SPSY 80299
DISSERTATION II
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: SPSY 80199.

SPSY 87987
PROFESSIONAL SEMINAR IN SCHOOL PSYCHOLOGY (3)
A professional seminar focused on the identity, history and development of school psychology, with special emphasis on current professional issues. Prerequisite: Permission.

SPSY 87992
DOCTORAL INTERNSHIP IN SCHOOL PSYCHOLOGY
Professional service and field experience under the supervision of licensed psychologist. Restricted to Ph.D. students in school psychology program. Emphasis on staff development, in-service education, research and consultation. 150 clinical/field hours per semester hour of credit. S/U grading; IP permissible.

SPSY 87998
RESEARCH SEMINAR IN SCHOOL PSYCHOLOGY (3)
Selected research topics in school psychology. Significant research literature is reviewed, research design methods and issues are presented, and small research projects are conducted. S/U grading. Prerequisite: Doctoral standing and permission.
The College of Fine and Professional Arts consists of seven diverse, dependent schools whose missions share complementary thrusts in the applied practice of their disciplines and the creative and scholarly investigations that form the evolving basis of such practice. As such, the programs frequently bridge traditional definitions of the “fine arts” and “professional studies.” The college includes graduate programs in the schools of Art, Exercise, Leisure and Sport, Family and Consumer Studies, Music, Speech Pathology and Audiology, and Theatre and Dance.

**Master’s Degree Programs**

Master’s degree programs are available in seven disciplines including the Master of Arts, Master of Fine Arts, Master of Music, Master of Public Health and Master of Science:

- Art (M.A.; M.F.A.)
- Exercise, Leisure and Sport (M.A.)
- Family and Consumer Studies (M.A.; M.S.)
- Music (M.A.; M.M.)
- Public Health (M.P.H.)
- Speech Pathology and Audiology (M.A.)
- Theatre (M.A.; M.F.A.)

**Doctor of Philosophy**

The Doctor of Philosophy is offered in four disciplines:

- Music (Ph.D.)
- Physical Education (Ph.D.)
- Speech Pathology and Audiology (Ph.D. and Au.D., Doctor of Audiology)

Information regarding individual graduate programs is provided on the following pages. Prospective students may obtain more information and admission applications by contacting the individual schools.

Application for admission is made online at www.admissions.rags.kent.edu. General admission requirements are listed earlier in this catalog. There also may be additional requirements for certain programs; please consult individual school sections in this catalog.

Persons seeking information on graduate nondegree status or graduate certificate programs should consult the Division of Research and Graduate Studies, Office of Graduate Program Services, 330-672-2661.
ART

Christine Havice, Director
211 Art Building
330-672-2192
chavice@kent.edu

The School of Art offers graduate study leading to the Master of Arts and Master of Fine Arts degrees. Master of Arts programs are offered in art education, art history, and the studio areas of ceramics, drawing/painting, glass, jewelry/metalwork/enamels, printmaking, sculpture, textile arts. These programs are 32 semester hours, except for art history which requires 35 hours. The Master of Fine Arts degree program is offered in the studio areas listed above and requires 60 hours of coursework.

The School of Art is accredited by the National Association of Schools of Art and Design.

Visit http://dept.kent.edu/art for more information.

SPECIAL PROGRAMS
Each year, the School of Art conducts special programs that are available for graduate credit. The special programs include the Kent/Blossom Art Program in crafts and fine arts. Interested persons should write to Kent/Blossom Art Program, School of Art for information, or visit the Web site at www.kent.edu/art.

<table>
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<th>Master of Arts/Master of Fine Arts</th>
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ADMISSION
In addition to regular application requirements of the university, admission to Master of Arts or Master of Fine Arts programs requires the following:

1. Three letters of recommendation from persons who are themselves in the applicant's proposed field of study or a closely related area.
2. A portfolio that shows an emphasis in the proposed area of studio interest. The portfolio is typically 15-20 35mm color slides, numbered and signed and in a plastic slide sheet. They should be accompanied by a numbered slide list that indicates medium, process, size, year and any other appropriate information. Master of Fine Arts applicants must also submit a 250-word autobiographical statement along with their slide portfolio. Portfolios are not required for applicants to the program in art history.
3. Applicants applying to the art history program are to submit a statement of purpose of approximately 250 words and indicate the proposed area of specialization within the art history curriculum.

Visits to the School of Art preceding the application are strongly recommended.

Two deadlines are in effect: February 15 for summer sessions and fall semester admissions, and October 15 for spring semester admissions. All materials referred to above must be received by these deadlines.

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<th>PROGRAM REQUIREMENTS</th>
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Art Education
In the Master of Arts program in art education, students must complete the following basic requirements: ART 61001, 61003, 61198, 61209, 8 semester hours of studio art electives and 6 semester hours of art history electives. To complete the program, one of the following options must be selected: (1) The thesis option totals 33 semester hours and includes 3 semester hours of electives and a research thesis in an approved area of interest; (2) The nonthesis option totals 35 semester hours and includes 9 credit hours of electives and ART 61298. Coursework for both options must be developed in consultation with the graduate faculty advisor.

Art History
The Master of Arts degree program in art history requires the completion of 35 semester hours of graduate credit. The program consists of 26 hours of art history, 3 hours of electives and a research thesis. Three (3) hours each must be taken in ancient, Medieval, Renaissance/Baroque, modern and non-Western. A reading knowledge of an approved foreign language must be demonstrated.

Studio Areas
The Master of Arts degree program in the studio areas requires the completion of 32 semester hours of graduate credit. The program consists of 23 hours in a studio area of primary interest, 3 hours of art history or a related academic field and a studio thesis.

The Master of Fine Arts degree program in the studio areas requires the completion of 60 semester hours of graduate credit consisting of 36 hours of studio art (26 hours of which must be in a specific studio concentration), 9 hours of art history, 9 hours of electives (choice and hours decided in consultation with advisor) and a studio thesis.

ADVISING
After a student is admitted to the program and notifies the graduate coordinator of his or her intention to enroll, a graduate advisor is assigned to help plan a course of study and to familiarize the student with the procedures of the school. The Graduate Program Handbook, which describes the routine procedures of the school, may be obtained from the graduate coordinator's office. To help in the planning of the student's program of study, the newly admitted student should share examples of his or her work with the graduate advisor.

CANDIDACY REVIEW EXAMINATION
Successful completion of the Candidacy Review Examination is a requirement in every School of Art graduate program. In the studio majors, it is scheduled after half of the program has been completed.

For graduate students in art education, ART 61001, 61003 and 61198, and 3 to 5 hours in other program requirements must be completed prior to scheduling the examination. In art
history the examination is given when all regular coursework is completed.

Successful completion of the examination designates the student as a candidate for the degree.

**THESIS**
The thesis is a significant project or body of work done independently of other coursework. Students are expected to demonstrate the ability to conduct research or produce a significant, original project in a discriminating and disciplined manner. The thesis topic should be one that will further the student’s knowledge and ability in the specialty by demonstrating skill as a researcher or studio artist. The outcome should be an effort that serves as a foundation for the pursuit of independent work when the graduate program is completed. At this stage, students are expected to work in close consultation with their thesis advisor.

**FINAL EXAMINATION**
The final examination occurs during the period of time in which the studio or research thesis is completed. The final examination is the presentation and defense of the thesis and is also an examination of the graduate student’s general comprehension of the visual arts. Graduate students are expected to follow the university schedule of deadlines for holding the final examination and presenting thesis materials.

**LABORATORY FEES**
Laboratory fees are assessed for some courses. The graduate student should seek updated information from the School of Art office on course fees.

**STUDIO FACILITIES**
Limited studio space is available on campus for graduate students.

<table>
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<tr>
<th>Courses (ART)</th>
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<tbody>
<tr>
<td>ART 51002</td>
</tr>
<tr>
<td>ART EDUCATION: METHODS AND MATERIALS (3)</td>
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<tr>
<td>An examination of relationships between content, materials and strategies for teaching art. 7 field and/or clinical hours are associated with this course. Prerequisite: Permission.</td>
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<tr>
<td>ART 51093</td>
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<tr>
<td>VARIABLE TITLE WORKSHOP IN ART (1-6)</td>
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<tr>
<td>S/U grading.</td>
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<td>ART 51525</td>
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<tr>
<td>ART EDUCATION: INQUIRY INTO PROFESSIONAL PRACTICE (3)</td>
</tr>
<tr>
<td>Concepts and practices related to teaching art. Inquiry into teaching art as a professional practice. 26 field and/or clinical hours are associated with this course.</td>
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</tbody>
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ART 52025
THE ART OF WEST AFRICA (3)
Arts, crafts and architecture of the western Sudanic and Guinea Coast areas of West Africa from prehistoric times to the present.

ART 52026
ART OF NIGERIA (3)
Study of the arts, crafts and architecture of Nigeria from prehistoric times to present.

ART 52027
ART OF CENTRAL AFRICA (3)
Study of the arts, crafts and architecture of Central Africa from prehistoric times to present.

ART 52031
GREEK ART AND ARCHAEOLOGY (3)
Greek art and architecture from earliest times through the Hellenistic period with special attention given to recent archaeological discoveries.

ART 52032
ROMAN ART AND ARCHAEOLOGY (3)
Introduction to archaeology of the Roman world. Emphasis on discoveries and impact on the study of Italic, Etruscan and Roman art, architecture and sculpture through Imperial period.

ART 52036
MEDIEVAL ART (3)
Emphasis on major periods of Medieval art (Byzantine, Carolingian, Ottonian, Romanesque and Gothic), treating iconographic themes and styles in a variety of media.

ART 52039
GOTHIC ART: 12TH TO 15TH CENTURIES (3)
An examination of the development of European Gothic art from the 12th to the 15th centuries. Students will research specific works of art. The course will put emphasis on contemporary, historical, philosophical and literary figures.

ART 52041
ITALIAN RENAISSANCE ART (3)
Study of development of major themes in Italian art from 1400 until about 1550, emphasizing achievements of the masters and analyzing major ideas and theories of the period.

ART 52042
NORTHERN RENAISSANCE ART (3)
Study of stylistic and iconographic questions and technique in northern panel painting as well as other arts in northern Europe.

ART 52046
BAROQUE ART OF THE 17TH CENTURY (3)
A study of the origins of baroque art in Italy and its spread throughout Flanders, the Netherlands, France and Spain.

ART 52047
ROCOCO ART OF THE 18TH CENTURY (3)
A study of 18th-century art in France and subsequent spread and development throughout continental Europe.

ART 52051
EUROPEAN ART: 1750-1900 (3)
Selected studies in late-18th-century and 19th-century painting, sculpture, architecture and allied arts of England, France, Germany and Spain.

ART 52058
AMERICAN FILM, PHOTOGRAPHY, ART AND IDEAS (3)
Key examples from colonial through postmodern American photography, film, video, fine and graphic arts examined within the broader context of Western cultural and intellectual history.

ART 52061
EARLY 20TH-CENTURY ART (3)
A study of painting, sculpture, architecture and allied arts in Europe from 1880 to 1940.

ART 52066
LATE MODERN ART SINCE 1940 (3)
A study of painting, sculpture and allied arts in the United States and Europe from 1940 to the present.

ART 52070
HISTORY OF GRAPHIC DESIGN (3)
This course traces the arts of visual communication from their origins to current trends and practices with an emphasis on theory and aesthetics.

ART 52078
HISTORY OF DECORATIVE AND APPLIED ARTS (3)
Historical and critical examination of decorative and applied arts and their relationship to Western societies that produced them.

ART 52080
FRANK LLOYD WRIGHT (3)
Examination of the life, buildings and literary works of Frank Lloyd Wright with emphasis on his contributions to American art and architecture and his place in American intellectual history.

ART 52095
SPECIAL TOPICS: ART HISTORY (1-3)
Discussion and lecture course whose topic changes in accordance with the interest and competence of the faculty. Precise title will be inserted in Schedule of Classes.
ART 54091
STUDIO SEMINAR: SELECTED TOPICS (3)
Contemporary issues related to visual arts explored through presentation, lecture and discussion. Guest speakers augment staff. Repeatable for a total of 9 hours. Special fee: $2 per semester hour (subject to change).

ART 55095
CRAFTS: SELECTED TOPICS (3)
Specialized courses in crafts that focus on specific techniques and media. Prerequisite: Permission. Special fee: $18 per credit hour (subject to change).

ART 61001
SEMINAR IN ART EDUCATION (3)
Required of Master of Arts students in art education. Appropriate course for graduate students in education, art and other graduate programs. Historical analysis of art education foundations. Prerequisite: Certification and permission for art education graduate students. Permission for nonmajors.

ART 61003
PROBLEMS AND ISSUES IN ART EDUCATION (3)
Required of Master of Arts students in art education. Appropriate course for graduate students in education, art and other graduate studies. Trends in art education. Prerequisite: ART 61001 and permission.

ART 61095/71095
SPECIAL TOPICS: ART EDUCATION (3)
A course in which the topic changes to reflect the interests and specializations of faculty. Prerequisite: ART 61198 and instructor’s permission.

ART 61096
INDIVIDUAL STUDY— ART EDUCATION (2-10)
Specialized study leading to the thesis in art education. IP permissible. Prerequisite: ART 61001, 61003, 61198 and permission.

ART 61198
RESEARCH IN ART EDUCATION (3)
Specialized research leading to the thesis in art education. IP permissible. Prerequisite: ART 61001, 61003 and permission.

ART 61209
CANDIDACY REVIEW EXAMINATION: ART EDUCATION (1)
This comprehensive review is a formal assessment of students’ knowledge and understanding of concepts in art, education and art education. Prerequisite: ART 61198 and instructor’s permission. S/U and IP grading.

ART 61298
MASTER’S PROJECT: ART EDUCATION (2)
A course for guiding the design, preparation of drafts, and presentation of the terminal project in the nonthesis track of the M.A. program in Art Education. Prerequisite: ART 61209 and instructor’s permission. S/U and IP grading.

ART 62056
AMERICAN ART: 1600-1860 (3)
Intensive survey of the major forms of art, styles, personalities, patrons, institutions and esthetic theories in the United States from its beginnings to the Civil War.

ART 62057
AMERICAN ART: 1860-1940 (3)
In-depth study of American painting, sculpture, graphics and allied arts from 1860 to 1940.

ART 62071
HISTORY OF PRINTS (3)
A chronological survey of printmaking (engraving, etching, lithography, etc.) from 1400 to the present, emphasizing its technical and stylistic evolution.

ART 62072
INTRODUCTION TO MUSEOLOGY (3)
Art elective course providing insights into the history of collecting, growth of museums and the scope of the museum field and specialized professional areas involved.

ART 62075
FILM AND PHOTOGRAPHY IN WESTERN ART AND IDEAS (3)
Selected studies of film and photography within the broader context of Western realism and ideas. Prerequisite: ART 12001, 22007 or 42051 recommended.

ART 62091
ART HISTORY SEMINAR (3)
Open format course with topics announced in advance. Designed to allow in-depth examination of selected topics. May be repeated up to a total of 9 hours.

ART 62095
SPECIAL TOPICS: ART HISTORY (3)
Discussion and lecture course whose topic changes in accordance with the interest and competence of the faculty. Special focus on problems and issues in the different areas of the discipline.

ART 62096
SELECTED PROBLEMS — ART HISTORY (3)
The course content changes each semester according to the topic, entailing discussion and lectures on specific problems, issues and areas in art history. Repeatable for a total of 9 hours. Prerequisite: Permission.
ART 62098
RESEARCH (1-15)
Independent research open only to art history graduate students who have completed course requirements for the Master of Arts degree.

ART 63220
GRAPHIC DESIGN STUDIO SEMINAR (2-10)
Experience in design studio, agency or company involving design responsibilities and procedures in area related to students' particular interests.

ART 64000
ADVANCED DRAWING STUDIO (3)
Conceptual basis of drawing investigated in relation to personal need and interest. Repeatable for a total of 9 hours.

ART 64040
PRINTMAKING: INDIVIDUAL STUDY (2-10)
Continuation of ART 54040 with emphasis on personal direction and printing of editions. IP permissible. Prerequisite: Permission. Special fee: $8 per credit hour (subject to change).

ART 64050
SCULPTURE: INDIVIDUAL STUDY (2-10)
Continued development of a personal direction in sculpture. IP permissible. Special fee: $15 per credit hour (subject to change).

ART 64060
PAINTING: INDIVIDUAL STUDY (2-10)
Individual study, painting. IP permissible. Prerequisite: Permission. Special fee: $8 per credit hour (subject to change).

ART 64098
RESEARCH (1-15)
Studio research in the visual arts.

ART 65991
SEMINAR IN CRAFTS (2)
Contemporary issues and professional concerns in the crafts explored through presentations, lectures and discussion. Graduate faculty and guest speakers.

ART 65996
INDIVIDUAL STUDY: CRAFTS (1-15)
Independent study in ceramics, glass, enamels, jewelry/metal or fiber arts. IP permissible. Special fee: $16 per credit hour (subject to change).

ART 67199
M.A. THESIS I (2-6)
Thesis students must register for a minimum of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

ART 67299
M.A. THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: ART 67199.

ART 69199
M.F.A. THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

ART 69299
M.F.A. THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: ART 69199.
The mission of the School of Exercise, Leisure and Sport is to enhance the quality of life of those we serve by generating and applying knowledge related to human movement, recreation and sport. At the graduate level the school strives to advance knowledge while promoting leadership development of graduate students in those diverse yet interrelated academic areas, through instruction, research and related internship experiences. The ultimate aim is to generate new knowledge, nurture attitudes and appreciations, and deliver information and services.

The School of Exercise, Leisure and Sport offers graduate study leading to the Master of Arts degree in exercise, leisure and sport and the Doctor of Philosophy degree in physical education. A certificate program in Athletic Coaching is also available.

The graduate programs are designed to enable students to assume key positions in research, teaching and administration in sport and leisure settings, including exercise physiology, sport and recreation management, therapeutic recreation and sport pedagogy. For more information, visit the school’s Web site at http://dept.kent.edu/sels.

**Master of Arts**

The Master of Arts degree is offered in five concentrations: exercise physiology, sport studies, sport and recreation management, teacher education in physical education and therapeutic recreation. Credit hours required for the degree vary from 32 to 40 hours depending upon the concentration selected. For course-specific listings and complete program requirements for each concentration, please contact the offices of the School of Exercise, Leisure and Sport. The overall purpose of each concentration varies and provides opportunities for students to specialize in an area of interest. Selection of a concentration is based on a student’s interests, background and future professional goals. Students select either a thesis or nonthesis option in the chosen concentration. Students expecting to pursue doctoral study are strongly encouraged to select a thesis option.

**ADMISSION**

Students are not required to have an undergraduate degree in physical education to be admitted to the Master of Arts program.

In addition to regular application requirements, applicants to the exercise physiology concentration should present a substantial record of experiences in sciences basic to the study of exercise physiology and gerontology, including basic organic, physiological or biological chemistry. Courses in biology, mathematics, psychology and physics are also desirable. A minimum undergraduate grade point average of 2.75 on a 4.0 scale is normally required. In some cases, a student with a lower grade point average may be admitted on a conditional basis. Applicants to the M.A. program must submit scores from their Graduate Record Examination, the Miller Analogies Test, Graduate Management Admission Test or other standardized test (prior approval necessary) as required by each individual concentration area. Applicants must submit recommendations from three former professors and a Career Goal Statement listing a student’s background and goals.
Students may also be considered for admission if they have relevant professional experiences and/or have completed designated postbaccalaureate coursework. Students must consult with the graduate coordinator prior to undertaking these alternative steps for admission.

PROGRAM REQUIREMENTS
The departmental requirements are ELS 63050 (Research Processes in Exercise, Leisure and Sport) and 63018 (Ethics in Exercise, Leisure and Sport). Following, or concurrent with, enrollment in courses taken to fulfill the departmental requirements, students complete courses identified as concentration requirements that are unique to the chosen concentration. Specific concentration program sheets may be obtained from the graduate coordinator.

More specific information, including details of transfer and transient credit, course substitutions, internship involvement, etc., is available from the graduate coordinator. Generally, application for transfer hours should be submitted along with regular application materials. Transient credit must be approved prior to commencing the course of study. Substitution of courses must be approved by the advisor, graduate coordinator and school director before the proposed substitution begins. When concentration requirements specify a course that may be repeated, such as ELS 63098 (Research), or allow for variable hours, such as internship, the maximum number of hours that may be credited toward fulfillment of degree requirements is specified.

Any deficiencies in a doctoral student's academic preparation must be corrected very early in the approved academic program.

Specific requirements and deficiencies are determined by the student's academic advisor and filed with the school in the first year. The following course groupings are used as guidelines for program planning:

1. Departmental Requirements (6)
2. Research Tools (12)
3. Exercise Physiology Concentration (28-30)
4. Research (2-15)
5. Dissertation (30)

Courses (ELS)

ELS 50612
PRACTICUM IN RESEARCH FITNESS PROGRAMS FOR THE ELDERLY (3)
This is a practicum experience in which students prescribe, supervise and educate older adults during exercise. Laboratory experiences are required in the physiology and cognition areas. Repeat registration permitted. IP permissible. Prerequisite: Permission.

ELS 53093
VARIABLE TITLE WORKSHOP IN EXERCISE, LEISURE AND SPORT (1-3)
Workshop in exercise, leisure and sport studies; topics vary. Repeat registration permitted. Maximum 4 hours may be applied to degree. S/U grading.

ELS 55015
PSYCHOLOGY OF COACHING (3)
Factors affecting athletic performance emphasizing skill, motivation, personality and practice conditions.

ELS 55020
CONTEMPORARY ATHLETIC COACHING (3)
A focus on the philosophy, skills, strategies and tactics of coaching within contemporary society.

ELS 55022
EVENT PLANNING AND PRODUCTION (3)
Students will learn the proper planning process that all sport events undergo. Students will then apply these concepts in actual events that they develop and hold.

ELS 55023
MARKETING AND PROMOTIONS IN SPORT AND RECREATION (3)
Analysis of marketing from a sport and recreation manager's perspective. Emphasis on marketing strategy and tactics in sport and recreation systems. Extensive use of case studies.
ELS 55051
ELEMENTARY SCHOOL PHYSICAL EDUCATION METHODS (3)
Approaches to teaching in elementary school physical education. Focusing on sequential curriculum development and on learning outcomes in three domains. Prerequisite: Permission.

ELS 55053
ELEMENTARY SCHOOL PHYSICAL EDUCATION CONTENT (3)
Physical education content for the elementary school child with emphasis on developmentally appropriate learning in three domains. Prerequisite: Permission.

ELS 55058
SECONDARY SCHOOL PHYSICAL EDUCATION METHODS (3)
Approaches to teaching in secondary school physical education. Focus on sequential curriculum development and on learning outcomes in three domains. Prerequisite: Permission.

ELS 55059
SECONDARY SCHOOL PHYSICAL EDUCATION CONTENT (3)
Introduction and development of content, management and organizational skills related to sports and activities utilized in secondary school physical education. Prerequisite: Permission.

ELS 55065
EXERCISE TESTING (3)
Lecture and laboratory experiences dealing with the administration and interpretation of exercise tests. Prerequisite: PEP 35075 and 45080, or permission.

ELS 55080
PHYSIOLOGY OF EXERCISE (3)
Physiological bases of muscular activity with special attention to general effects of exercise on body function. Laboratory included.

ELS 56000
TOURISM DEVELOPMENT AND RECREATIONAL TRAVEL (3)
Investigation of travel and tourism development using an interdisciplinary social science approach. Prerequisite: LEST 36060 or permission.

ELS 56030
DYNAMICS OF LEISURE BEHAVIOR (3)
Analysis of leisure behavior through examination of psychological theories and research. Prerequisite: LEST 36040 and 36075 and PEP 25068 or PSYC 21621, or permission.

ELS 56040
THERAPEUTIC RECREATION PROGRAM TECHNIQUES (3)
Intervention/facilitation techniques employed in therapeutic recreation practice. Integration of theory into program plans used in TR for treatment and leisure education services for people with illnesses or disabilities. Prerequisite: LEST 36080 or permission.

ELS 56041
MANAGEMENT OF THERAPEUTIC RECREATION SERVICES (3)
Techniques, approaches, procedures and practices in the provision of therapeutic recreation services. Prerequisite: ELS 56040 or permission.

ELS 56060
ADMINISTRATION OF LEISURE SERVICES (3)
Administrative practices of private and public leisure service agencies. Organization, philosophy, personnel and fiscal management, public relations and legal concerns will be examined. Prerequisite: LEST 36040, 36075, 36092 or 36192, or permission.

ELS 56070
RESOURCES FOR LEISURE (3)
Understanding the relationship between recreation resources (e.g., land and facilities) and the people who use them. This includes the design and management of public and commercial recreation places. Prerequisite: LEST 36040 and 36075, or permission.

ELS 56071
MAINTENANCE AND OPERATION OF AREAS AND FACILITIES (3)
A systems approach for effective maintenance and operation of areas and facilities. Prerequisite: LEST 36040 and 36075, or permission.

ELS 56080
LEISURE AND LAW (3)
Designed to alert potential recreational professionals to the litigious environment prevalent in the United States, increase awareness of their responsibility and risk management strategies. Prerequisite: LEST 36075, 36092 or 36192, or permission.

ELS 60610/70610
PHYSIOLOGY OF AGING: IMPLICATIONS FOR HUMAN BEHAVIOR (3)
Examine physiological changes that accompany advancing age. Special attention is paid to the effect of these changes on sensory, motor and cognitive behavior.

ELS 63018/73018
ETHICS IN EXERCISE, LEISURE AND SPORT (3)
Examination of selected situations in exercise, leisure and sport from an ethical reasoning perspective. A problem-oriented, case study approach based upon contemporary moral issues and moral theory.

ELS 63050
RESEARCH PROCESSES IN EXERCISE, LEISURE AND SPORT (3)
The research process and statistical concepts applied to exercise, leisure and sport.
ELS 63051
QUANTITATIVE AND RESEARCH METHODS IN EXERCISE, LEISURE AND SPORT (3)
Research design and statistical methods applied to exercise, leisure and sport. Prerequisite: ELS 63050.

ELS 63094/73094
COLLEGE TEACHING IN EXERCISE, LEISURE AND SPORT (2)
Guided teaching experiences in educational settings. Repeat registration permitted. Prerequisite: Permission.

ELS 63095/73095
RESEARCH SEMINAR (1)
Presentation and discussion of research by faculty and students. A total of 2 credits may be applied toward degree requirements. S/U grading.

ELS 63098
RESEARCH (1-15)
Research or individual investigation. Repeat registration permitted. IP permissible.

ELS 63193
VARIABLE TITLE WORKSHOP IN EXERCISE, LEISURE AND SPORT (1-3)
Workshop in exercise, leisure and sport; topics vary. Repeat registration permitted. Maximum 4 hours applied to the degree. S/U grading. Prerequisite: Permission.

ELS 63195
SPECIAL TOPICS IN EXERCISE, LEISURE AND SPORT (1-3)
Selected and varied topics of relevance in exercise, leisure and sport. Repeat registration permitted.

ELS 63199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a semester, distributed over several semesters if desired. S/U grading; IP permissible.

ELS 63299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: ELS 65199.

ELS 65005/75005
ROLE OF PERCEPTION IN MOTOR BEHAVIOR (3)
Exploration of perceptual processes important in the study of motor behavior. Emphasis on current research dealing with perceptual input that relates to motor function. Prerequisite: ELS 6/75030.

ELS 65006/75006
CONTEMPORARY ISSUES IN SPORT MANAGEMENT (3)
A comprehensive examination of current topics impacting administrations of professional and amateur sport programs from the local to international level.

ELS 65007/75007
MOTOR SKILL ACQUISITION AND PERFORMANCE (3)
Examination of contemporary motor learning and control theories and laboratory experiences, with emphasis upon motor skill acquisition and performance as studied experimentally. Laboratory included. Prerequisite: ELS 6/75030.

ELS 65008/75008
SOCIOLOGY OF SPORT AND PHYSICAL ACTIVITY (3)
Sociological analysis of sport from a theoretical and empirical perspective. Prerequisite: ELS 6/75006.

ELS 65021
ORGANIZATION/MANAGEMENT OF SPORTS PROGRAMS (3)
A study of the pragmatic understanding necessary in the organization and management of a sports program at the high school, college or professional level.

ELS 65023
LEARNING THEORIES APPLIED TO ELEMENTARY PHYSICAL EDUCATION (2)
A study of movement learning theorists relevant to perceptual motor development of the elementary school child.

ELS 65024/75024
MOVEMENT FOUNDATIONS IN SPORT PEDAGOGY (3)
An examination of the movement education approach in physical education, its impact and implications at all levels.

ELS 65025
CONTEMPORARY ISSUES IN SPORT PEDAGOGY (3)
Investigation and study of current problems, issues and trends in sport pedagogy. Prerequisite: ELS 65044 and 65055.

ELS 65030/75030
MOTOR LEARNING AND DEVELOPMENT (3)
Current theories and practices in motor learning and motor development. Prerequisite: ELS 55010 or equivalent.

ELS 65031/75031
SOCIAL PSYCHOLOGY OF SPORT AND RECREATION (3)
Psychological, social and developmental factors of participation and behavior in sport, exercise and recreational activities. Theoretical and applied perspectives addressed.

ELS 65032/75032
EVALUATION AND REMEDIATION OF PERCEPTUAL MOTOR DEFICITS (3)
Evaluation techniques in the assessment of perceptual motor deficits and remedial programming implications. Prerequisite: ELS 6/75030 or permission.
Exercise, Leisure and Sport

ELS 65033
LEGAL ISSUES IN SPORT AND RECREATION (3)
Provides students with a basic understanding of tort, contract and constitutional law in relation to sport and leisure.

ELS 65034/75034
CONTEMPORARY SPORT LAW (3)
Legal principles of antitrust law, injunctions, labor law and agency in sport, with a focus on professional sports. Prerequisite: PERD 65033 or equivalent.

ELS 65036
SPORT IN HIGHER EDUCATION (3)
Identification of contemporary problems and issues in collegiate sport, their history and the role of sport in colleges and universities, now and in the future.

ELS 65038/65038
SPORT PROMOTION AND FUNDRAISING (3)
Analysis of contemporary sports promotions strategies as well as fundraising tactics.

ELS 65039
FINANCIAL ASPECTS OF SPORT AND RECREATION (3)
Review of basic accounting, sources and uses of funds, capital budgeting, leasing and investments as they apply in a sports and recreation context. Financial software used in the sport and recreation industry will be introduced.

ELS 65040
HANDICAPPING CONDITIONS IN MOTOR BEHAVIOR (3)
Theoretical and applied study of the various handicapping conditions affecting motor behavior, including developmental, neurological, perceptual, orthopedic, cognitive, behavioral, social, psychological and aging factors. Prerequisite: PEP 45037 or permission.

ELS 65042
LEADERSHIP OF SPORT AND RECREATION (3)
Study of theoretical and applied constructs foundational to the leadership behavior applied to sport and recreation.

ELS 65043/75043
SUPERVISION PROCESSES IN SPORT PEDAGOGY (3)
A course designed to enhance ability to develop more effective teaching/learning environments through the use of systematic observation and application of supervisory theory.

ELS 65044
PEDAGOGICAL ANALYSIS OF PHYSICAL EDUCATION AND SPORT (3)
An analysis of contemporary pedagogical models, practices and theories relevant to the multidimensional environments of physical education and sport.

ELS 65046
FACILITY MANAGEMENT AND OPERATIONS (3)
Analysis of management competencies necessary to operate sport, recreation, convocation or convention facilities. Conceptual and technical aspects of planning and design introduced.

ELS 65055
CURRICULUM DEVELOPMENT IN SPORT PEDAGOGY (3)
The analysis, development and design of curricular theory and practice in physical education and sport. An examination of current and future issues in curriculum implementation.

ELS 65060
THERAPEUTIC EXERCISE (2)
The application of the principles of exercise to specific defects, with particular reference to sports medicine.

ELS 65061/75061
PHILOSOPHICAL AND SOCIAL BASES OF LEISURE AND SPORT (3)
Overview of philosophical and social foundations of leisure and sport. Contemporary theories and perspectives will be examined.

ELS 65062
CONTEMPORARY ISSUES IN LEISURE AND RECREATION (3)
Seminar to identify contemporary problems in recreation and leisure, and seek methods for their resolution. Prerequisite: Permission.

ELS 65063
ADMINISTRATIVE PROBLEMS IN RECREATION AND LEISURE SERVICES (3)
Special problems in recreation and leisure service agencies, legal powers and liability, departmental organization, financing, personnel policies and human resource development. Prerequisite: LEST 46060 or ELS 56060.

ELS 65064
CONCEPTS AND TECHNIQUES IN THERAPEUTIC RECREATION (3)
Issues in the application of concepts in therapeutic recreation from a multidisciplinary perspective; study of evaluation and research. Prerequisite: LEST 46041 or ELS 56041.

ELS 65080/75080
PHYSIOLOGICAL BASIS OF EXERCISE AND SPORT (3)
Application of physiological concepts to human performance. Includes role of testing, training strength and endurance, nutritional considerations, environmental influences and adapted exercise programs. Prerequisite: ELS 55080 or equivalent.
ELS 65081/75081
ENERGY METABOLISM AND BODY COMPOSITION (3)
Measurement of metabolic response to exercise. Topics include
ergometry, spirometry, energy expenditure, body composition
and performance correlates of strength, power and endurance.
Prerequisite: ELS 55080 or equivalent, undergraduate chemistry
and physics recommended.

ELS 65082/75082
CARDIO-RESPIRATORY FUNCTION (3)
Measurement of the cardiovascular-respiratory response to
exercise. Includes resting spirometry, lung function during
exercise, electrocardiography, blood pressure, PWC testing and
exercise prescription. Prerequisite: ELS 55080 or equivalent,
undergraduate chemistry and physics recommended.

ELS 65092
INTERNSHIP IN SPORT AND RECREATION MANAGEMENT (24)
Field experience involving supervised contact with sport and
recreation administrators. Students will work as understud-
ies with these administrators in all phases of their positions.
Repeat registration permitted. IP permissible.

ELS 65192/75192
INTERNSHIP IN PHYSICAL FITNESS TESTING PROGRAMS (2-8)
Field experience in physical fitness programs and testing in
Kent State adult fitness program cooperating agencies. S/U
gradning; IP permissible. Repeat registration permitted. Prereq-
usite: Permission.

ELS 65292
INTERNSHIP IN LEISURE STUDIES (1-4)
Field experience involving supervised contact with recreation
and leisure professionals. Involves experience in all phases of
agency administration. Repeat registration permitted. S/U
grading; IP permissible. Prerequisite: Permission.

ELS 65392
ADVANCED PRACTICUM IN PHYSICAL EDUCATION (10)
A sixteen-week practicum in K-12 physical education, combin-
ing full-time student teaching and student teaching seminar.
Eight weeks of student teaching at the preschool- to fifth-
grade level and eight weeks at the sixth- to twelfth-grade level.
S/U grading; IP permissible. Prerequisite: Permission.

ELS 65592/75592
INTERNSHIP IN MOTOR DEVELOPMENT (1-12)
Supervised and supervisory experiences in motor develop-
ment for all ages and abilities, including conceptual bases
for assessment, individualizations, task analysis. Maximum of
6 hours applies to degree. Repeat registration permitted. IP
permissible. Prerequisite: Permission.

ELS 65692
INTERNSHIP IN ATHLETIC COACHING (2-4)
Supervised experience in organized sport focused upon the
duties of a coach; can be at one or more levels (youth, school,
college, professional) and sports. A focus on the philosophy,
skills, strategies and tactics of coaching within contemporary
society. S/U grading; IP permissible. Prerequisite: Permission.

ELS 65792
INTERNSHIP: SPORT STUDIES (1-6)
Supervised field experience in a sport or physical education
setting. 60 hours of involvement per credit. S/U grading; IP
permissible. Prerequisite: Permission.

ELS 73020
KNOWLEDGE GENERATION IN EXERCISE, LEISURE AND
SPORT (3)
This course examines issues involved in the generation,
organization, dissemination, and use of scientific and scholarly
knowledge in exercise, leisure and sport.

ELS 73052
ADVANCED RESEARCH DESIGN AND STATISTICS IN EXERCISE,
LEISURE AND SPORT (3)
Advanced topics in research and statistical analysis with com-
puter applications in exercise, leisure and sport. Prerequisite:
Permission.

ELS 75004
BIOMECHANICS (3)
Survey of biomechanics, with particular emphasis on skeletal
muscle mechanics.

ELS 75075
MUSCLE FUNCTION AND EXERCISE (3)
Characteristics of skeletal muscle related to contraction during
exercise, strength, elasticity, fatigue and training. Electromyo-
graph analysis of muscle function emphasized. Lecture and
laboratory. Prerequisite: ELS 55080 and 75004 and doctoral
standing.

ELS 75076
ENVIRONMENTAL STRESS AND EXERCISE (3)
Effects of heat, cold, pressure, pollution and psychological
stress upon physiological responses to exercise. Lecture and
laboratory. Prerequisite: Permission.

ELS 75083
EXERCISE ENERGY METABOLISM (3)
Energy transformations during exercise. Emphasis on control-
ling mechanisms that regulate the anabolic and catabolic
responses to both acute and chronic exercise. Prerequisite: ELS
65081, 65082 and biochemistry.
Exercise, Leisure and Sport

ELS 75084
CARDIOVASCULAR/RESPIRATORY DYNAMICS DURING EXERCISE (3)
Responses of the cardiovascular and respiratory systems to exercise. Use of noninvasive methods to measure cardio-respiratory function emphasized. Lecture and laboratory. Prerequisite: ELS 65081 and 65082.

ELS 75085
ANTHROPOMETRY AND BODY COMPOSITION IN THE EXERCISE SCIENCES (3)
Theory of selected procedures for the measurement of body composition and physique and their applications in the sports sciences. Laboratory seminar format. Prerequisite: ELS 65081 and permission.

ELS 75097
COLLOQUIUM IN SPORT AND RECREATION STUDIES (3)
Consideration of current scholarly issues in sport and recreation studies related to potential student research topics. Repeatable with permission.

ELS 83098
RESEARCH (1-5)
Research for doctoral students. Repeat registration permitted. IP permissible. Prerequisite: Permission.

ELS 83199
DISSERTATION I (15)
Doctoral dissertation, for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until the completion of 30 hours. S/U grading; IP permissible. Prerequisite: Admission to candidacy for doctoral degree and permission.

ELS 83299
DISSERTATION II (1 or 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: ELS 83199.
FAMILY AND CONSUMER STUDIES

Mary Dellmann Jenkins, Director
100 Nixson Hall
330-672-2197
mdellman@kent.edu

Maureen Blankemeyer, Coordinator of Graduate Studies
100 Nixson Hall
330-672-9397
mblankem@kent.edu

The School of Family and Consumer Studies offers programs of graduate study leading to the Master of Arts degree in Family Studies and the Master of Science degree in Nutrition. Both programs prepare students for professional positions that contribute to the well-being of individuals and families, and prepare quality students for entry into related doctoral programs. A Certificate in Gerontology is available for graduate students seeking advanced knowledge and expertise in the field of aging.

Visit http://dept.kent.edu/f&cs/ for more information.

Master of Arts

The Master of Arts program offers two options: Family Life Professional and Gerontology. The Family Life Professional option provides students with advanced knowledge in the fields of family sciences and human development and the opportunity to develop multidisciplinary research and community outreach skills. Coursework in this graduate option enables students to apply to become Certified Family Life Educators (CFLE). Kent State is one of only two CFLE-approved graduate programs in Ohio. Family Life Professional graduates are prepared for leadership and teaching positions in the social services, junior and community colleges and cooperative extension.

The option in Gerontology provides students with an interdisciplinary course of study and opportunities to participate in aging-related research and community outreach projects. Students are assisted in developing a specialty area in gerontology that will enable them to advance in their professional or academic careers.
Family and Consumer Studies

ADMISSION
In addition to regular application requirements of the university, admission to the Master of Arts degree program requires the following:

1. An undergraduate grade point average of 3.0 (A=4.0).
2. Submission of scores on the general test of the Graduate Record Examination.
3. Submission of at least three letters of recommendation from persons familiar with the applicant’s academic background.
4. Submission of a letter of application describing the applicant’s professional/research goals.

PROGRAM REQUIREMENTS
Core courses required in both options include FCS 64023, 61018 and EDUC 65510. Option I, Family Life Professional, requires 32 semester hours including either a master’s thesis or master’s project. Option II, Gerontology, requires 33 credit hours including a thesis. Detailed program outlines may be obtained from the School of Family and Consumer Studies.

Master of Science

The Master of Science program offers two options: Nutrition and Nutrition and Gerontology. Both options provide students with advanced specialization in the field of nutritional sciences and opportunities to participate in interdisciplinary research in laboratory and community settings. Students choosing the Nutrition and Gerontology option will be assisted in developing a specialty area in the field of aging. Students in both M.S. programs can choose to become prepared for positions as nutritionists in clinical, community, wellness-exercise and research settings. Recent expansion of this program includes the establishment of a Dietetic Internship concentration approved by the American Dietetics Association and a Human Nutrition Laboratory. Upon completion of the 21-credit program and all Master of Science degree requirements, students will be eligible to take the registration exam to become registered dietitians. The Human Nutrition Research Laboratory provides students the opportunity to work side-by-side with researchers using state-of-the-art clinical laboratory equipment.

ADMISSION
In addition to regular application requirements of the university, admission to the Master of Science degree program requires the following:

1. An undergraduate grade point average of 3.0 (A=4.0).
2. Coursework in biochemistry and advanced nutrition.
4. A letter of intent describing the applicant’s professional/research goals.

PROGRAM REQUIREMENTS
Core courses required in both concentrations include NUTR 63519, 63520, 63521, FCS 61018 and EDUC 65510. A master’s thesis or master’s project is required. The concentration in nutrition requires 32 semester hours, including a master’s thesis or master’s project, while the concentration in nutrition and gerontology requires 36 credit hours, including a master’s thesis. Detailed program outlines may be obtained from the School of Family and Consumer Studies.

Gerontolgy Certificate

Kent State University and The University of Akron together offer a graduate-level Certificate in Gerontology, which may be received in conjunction with degrees from either institution at the specialist’s, master’s or doctoral levels. Students thus receive basic preparation in their selected discipline or major while concurrently obtaining specialized training in gerontology through the certificate program. Coursework completed at either institution may be applied to the certificate program. The two universities are located within a 15-minute drive from each other.

To be eligible for the Graduate Gerontology Certificate Program, a student must be matriculated in a graduate degree program or hold a graduate degree from an accredited institution. Students may be admitted with nondegree status, but they must complete a graduate degree program prior to being awarded the certificate.

The certificate program is flexible with minimal required coursework beyond those needed to complete degree requirements. Students can tailor the courses taken toward completion of the certificate to meet their unique professional interests. A thesis or dissertation may be applied toward certificate requirements if it involves an aging-related topic. At least 12 of the required hours are to carry 600-level (University of Akron), 60000-level (Kent State University) or above designation. A maximum of 3 credit hours is transferable from outside the university. Certificate completion is acknowledged by special notation on student transcripts.

The certificate program requires 18 credit hours of graduate coursework as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Required Course</td>
<td></td>
</tr>
<tr>
<td>Interdisciplinary Seminar</td>
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<tr>
<td>Psychosocial Gerontology</td>
<td>3</td>
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<tr>
<td>Research Methods</td>
<td>3</td>
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<tr>
<td>Biology of Aging,</td>
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<tr>
<td>Physiology of Aging or Equivalent</td>
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<td>Electives</td>
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<td>Research or Practicum</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
</tr>
</tbody>
</table>

To be eligible for the Graduate Gerontology Certificate Program, a student must be matriculated in a graduate degree program or hold a graduate degree from an accredited institution. Students may be admitted with nondegree status, but they must complete a graduate degree program prior to being awarded the certificate.
The certificate program is based on the recommended standards of excellence established by the Association for Gerontology in Higher Education. The faculty at both Kent State University and The University of Akron are nationally and internationally recognized scholars in gerontology. Many are Fellows of the Gerontological Society of America (www.geron.org). Faculty are available to assist students with course selection, research projects and other matters of interest in the field of gerontology.

Additional information and application materials are available from our Web sites: http://dept.kent.edu/f&cs or http://www3.uakron.edu/ilsdg/. Interested students should contact one of the certificate directors below:

Gregory Smith, Ed.D., Director
Human Development Center
Kent State University
100 Nixson Hall
Kent, OH 44242-0001
330-672-9993
Fax: 330-672-2194
gsmith2@kent.edu

Harvey L. Sterns, Ph.D., Director
Institute for Life-Span Development and Gerontology
The University of Akron
Arts & Sciences Building — Suite 340
Akron, OH 44325-4307
330-972-7243
Fax: 330-972-5174
hsterns@uakron.edu

### Courses (FCS)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCS 51093</td>
<td>VARIABLE TITLE WORKSHOP IN FAMILY AND CONSUMER STUDIES</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>Workshop setting dealing with a topic or topics in family and consumer studies. Learning experiences are provided in a wide range of areas. S/U grading.</td>
<td></td>
</tr>
<tr>
<td>FCS 51095</td>
<td>SPECIAL TOPICS IN FAMILY AND CONSUMER STUDIES (1-4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discussion of a major topic within a specific field of Family and Consumer Studies.</td>
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</tr>
<tr>
<td>FCS 51096</td>
<td>INDIVIDUAL INVESTIGATION (1-3 in each area)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independent study in human development, family studies and/or gerontology. Prerequisite: Written permission from instructor.</td>
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<tr>
<td>FCS 54020</td>
<td>ADOLESCENT DEVELOPMENT (3)</td>
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<tr>
<td></td>
<td>Adolescent development with emphasis on forces related to adolescent behavior. Evaluation of current research. Prerequisite: FCS graduate student standing.</td>
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<tr>
<td>FCS 54021</td>
<td>FAMILY INTERVENTION ACROSS THE LIFE SPAN (3)</td>
<td></td>
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<tr>
<td></td>
<td>Evaluation of research and theoretical models in the area of family intervention. Focus on strategies for assisting families in coping with a variety of critical issues over the family life cycle. Prerequisite: FCS graduate student standing.</td>
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<tr>
<td>FCS 54023</td>
<td>BUILDING FAMILY STRENGTHS (3)</td>
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<tr>
<td></td>
<td>The Building Family Strengths Model builds upon family life potential, based on extensive research emphasizing identified family strengths. Prerequisite: FCS graduate student standing.</td>
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<tr>
<td>FCS 54028</td>
<td>PARENT-CHILD RELATIONSHIPS (3)</td>
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<tr>
<td></td>
<td>Study of parent-child relationships across the life span and within various contexts. Emphasis on the process of socialization and determinants of parent-child relationships based on current research. Prerequisite: FCS graduate student standing.</td>
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<tr>
<td>FCS 54029</td>
<td>FAMILY POLICY (3)</td>
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<tr>
<td></td>
<td>Understanding federal, state and local policy issues affecting families. Role of family life educator in promoting a family-friendly perspective in policy-making.</td>
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<tr>
<td>FCS 54030</td>
<td>ADULT DEVELOPMENT AND AGING (3)</td>
<td></td>
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<td></td>
<td>Examines developmental processes across adulthood. Evaluation of theoretical models and scientific literature.</td>
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<tr>
<td>FCS 54092</td>
<td>PRACTICUM IN INDIVIDUAL/FAMILY STUDIES AND GERONT OLOGY (3-10)</td>
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<tr>
<td></td>
<td>Observation and participation in services offered by family and childcare agencies. May register for 3 to 10 credits in any one semester. Prerequisite: FCS graduate student standing.</td>
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<tr>
<td>FCS 55514</td>
<td>THE CONSUMER FAMILY IN TODAY'S SOCIETY (2)</td>
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<tr>
<td></td>
<td>Study of current and future role of consumer families relevant to consumption, alternatives and priorities. Prerequisite: Economics, consumer or family economics, 2 semester hours.</td>
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<tr>
<td>FCS 61018</td>
<td>TECHNIQUES OF RESEARCH IN FAMILY AND CONSUMER STUDIES (3)</td>
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</tr>
<tr>
<td></td>
<td>Introduction to the types of research and methods of data collection applied to a project of student's choice.</td>
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</tbody>
</table>
Family and Consumer Studies

FCS 61091
SEMINAR (2-3 in each area)
Evaluation and interpretation of recent literature in human development, family studies and/or gerontology. Topic selected for semester will be indicated in the Schedule of Classes.

FCS 61098
RESEARCH (1-15)
Research for master's-level graduate students. Credits earned may be applied toward meeting degree requirements if school approves. Repeat registration permitted. IP permissible.

FCS 61199
THESIS I (2-6)
Thesis students must register for total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

FCS 61299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: FCS 61199.

FCS 64022
FAMILY LIFE IN THE LATER YEARS (3)
Research on families in the later years is reviewed, with a particular emphasis on its utility to family life practitioners.

FCS 64023
FAMILY DEVELOPMENT (3)
Relationship and organization in family living occurring during family life cycle with implications for professionals who work with families. Prerequisite: FCS 24011 or equivalent.

FCS 64024
FAMILY LIFE EDUCATION (3)
Developing community acceptance, teaching aids and techniques, and curriculum for family life education.

FCS 64025
STUDIES IN CHILD REARING (3)
Review and critical analysis of selected child-rearing studies in contemporary American society. Prerequisite: FCS 24012 or equivalent.

FCS 64027
EARLY ADOLESCENCE (3)
Examines the fundamental changes, social contexts and psychosocial processes involved in human development from ages eight through 15. Implications for working with this age group within schools and human service agencies.

FCS 65516
FAMILY RESOURCE MANAGEMENT (2)
Examines resource and financial management across the life cycle.

FCS 65517
WORK AND FAMILY (3)
Impact on family roles, life stage planning, career decisions and support systems. Responses and trends of public policy and corporate actions.

Gerontology (GERO)

GERO 51093
VARIABLE TITLE WORKSHOP IN GERONTOLOGY (1-3)
Workshop setting dealing with a topic or topics in the field of gerontology. Prerequisite: Graduate student standing. S/U grading.

GERO 51095
SPECIAL TOPICS IN GERONTOLOGY (1-4)
Discussion of a major topic or topics within the field of gerontology. Prerequisite: Graduate student standing.

GERO 51096
INDIVIDUAL INVESTIGATION IN GERONTOLOGY (1-3)
Independent study in the area of gerontology. Prerequisite: graduate student standing.

GERO 60120
INTERDISCIPLINARY SEMINAR IN GERONTOLOGY (3)
Course is designed to assist students in developing the knowledge and skills needed to understand major issues in gerontological theory, research and practice from a multidisciplinary perspective. Prerequisite: graduate student standing.

GERO 61191
INTERDISCIPLINARY SEMINAR IN GERONTOLOGY (3)
Course is designed to assist students in developing the knowledge and skills needed to understand major issues in gerontological theory, research and practice from a multidisciplinary perspective. Prerequisite: Graduate student standing and permission.

GERO 64022
FAMILY LIFE IN THE LATER YEARS (3)
Research on families in the later years is reviewed, with a particular emphasis on its utility to family life practitioners. Prerequisite: Graduate student standing.

Hospitality Management (HM)

HM 63024
MANAGEMENT OF FOOD AND NUTRITION SERVICES (3)
Management issues in health care, food and nutrition services, child nutrition programs and other noncommercial food services will be examined. The impact of quality standards, public policy and current societal trends upon management of noncommercial operations will be studied.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR 51093</td>
<td>VARIABLE TITLE WORKSHOP IN NUTRITION (1-3)</td>
<td>Workshop setting dealing with a topic or topics in the field of nutrition and dietetics.</td>
<td>Prerequisite: Graduate student standing. S/U grading.</td>
<td>1-3</td>
</tr>
<tr>
<td>NUTR 51095</td>
<td>SPECIAL TOPICS IN NUTRITION (1-4)</td>
<td>Discussion of a major topic within a specific field of nutrition and dietetics.</td>
<td></td>
<td>1-4</td>
</tr>
<tr>
<td>NUTR 51096</td>
<td>INDIVIDUAL INVESTIGATION IN NUTRITION (1-3)</td>
<td>Independent study in the area of nutrition and dietetics. Prerequisite: Graduate student standing.</td>
<td></td>
<td>1-3</td>
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<tr>
<td>NUTR 53013</td>
<td>EXPERIMENTAL METHODS IN NUTRITION (3)</td>
<td>Students will gain laboratory experience in biochemical methods of assessing nutrition status and the identification of nutrition-related conditions. Principles of experimental design and data analysis and techniques of scientific writing will be applied. Prerequisite: NUTR 33512. Special fee: $20 per semester.</td>
<td>Prerequisite: NUTR 33512</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 53016</td>
<td>CULTURAL ASPECTS OF FOOD, NUTRITION AND HEALTH (3)</td>
<td>Cultural overview of racial, ethnic and religious population groups residing in the United States and the impact on food habits, nutritional and health status and counseling concerns. Prerequisite: NUTR 23511.</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>NUTR 53513</td>
<td>ADVANCED NUTRITION (3)</td>
<td>Mechanisms through which nutrients meet human biological needs. Fundamental concepts underlying human nutrition. Evaluation and interpretation of research findings. Prerequisite: NUTR 33512, CHEM 30284 and BSI 30030.</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>NUTR 53515</td>
<td>COMMUNITY NUTRITION (3)</td>
<td>Introduction to nutrition problems and practices in community. Prerequisite: NUTR 33522 and 43513.</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>NUTR 53518</td>
<td>MATERNAL AND CHILD NUTRITION (3)</td>
<td>Nutrition requirements and problems: pregnancy, lactation, childhood and adolescence. Prerequisite: NUTR 33512.</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>NUTR 53520</td>
<td>NUTRITION FOR FITNESS (3)</td>
<td>This course will explore the relationship between nutrition, health and exercise. Dietary change of improved health and fitness will be discussed as well as the impact of diet and exercise on body composition and weight. Prerequisite: NUTR 33512.</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>NUTR 53521</td>
<td>FOOD CHOICES FOR PRESCRIBED DIETARY MODIFICATION (2)</td>
<td>Adapting adequate normal diet in terms of food choices to accommodate prescribed food restriction or bodily dysfunction. Not open to dietetic majors. Prerequisite: NUTR 23511 or equivalent.</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>NUTR 61018</td>
<td>TECHNIQUES OF RESEARCH IN FAMILY AND CONSUMER STUDIES (3)</td>
<td>Introduction to the types of research and methods of data collection applied to a project of student’s choice.</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>NUTR 61091</td>
<td>SEMINAR IN NUTRITION (2-3)</td>
<td>Seminar dealing with topics in the field of nutrition and dietetics. Prerequisite: Graduate student standing.</td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td>NUTR 61098</td>
<td>RESEARCH (1-15)</td>
<td>Research for master’s-level graduate students. Credits earned may be applied toward meeting degree requirements if school approves. Repeat registration permitted. IP permissible.</td>
<td></td>
<td>1-15</td>
</tr>
<tr>
<td>NUTR 61199</td>
<td>THESIS I (2-6)</td>
<td>Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.</td>
<td></td>
<td>2-6</td>
</tr>
<tr>
<td>NUTR 61299</td>
<td>THESIS II (2)</td>
<td>Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: NUTR 61199.</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>NUTR 63519</td>
<td>ADVANCED STUDY OF MICRONUTRIENTS (3)</td>
<td>Intake, digestion and absorption of nutrients. Prerequisite: NUTR 4/53513 or equivalent.</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>NUTR 63520</td>
<td>MACRONUTRIENT NUTRITION (3)</td>
<td>Metabolic utilization of macronutrients for body processes. Prerequisite: CHEM 30284 and NUTR 4/53513.</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
NUTR 63521
NUTRITION AND DISEASE: CLINICAL APPLICATIONS (3)
Recent trends and concepts in research and practice of therapeutic dietetics. Prerequisite: NUTR 63519.

NUTR 63523
NUTRITION AND GERONTOLOGY (3)
Biochemistry of aging process and the interrelation of gerontology and nutrition. Prerequisite: NUTR 23511 or equivalent.

NUTR 63525
DIETETIC PRACTICE: COMMUNITY (1)
Discussion focusing on nutrition care in the community setting. Evaluation and interpretation of the scientific literature. Prerequisite: Graduate dietetic interns only.

NUTR 63526
DIETETIC PRACTICE: MANAGEMENT (1)
Discussion focusing on the management of food and nutrition services. Evaluation and interpretation of the scientific literature. Prerequisite: Graduate dietetic interns only.

NUTR 63527
DIETETIC PRACTICE: CLINICAL (1)
Discussion focusing on nutrition care in the acute practice setting. Evaluation and interpretation of the scientific literature. Prerequisite: Graduate dietetic interns only.

NUTR 63591
NUTRITION SEMINAR (1-3)
Evaluation and interpretation of recent literature in an area of nutrition. Topic selected will be indicated in the Schedule of Classes each semester offered.

NUTR 63592
DIETETIC INTERNSHIP (1-4)
Supervised practice component of dietetic internship. S/U grading. Prerequisite: Graduate dietetic interns only.
MUSIC

To Be Named, Director

Kazadi wa Mukuna, Coordinator of Graduate Studies
Music and Speech Center D107
330-672-3041
wcary@kent.edu

Graduate programs in music lead to the degrees Master of Arts, Master of Music or Doctor of Philosophy, all of which are accredited by the National Association of Schools of Music. Master of Arts degree majors are available in music composition, ethnomusicology, musicology and music theory. Master of Music majors are available in performance, conducting and music education. Doctor of Philosophy majors are available in music education, musicology-ethnomusicology and music theory and composition. Visit the school Web site at http://dept.kent.edu/music for more information.

ADMISSION
In addition to regular application requirements of the university, admission to the Master of Arts, Master of Music or Doctor of Philosophy programs requires the following:

1. At least three letters of recommendation from persons familiar with the applicant’s academic background, musicianship and teaching effectiveness. For prospective music education students, these letters should provide evidence of successful teaching experience.
2. Master’s degree applicants in performance and those individuals who are planning to take applied lessons at the graduate level, regardless of their degree program, must audition in their major performing medium. Students entering the M.M. program with a voice major will be expected to demonstrate proficiency in German, French and Italian diction. If a language deficiency is identified, the student will be required to take remedial language courses at the undergraduate level including Singer’s Diction, MUS 18611 and MUS 18612. Remedial courses will not count toward graduation. For students residing at an inconvenient distance from Kent, an audition tape may be sent to the coordinator of graduate studies. It should contain up to 30 minutes of material covering a variety of performance styles (and languages for vocalists). A list of repertoire studied in the past year should accompany the tape or be brought to the audition. While it is not required for admission, doctoral students planning to study applied music must audition. Students desiring return of the audition tape should enclose a self-addressed stamped envelope.
3. A resume of educational and professional achievements and a cover letter indicating future career goals.
4. Applicants for the Master of Arts in musicology, ethnomusicology, composition and theory should include an academic paper written in English (e.g., term paper). Composition majors must also include a portfolio of their original compositions.
5. Music education master’s and doctoral applicants must hold an accredited teaching certificate. Doctoral applicants in music education must also have a minimum of three years of successful teaching experience at elementary and/or secondary levels.
6. Doctoral applicants should include evidence of competence in written English, organizational skills and knowledge of basic research techniques. A master’s thesis or scholarly paper will satisfy this requirement. Doctoral students majoring in composition theory/composition should send several representative examples of recent compositions.

DIAGNOSTIC EXAMINATIONS
All entering master’s and doctoral students take diagnostic examinations in music theory and in music history prior to first enrollment. Based upon the examination results, the student may be required to take certain courses as a part of his/her program.

Students with an extensive background in a specific area may not be required to take any courses. Students with a generally good background may be required to take one or two graduate
Music

courses in one area. Students who are not fully prepared for graduate-level work in any area may be required to take the appropriate undergraduate practicum course (MUS 41111 or 42211) in addition to one or two graduate courses.

Graduate courses required as a result of the diagnostic examinations will be considered electives within the degree program except where required as part of the major program. If the number of hours required exceeds the number of elective hours in the program, this will result in a larger number of required hours than the minimum numbers listed below.

**Master of Arts and Master of Music**

**PROGRAM REQUIREMENTS**

Each student will be accepted as a major in a specific curricular area. It may be necessary for the student to complete Kent State University requirements for the appropriate undergraduate degree. A program of study leading to the master’s degree should be planned in consultation with the advisor. Students pursing the Master of Music may select one of the following options: a thesis option, an essay and recital option, a two-recital option, or a coursework option depending on their major. The Master of Arts program requires a thesis.

**SECONDARY APPLIED MUSIC**

Election of secondary instruments or secondary voice requires an audition and approval of the appropriate applied division.

**ENSEMBLE**

A maximum of two ensemble credit hours may be applied toward degree requirements. Students must petition the Graduate Studies Committee to count additional ensemble hours toward degree requirements.

**RESEARCH TOOL REQUIREMENT**

Candidates for the Master of Arts degree program in musicology or ethnomusicology must demonstrate a reading knowledge of one foreign language, normally German or French. With the approval of the advisor and the graduate studies committee, other languages may be substituted, especially for the student in ethnomusicology. Credit hours earned in meeting this requirement are not applicable toward the credit-hour requirement in the degree program.

**FINAL ORAL EXAMINATION**

All students writing a thesis or essay must pass a final oral examination covering the thesis or essay and the student's major area of study. A student electing the two-recital option must pass a final oral examination covering literature performed in recitals and the student's areas of performance and study in the degree. Those completing a coursework option must pass a final oral examination covering all of the coursework in the master's degree program. Students must register for at least 1 credit hour in the semester in which the final oral examination is taken. The final oral examination may be attempted two times.

**WORKSHOP CREDIT**

A maximum of 4 semester hours of workshop credit may be applied to certain graduate degrees. The hours must pertain to the degree emphasis. Workshop credit with grades of A or B may be transferred into a degree program.

### Master of Arts

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Music Composition</td>
<td>8</td>
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<tr>
<td>MUS 61211</td>
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<tr>
<td>MUS 62451</td>
<td>3</td>
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<tr>
<td>Select from MUS 61171, 61172, 71191</td>
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<tr>
<td>Electives</td>
<td>7</td>
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<tr>
<td>Ensemble</td>
<td>2</td>
</tr>
<tr>
<td>Thesis</td>
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<tr>
<td>Ethnomusicology</td>
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<td>Select from MUS 52111, 52141, 52151</td>
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<tr>
<td>MUS 62412</td>
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<tr>
<td>Select from MUS 62601, 62602, 62603, 62604, 62605, 62606, 72691</td>
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<tr>
<td>Electives</td>
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<table>
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<td>Musicology</td>
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<td>Select from MUS 62511, 62521, 62531, 62541</td>
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</tr>
<tr>
<td>MUS 62281 and/or select from 62606, 72691</td>
<td>6</td>
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<tr>
<td>MUS 62451</td>
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<tr>
<td>Electives</td>
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<tr>
<td>Ensemble</td>
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<table>
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<tr>
<th>Requirement</th>
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<tr>
<td>Music Theory</td>
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<td>MUS 58251, 61171, 61172, 71191</td>
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<td>MUS 62451</td>
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<td>Electives</td>
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### Master of Music

<table>
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<th>Requirement</th>
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<td>Performance</td>
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<td>Essay or Recital</td>
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<tr>
<td>Total</td>
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</table>
Note: For piano performance majors, the applied music major requirement may be fulfilled by taking either MUS 66111, 66112 or a combination of the two. Students who elect MUS 66112 must take MUS 66191 concurrently. The performance of works for ensemble, including accompaniments, will be acceptable as part or all of a degree recital if approved by the recital committee.

Note 3: Students who elect the thesis or recital and essay option must take 9 credit hours. Courses to be included will take 6 credit hours. Students who elect the course-work option must take 9 credit hours. Courses to be included in this option must be approved by the student's advisor.

Note 4: Students planning to continue into a Ph.D. program in this option must be approved by the student's advisor.

Note 1: Special areas of concentration are general music; choral music and conducting; and instrumental music and conducting. Students who elect the general music area must take MUS 63263; students who elect the choral music and conducting area must take MUS 63261 and 64111; students who elect the instrumental music and conducting area must take MUS 63262 and either MUS 64121 or 64131.

Note 2: All students except those who elect the general music area must take 2 credit hours of ensemble.

Note: Applicants for this degree program must audition in conducting.

Music Education
MUS 63271, 63283, 63274 .................................................. 9
Pedagogy concentration (see Note 1) .................................. 5
Music electives, other than Music Education (see Note 2) ... 12
Thesis, Recital and Essay or Coursework option (see Notes 3, 4) 6-9
Total .................................................................................. 32

Students who do not have a master's degree in the appropriate area will be required to take coursework, including the writing of a thesis (if required in that area), necessary to achieve the level of competence expected of a student who does hold a master's degree in that area. These credits will be considered part of the doctoral program but will be in addition to the minimums for the Doctor of Philosophy degree. Students who envision possible problems with the four-year limit to candidacy might consider enrolling initially at the master's level and transferring to the doctoral program when these requirements are substantially fulfilled.

Music Education
The degree of Doctor of Philosophy in music with a major in music education is designed for students seeking leadership positions in music education in schools, colleges and universities. This degree program provides flexibility in meeting individual student needs. A wide array of courses is available in music education, ethnomusicology, musicology, music theory and applied music.

Minimum semester hours beyond Master's Degree:
Concentration ................................................................. 16-19
Pedagogy Concentration ................................................ 8-9
Outside Minor .................................................................. 6
Ethnomusicology ............................................................ 3
Related Studies (Electives) ............................................. 0-5
Dissertation ...................................................................... 30
Total .................................................................................. 63-72

Musicology-Ethnomusicology
The degree of Doctor of Philosophy with a major in musicology-ethnomusicology is designed to prepare college and university teachers and research scholars, with an emphasis on combining the techniques of historical musicology and ethnomusicology.

Students will elect to emphasize either musicology or ethnomusicology and will be required to take at least 21 hours in the emphasized area. In addition, they must take at least 9 hours in the area that is not emphasized, unless appropriate courses have been taken previously, e.g., in the master's program. These hours will be considered as part of the major requirement beyond the minimum 21 hours. A 9-hour outside minor is required, but appropriate courses taken previously may be counted toward this requirement. Theory and music history courses required by the diagnostic examination or elected will count in the related-studies block.

Minimum semester hours beyond Master's Degree:
Concentration ................................................................. 21-24
Non-Music Minor ................................................................ 9
Music Theory-Composition

The degree of Doctor of Philosophy with a major in music theory-composition is designed to prepare composers, college and university teachers, and research scholars in the area of music theory. This degree program is based on the premise that original composition of high quality requires a strong background in theory, and that significant scholarship in theory requires experience in original composition.

Minimum semester hours beyond Master's Degree:

Concentration

<table>
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<tr>
<th>Subject</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Theory and Composition</td>
<td>15-21</td>
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<tr>
<td>Minor Area: Ethnomusicology, Musicology</td>
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<tr>
<td>or Music Education</td>
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<td>Related Studies (Music Electives)</td>
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<td>Total</td>
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</table>

ADVISING

At the time of admittance, the doctoral student will be assigned a major advisor by the coordinator of graduate studies. The student, major advisor and coordinator of graduate studies will then select members for that student's advisory committee, which will be composed of at least four graduate faculty members. Two members must be from the student's major area, and two must be from outside the major area. At least one member must be from musicology or theory. The membership of the advisory committee must be approved by the advisor and the Graduate Studies Committee.

A program of studies to be completed within the student’s degree program will be determined collectively by the student and his/her advisory committee. This document is official when signed by all the committee members. The program of study form should be completed within the first two semesters of full-time study. Alterations may be made by memo, with the signature approval of all committee members.

RESIDENCE

The student must complete at least 15 semester hours of study within one calendar year in residence.

RESEARCH TOOL REQUIREMENT

Each doctoral program in the School of Music has a research tool requirement. The purpose of this requirement is to assure that doctoral-level students have prerequisite skills for completing independent research activity. Specific requirements for each of the programs are described in the following paragraphs. In all cases, students may satisfy these requirements either through satisfactory performance in coursework or by examination. Credit hours earned in acquiring these competencies are not applicable toward the credit hour requirement in the degree program. All research tool requirements must be passed before the student is permitted to attempt the candidacy examination.

In musicology-ethnomusicology, the requirement is a reading knowledge of two foreign languages, normally German and French. With the approval of the doctoral advisory committee, other languages may be substituted, especially for the student emphasizing ethnomusicology.

In music education, the requirement is either a reading knowledge of one foreign language or a demonstrated competence in statistics equivalent to that which might be obtained in two graduate-level statistics courses. Demonstrated competence in other areas of research may be substituted on the recommendation of the doctoral advisory committee.

In theory-composition, the requirement is either a reading knowledge of one foreign language or a demonstrated competence in an area of research specified by the doctoral advisory committee.

CANDIDACY EXAMINATION

This examination will normally be taken when the student has substantially completed his/her coursework and has received the consent of the advisory committee to attempt the examination. The written portion of the examination will cover the major and supportive areas of study and will be followed by a comprehensive oral examination. Students who fail the candidacy examination two times will be dismissed from the doctoral program.

Courses (MUS)

<table>
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<tr>
<th>Course Code</th>
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<tr>
<td>MUS 51131</td>
<td>KEYBOARD HARMONY (3)</td>
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<td>Theoretical skills demonstrated</td>
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<tr>
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<td>realization of figured bass,</td>
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<td>improvisation.</td>
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<td>MUS 51141/71141</td>
<td>16TH-CENTURY COUNTERPOINT (3)</td>
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<tr>
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<td>Two- three- and four-part vocal</td>
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<td>counterpoint in 16th-century</td>
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<tr>
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<td>style.</td>
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<td>MUS 51151/71151</td>
<td>18TH-CENTURY COUNTERPOINT (3)</td>
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<td>Technique of writing</td>
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<tr>
<td></td>
<td>counterpoint in 18th-century</td>
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</tr>
<tr>
<td></td>
<td>style, especially that of J. S.</td>
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<tr>
<td></td>
<td>Bach.</td>
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MUS 51161
ADVANCED MUSICAL ANALYSIS (3)
A study of 20th-century approaches to tonal and nontonal musical analysis. Emphasis on familiarity with styles, nomenclature and appropriate graphic techniques.

MUS 51211
COMPOSITION (2)
Study of the materials and techniques of composition culminating in original compositions based upon observable principles of unity and variety. Repeat registration permitted. Prerequisite: Permission.

MUS 51231/71231
TECHNIQUES OF ELECTRONIC MUSIC (3)
Techniques of the composition of electronic music, including tape techniques and synthesizer techniques. Study oriented toward the facilities of the Kent Electronic Music Studio. Prerequisite: Music major or permission.

MUS 51341
JAZZ IMPROVISATION (2)
The development of the art of jazz improvisation through performance and analysis. Prerequisite: Permission.

MUS 61131/71131
SCHENKERIAN ANALYSIS (3)
An introduction to musical analysis according to the principles expounded by Heinrich Schenker and later exponents of his ideas. Prerequisite: Permission.

MUS 61171/71171
ANALYTICAL TECHNIQUES I (3)
The application of standard analytical techniques to works of various style periods.

MUS 61172/71172
ANALYTICAL TECHNIQUES II (3)
The application of standard analytical techniques to works of various style periods.

MUS 61211
COMPOSITION (2-4)
Original composition using longer forms of music for diverse media including multimedia and electronic composition. Repeat registration permitted. Prerequisite: Permission.

MUS 71191
SEMINAR IN 20TH-CENTURY MUSIC AND TECHNIQUES (3)
Detailed class analysis of scores using specified styles and techniques; individual projects in areas of particular interest to the student. Repeatable to 6 hours credit. Prerequisite: Doctoral standing or permission.

MUS 71195
SPECIAL PROJECTS IN THEORETICAL STUDIES (3)
Individual and class investigation into specific methods of analysis and their application to music in various styles. Prerequisite: Doctoral standing or permission.

MUS 71241
ELECTRONIC MUSIC COMPOSITION (2-4)
Original composition using tape recorders and analog synthesizers. Repeatable to 8 hours credit. Prerequisite: Doctoral standing or permission.

MUS 81196
INDIVIDUAL INVESTIGATION IN MUSIC THEORY (3 or 6)
Intensive research or readings on selected topic beyond normal course coverage. Repeat registration permitted. S/U grading. Prerequisite: Doctoral standing or permission.

MUS 81211
COMPOSITION (2 or 4)
Refinement of compositional techniques culminating in large-scale works for media of student’s choice. Repeat registration permitted.

Orchestration

MUS 51321
ORCHESTRATION (3)
Ranges, tonal possibilities, technical limitations and transpositions for all orchestral instruments. Scoring techniques and analysis of representative instrumental ensemble repertoire. Prerequisite: Permission.

MUS 51342
JAZZ ARRANGING (2)
Arranging for the large and small jazz ensemble. Prerequisite: Permission.

MUS 61331/71331
BAND ARRANGING (2)
Arranging in traditional and contemporary styles for the wind ensemble, concert band and/or marching band. May be repeated for a maximum of 6 credit hours. Prerequisite: MUS 51331 or equivalent.
Musicology

MUS 52131
AMERICA’S MUSIC (3)
Historical survey of music in America from New England psalmody to present-day compositional trends.

MUS 52221
SYMPHONIC LITERATURE (3)
Historical and stylistic survey of music for large instrumental ensemble.

MUS 52222
CHAMBER MUSIC LITERATURE (3)
Historical and stylistic survey of chamber music literature.

MUS 52241
PIANO LITERATURE (3)
Survey of keyboard and piano literature from the 16th century to the present. Study of related forms and styles. Emphasis on performing, listening and analysis. Prerequisite: Permission.

MUS 52251
SONG LITERATURE (3)
A study of vocal literature from the 16th century to the present. Emphasis upon the style, interpretation and presentation of solo materials for all voice classifications.

MUS 52261
OPERA LITERATURE (3)
The historical development of opera from the 17th century to the present. Detailed analysis of representative works.

MUS 52271
CHORAL LITERATURE (3)
Study of choral literature from all historical periods and styles.

MUS 62227/72227
HISTORY AND LITERATURE OF THE WIND BAND (2)
Historical survey of wind band literature and the development of the ensemble. Prerequisite: Permission.

MUS 62281/72281
SEMINAR IN MUSIC HISTORY AND LITERATURE (3)
Selected problems of research in music history and literature. Each student will be responsible for presenting papers for discussion. Repeat registration permitted.

MUS 62451/72451
INTRODUCTION TO MUSICOLOGY (3)
Techniques of music research and creative musical writing including special projects, reports and readings.

MUS 62511/72511
MUSIC HISTORY I (3)
A study of Western music history and its place in the medieval world to the beginning of the 16th century (ca. 1520).

MUS 62521/72521
MUSIC HISTORY II (3)
A study of Western music history and its place in the cultural milieu of the late Renaissance and Baroque eras.

MUS 62531/72531
MUSIC HISTORY III (3)
A study of Western music during the classical period and the classic tradition to the end of the 19th century.

MUS 62541/72541
MUSIC HISTORY IV (3)
A study of romantically inclined composers to the end of the 19th century and major trends, techniques and composers since 1900.

MUS 72211
NOTATION I (3)
Study and transcription of white mensural notation (ca. 1450-1600) and the various types of keyboard and lute tablatures. Prerequisite: Doctoral standing or permission.

MUS 72212
NOTATION II (3)
Study of the notation of medieval polyphonic music from the earliest forms of organum through end of the 14th century. Prerequisite: MUS 72211.

MUS 82291
SEMINAR IN MUSICOLOGY (3)
Examination into primary sources, treatises and writings in selected areas in Western music. Topics selected range from medieval period to present. Repeat registration permitted. Prerequisite: MUS 62451 and 72211 and doctoral standing.

MUS 82396
INDIVIDUAL INVESTIGATION IN MUSICOLOGY (3 or 6)
Intensive research or readings on selected topic beyond normal course coverage. Repeat registration permitted. S/U grading. Prerequisite: Doctoral standing and permission.

Ethnomusicology

MUS 52111
AFRICAN MUSIC AND CULTURES (3)
African music as related to social sciences and humanities. Oral traditions. Use of music recordings, tapes, musical instruments. Participation in performance and group work involvement.

MUS 52141
FOLK AND TRADITIONAL MUSIC OF WESTERN CONTINENTS (3)
Study of selected music cultures of Eastern and Western Europe, and South, Central and North America.
### Music

**MUS 52151**  
*ASIAN MUSICS* (3)  
Survey of Asian musics. Emphasis on art, folk and popular musics and relationships of these musics to their respective cultures.

**MUS 52161**  
*HISTORY OF JAZZ* (3)  
The evolution of jazz from its origins to the present.

**MUS 62412/72412**  
*INTRODUCTION TO ETHNOMUSICOLOGY* (3)  
A study of the history, concepts and methods of ethnomusicology, techniques of field research, transcription, analysis and bibliography. Prerequisite: MUS 52111 or 52141 or 52151, or permission.

**MUS 62413/72413**  
*ADVANCED FIELD AND LAB METHODS IN ETHNOMUSICOLOGY* (3)  
Development of professional-level research skills in all media of field documentation, transcription, analysis and scholarly writing. Study of current related issues in ethnomusicology. Prerequisite: MUS 62412.

**MUS 62601/72601**  
*SEMINAR IN MUSICS OF AFRICA* (3)  
Specialized investigations of music cultures of Africa. Prerequisite: Permission.

**MUS 62602/72602**  
*SEMINAR IN MUSICS OF THE AMERICAS* (3)  
Specialized investigation of music cultures of the Americas. Prerequisite: Permission.

**MUS 62603/72603**  
*SEMINAR IN MUSICS OF THE MIDDLE EAST* (3)  
Specialized investigation of music cultures of the Middle East. Prerequisite: Permission.

**MUS 62604/72604**  
*SEMINAR IN MUSICS OF EAST ASIA* (3)  
Specialized investigation of music cultures of East Asia. Prerequisite: Permission.

**MUS 62605/72605**  
*SEMINAR IN MUSICS OF SOUTH ASIA* (3)  
Specialized investigation of music cultures of South Asia. Prerequisite: Permission.

**MUS 62606/72606**  
*SEMINAR IN MUSICS OF SOUTHEAST ASIA* (3)  
Specialized investigation of music cultures in Southeast Asia. Prerequisite: Permission.

**MUS 72691**  
*SEMINAR IN ETHNOMUSICOLOGY* (3)  
Specialized topics in ethnomusicology for advanced students. Prerequisite: Doctoral standing or permission.

**MUS 82696**  
*INDIVIDUAL INVESTIGATION IN ETHNOMUSICOLOGY* (3 or 6)  
Intensive research or readings on selected topic beyond normal course coverage. Repeat registration permitted. S/U grading. Prerequisite: Permission.

### Music Education

**MUS 53240**  
*JAZZ AND MARCHING BAND TECHNIQUES* (3)  
Organization, administration and techniques of marching bands and jazz ensembles in the schools. Topics covered include musical styles, literature, show design and improvisation.

**MUS 53242**  
*JAZZ ENSEMBLE TECHNIQUES* (2)  
Organization and administration of the jazz ensemble with emphasis on musical interpretation, jazz styles and rehearsal techniques taught through laboratory experience. Prerequisite: Permission.

**MUS 53243**  
*VOCAL JAZZ AND MUSICAL THEATRE IN THE SCHOOLS* (2)  
Basic techniques and materials for teaching vocal jazz and musical theatre in the schools. Administration, organization and publicity for productions as well as literature for these performing groups will be explored.

**MUS 63261/73261**  
*ADVANCED STUDIES IN SECONDARY CHORAL AND GENERAL MUSIC* (3)  
Review curriculum in secondary general music and development of innovative teaching materials and strategies. Analytical techniques, rehearsal procedures, repertory suitable for secondary school choral ensembles. Prerequisite: Permission.

**MUS 63262/73262**  
*ADVANCED STUDIES IN INSTRUMENTAL MUSIC* (3)  
Study of curriculum, method, techniques and materials in school instrumental music education.

**MUS 63263/73263**  
*ADVANCED STUDIES IN GENERAL MUSIC FOR CHILDREN* (3)  
Study of trends in philosophy, curriculum and program development, instructional materials and innovative teaching techniques for elementary school and early childhood general music. Prerequisite: Permission.
MUS 63271/73271
MEASUREMENT AND EVALUATION IN MUSIC (3)
Study of measurement and evaluation techniques for music aptitude, achievement and preference. Emphasis on developing teacher-made tests and on available standardized music tests.

MUS 63272/73272
LEARNING THEORIES IN MUSIC (3)
Application of current theories of learning to the teaching and learning of music.

MUS 63273/73273
PSYCHOLOGY OF MUSIC (3)
The study of music's effect on human behavior including physiological and affective responses. Applications of music psychology to the teaching and learning of music will be explored.

MUS 63274/73274
FOUNDATIONS OF MUSIC EDUCATION (3)
Study of the influences on the field of music education, including sociology, psychology, philosophy, curriculum and history.

MUS 63283/73283
RESEARCH IN MUSIC EDUCATION (3)
Introduction to research techniques in music education including topic selection, data collection, analysis and interpretation; and presentation of information in written form.

MUS 63284/73284
HISTORY OF MUSIC EDUCATION (2)
Study of historical approaches to music education with emphasis on significant people, places and events that have influenced music teaching and learning music. Prerequisite: MUS 63274 or equivalent.

MUS 63285/73285
PHILOSOPHY OF MUSIC EDUCATION (2)
Study of the philosophical foundations of music education with emphasis on the application of aesthetics to teaching and experiencing music. Prerequisite: MUS 63274 or equivalent.

MUS 63311/73311
DALCROZE TECHNIQUES IN MUSIC EDUCATION (2)
Dalcroze principles of eurhythmics, ear training and keyboard improvisation as applied to teaching music in schools. Emphasis on teaching young children. Development of teaching skills. Prerequisite: MUS 58111.

MUS 73381
ADVANCED RESEARCH IN MUSIC EDUCATION (3)
The design, implementation and reporting of research studies that illustrate a variety of methodological and statistical plans for research in music education. Prerequisite: MUS 6/73283, doctoral standing or permission.

MUS 83196
INDIVIDUAL INVESTIGATION IN MUSIC EDUCATION (3 or 6)
Intensive research or readings on selected topic beyond normal course coverage. Repeat registration permitted. S/U grading. Prerequisite: Permission.

MUS 83211
SEMINAR IN TEACHER EDUCATION IN MUSIC (3)
Investigation of the role of curriculum, accreditation and certification in music teacher education. Procedures related to teaching methods courses and to the student teaching program.

### Conducting

MUS 64111/74111
CONDUCTING PROJECTS: CHORAL (2 or 4)
Choral conducting techniques, score analysis, rehearsal procedures and study of musical style. Repeat registration permitted. Prerequisite: Permission.

MUS 64121/74121
CONDUCTING PROJECTS: BAND (2 or 4)
Band-conducting techniques, score analysis, rehearsal procedures and study of musical style. Repeat registration permitted. Prerequisite: Permission.

MUS 64131/74131
CONDUCTING PROJECTS: ORCHESTRA (2 or 4)
Orchestra-conducting techniques, score analysis, rehearsal procedures and study of musical style. Repeat registration permitted. Prerequisite: Permission.

### Music Ensembles

Music ensembles are open to all qualified university students upon satisfactory audition. Membership in music organizations is not limited to music majors and minors. All master's students are required to participate in an ensemble for two semesters. One summer session is considered equivalent to one semester. No more than 2 ensemble credit hours may be applied toward degree requirements.

MUS 55111
UNIVERSITY CHOIR (1)
Study and performance of choral music from Renaissance through contemporary styles, large and small forms with appropriate accompaniment.
MUS 55121
KENT CHORUS (1)
Study and performance of choral music from Renaissance through contemporary styles, large and small forms with appropriate accompaniment.

MUS 55131/75131
OPERA: SINGER-ACTOR TECHNIQUES (2)
A course designed to give the young singing actor practical operatic experience in the performance of portions of or complete operas. Prerequisite: Audition.

MUS 55141/75141
KENT STATE UNIVERSITY CHORALE (1)
Study and performance of literature for vocal chamber ensemble from medieval through contemporary styles sung in the original language with appropriate accompaniment. Prerequisite: Audition.

MUS 55151
KENT STATE UNIVERSITY GOSPEL CHOIR (1)
Study and performance of choral music in the gospel tradition, including works by contemporary artists. One weekly rehearsal and a minimum of one concert per semester. Off-campus concerts are possible.

MUS 55212/75212
KENT STATE UNIVERSITY ORCHESTRA (1)
A select group of instrumentalists for the purpose of studying and performing music written specifically for chamber orchestra, including works of the 17th, 18th and 20th centuries. Prerequisite: Audition.

MUS 55221
CONCERT BAND (1)
Study and performance of music literature for wind band. Prerequisite: Audition.

MUS 55222
MARCHING BAND (1)
Study and performance of literature and maneuvers for marching band. Repeatable up to 6 hours. Prerequisite: Audition.

MUS 55223/75223
WIND ENSEMBLE (1)
A select concert ensemble that performs the finest in wind instrument literature with emphasis on major original works. Prerequisite: Audition.

MUS 55231/75231
JAZZ ENSEMBLE (1)
Study and performance of music literature in the jazz idiom. Prerequisite: Audition.

MUS 55241
TROMBONE ENSEMBLE (1)
A thorough study of trombone performance in various size ensembles. Emphasis on original literature from over four centuries. Prerequisite: Audition.

MUS 55251
PERCUSSION ENSEMBLE (1)
A comprehensive study of percussion performance in various size ensembles. Use of keyboard percussion instruments along with drums and accessories. Study of percussion ensemble literature. Prerequisite: Audition.

MUS 55261
BASSOON ENSEMBLE (1)
Study and performance of music for multiple bassoons; emphasis upon refined ensemble playing, interpretation, leadership skills and arranging techniques. Repeat registration permitted. Prerequisite: Permission.

MUS 55271/75271
NEW MUSIC ENSEMBLE (1)
Study and performance of 20th-century chamber music with an emphasis on works by contemporary composers. Repeat registration permitted. Prerequisite: Permission.

MUS 55281
FLUTE ENSEMBLE (1)
Study and performance of music for multiple flutes; emphasis upon all aspects of ensemble playing and style considerations will be addressed in both chamber and conducted formats. Repeat registration permitted. Prerequisite: Audition.

MUS 55311/75311
CHAMBER MUSIC (1-2)
The study and performance of music for small ensembles. Prerequisite: Permission.

MUS 55321
ACCOMPANYING (1-2)
Accompanying instrumental and vocal soloists; piano ensemble works. Credit counted toward ensemble requirements. One hour credit for two hours of assigned accompanying weekly. Repeat registration permitted. Prerequisite: Permission.

MUS 55142
MEN’S CHORUS (1)
A chorus of male voices. Emphasis on music literacy, vocal production, instruction, study and performance of music written for male voices. All Western music periods are represented. Experience with mixed-voice choirs also occurs. Prerequisite: Permission.
Music

MUS 55143
WOMEN’S CHORUS (1)
A chorus of women’s voices. Emphasis on music literacy, vocal production, instruction, study and performance of music written for women’s voices. All Western music periods are represented. Experience with mixed-voice choirs also occurs. Prerequisite: Permission.

Applied Music

Students who plan to register for applied music for the first time must appear for an audition before the examination committee of the Hugh A. Glauser School of Music prior to registration in order to be assigned a course number and instructor.

Privately instructed applied music courses are offered each semester. Each course provides a one-half-hour private lesson weekly for 2 semester hours of credit or a one-hour lesson weekly for 4 semester hours of credit. In order to receive a passing grade in applied music, performance of a juried examination is required during the week of final examinations each semester of registration. Approved exceptions include the performance of a degree recital, a full concerto with instrumental ensemble or a major role in an opera performed during the semester of enrollment.

The private instruction fee is $40 per credit hour. Prerequisite for each course is an audition.

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<th></th>
<th>Master’s</th>
<th>Doctoral</th>
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MUS 66191
SEMINAR IN ACCOMPANYING (2)
Studio performances of standard repertoire for piano and voice or instruments; investigation of other topics relating to the accompanying of the repertoire. Repeat registration permitted. Prerequisite: Audition or instructor’s permission.

Eurhythmics

MUS 58111
EURHYTHMICS (1)
Applied study of rhythm through kinesthetic, intellectual and emotional involvement. Movement experiences to strengthen concentration and communication among ear, brain and muscles that execute rhythm. Prerequisite: Permission.

MUS 58112
EURHYTHMICS (1)
A continuation of MUS 58111. Prerequisite: MUS 58111.

Pedagogy

MUS 58221
ELEMENTS OF ACCOMPANYING I (2)
Techniques of accompanying; selected overview of art song literature including Italian, German, French and English songs; development of playing-at-sight skills. Prerequisite: Permission.

MUS 58222
ELEMENTS OF ACCOMPANYING II (2)
Continuation of accompanying techniques including opera accompanying, orchestral reductions, and selected overview of literature for solo instrument and piano; continuation of playing-at-sight skills. Prerequisite: Permission.

MUS 58241
VOICE PEDAGOGY (2)
Survey of techniques, practices and materials of teaching voice. Prerequisite: Permission.

MUS 58251
PEDAGOGY OF MUSIC THEORY (2)
The principles and techniques of teaching music theory.

MUS 58257
PEDAGOGY— INSTRUMENTAL (2)
Principles and techniques of instruction. Literature survey. Analysis of instrumental problems and performance practice. Offered as needed for strings, woodwinds, brass, percussion, organ or guitar. Prerequisite: Permission.

MUS 68214/78214
PIANO PEDAGOGY AND MATERIALS I (3)
Teaching techniques and materials for the studio teacher including approach to philosophy of teaching, lesson structure and current innovations. Prerequisite: Permission.
MUS 68215/78215
PIANO PEDAGOGY AND MATERIALS II (3)
Teaching techniques and materials for the studio teacher; analysis of specific teaching problems including the teaching of 20th-century music. Prerequisite: MUS 6/78214 or permission.

MUS 68294/78294
COLLEGE TEACHING OF MUSIC (3)
Study of administrative structure, faculty role, pedagogy, content and evaluation relating to the college music curriculum. Prerequisite: Doctoral standing, appointment as graduate assistant in music, or permission.

Workshop

MUS 58393/78393
VARIABLE TITLE WORKSHOP IN MUSIC (1-4)
Offered for specific professional needs. Emphasis on performance and pedagogical skills. S/U grading. Prerequisite: Permission.

Individual Investigation, Thesis and Dissertation

All the following courses require permission before registration. Repeat registration permissible. Registration in one of the following is required in semester of final oral examination.

MUS 68199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters, if desired. S/U grading; IP permissible.

MUS 68299
THESIS II (1-2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: MUS 68199.

MUS 68598
RESEARCH (1-15)
Research or individual investigation for master's-level graduate students. IP permissible.

Blossom Festival School—Music

BFSM 50026/70026
ACCOMPANYING PROJECTS (2-4)

BFSM 50031/70031
CHAMBER MUSIC (1-4)

BFSM 50032/70032
ORCHESTRAL REPERTOIRE AND TECHNIQUE (1)

BFSM 50093/70093
VARIABLE TITLE WORKSHOP IN MUSIC (1-4)
Offered for specific professional needs. Emphasis on performance and pedagogical skills. S/U grading. Prerequisite: Permission.

BFSM 60042/70042
APPLIED MUSIC—INSTRUMENTAL (1-2)
Public Health

PUBLIC HEALTH

CONSORTIUM OF EASTERN OHIO MASTER OF PUBLIC HEALTH PROGRAM

Davina Gosnell, Ph.D., R.N.,
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Administrative Director Community Health Sciences
NEOUCOM
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The Consortium of Eastern Ohio Master of Public Health Program is a partnership program with six participating academic institutions: The University of Akron, Cleveland State University, Kent State University, Northeastern Ohio Universities College of Medicine (NEOUCOM), Ohio University and Youngstown State University.

The Master of Public Health (M.P.H.) program at Kent State University offers a multidisciplinary, interdepartmental and inter-institutional curriculum that provides opportunities for graduate studies in public health. Although the M.P.H. degree is awarded by Kent State University, the M.P.H. program is consortium-based. It draws its faculty from several departments at Kent State University, the Northeastern Ohio Universities College of Medicine (NEOUCOM), The University of Akron, Cleveland State University, Ohio University and Youngstown State University. Curricular programs have been developed by faculty committees and draw heavily from current course offerings within a number of different departments and universities. New courses and seminars are created as required to provide integration and correlation of the multidisciplinary offerings. Inquiries concerning the specific options, curricula, requirements and faculty membership and research/clinical interests may be addressed to either of the directors of the M.P.H. program listed above.

The mission of the CEOMPH program is to preserve and enhance the health and well-being of the community by providing an educational program that fosters collaboration among the participating academic institutions, students, public health practitioners and the public health system, and that prepares graduates in the knowledge, skills and analytic capabilities required to improve the health of diverse populations at the local, state and national levels via community practice, research and service.

The CEOMPH program focuses on the public health and health care practitioners in an effort to train such practitioners to better serve the community’s health needs. Graduates of this program will be able to help improve the health status of the communities in which they live and work.

The program contains the five core areas basic to public health. By the end of the program, the student should gain mastery in the following:

1. Biostatistics—collection and interpretation of health data, understanding of statistical data analysis.
2. Epidemiology—determinants of disease and death in human populations, the natural history of disease and the biologic basis of health.
3. Environmental health sciences—environmental factors that affect the health of a community.
4. Health services administration—planning, organization, administration, management, evaluation and policy analysis of health programs.
5. Social and behavioral sciences—concepts and methods of social and behavioral sciences related to resolving public health problems.

Students will take core courses at any one of the distance-learning sites on the participating campuses. Electives may be taken at The University of Akron, Cleveland State University, Kent State University, NEOUCOM, Ohio University or Youngstown State University. Electives will be taken on the campus where they are being offered and may be taken anytime during the program. An academic advisor will guide the student on the electives to take, depending on future career goals and interest.

Students are encouraged to move through the core coursework as a cohort. However, withdrawal will be permitted from courses under unusual conditions. Core courses are scheduled
on Saturdays from 9 a.m. to 4 p.m. (an hour for lunch). Alternate scheduling will be considered to accommodate students with special circumstances.

ADMISSION
CEOMPH applications, which are separate from the standard Kent State University admissions applications, may be obtained from the CEOMPH program office or from the Office of Student Services, 203 Taylor Hall. Application forms also may be downloaded from www.neoucom.edu/mph/admissions/application-page.htm. The students are admitted to a home university—this is the university that handles your official student information, including transcripts, course registration information and graduation documents—in this case, Kent State University. The applicant will indicate her/his first, second, third, fourth and fifth preference for the home university on the application. Efforts will be made to accommodate student preference. The CEOMPH Admissions Committee, composed of members from The University of Akron, Cleveland State University, Kent State University, Northeastern Ohio Universities College of Medicine, Ohio University and Youngstown State University, meet yearly to decide who will be admitted into the program. Enrollment is limited. Applications and all accompanying materials are due by January 15 for admission into the program in the year’s fall semester.

Completed applications may be sent to the following address:
Consortium of Eastern Ohio Master of Public Health
4209 State Route 44
P.O. Box 95
Rootstown, OH 44272-0095

In order to be considered for admission, the applicant must submit the following items. International students must also complete an International Student Documentation Packet.

1. A completed application form with both signatures on the second page. It must be typewritten or legibly printed in ink and submitted by the required date.

2. Applicants must hold a bachelor’s degree from an accredited college or university.

3. Official academic records from each institution of higher education attended by the candidate. A minimum GPA of 2.75 out of a 4.00 scale is required. A minimum GPA of 3.00 out of a 4.00 scale is required for graduate coursework. If the official record is not in English, an official translation must accompany the original language document.

4. Three letters of recommendation from individuals familiar with the applicant’s academic or professional background. Individuals who have not been involved in an academic institution for two years or more may submit letters of recommendation by supervisors from his/her place of employment. The letters should include an assessment of the applicant’s current work quality and ability to successfully complete graduate training. Letters should be addressed to the CEOMPH Admissions Committee and submitted to the above address.

5. Successful completion of a college-level mathematics or statistics course.

6. Successful completion of a college social or natural science course.

7. A cover letter (no more than two pages) explaining the candidate’s educational and professional history, area of interest in public health, interest and motivation for seeking a Master of Public Health degree, and professional or academic career plans upon completion of the program. If appropriate, also indicate whether you are applying to another degree program (and indicate which university) in a dual-degree track.

8. Acceptable GRE scores (as determined by the Admissions Committee) within the last five years. Use code #1903 to indicate the institution that should receive your scores. If you have already sent your scores to Kent State University, please indicate such on the application form next to your GRE information. GRE scores may be waived if the applicant has a professional or academic master’s or doctoral degree in a relevant area.

9. TOEFL scores taken within the last two years from graduates of foreign universities who are non-native English speakers. The minimum score must be 550 (paper-based) or 213 (computer-based). Use code #1903 to indicate the institution that should receive your scores. If you have already sent your scores to Kent State University, please indicate such on the application form next to your TOEFL information.

10. Two years of work experience in a relevant field is highly recommended.

11. A $45 nonrefundable application fee. Students with international credentials must pay a total of $90.

While applications will be retained for two years and will be considered each year during the selection process unless the candidate wishes to withdraw his/her name, the applicant’s file should be updated yearly as appropriate. After two years, the applicant must reapply to be considered for admission into the program.
Any questions may be answered by writing the address above, calling the Kent Program Director at 330-672-2760, or the CEOMPH Program Office at 330-325-6179, faxing 330-325-5907, or e-mailing pubhlth@neoucom.edu.

**CURRICULUM**

Students will be expected to take the following core courses and electives. In addition, a capstone project, portfolio and exit presentation will be required.

Students should plan on taking the core courses as a cohort. Core courses are offered on Saturdays, with one course in the morning and one in the afternoon. Core courses may be taken at any one of the distance-learning classrooms at the universities. Distance learning will involve interactive video-conferencing technology. Web-based learning is incorporated, as well.

Electives may be taken at any time in the program. Students may choose an elective from any of the partner universities from a list of approved courses. If the student is interested in a course not listed on the Approved Electives List (from one of the partner universities or from another university), an Elective Approval Form must be submitted along with a course syllabus to the M.P.H. Program office. Students must fill out a cross registration form to take an elective at one of the other partner institutions.

**COURSE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Core courses</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MPH 60101</td>
<td>3</td>
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<tr>
<td>MPH 60102</td>
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<tr>
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<tr>
<td>MPH 60106</td>
<td>3</td>
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<tr>
<td>Total</td>
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</table>

Capstone Project

MPH 60098 .................................................. 3-6

Electives .................................................. 15 or 18
15 hours if capstone is 6 credits or 18 hours if capstone is 3 credits.

Total credits ............................................. 39

**STUDENT ADVISING**

An academic advisor will be assigned to each student upon entering the program. Students should meet with advisors at least once a year so that progress may be monitored. Advisors will offer guidance on choosing electives appropriate to student career goals and interests.
MPH 60104
BIOSTATISTICS IN PUBLIC HEALTH (3)
Principles of biostatistics in the context of multiple public health applications, epidemiological information and various statistical packages to be used. Prerequisite: Permission of course director required for non-M.P.H. students.

MPH 60105
HEALTH SERVICES ADMINISTRATION IN PUBLIC HEALTH (3)
Management principles, including personnel administration, budgeting, financing and continuous quality improvement as pertains to public health. Planning and evaluation principles, grant-writing, public health economics, public health policy and data sources. Prerequisite: Permission of course director required for non-M.P.H. students.

MPH 60106
ENVIRONMENTAL HEALTH SCIENCES IN PUBLIC HEALTH (3)
Air quality, water quality, food hygiene, sanitation, solid waste management, hazardous materials management, vector-borne disease, other special topics, occupational health, legal issues, environmental hazard identification and response. Prerequisite: Permission of course director required for non-M.P.H. students.

MPH 60110
GRANT WRITING IN PUBLIC HEALTH PRACTICE (3)
Methods and techniques for writing and managing grant proposals to support public health programs. Prerequisite: Permission of course director required for non-M.P.H. students.

MPH 60196
INDIVIDUAL INVESTIGATION IN PUBLIC HEALTH (1-3)
Intensive research or readings on selected topic or problem to be selected in consultation with M.P.H. graduate faculty. Prerequisite: MPH 60101, 60104.
**Speech Pathology and Audiology**

**SPEECH PATHOLOGY AND AUDIOLOGY**

**Peter B. Mueller, Director**
104A Music and Speech Center
330-672-2672
pmueller@kent.edu

**Robert S. Pierce, Coordinator of Graduate Studies**
105A Music and Speech Center
330-672-2672
rpierce@kent.edu

The School of Speech Pathology and Audiology offers programs of graduate study leading to the Master of Arts, Doctor of Philosophy and Doctor of Audiology degrees. The Master of Arts degree is offered in speech-language pathology. The general purpose of the education and training program is to prepare the student for employment as a clinician providing services to the speech, language and/or hearing impaired. The primary purpose of the Ph.D. program is to provide the student with a strong theoretical background and research competencies in communication processes and/or disorders. Students may pursue programs of study in speech-language pathology or audiology. A clinical track in audiology has been delineated that meets all requirements under the existing Ph.D. program.

The Doctor of Audiology is a professional doctorate degree that prepares students as competent audiologists.

For information on specifics of degree program requirements, students may contact the coordinator of graduate studies or visit the school Web site at http://dept.kent.edu/spa.

**ADMISSION**

In addition to regular application requirements of the university, all graduate applicants, in order to be considered for admission, are expected to have earned a grade point average of at least 3.0 (A=4.0) for all coursework (both overall and in their major coursework); submit acceptable scores on the Graduate Record Examination; and submit three letters of recommendation. At least two of the three required letters should come from former professors competent in either the fields of speech-language pathology or audiology or related areas. Applicants to the doctoral programs must provide a letter of intent that details their career and research goals.

Applicants should also note that certain standards of speech, hearing and behavior are especially important to success in the profession of speech pathology and audiology. While it is university policy to make adjustments whenever possible for the accommodation of otherwise qualified students with handicaps, applicants with disabilities in the areas specified above should seek advice so that individual circumstances might be considered.

Completed applications to the master's and Au.D. programs are reviewed as of March 1. Applications are reviewed after March 1 as availability permits.

Applications to the Ph.D. program are reviewed as they are received.

**Master of Arts**

**PROGRAM REQUIREMENTS**

Students wishing to enter the master's program either without an undergraduate degree in speech-language pathology and audiology or with inadequate preparation for professional training are required to complete a core group of courses (basically the same as those offered to undergraduate students at Kent State University) prior to being considered for admission into the master's program.
It takes approximately two years to complete the Master of Arts degree. In addition to the academic requirements, students must complete clinical practicum experiences in accordance with training guidelines established by the American Speech-Language-Hearing Association. Students must complete either a thesis or nonthesis paper.

Students may be admitted to the master’s program on a part-time basis. However, part-time students cannot be guaranteed that all required courses will be taught at night or during the summer sessions. Guest students are typically not permitted to enroll in clinical practicum courses.

Certificate in Pervasive Developmental Spectrum Disorders

Graduate-level speech-language pathologists or certified speech-language pathologists may complete coursework that will provide them with knowledge and skills necessary to collaborate with parents and other professionals to provide services for children, youth and adults with Pervasive Developmental Delay (Autism Spectrum Disorders). The program is built upon two existing graduate programs and is intended as a Kent State University advanced certificate beyond the master’s degree. Each participant would complete (or have completed within the past seven years) some or all of the 23 hours of coursework listed and the 2-credit-hour practicum to be eligible for the certificate.

Certificate coursework includes SP&A 64309, 64310, 64350, 64492 and 64500; SPED 53020, 53030 and 63991.

Doctor of Philosophy

PROGRAM REQUIREMENTS
The Ph.D. programs are designed so that students' curricula are tailored to fit individual needs and interests such as basic/applied research and clinical/professional skills. The clinical track in audiology requirements include specific coursework in business management and supervision and a minimum of 1,000 hours of clinical experience in a variety of settings. Prior clinical experience may be considered in meeting this minimum requirement. The length of the doctoral programs is four years beyond the B.S. degree, given year-round attendance. While students may apply to the program with undergraduate and graduate degrees from other institutions, additional coursework may be required to satisfy undergraduate requirements.

Admission to candidacy requires compliance with general university requirements as well as school requirements. Specific school requirements include completion of 45 semester hours of precandidacy graduate work beyond the master’s degree and acceptable performance on a written and oral comprehensive examination. Students must also meet a residency requirement of one academic year prior to acceptance into candidacy.

Students who have not completed a master’s thesis are required to complete and defend a research project prior to taking their comprehensive examination.

The 45 semester hours of precandidacy study consists of 24 hours in a major area of focus, 15 hours in two minor areas of focus, and 6 semester hours of research tool courses.

Doctor of Audiology Program (Au.D.)

The Au.D. is a four-year postbaccalaureate professional doctoral degree program. Doctors of Audiology are independent professionals who specialize in the diagnosis, management and treatment of hearing and balance disorders.

The Au.D. degree program is administered jointly by Kent State University, The University of Akron and the Cleveland Clinic Foundation, working cooperatively as the Northeast Ohio Au.D. Consortium (NOAC). NOAC is a single unified program of faculty, students, facilities and resources. Students will spend equal amounts of time attending classes and clinical practicum at both universities. Students may choose to apply to NOAC through either Kent State University or The University of Akron and will register for courses on the campus where they are admitted. All classes are cross-listed at both universities.

ADMISSION
• Bachelor's degree from an accredited college or university
• Grade point average of 3.0 or higher
• Three letters of recommendation
• Graduate Record Examination scores
• Personal statement of purpose as to why the applicant wishes to become an audiologist

PROGRAM REQUIREMENTS
The Au.D. curriculum is a continuous 48-month postbaccalaureate course of study designed to integrate classroom, laboratory and clinical experiences. All students will attend full-time and take the same courses in appropriate sequence. The emphasis of the program is on the principles and practices underlying evaluation, treatment and provision of hearing care services.

For progression and graduation, students must meet the following degree requirements:
• Maintain an overall grade point average of 3.0.
• Complete a minimum of 134 semester hours.
• Accrue 2000 clock hours of clinical experience.
• Meet the requirements for provisional Ohio licensure in audiology.
• Pass academic and clinical competency-based examinations.
• Satisfactorily complete the required courses, which may be found at http://dept.kent.edu/aud/.
### Courses (SP&A)

**SP&A 50104**  
SPEECH AND LANGUAGE REHABILITATION (2)  
Orientation to types of speech, hearing and language disorders found in schools and how classroom teachers should handle them. Closed to speech pathology and audiology majors.

**SP&A 53300**  
SPEECH OF THE HEARING-IMPAIRED (3)  
Basic principles, variables and techniques for understanding, evaluating and improving expressive communication of hearing-impaired individuals. Prerequisite: Education of hearing-impaired majors: SP&A 43105, 43600; speech pathology and audiology majors: SP&A 33101, 34102.

**SP&A 53402**  
AUDIOMETRY (3)  
Measurement of human hearing by pure tone and speech audiometry; evaluation of middle ear function by immittance audiometry; screening techniques; pathologies of the conductive and sensorineural systems. Prerequisite: SP&A 33101 (grade of “C” or better) or equivalent.

**SP&A 53404**  
AURAL REHABILITATION (3)  
Basic principles, variables and techniques for understanding, evaluating and improving receptive communication of hearing-impaired individuals. Prerequisite: Education of hearing-impaired majors: SP&A 43600; speech pathology and audiology majors: SP&A 33101, 34102, 43402.

**SP&A 53506**  
SPECIAL ISSUES IN AUDIOLOGY (3)  
Readings and discussion of classic and current research on the evaluation of hearing disorders. Prerequisite: SP&A 4/53402.

**SP&A 54096**  
INDEPENDENT STUDY: SPEECH PATHOLOGY AND AUDIOLOGY (2-6)  
Readings and/or research on problems approved by chair of department in consultation with student’s advisor and project director. IP permissible. Prerequisite: Permission.

**SP&A 54110**  
SPEECH SCIENCE (3)  
Consideration of physiological and acoustic characteristics of normal speech production and perception with implications for speech and hearing disorders. Prerequisite: SP&A 34102, 34106 or equivalents.

**SP&A 54111**  
NEURAL PROCESSES IN SPEECH AND LANGUAGE (3)  
Anatomy and physiology of the nervous system underlying speech and language. Topics include: definition and fundamental concepts, afferent and efferent systems, cortical anatomy and function, cranial nerves, theories of brain function, and neural maturation and learning. Prerequisite: SP&A 34103 or permission of the instructor.

**SP&A 54112**  
AGE-RELATED CHANGES IN COMMUNICATION (3)  
Nonpathological age-related changes in speech, language and voice. Topics include: structural changes in orofacial, laryngeal and respiratory mechanisms; sequelae for speech, language and voice in the elderly; effects of age on swallowing; facilitating conversational interactions with elderly individuals.

**SP&A 54130**  
COMMUNICATION DISORDERS OF THE AGING (2)  
Hearing, speech and language disorders in geriatric population. Symptoms, causes and treatment: normal changes in hearing, language and speech accompanying aging process. Prerequisite: Senior standing or permission.

**SP&A 54310**  
CLINICAL PROCEDURES (3)  
An examination of evaluative and therapeutic procedures used with communicatively impaired children and adults. Prerequisite: SP&A 34103 or 34106 or senior standing.

**SP&A 63104/73104**  
ADVANCED AUDIOMETRY (3)  
Behavioral and physiological assessment of auditory and vestibular site-of-lesion.

**SP&A 63105/73105**  
AMPLIFICATION (3)  
Historical through contemporary views of the selection and fitting of amplification for the hearing-impaired. Consideration of legal, political and financial issues when choosing to dispense. Prerequisite: SP&A 4/53402, 4/53404 or permission.

**SP&A 63107/73107**  
ANATOMY AND PHYSIOLOGY OF THE HEARING MECHANISM (3)  
Anatomy and physiology of the peripheral and central hearing mechanism, including the embryological development of the ear; some emphasis on conductive and sensorineural pathologies. Prerequisite: SP&A 33101, 4/53402 or equivalent.

**SP&A 63202/73202**  
AUDITORY ELECTROPHYSIOLOGY (3)  
Foundations, instrumentation, protocols and interpretation of electrophysiological testing in audiology. Tests include brainstem response audiometry, otoacoustic, electroneystagmography and interoperative monitoring.
SP&A 63205/73205
ADVANCED AMPLIFICATION (3)
Strategies for the selection, fitting and verification of advanced hearing aid technology. Prerequisite: SP&A 6/73105.

SP&A 63301/73301
PEDIATRIC AUDIOLOGY (3)
Audiological testing techniques in children including auditory development, philosophy in the selection of a test battery, and pathological conditions affecting the pediatric population.

SP&A 63502/73502
ADVANCED AURAL REHABILITATION (3)
Generic and specific models for implementing aural rehabilitation programs with children and adults.

SP&A 63504/73504
PSYCHOACOUSTICS (3)
Basic principles, theories, methods and findings relating physical and psychological dimensions of sound.

SP&A 63691/73691
SEMINAR IN AUDIOLOGY (3)
Research, readings and discussion in any of these areas: aural rehabilitation, amplification, psychoacoustics, auditory physiology, medical audiology, hearing conservation. Repeatable up to a maximum of 12 semester hours.

SP&A 64091/84091
SEMINAR IN COMMUNICATION DISORDERS (1-3)
Special topics seminar for advanced students in speech-language pathology and audiology. Presentations and discussion of research projects are required. Repeatable to 9 credits. S/U grading; IP permissible.

SP&A 64093/74093
WORKSHOP IN COMMUNICATION DISORDERS (1-3)
Variable topic workshop offered when need arises, either on- or off-campus to update training in a particular area of speech pathology. S/U grading.

SP&A 64096
INDIVIDUAL INVESTIGATION: PATHOLOGY AND AUDIOLOGY (2-6)
Independent study of area or problem to be selected in consultation with graduate staff. May be repeated for maximum of 6 credit hours. IP permissible.

SP&A 64098
RESEARCH (1-15)
Research or individual investigation for master’s-level graduate students. Repeat registration permitted. S/U grading; IP permissible.

SP&A 64191/74191
SEMINAR: NEUROGENIC COMMUNICATION DISORDERS (1-3)
Reading and discussion seminar on swallowing disorders and the communication disorders relating to aphasia, apraxia, dysarthria, closed head injury, right brain damage and dementia. Repeatable up to 9 hours. S/U grading; IP permissible. Prerequisite: SP&A 64301 or permission.

SP&A 64199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. S/U grading; IP permissible.

SP&A 64291/74291
SEMINAR: CHILD LANGUAGE (1-3)
Topics are selected for class investigation from the areas of child language, development or disorders. Repeatable up to 9 hours. S/U grading; IP permissible. Prerequisite: Permission.

SP&A 64299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: SP&A 64199.

SP&A 64301/74301
APHASIA AND APRAXIA (3)
Neuro-anatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to aphasia and apraxia of speech in adults.

SP&A 64302/74302
LANGUAGE ASSESSMENT AND INTERVENTION IN EARLY CHILDHOOD (3)
Methods of language assessment and intervention for infants, toddlers and preschoolers who are either at risk or diagnosed as presenting language delays or disabilities. Prerequisite: SP&A 34107 or permission.

SP&A 64303/74303
DISORDERS OF ARTICULATION AND PHONOLOGY (3)
Diagnosis and remediation of children’s articulation and phonological disorders.

SP&A 64304/74304
COGNITIVE-COMMUNICATIVE DISORDERS (2)
Neuro-anatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to cognitive-communicative disorders in adults subsequent to right-brain damage, head trauma and dementia.

SP&A 64305/74305
FLUENCY DISORDERS (2)
Nature, theories and their derived therapeutic approaches to the treatment of fluency disorders.
Speech Pathology and Audiology

SP&A 64306/74306
VOICE DISORDERS (2)
Normal aspects of voice production, etiology and symptomatology of voice disorders, diagnostic procedures and management techniques.

SP&A 64307/74307
DYSARTHRIA (1)
Neuro-anatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to dysarthria in adults.

SP&A 64308/74308
LANGUAGE ASSESSMENT AND INTERVENTION WITH SCHOOL-AGE POPULATIONS (3)
Theoretical background knowledge and practical assessment and intervention techniques for school-age children who demonstrate language disorders. Prerequisite: SP&A 34107 or permission.

SP&A 64309/74309
PDD SPECTRUM DISORDERS: THEORY AND DIAGNOSIS (3)
This course provides an examination of the medical, developmental, social, cognitive and communicative aspects of disorders on the pervasive developmental disorders (PDD) spectrum. Assessment and intervention models are explored as they relate to various theoretical models for understanding the presentation of PDD.

SP&A 64310/74310
PDD SPECTRUM DISORDERS: LIFE-SPAN INTERVENTIONS (3)
This course provides students with a review of the significant aspects related to educational, social, vocational transitions for children, adolescents and adults with PDD. Students learn skills necessary to evaluate and develop programs designed to meet the changing and long-term needs of individuals with PDD.

SP&A 64350/74350
AUGMENTATIVE COMMUNICATION AND LANGUAGE PROGRAMMING (3)
Methods of communication and language programming through augmentative and/or alternative modes with a primary focus on interdisciplinary teams and interdisciplinary decision-making and programming. Prerequisite: SP&A 6/74302 or 6/74308 or permission.

SP&A 64351/74351
CLINICAL MANAGEMENT IN SPEECH PATHOLOGY AND AUDIOLOGY (3)
Consideration of problems involved in administration of speech and hearing programs as these vary from hospitals, clinics, schools and universities.

SP&A 64352/74352
THE SUPERVISORY PROCESS IN SPEECH PATHOLOGY/AUDIOLOGY (3)
Seeks to emphasize development of process skills related to clinical supervision in speech and hearing. Prerequisite: C&I 67100.

SP&A 64353/74353
COMMUNICATION PROGRAMMING FOR CHILDREN WITH MULTIPLE DISABILITIES (3)
Nature and clinical management of the communication disorders of children having a variety of disabling conditions.

SP&A 64354/74354
MAXILLOFACIAL ANOMALIES (1-3)
Nature, diagnosis, and treatment for individuals with congenital and acquired maxillofacial anomalies and/or resonance disorders.

SP&A 64355/74355
ENVIRONMENTAL LANGUAGE PROGRAMMING (3)
Consideration of environmental and cultural influences on language behavior and relevance of these factors in programming for language-impaired children. Prerequisite: SP&A 4/54108 and 6/74302 or permission.

SP&A 64356/74356
DYSPHAGIA (3)
Anatomy, etiologies, symptomatologies, evaluation procedures and treatment techniques relating to swallowing disorders in adults and children.

SP&A 64391/74391
SEMINAR: ARTICULATION AND PHONOLOGY (1-3)

SP&A 64491/74491
SEMINAR: ORGANIC SPEECH DISORDERS (1-3)
A revolving topics seminar on theoretical and/or clinical issues related to neurogenic/organic speech and/or language disorders. S/U grading; IP permissible.

SP&A 64492/74492
CLINICAL PRACTICE IN SPEECH PATHOLOGY AND AUDIOLOGY (1-12)
Supervised clinical practice with patients who have speech, hearing or language problems. IP permissible. Prerequisite: Permission. Special fee: $25 per semester.

SP&A 64500/74500
LANGUAGE SCIENCE (3)
Detailed discussion of current theoretical issues in first language acquisition from the prelinguistic period to the development of complex linguistic and communicative abilities. Prerequisite: SP&A 34104 or permission.
Speech Pathology and Audiology

SP&A 64504/74504
EXPERIMENTAL PHONETICS (3)
Consideration of experimental bases of normal speech production and perception; survey of literature, with implications for speech and hearing disorders. Prerequisite: SP&A 4/54110 or permission.

SP&A 64506/74506
INSTRUMENTATION (3)
Basic principles of electricity and electronics and their clinical and research applications to speech and hearing.

SP&A 64525
PUBLIC SCHOOL TECHNIQUES IN COMMUNICATION DISORDERS: INQUIRY INTO PROFESSIONAL PRACTICE (3)
Inquiry into speech pathology and audiology as practiced in the school setting; emphasis on speech-language pathologist or audiologist as disciplined investigator. Combination of themes including organizational procedures, therapy techniques, collaboration, ethics and research. Prerequisite: Permission. To be taken concurrently with SP&A 64528.

SP&A 64528
STUDENT TEACHING IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (4-8)
Inquiry into speech pathology and audiology as practiced in the school setting; emphasis on speech-language pathologist or audiologist as disciplined investigator. Combination of themes including organizational procedures, therapy techniques, collaboration, ethics and research. S/U grading. Prerequisite: Permission. Corequisite: SP&A 64525.

SP&A 64591/74591
SEMINAR: FLUENCY DISORDERS (1-3)
Seminar dealing with the theoretical and applied aspects of fluency disorders in children and adults. Repeatable up to 9 hours. S/U grading; IP permissible.

SP&A 64600/74600
RESEARCH METHODS IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (3)
Methodologies for collecting, analyzing and interpreting data for clinical and research purposes in speech-language pathology and audiology.

SP&A 64691/74691
SEMINAR: VOICE DISORDERS (1-3)
Current literature review and discussions dealing with varying topics ranging from normal aspects of phonation in various populations to disorders of voice and their diagnosis and treatment. Repeatable up to 9 hours. S/U grading; IP permissible. Prerequisite: SP&A 6/74306 or its equivalent or permission.

SP&A 64791/74791
SEMINAR: SPEECH SCIENCE (1-3)
Consideration of selected topics related to physiological, anatomical and acoustic aspects of speech production and perception. Repeatable up to 9 hours. S/U grading; IP permissible. Prerequisites: SP&A 4/54110, 6/74504 or permission.

SP&A 64891/74891
SEMINAR: COMMUNICATION MODALITIES AND ASSISTIVE TECHNOLOGY (1-3)
Nature, etiologies and correlates of speech/language communication disorders and differences that may indicate a need for a multimodal communication approach. Includes an emphasis on assistive technology for communication, language, learning and literacy. S/U grading; IP permissible. Prerequisites: SP&A 64500, 64302 or instructor permission.

SP&A 64991/74991
SEMINAR: CRITICAL TOPICS IN SPEECH LANGUAGE PATHOLOGY (1-3)
Principles and methods of assessment and intervention for various topics in speech-language pathology from critical thinking and case-study framework. S/U grading; IP permissible. Prerequisite: Instructor permission; majors only.

SP&A 70691
SEMINAR IN AUDIOLOGY (2)
Selected current topics in audiology with emphasis on review of current literature. Prerequisite: Admission to the Au.D. program or permission of the instructor; doctoral standing.

SP&A 70692
INTERNSHIP IN AUDIOLOGY I (2)
Supervised practicum in audiology requiring the independent performance of basic audiologic procedures, including hearing aid management. Prerequisite: SP&A 70744 and permission; doctoral standing. Special course fee $25.00 per semester (subject to change).

SP&A 70701
BASIC AND APPLIED PHYSICAL ACOUSTICS FOR AUDIOLOGY (4)
Study of physical acoustics, basic electricity and electronics, as well as principles, methodology, calibration and maintenance of audiologic equipment. Prerequisite: Admission to the Au.D. program or permission of instructor; doctoral standing.

SP&A 70702
ANATOMY AND PHYSIOLOGY OF PERIPHERAL AUDITORY AND VESTIBULAR SYSTEMS (3)
A study of the anatomy, biophysics and physiology of the auditory and vestibular systems. Prerequisite: Admission to the Au.D. program or permission of the instructor; doctoral standing.
Speech Pathology and Audiology

SP&A 70703
ACOUSTIC PHONETICS (3)
Study of the acoustics, measurement and nomenclature of speech sounds and theoretical and acoustics bases of speech perception. (Includes 1 hour lab.) Prerequisite: Admission to the Au.D. program or permission of the instructor; doctoral standing.

SP&A 70704
CRITICAL ANALYSIS OF RESEARCH IN AUDIOLOGY (2)
General introduction to the research process with an emphasis on acquiring a reading knowledge of research and an ability to evaluate research. Prerequisite: Admission to the Au.D. program or permission of the instructor; doctoral standing.

SP&A 70705
AUDITORY DISORDERS (2)
Study of conditions/diseases that can affect the auditory system. Prerequisite: Admission to the Au.D. program or permission of the instructor; doctoral standing.

SP&A 70706
ANATOMY AND PHYSIOLOGY UNDERLYING NEURO-OOTOLOGY (4)
An in-depth study of the anatomy and physiology of the central auditory and vestibular nervous system. (Includes 1 hour lab.) Prerequisite: SP&A 70702; doctoral standing.

SP&A 70707
PSYCHOACOUSTICS (3)
Study of the principles, procedures and research of psychoacoustics; the relationships between the physical dimensions of auditory stimuli and the resultant perceptual experience with normal and impaired hearing. Prerequisite: Admission to the Au.D. program or permission; doctoral standing.

SP&A 70708
CRITICAL ANALYSIS OF RESEARCH II (2)
Development of a reading knowledge of research and the ability to evaluate the quality of research studies. Prerequisite: SP&A 70704; doctoral standing.

SP&A 70709
AUDIOLOGIC ASSESSMENT (3)
Theoretical basis for tests underlying basic audiologic assessments. Prerequisite: SP&A 70705; doctoral standing.

SP&A 70710
INDUSTRIAL AND COMMUNITY NOISE (3)
Theoretical principles of noise measurement; etiology of noise-induced hearing loss and acoustic trauma; industrial hearing conservation programs; Occupational Safety and Health Act; community and recreational noise evaluation and management. Prerequisite: Admission to the Au.D. program or permission; doctoral standing.

SP&A 70711
SPEECH-LANGUAGE PATHOLOGY FOR THE AUDIOLOGIST (4)
Examination of normal and abnormal aspects of speech and language including their impact on auditory function and testing. Prerequisite: Admission to the Au.D. program or permission; doctoral standing.

SP&A 70712
DIAGNOSIS OF AUDITORY DISORDERS (3)
Underlying theory and principles of administration and interpretation of site-of-lesion tests. Prerequisite: SP&A 70709; doctoral standing.

SP&A 70713
HEARING AID TECHNOLOGY (4)
Study of amplification systems for the hearing impaired. Prerequisite: SP&A 70701; doctoral standing.

SP&A 70714
GERONTOLOGICAL ISSUES IN AUDIOLOGY (3)
Physiological, psychological and sociological theories of aging with focus on the etiology, symptomatology, assessment and rehabilitation of older adults with hearing impairments. Prerequisite: Admission to the Au.D. program or permission; doctoral standing.

SP&A 70715
CENTRAL AUDITORY PROCESSING: EVALUATION AND MANAGEMENT (3)
Study of audiologic evaluation and habilitation/rehabilitation procedures for people who have central auditory disabilities. Prerequisite: SP&A 70705 and 70706; doctoral standing.

SP&A 70716
ADULT HEARING-AID FITTING AND SELECTION (3)
Examination of the theory and practice of fitting hearing aids. Emphasis on special clinical procedures, research needs and evolving technology in hearing instruments. Prerequisite: SP&A 70713; doctoral standing.

SP&A 70717
PEDIATRIC AUDIOLOGY (3)
Study of audiologic diagnostic and auditory habilitative protocols for the birth to age three population. Both assessment and management strategies will be emphasized. Prerequisite: SP&A 70709; doctoral standing.

SP&A 70718
COCHLEAR IMPLANTS (2)
Study of cochlear implants in children and adults including equipment, candidacy, mapping and overview of (re)habilitation. Prerequisite: Admission to the Au.D. program or permission of instructor; doctoral standing.
SP&A 70719
COUNSELING IN AUDIOLOGY (3)
Focus on interviewing, counseling and interacting with individuals with hearing impairments, their families and significant others. Prerequisite: Admission to the Au.D. program or permission of instructor; doctoral standing.

SP&A 70720
PEDIATRIC AMPLIFICATION (3)
The focus of study is on amplification systems and fitting techniques for the pediatric population. Prerequisite: SP&A 70713, 70716 and 70717; doctoral standing.

SP&A 70721
EVALUATION AND MANAGEMENT OF BALANCE DISORDERS (3)
Study of the balance mechanism; differential diagnostic assessment of balance disorders including electronystagmography, posturography and rotational testing; rehabilitation of the balance-disordered patient. (1 hour lab included.) Prerequisite: Admission to the Au.D. program or permission of instructor; doctoral standing.

SP&A 70722
AUDIOLOGIC MANAGEMENT OF THE SCHOOL-AGE CHILD (3)
Focus on educational audiology. Features delivery of audiological services designed to access the school environment for children ages 4-21. Prerequisite: SP&A 70717; doctoral standing.

SP&A 70723
AUDIOLOGIC REHABILITATION OF ADULTS (4)
Study of current methodologies employed in the audiological rehabilitation of adults with hearing impairments. Implementation of remedial strategies is emphasized. Prerequisite: SP&A 70716 or permission of instructor; doctoral standing.

SP&A 70724
HISTORY OF AUDIOLOGY (1)
An examination of the history of deafness/hearing impairment and the profession of audiology. Prerequisite: Admission to the Au.D. program or permission of instructor; doctoral standing.

SP&A 70725
MEDICAL MANAGEMENT OF AUDITORY DISORDERS (2)
A study of the multidisciplinary approach to medical/surgical management of patients with auditory and vestibular disorders. Prerequisite: SP&A 70712 or permission; doctoral standing.

SP&A 70726
ELECTROPHYSIOLOGICAL TECHNIQUES IN AUDIOLOGY (3)
Study of evoked responses used in diagnostic audiology, including ABR, MLR, EchochG, ENOG, ALR, P300, VER and SSER. Prerequisite: SP&A 70706 or permission; doctoral standing.

SP&A 70727
CULTURAL ISSUES IN DEAFNESS (2)
An introduction to deaf culture and the audiologist’s roles and responsibilities in planning treatment with a member of the deaf community. Prerequisite: Admission to the Au.D. program or permission; doctoral standing.

SP&A 70730
PRACTICE MANAGEMENT IN AUDIOLOGY (4)
Study of issues that impact the management of audiological practices, including establishing a private practice, reimbursement, marketing, record-keeping and professional liability. Prerequisite: Admission to the Au.D. program or permission; doctoral standing.

SP&A 70741
DIRECTED OBSERVATION IN AUDIOLOGY I (1)
Introduction to clinical practicum in audiology. Directed observation of clinical practice including audiological diagnosis and audiological rehabilitation are required. Prerequisite: Admission to the Au.D. program or permission of instructor; doctoral standing.

SP&A 70742
DIRECTED OBSERVATION IN AUDIOLOGY II (1)
Introduction to clinical practicum in audiology. Directed observation of clinical practice including audiological diagnosis and audiological rehabilitation are required. Prerequisite: Admission to the Au.D. program or permission of instructor; doctoral standing.

SP&A 70743
CLERKSHIP I (1)
Clinical practicum in audiology during which students perform discrete tasks under supervision. Corequisite: SP&A 70709 and permission of instructor; doctoral standing. Special course fee: $25.00 per credit hour (subject to change).

SP&A 70744
CLERKSHIP II (1)
Supervised clinical practicum in audiology during which students will perform discrete clinical tasks while under supervision. Prerequisite: SP&A 70743 and permission; doctoral standing. Special course fee: $25.00 per credit hour (subject to change).

SP&A 70747
GRADUATE AUDIOLOGIST I (3)
Supervised clinical practicum in audiology that encompasses audiological assessments and audiological habilitation. Prerequisite: SP&A 70792 or permission; doctoral standing. Special course fee: $25.00 per semester (subject to change).
Speech Pathology and Audiology

SP&A 70748
GRADUATE AUDIOLOGIST II (3)
Supervised clinical practicum in audiology requiring the independent performance of audiological assessment procedures, audiologic rehabilitation, and vestibular assessment and rehabilitation. Prerequisite: SP&A 70747 or permission; doctoral standing. Special course fee: $25.00 per semester (subject to change).

SP&A 70749
GRADUATE AUDIOLOGIST III (3)
Supervised clinical practicum in audiology that encompasses the entire range of audiological procedures including neurophysiological-based procedures. Prerequisite: SP&A 70748 or permission; doctoral standing. Special course fee: $25.00 per semester (subject to change).

SP&A 70750
CLINICAL EXTERNSHIP IN AUDIOLOGY I (1-4)
Full-time clinical practicum in audiology at an off-campus site. Prerequisite: SP&A 70749, permission and successful completion of the PRAXIS Examination. Corequisite: SP&A 70791; doctoral standing. Special course fee: $25.00 per semester (subject to change).

SP&A 70751
CLINICAL EXTERNSHIP IN AUDIOLOGY II (1-4)
Full-time clinical practicum in audiology in an off-campus site. Prerequisite: SP&A 70750 or permission. Corequisite: SP&A 70791; doctoral standing. Special course fee: $25.00 per semester (subject to change).

SP&A 70791
CLINICAL SEMINAR IN AUDIOLOGY (1)
In-depth consideration of topics/issues in the practice of audiology with emphasis upon issues related to clinical rotation. Repeat registration permitted. Corequisite: SP&A 70750 or 70751, or permission of instructor; doctoral standing.

SP&A 70792
INTERNESHIP IN AUDIOLOGY II (2)
Supervised clinical practicum in audiology requiring the independent performance of diagnostic hearing aids and audiological rehabilitation procedures. Prerequisite: SP&A 70649 or permission; doctoral standing. Special course fee: $25.00 per semester (subject to change).

SP&A 70798
RESEARCH PROJECT IN AUDIOLOGY (3)
Completion of a doctoral research project including data collection, analysis, write-up and oral presentation. Prerequisite: Admission to the Au.D. program or permission; doctoral standing.

SP&A 84098
RESEARCH (1-15)
Research or individual investigation for doctoral students who have not yet passed their candidacy examination. Repeat registration permitted. IP permissible.

SP&A 84199
DISSERTATION I (15)
Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun, and continuing until the completion of 30 hours. S/U grading; IP permissible. Prerequisite: Admission to candidacy.

SP&A 84299
DISSERTATION II (1 or 15)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: SP&A 84199.
THEATRE AND DANCE

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The School of Theatre and Dance offers programs of graduate study leading to the Master of Arts degree or the Master of Fine Arts degree. It also provides graduate coursework in theatre for graduate students in other disciplines of the university when it is required or elected as part of their programs.

The Master of Arts program, normally a two-year course of study, is designed to offer the student advanced work in theatre that will represent mastery of the field in general and of a specific area of theatre as well. In addition, the research writing skills stressed in the program are intended to prepare the student, who so elects, to define and pursue a terminal degree.

The Master of Fine Arts, normally a three-year course of study, is offered in acting and in design/technology (with concentrations in costume design, scenic design, lighting design and in costume technology and technical direction). The acting concentration includes a returning professional's track in which students can receive credit for professional work previously completed as fulfillment of Kent State University course requirements (substitutions require course enrollment for credit). The M.F.A. is a terminal degree designed for those who intend to pursue a career in the profession as a creative artist or theatre technologist.

The School of Theatre and Dance offers a limited number of graduate assistantships for both the Master of Arts and Master of Fine Arts student. The graduate assistantships usually provide tuition waiver and a stipend and require a minimum of 20 hours of service to the School of Theatre and Dance in the form of instruction, supervision of labs or work in a specific area (management, scene shop, costume shop). Students interested in a graduate assistantship must apply to the School of Theatre and Dance in writing. To be continued on a graduate assistantship, students must maintain a minimum 3.0 GPA, pass periodic review by the Graduate Studies Committee and (if M.F.A. students) regular audition or portfolio review, and show satisfactory progress toward the degree. Students are notified at the time of these reviews of the awarding or continuation of a graduate assistantship. An M.A. student may hold an assistantship for a maximum of two academic years (excluding summers) and an M.F.A. student may hold an assistantship for a maximum of three academic years (excluding summers and off-campus internships).

For further information on either the Master of Arts degree or the Master of Fine Arts degree, please contact the School of Theatre and Dance or visit the school’s Web site at http://www.theatre.kent.edu/.

Master of Arts

ADMISSION
All Master of Arts applicants for graduate study should comply with the conditions for admission as set forth in the general section of this catalog. Of the three letters of recommendation required in the application for graduate study, at least two should come from former professors or others competent to evaluate research or scholarly writing skills. The application must be accompanied by a brief statement (no more than two double-spaced pages) summarizing the student's background and career goals, and by an example of historical or critical writing (such as a documented research paper). Applicants for the Master of Arts must achieve and submit appropriate scores on the Graduate Record Examination.

Applicants are expected to have the equivalent of an undergraduate curriculum in theatre consisting of at least 12 semester hours in theatre history and dramatic literature and basic courses in acting, directing, design and technical theatre. An idea of the level of background expected may be derived from the Kent State University undergraduate catalog and from course syllabi in these areas of theatre. Applicants who do not possess the equivalent of this curriculum may be required to complete specified undergraduate coursework for no credit in addition to the master's degree curricular requirements.

PROGRAM REQUIREMENTS
Curricular advising will be provided by the coordinator of graduate studies initially, during the week prior to first enrollment. Unless they have successfully completed an equivalent course, Master of Arts students must take Introduct-
tion to Graduate Studies (THEA 61000) during their first semester. Program requirements may be completed via one of the following options, which the student will elect in consultation with an advisor, chosen during the first semester in residence:

Option 1. Thesis. Requires a minimum of 32 hours of graduate coursework, consisting of THEA 61000, at least five courses from among our graduate offerings in theatre history, drama, theory and criticism (to include THEA 51133, 51134, 61001, 61110 and 61111), courses in other departments that support and enrich the area of specialty, and 6 hours of Thesis I (THEA 61199). Continuous enrollment in Thesis II (THEA 61299), including summer, is required until the thesis is successfully defended (maximum time: six calendar years from first enrollment). A description of the thesis process may be obtained from the school. The thesis is deposited in the college office and archived, and follows regulations described in the College of Fine and Professional Arts Style Guide.

Option 2. Nonthesis Paper. Requires a minimum of 36 hours of graduate coursework consisting of THEA 61000, at least five courses from among our graduate offerings in theatre history, drama, theory and criticism (to include THEA 51133, 51134, 61001, 61110 and 61111), courses in other departments that support and enrich the area of specialty, 9 hours in a specified research area (at least 3 hours of these courses must be at the 60000 level), and 3 hours of Research (THEA 61098). A description of the nontthesis paper process may be obtained from the school. A copy of the nontthesis paper becomes part of the student's file in the college office.

Master of Fine Arts

ADMISSION
All Master of Fine Arts applicants for graduate study should comply with the conditions for admission as set forth in the general section of this bulletin and in the application form. Applicants whose undergraduate grade point average is below 3.0 are not normally accepted for graduate study. Those seeking exception to this rule must submit scores on the Graduate Record Examination and other evidence of high academic potential. Of the three letters of recommendation required in the application for graduate study, at least two should come from former professors competent in the field of the applicant's specialization.

In addition to meeting the general university requirements for admission to graduate study, the applicant must meet one of the following two requirements in undergraduate preparation: a baccalaureate degree in theatre that includes a core curriculum consisting of 12 semester hours in theatre history and dramatic literature, plus basic courses in acting, directing, technical theatre and design; or a baccalaureate degree in a discipline other than theatre, when there is a record of equivalent professional training or experience in theatre, or demonstrable potential for work at the Master of Fine Arts level in theatre.

APPLICATIONS
Applicants to the Master of Fine Arts program are required to submit a resume of all theatrical experience and a brief statement — no more than two double-spaced pages — summarizing background and career goals.

ADMISSION TO THE MASTER OF FINE ARTS
Admission to the Master of Fine Arts concentrations in design/technology or acting requires an audition or portfolio review with the graduate faculty in the area of concentration. On-campus interviews, auditions and portfolio reviews are by appointment only and are scheduled each semester, typically during the November or March preceding the first enrollment for a fall semester. M.F.A. classes are admitted once every three years, beginning with the fall of 2003. Students may also schedule an appointment at conferences and conventions where graduate faculty are in attendance. During the first and second years of study, students are regularly reviewed by the graduate faculty in their area of concentration (design/technology faculty or acting faculty) and advised of the outcome of those reviews. Reviews concern whether the student will be allowed to continue in the program and may involve warning, probation or dismissal, as well as retention. Design/technology students must present a portfolio of their work for these reviews and acting students the performance of a significant role. All students are expected to be able to demonstrate significant contributions to the productions of the School of Theatre and Dance.

PROGRAM REQUIREMENTS
The Master of Fine Arts program is an intensive, three-year, professional training program requiring the completion of 60-73 semester hours of graduate credit depending on the area of concentration. All M.F.A. students are required to take THEA 61000 during their first semester in the program, the graduate core courses THEA 61110 and THEA 61111, 6 hours of Graduate Practicum in their area of concentration (design/technology or acting), THEA 60992, 61992 and 60199-M.F.A. Thesis Project. Each student will be assigned a graduate faculty advisor from his/her area of concentration to assure that curricular requirements in the area of specialty are met.

THEA 60992 and THEA 61992 may be completed in one of three ways (all require the advisor’s approval): (1) an internship with the Porthouse Theatre Company and an internship with another professional theatre company; or (2) internships with two professional theatre companies; or (3) two internships with the Porthouse Theatre Company. All internships require an exit document by the on-site supervisor summarizing the duties performed, skill level attained and quality of the student’s internship work. Where possible, internships should be undertaken during the summer. Absence on internship during a semester requires prior approval by the Graduate Studies Committee.

M.F.A. students are required to remain in residence for the three years needed to complete the program (excluding, if appropriate, the internship). At a minimum, acting students must audition for all main stage productions and accept the
Students in the returning professional track in acting focus upon one task for the M.F.A. thesis project, approved according to the topic proposal to project completion process outlined above. The advisor will clarify what is documented in the thesis project paper.

As soon as the thesis project has been completed, the student will prepare and submit the thesis project paper or components to the advisor in accordance with regulations specified in the school's description of the M.F.A. Thesis Project Paper (available from the coordinator of graduate studies) and in the College Style Guide. When both are satisfied, the paper will be circulated to the members of the student's thesis project committee. When the committee deems the work is in appropriate form, it will be made available to members of the graduate faculty in the school and presented at a public meeting. Upon successful completion of these procedures, the Report of Completion of M.F.A. Thesis Project will be signed and the thesis project placed in the student's file and deposited in the college office.

### Design/Technology

Students in design/technology begin this process by presenting a two-page proposal to the advisor requesting that a specific design or project be accepted as the thesis project topic, and identifying a thesis project committee, consisting of a minimum of three graduate faculty, including the student's academic advisor. When deemed in submissible form, the advisor will present the proposed topic to the graduate faculty in the area of concentration. When approved by the graduate faculty in the area, the advisor will submit the proposal to the graduate coordinator for circulation to the Graduate Studies Committee and will present the thesis project topic to them as scheduled. The approval of this committee shall be final and a Notification of Approved M.F.A. Thesis Project Topic form will be filed with the school and the college. The student may then enroll in THEA 60199 for the semester in which the project will be undertaken.

### Acting

Students in acting begin the thesis project process during the second semester of study by identifying a committee of three graduate faculty members in the area of concentration. Each of three roles in which the student is cast (from this point to the conclusion of the plan of study) is presented to this committee with the student's arguments that the role is sufficiently challenging and significant to that plan as to serve as part of the thesis project. If the committee approves the role, the student documents the process, as explained by the thesis project advisor (one of the three committee members). During the semester in which the third role is approved, which is at least the semester before graduation is anticipated, the advisor will submit the three-role proposal the student has drafted to the graduate coordinator for circulation to the Graduate Studies Committee, and will present the thesis project topic to them as scheduled. The approval of this committee shall be final and a Notification of Approved Master of Fine Arts Thesis Project Topic form will be filed with the school and the college. The student may then enroll in THEA 60199 for the semester in which the third role concluding the project will be undertaken.
THEA 51114
GAY AND LESBIAN THEATRE (3)
Studies in how the gay and lesbian community has been represented in theatre. Frameworks will include the history of the community, political issues, identity questions and gender theory.

THEA 51133
THEATRE AND DRAMA IN AMERICA I (3)
History of theatre and drama in America from the beginning to ca. 1900. Prerequisite: Instructor's permission.

THEA 51134
THEATRE AND DRAMA IN AMERICA II (3)
History of the theatre and drama in America from ca. 1900 to the present. Prerequisite: Instructor's permission.

THEA 51191
VARIABLE CONTENT SEMINAR: THEATRE HISTORY/ LITERATURE/THEORY (3)
Seminar focuses on selected topics in these areas, for example, performance art, performance theory or theatre in a multicultural society.

THEA 51303
STYLES OF ACTING I (3)
Characterization and the demands of theatrical style in comedy. Imaginative exploration, physical commitment and the creation of a "comic truth" in Greek and Roman, Commedia, Molière and others. Prerequisite: Permission.

THEA 51304
STYLES OF ACTING II (3)
Continued exploration of theatrical style and period. Elizabethan and Jacobean theatre, with particular emphasis on Shakespearean performance. Prerequisite: THEA 51303 and permission of instructor.

THEA 51305
PROFESSIONAL ASPECTS: PERFORMANCE (3)
A study of the practical demands and requirements of a professional acting career with particular emphasis on audition skills. Also covered: pictures and resumes, making rounds, professional unions, casting directors, agents and managers, the job market and career prospects. Prerequisite: Permission of instructor.

THEA 51306
PROFESSIONAL ASPECTS: DESIGN AND TECHNOLOGY (3)
A study of the practical demands and requirements of a professional career in design and technology, including portfolio development, resumes, unions, job market, financial matters and career prospects. Use of computers as a resource and tool emphasized. Special course fee $8.00 per credit hour (subject to change).

THEA 51401
ADVANCED DIRECTING (3)
Advanced work in directing for the theatre. Topics include director as creative/interpretative artist; the director and the actor. Students direct individual projects. Prerequisite: Permission of instructor.

THEA 51521
ADVANCED LIGHTING TECHNOLOGY (3)
Advanced study of the technologies used in lighting designs; instrument design, optics, dimmer control systems, projection techniques and special effects. Special fee: $30 per semester. Prerequisite: Permission.

THEA 51522
DESIGN STUDIO: LIGHTING (3)
Advanced study of lighting design, emphasizing artistic style and concept through a variety of design problems. Special fee: $30 per semester. Prerequisite: Permission.

THEA 51523
SOUND DESIGN AND TECHNOLOGY I (3)
Sound design for the theatre, sound production and sound reinforcement techniques. Introduction to electronic equipment: mixing consoles, amplifiers, speakers.

THEA 51524
DESIGN STUDIO: COSTUME (3)
Advanced study in costume design. Genres, styles, in the context of performance spaces with an emphasis on research, practical considerations of costume production and communication between designer/shop personnel and designer/director. Prerequisite: Permission. Special fee: $45 per semester (subject to change).

THEA 51525
PROPS AND CRAFTS (3)
Examination of the processes related to the creation and procurement of scenic and costume props. Special fee: $50 per semester.

THEA 51527
SOUND AND DESIGN TECHNOLOGY II (3)
Studies in sound design, sound production and reinforcement for live performance. Advanced software applications will be explored. Additional work required for graduate credit. Prerequisite: THEA 51523 and permission.

THEA 51528
THEATRE SOUND REINFORCEMENT (3)
Studies in the theories and practice of audio mixing in support of live vocal and musical performance. Topics include wired and wireless microphones and real-time digital processing of audio. Extra work required for graduate credit. Prerequisite: Permission.
THEA 51529
ADVANCED WIG AND MAKEUP TECHNIQUES — STAGE AND SCREEN (3)
Advanced study of the process of designing and executing wigs and makeup with an emphasis on standards in the profession. Some prosthetic work required. Prerequisite: Permission. Special fee: $45 per semester.

THEA 51530
AUTOMATED STAGE LIGHTING PROGRAMMING (3)
Studies in the application of automated lighting techniques to live performance emphasizing artistic style and concept through a range of programming problems. Prerequisite: Permission.

THEA 51560
THEATRE FABRICATION TECHNOLOGY (3)
History of technical production practice, materials theory and application in scenic construction technology. Special fee: $80 per semester.

THEA 51620
HISTORY OF PERIOD STYLES FOR THEATRE DESIGNERS (3)
A survey of visual styles as related to historical and contemporary culture from antiquity through the 20th century with an emphasis on their application to theatrical design.

THEA 51621
PRESENTATION MEDIA (3)
Advanced process techniques in rendering, model building and design presentation for the scenic, costume and lighting designer in traditional and new media. Special fee: $45 per semester.

THEA 51622
DESIGN STUDIO: SCENERY (3)
Advanced study in scenic design. Explores genres, styles, performance spaces, including practical considerations. Prerequisite: Permission. Special fee: $50 per semester.

THEA 51623
TELEVISION PRODUCTION: LIGHTING (3)
Studies in the process and application of designing lighting for studio and event-based television production. Prerequisite: Permission.

THEA 51701
ADVANCED MOVEMENT I (3)
Development of advanced movement skills and the actor’s instrument. Emphasizes the elements of time, weight, focus and flow. Prerequisite: Permission.

THEA 51726
THEATRE MANAGEMENT (3)
Principles and practices of managing theatrical producing organizations. Problems of finance, personnel policy, program building and public relations. Production participation as assigned.

THEA 51736
PRODUCTION AND STAGE MANAGEMENT (3)
Detailed investigation of the methodology used in stage managing a professional theatrical production including paperwork, rehearsals and calling a show.

THEA 51801
ADVANCED VOICE/SPEECH I (3)
The use of exercise and specific text work to explore centering as it relates to the vocal, physical and emotional process of the actor. Focus on extremes of emotional sounds and the removal of barriers and nonuseful vocal habits/speech patterns. Incorporation of personal vocal/physical warm-up into actor’s process. Prerequisite: Permission.

THEA 57073
HISTORY OF DANCE AS A CULTURAL AND THEATRICAL PHENOMENON (4)
History of dance with emphasis on the vernacular, social and theatrical roots of Western culture.

THEA 57174
PRINCIPLES OF DANCE COMPOSITION I (3)
Movement exploration with emphasis on the concepts of design structure and form. Prerequisite: Permission.

THEA 60096
INDIVIDUAL INVESTIGATION — COSTUME HISTORY (2)
The study of 20th-century costume and international dress. Prerequisite: Permission.

THEA 60196
INDIVIDUAL INVESTIGATION — HISTORIC TEXTILES (3)
Identification and analysis of textile fabric as the reflection of culture.

THEA 60199
M.F.A. THESIS PROJECT (3)
Students must register for course during the semester of their M.F.A. thesis project. Not repeatable. S/U grading; IP permissible. Prerequisite: Permission of advisor.

THEA 60992
PROFESSIONAL THEATRE INTERNSHIP I (3-6)
Theatre and Dance

THEA 61000
INTRODUCTION TO GRADUATE STUDY IN THEATRE (3)
Orientation to bibliography and research in the field of theatre
with emphasis on application of research to performance.

THEA 61001
THEATRE RESEARCH STRATEGIES (3)
A survey of modern research strategies and their application
to specific research proposals formulated by the students.

THEA 61094
COLLEGE TEACHING IN THEATRE (3)
Strategies for teaching, issues on implications of pedagogical
practice, and responsibilities of academic leadership.

THEA 61095
SPECIAL TOPICS (1-3)
Offered irregularly when unusual resources permit a topic
different from existing courses. Topic will be announced when
scheduled. Repeat registration permitted.

THEA 61096
INDIVIDUAL INVESTIGATION: THEATRE AND DRAMA (1-4)
Independent study of an area or problem approved by divi-
sional graduate coordinator in consultation with project direc-
tor. Repeatable for maximum of 6 credit hours. IP permissible.
Prerequisite: Permission.

THEA 61098
RESEARCH (1-15)
Research or individual investigation for master's-level graduate
students. Credits may be applied toward meeting degree re-
quirements if school approves. Repeat registration permitted.
S/U grading; IP permissible. Prerequisite: Graduate standing
(master’s level).

THEA 61100
HISTORY OF THEORIES OF ACTING AND SPACE I (3)
History of theories of acting and space in the theatre from the
beginning to ca. 1850.

THEA 61110
HISTORY OF THEORIES OF ACTING AND SPACE II (3)
History of theories of acting and space in the theatre from ca.
1850 to the present.

THEA 61112
THEATRE HISTORY AND THEORY I (4)
The development of theatre in the Greek and Roman world is
examined in its historical and aesthetic contexts.

THEA 61113
THEATRE HISTORY AND THEORY II (4)
The development of theatre in the Medieval and Renaissance
periods is examined in its historical and aesthetic contexts.

THEA 61114
THEATRE HISTORY AND THEORY III (4)
The development of theatre in the 17th and 18th centuries is
examined in its historical and aesthetic contexts.

THEA 61115
THEATRE HISTORY AND THEORY IV (4)
The development of theatre in the period of Romanticism is
examined in its historical and aesthetic contexts.

THEA 61116
THEATRE HISTORY AND THEORY V (4)
The development of theatre in the late-19th and early-20th
centuries examined in its historical and aesthetic contexts.

THEA 61117
THEATRE HISTORY AND THEORY VI (4)
The development of theatre in the later-20th century exam-
ined in its historical and aesthetic contexts.

THEA 61191
SEMINAR: THEATRE HISTORY AND THEORY (3)
An investigation of a period, historical/theoretical develop-
ment, playwright/practitioner/theorist (variable topics).

THEA 61199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours
in a single semester, distributed over several semesters if de-
sired. S/U grading; IP permissible.

THEA 61201
SOFTWARE APPLICATIONS (3)
A survey of current software used in theatre production with
an emphasis on applications for management, design and
technical direction. Prerequisite: Permission. Special fee: $45
per semester.

THEA 61299
THESIS II (2)
Thesis students must continue registration each semester until
all degree requirements are met. S/U grading; IP permissible.
Prerequisite: THEA 61199.

THEA 61303
STUDIO: ACTING PREPARATION (3)
Exploration of actor responsiveness and spontaneity in indi-
vidual and interactive exercises, creative game playing, mono-
logues and scene work. Prerequisite: Permission of instructor.

THEA 61304
STUDIO: SCENE STUDY I (3)
Stanislavski-based approaches to the realistic scene. Prerequi-
site: THEA 61303 and permission.
THEA 61305
STUDIO: SCENE STUDY II (3)
Approaches to nonrealistic and nontraditional scenes. Prerequisite: THEA 61304 and permission.

THEA 61391
SEMINAR: PLAYWRITING (3)
Intensive analysis of dramaturgical theory. Scope of the inquiry dependent upon individual interests of those enrolled. Prerequisite: Permission.

THEA 61401
DIRECTING: PRODUCTION STYLE (3)
How plays “make” their meanings. Analysis of form and theatrical style for director and dramaturge. Prerequisite: Permission of instructor.

THEA 61402
DIRECTING: TEXT, SPACE AND ACTOR (4)
The director’s relationship to playtext, theatrical world and the human actor. Theoretical exploration and practical experience. Prerequisite: Permission.

THEA 61491
SEMINAR: DIRECTING AND ACTING (3)
Intensive theoretical and practical study of a great actor or director, a school of acting or directing, or stylistic approach; variable topics. Repeatable once. Prerequisite: Permission of instructor.

THEA 61497
PRODUCTION COLLOQUIUM (13)
Collegial exploration of the intersections among creative and scholarly/critical/theoretical thinking. Students involved in the colloquium may be pursuing current creative projects under faculty supervision. Does not count toward degree. Prerequisite: Permission.

THEA 61521
ADVANCED THEATRE DRAFTING (3)
Advanced drafting techniques for the technical director, scenic designer and lighting designer. Includes film, television, industrial and engineering graphic techniques. Prerequisite: Permission. Special fee: $25 per semester.

THEA 61522
ADVANCED STUDIES IN LIGHTING DESIGN (3)
Detailed exploration of the skills of designing lighting with emphasis on theatre, opera, ballet, alternative venues and professional standards. Special fee: $30 per semester.

THEA 61524
ADVANCED STUDIES IN COSTUME DESIGN FOR STAGE AND SCREEN (3)
Detailed exploration of skills in designing costumes for stage and screen. Emphasis on concept work, stylist work, accuracy in research, organizational skills and industry standards. Prerequisite: THEA 51524 and/or permission. Special fee: $30 per semester.

THEA 61525
MILLINERY AND 3-D CHARACTERS (3)
Advanced studies of techniques of millinery construction and 3-D character construction with an emphasis on current practice in the industry. Special fee: $80 per semester.

THEA 61527
SHOP MANAGEMENT (3)
Study of resource management for the professional shop. Topics: Business planning, labor relations, accounting, budgeting and productivity techniques. Prerequisite: Permission.

THEA 61561
ADVANCED CONSTRUCTION THEORY (3)
The theory and practice of structural and mechanical design for theatre production. Related issues in resource management for the professional shop. Prerequisite: Permission. Special fee: $30 per semester.

THEA 61621
ADVANCED STUDIES IN SCENE PAINTING (3)
Advanced study of the techniques used in painting scenery for theatre and television. Emphasizes professional standards and the practical application of skills. Prerequisite: Permission.

THEA 61622
ADVANCED STUDY: SCENERY FOR STAGE AND SCREEN (3)
Detailed exploration of the skills of designing scenery with emphasis on theatre, opera, ballet, film, television and alternative venues and the professional standards associated with each area. Prerequisite: Permission. Special fee: $50 per semester.

THEA 61701
ADVANCED MOVEMENT II (3)
Application of advanced specialized movement techniques. Prerequisite: THEA 61700.

THEA 61702
MOVEMENT: STYLES (3)
A study of special problems in movement for the stage. Prerequisite: Permission. Corequisite: THEA 61802.

THEA 61801
ADVANCED VOICE/SPEECH II (3)
Voice principles will be covered in depth and detail, with emphasis on their application to dialects, singing and media voice work. Prerequisite: THEA 61800.
Theatre and Dance

THEA 61802
VOICE/SPEECH: STYLES (3)
Integration of vocal work with period and modern texts. Students learn to approach text with more complex demands. Prerequisite: Permission. Corequisite: THEA 61702.

THEA 61992
PROFESSIONAL THEATRE INTERNSHIP II (3 or 6)

THEA 62092
PRACTICUM: DESIGN/TECHNOLOGY (3)
Practical experience for the graduate student in theatre design and technology under faculty supervision. S/U grading; IP permissible.

THEA 62192
PRACTICUM: PERFORMANCE (3)
Practical experience for the graduate student in theatre performance under faculty supervision. S/U grading; IP permissible. Repeat registration permitted.

THEA 62792
PRODUCTION DRAMATURGY (3)
Under faculty supervision, a student will dramaturge a School of Theatre and Dance production. Repeat registration permitted.

THEA 62992/72992
THEATRE PRODUCTION INTERNSHIP (16)
Intensive advanced training in practical aspects of production. Periodic seminars, laboratory sessions and performance in a theatre company or touring with Kent Theatre Ensemble. Repeatable for a maximum of 12 hours. S/U grading; IP permissible. Prerequisite: Permission of advisor.

THEA 67070
PRINCIPLES OF DANCE COMPOSITION II (3)
Movement exploration with emphasis on the development of advanced choreographic techniques. Prerequisite: Permission.

THEA 81199
DISSERTATION: THEATRE I (10 or 15)
Doctoral dissertation for which registration in at least two semesters is required, first of which will be semester in which dissertation work is begun and continuing until completion of 30 hours. S/U grading; IP permissible. Prerequisite: Admission to doctoral candidacy.

THEA 81299
DISSERTATION II (1 or 8)
Continuing registration required of doctoral students who have completed the initial 30 hours of dissertation and continuing until all degree requirements are met. S/U grading; IP permissible. Prerequisite: 81199.
The Kent State University College of Nursing offers the Doctor of Philosophy (Ph.D.), the Master of Science in Nursing (M.S.N.), several post-master’s certificate programs and two dual-degree programs in combination with other non-nursing master’s programs at Kent State University. The dual-degree programs offered are the Master of Science in Nursing/Master of Business Administration and the Master of Science in Nursing/Master of Public Administration. The Ph.D. in nursing is offered jointly with The University of Akron College of Nursing. The College of Nursing is accredited by the National League for Nursing and the Commission on Collegiate Nursing Education.

The joint program for the Doctor of Philosophy is characterized by excellence through scholarship, integrity and caring. The primary purpose of the program is to produce nurse scholars. This purpose is realized through the development, testing and dissemination of nursing knowledge derived from theories and models of nursing practice as well as from the social, legal, political and economic aspects of health care policies and practices. Interdisciplinary collaboration and community outreach are emphasized throughout the program, and graduates are characterized by the excellence of their leadership, research, teaching, or application of nursing and health care policy.

The Master of Science in Nursing (M.S.N.) program incorporates concepts of advanced practice nursing throughout the program. Students are prepared to function in clinical, managerial or leadership roles as dictated by their concentration and role specialties, and to be eligible for doctoral study. The program’s graduates hold leadership positions in a variety of roles in urban and rural settings in Ohio and nationally. At this writing, all graduates of the advanced practice programs at Kent State University who have sat for their certification examinations have successfully passed them.

The M.S.N. has concentrations in the areas of nursing of the adult, nursing and health care management, psychiatric-mental health nursing and parent-child nursing. The roles of Clinical Nurse Specialist (CNS) and Nurse Practitioner (NP) exist in all the clinical concentrations. The two roles can be combined or separately pursued in psychiatric-mental health nursing. Parent-child nursing is further subdivided into women’s health and pediatric nursing for each of the CNS or NP roles. In addition, the College of Nursing offers the M.S.N. with a concentration in interdisciplinary gerontology. A thesis is optional in all the nursing master’s concentrations except for the interdisciplinary gerontology program, where it is required.

The dual-degree programs of the Master of Science in Nursing and the Master of Business Administration (M.S.N.-M.B.A.) and the Master of Science in Nursing and the Master of Science in Public Administration (M.S.N.-M.P.A.) are designed for experienced nurses whose career goals include assuming middle- or executive-management positions in health services agencies or companies, or who are interested in starting their own businesses. Practical management knowledge and skills are concurrently integrated with nursing courses and relevant management experiences in the form of internships. Both curriculums are cost and time effective for nurses with clear goals and demanding schedules. Clinical courses are not required but may be added if desired. Graduates of these programs are prepared to pursue doctoral study.

All the graduate programs can be taken full- or part-time. Students completing programs requiring certificates for practice are eligible to sit for certification examinations upon graduation.
Persons seeking additional information on graduate study in nursing should consult the College of Nursing at 330-672-8761 or http://dept.kent.edu/nursing. Students may also contact the Division of Research and Graduate Studies, Office of Graduate Program Services, 330-672-2661.

**Master of Science in Nursing**

**ADMISSION**

In addition to regular application requirements of the university, admission to the Master of Science in Nursing degree program requires the following information. Applications can be obtained through the College of Nursing, Office of Student Services Research and Graduate Studies, Office of Graduate Program Services or online at https://admissions.rags.kent.edu. Students should retain personal copies of the information submitted.

1. Current licensure as a registered nurse by the Ohio Board of Nursing.
2. A baccalaureate and/or graduate degree from an accredited university.
3. A registered nurse with a baccalaureate degree in a non-nursing field may be eligible for entrance into the master’s program pending an interview with selected faculty and acceptable grade point averages (see below).
4. An undergraduate grade point average of 3.0 on a 4.0 scale.
5. Satisfactory completion of a statistics course within the previous five years and an elementary course in research methodology. Consult with the Dean for Research and Graduate Affairs in nursing about remedial work in these areas.
6. Three letters of reference, preferably from individuals who can address the applicant’s ability to master graduate study.
7. Submission of scores on the Graduate Record Examination. The Graduate Record Examination is required only of applicants with an undergraduate GPA of 2.99 or less on a 4.00 scale.
8. A pre-admission interview, by telephone or in person. The interview is used to establish a fit between student goals and the desired College of Nursing graduate program as recommended by the interviewer(s).
9. A 300-word essay describing professional goals and reasons for seeking graduate nursing education. Students seeking admission to the Interdisciplinary Gerontology program must focus their essay on their career interest in gerontology.
10. Students seeking admission to the Interdisciplinary Gerontology program must specifically request admission into that program. This request may take the form of a letter submitted with their other materials.

**PROGRAM REQUIREMENTS**

Master’s program requirements vary by track within clinical concentrations and by the dual-degree or interdisciplinary gerontology programs; however, single M.S.N. tracks typically require between 36-42 semester credit hours. All programs are four to five semesters (two full-time academic years) except for the dual-degree programs (see dual-degree programs). Part-time students typically take three to four years of study to complete their program; the university mandates a six-year time limit in obtaining a master’s degree, subject to petition. In most of the master’s nursing tracks curriculum designs, there are a total of 19 semester credits of courses related to their area of clinical concentration, 9 semester credit hours in courses...
SAMPLE PROGRAMS

Because many of the plans for programs change for reasons related to certification and the maintenance of updated courses, interested applicants are urged to contact the College of Nursing for samples of desired program plans. All programs contain sufficient clinical hours to meet certification requirements of the specialty.

Below is an illustration of a sample full-time nurse practitioner program. A part-time plan can be developed from the full-time plan by taking fewer courses per semester, over more semesters, with approval by the advisor. In the example of a nurse practitioner program, asterisked courses indicate where specialty content courses would occur for the specific nurse practitioner programs of adult primary care, women’s health, pediatric or psychiatric mental health. For instance, while the adult primary care nurse practitioner program would have Primary Care I as a course, the women’s health nurse practitioner program would have the course, Parent-Child I. Consult the catalog for the full range of courses within a program track.

Courses are available for students who are interested in gerontology.

SAMPLE FULL-TIME NURSE PRACTITIONER PLAN

Year 1 Fall Semester  
**Clinical Course I ................................................... 3  
Ambulatory Diagnostics .............................................. 2  
Advanced Human Physiology .................................... 3  
Total ................................................................................. 8-11

Year 1 Spring Semester  
**Clinical Course II .................................................... 5  
Theoretical Basis of Nursing .......................................... 3  
Advanced Pharmacology .............................................. 3  
Total ................................................................................. 11

Year 1 Summer Semester  
Clinical Inquiry I ......................................................... 3  
NP Summer Practicum ................................................. 2  
Total ................................................................................. 5

Year 2 Fall Semester  
**Clinical Course III .................................................... 5  
Introductory Applied Epidemiology ............................ 1  
Health Policy and Delivery Systems ............................ 2  
Clinical Inquiry II or Thesis option* ............................ 2 (*3)  
(Either course is also available during Year 2 Spring Semester)  
Total ................................................................................. 10-11

Year 2 Spring Semester  
**Capstone ................................................................. 4  
Ethical and Cultural Issues .......................................... 2  
Optional Thesis ......................................................... (3)  
Total ................................................................................. 6-9

** Clinical courses and practica focus on specialty (e.g. women’s health, adult primary care, etc.).

Dual-Degree Programs

Dual-degree programs prepare nurses to be leaders and managers in health care organizations. The Master of Science in Nursing/Master of Business Administration and the Master of Science in Nursing/Master of Public Administration dual-degree coursework is integrated and concurrent. The M.S.N./M.B.A. is 64 credit hours long, while the M.S.N./M.P.A. is 54 credit hours long. Both can be completed in six full-time semesters (three full-time years) or, if part-time, within a 4.5-5 year sequence.

In the M.S.N./M.P.A. program, the M.S.N. (normally 36-40 hours) contributes 19-31 credits, while the M.P.A. (normally 45 hours) contributes 27-39 credits. In the M.S.N./M.B.A. program, the M.S.N. contributes 19-31 credit hours, while the M.B.A. (normally 60 credits) contributes 39-45 credits.

Although student learning needs and previous coursework may create individual variations in the dual-degree programs, the M.S.N./M.B.A. includes 9-13 hours of management practice, 6-9 hours of nursing theory and research, 34 hours of M.S.N. and M.B.A. core courses, 9 hours of executive modules, and 9 hours of integration and capstone courses, including an internship. The M.S.N./M.P.A. includes 9-13 hours of management practice, 8-14 hours of nursing theory and research, 31 hours of M.S.N. and M.P.A. core courses, 6-12 hours of internships in health and public administration, and 6 hours of organizational theory and electives.

Each of the dual-degree programs combines the strengths of advanced nursing preparation and research with the management knowledge needed to develop patient-responsive organizations. Nursing graduate students, with faculty advice, select their program of study and combine it with the respective management programs. Practicum experiences, an integral part of the programs, provide a combined management and nursing focus. A management internship near the end of the respective dual-degree program enables students to practice new leadership skills within a health care setting.

The dual-degree programs must be completed within six years of the date of matriculation. Under selected circumstances and upon the consent of the advisor, petitions for extensions of time may be submitted.
Nursing

ADMISSION
For either of the dual-degree programs, applicants submit one set of application materials only to the College of Nursing, specifically stating which dual degree they seek. The College of Nursing, after its review, sends the packet of materials to the applicant’s respective management program. Each program, nursing or management, makes an independent admission decision and each separately notifies the applicant of their decision.

Post-Master’s Certificates
Post-master’s certificates are offered to nurses with a master’s degree in nursing. These certificates are useful for career mobility or for personal fulfillment. Certificates are offered in all programs as well as in nursing higher education and in acute care nursing. All certificates are offered on the basis of space and faculty availability. Typically the certificates require 12 to 15 semester hours of courses beyond prerequisites. Please contact the College of Nursing’s graduate office (330-672-8761) for further information.

Doctor of Philosophy
Kent State University and The University of Akron offer a joint program leading to the Ph.D. degree, a single doctoral program with a unified doctoral nursing faculty and doctoral student body. The diploma will be issued from the student’s choice of university. Courses will be cross-listed and scheduled at each university.

ADMISSION
Students may apply to the joint program through Kent State University or The University of Akron. Applications will be reviewed by the joint program admissions committee who use a single set of admission criteria.

Each applicant for admission into the Doctor of Philosophy program must meet the following criteria:

1. Evidence of successful completion of a master’s degree program in nursing at an accredited school with a minimum grade point average of 3.0 on a 4.0 scale.
2. Evidence of current licensure, or eligibility for licensure, by the Ohio Board of Nursing.
3. Official evidence of acceptable scores on the Graduate Record Examination.
4. A single-page statement about nursing career interests and goals.
5. A sample of written work. This may include an essay, a term paper, a master’s thesis, professional report or published article.
6. Successful completion of a personal interview with a graduate faculty member conducting research in the area of interest.

International students will be considered for admission. In addition to the above admission criteria, international students must demonstrate a high level of competence in English with a minimum score of 550 on the Test of English as a Foreign Language (TOEFL).

Accelerated Ph.D. Program for Undergraduate and Master’s Students
Accelerated programs for the Ph.D. are available for students in the Kent State University or The University of Akron baccalaureate programs, or their respective master’s programs, by substituting more advanced courses for lower-level courses. The accelerated program saves students at least one or two semesters of coursework and associated costs. Plans for the baccalaureate undergraduate students include summer clinical externships to better prepare them for RN licensure examination as well as doctoral research foci and practice. Please contact the Director of the Joint Ph.D. in Nursing Program at Kent State for further information.

PROGRAM REQUIREMENTS
The joint Ph.D. program in nursing is a post-master’s degree requiring 72 semester credit hours including the dissertation. It consists of five components: (1) Nursing Knowledge Component, (2) Research Methods, Designs and Statistics, (3) Cognates, (4) Health Care Policy and (5) Dissertation.

Nursing Knowledge Component

<table>
<thead>
<tr>
<th>Five required courses</th>
<th>Hours</th>
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<tbody>
<tr>
<td>NURS 70710 Akron 8200:810</td>
<td>3</td>
</tr>
<tr>
<td>NURS 70715 Akron 8200:815</td>
<td>3</td>
</tr>
<tr>
<td>NURS 70720 Akron 8200:820</td>
<td>3</td>
</tr>
<tr>
<td>NURS 86091 Akron 8200:840</td>
<td>3</td>
</tr>
<tr>
<td>NURS 87091 Akron 8200:850</td>
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Research Methods, Designs and Statistics

<table>
<thead>
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<th>Three required method/design courses</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>NURS 70725 Akron 8200:825</td>
<td>3</td>
</tr>
<tr>
<td>NURS 70730 Akron 8200:830</td>
<td>3</td>
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</tbody>
</table>

One of the following selected with the approval of the student’s advisor:

| NURS 70745, 70746, 70747, 70748 or 70749 Akron 8200:845, 846, 847, 848, 849 | 3 |

Cognates

<table>
<thead>
<tr>
<th>Three required courses</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Selected with the approval of the student’s academic advisor; 6 hours must be from disciplines outside of nursing and 3 hours may be within or outside of nursing. Cognates support the student’s research interest. Total Hours</td>
<td>9</td>
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Health Care Policy

<table>
<thead>
<tr>
<th>One required course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 70735 Akron 8200:835</td>
<td>3</td>
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</tbody>
</table>
Dissertation
NURS 80199 Akron 8200:835 ................................. 30

COOPERATIVE PROGRAMMING
Exchange graduate faculty from a variety of northeastern Ohio universities are available for teaching or thesis/dissertation committee membership for all programs at Kent State, including all nursing programs. In addition, the nursing programs at Kent State and The University of Akron cooperate so that students may take nursing electives or use library and other facilities at either program.

General Courses (NURS)

NURS 50057
CASE MANAGEMENT IN HEALTH CARE AGENCIES (2-3)
Course describes roles of institutional, community and insurance-based case managers, identifies mechanisms to establish case management systems and develops communication, clinical evaluation and financial management skills.

NURS 60045
PATHOPHYSIOLOGY FOR ADVANCED PRACTICE NURSES (3)
This course will provide graduate nursing students with a theoretical foundation of the phenomena that produce alterations or pathology in human physiological function across the life span. Prerequisite: BSCI 60495. Special Topics: Advanced Human Physiology.

NURS 60101
THEORETICAL BASIS FOR NURSING PRACTICE I (3)
This course will be used to study concepts and theories common to all specialty areas of nursing. It provides a firm basis for advanced clinical nursing practice. Progress in theory development for nursing practice is addressed. Prerequisite: Graduate standing in nursing or permission.

NURS 60199
THESIS I (2-6)
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. IP grading; IP permissible. Prerequisite: NURS 60401, 60001 or 60021 and permission.

NURS 60205
INTRODUCTION TO APPLIED EPIDEMIOLOGY (1)
Seminar on basic epidemiology principles, concepts and procedures for disease surveillance and investigation. Prerequisite: Basic understanding of biostatistics.

NURS 60206
AMBULATORY DIAGNOSTICS FOR ADVANCED NURSING PRACTICE (2)
Experience for the nurse practitioner student in selection, safe use and interpretation of basic laboratory testing, screening and examinations for client management in primary care. Prerequisite: NURS 60041 recommended.

NURS 60299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: NURS 60199.

NURS 60401
CLINICAL INQUIRY I (3)
Principles of nursing research methodology are taught with a focus on clinical nursing research. Steps in the research process are examined so that the student has a knowledge base for conduct of clinical nursing research. Prerequisite: Statistics or permission.

NURS 60402
CLINICAL INQUIRY II (2)
Critical examination of data analysis techniques for nursing research problems. Theory and laboratory experience utilizing the computer as a research tool. Prerequisite: NURS 60401.

NURS 60431
ADVANCED PRACTICE NURSE SEMINAR (2)
Seminar on roles and functions of the advanced practice nurse, including current trends and issues. Prerequisite: Two of three clinical courses for adult, parent-child or psychiatric mental health nursing.

NURS 60441
PHARMACOLOGY FOR ADVANCED PRACTICE NURSES (3)
A survey course addressing the fundamental principles of medication prescribing and administration necessary for nurses in advanced practice. Course addresses pharmacodynamics, pharmacokinetics and pharmacotherapeutics. Prerequisite: Graduate standing or permission.

NURS 60442
PSYCHOPHARMACOLOGY FOR APPLIED HEALTH PROFESSIONALS (2)
Psychopharmacology for advanced practice addresses the fundamental principles of psychopharmacology necessary for health practitioners in advanced adult/child/geriatric psychiatric practice; includes basic pharmacokinetics and pharmacodynamic principles. Prerequisite: Permission of instructor.

NURS 60450
ETHICAL AND CULTURAL ISSUES FOR HEALTH PROFESSIONALS (2)
This course will examine varying cultural perspectives, including one’s own and critical ethical issues faced by today’s health care providers.
NURS 60451
HEALTH POLICY AND DELIVERY SYSTEMS FOR HCP (2)
This course, focused on health care policy, financing and delivery systems, is one of a two-course graduate seminar series. Students explore the political and scientific basis of health policy formulation, primarily in the U.S., and public/private funding arrangements. “State of science” assignments concern current research.

NURS 60496
INDEPENDENT STUDY (1-4)
Readings and/or research supervised by a member of graduate faculty. Provides students the opportunity to explore a content area in depth. IP permissible. Prerequisite: Permission.

NURS 60498
RESEARCH (1-15)
Research or individual investigation supervised by a graduate faculty member. Repeat registration permitted. Maximum of 9 credit hours may apply toward degree. Prerequisite: Permission.

NURS 60598
PROJECT (2-6)
Project student must register for 3 to 6 hours in a single semester, distributed over several semesters if necessary. Maximum of 6 credit hours can be applied to the degree. IP permissible. Prerequisite: NURS 60401, 60001 or 60021, and permission.

Nursing of the Adult

NURS 60041
ADVANCED ASSESSMENT OF ADULT CLIENTS (3)
Assessment, reasoning and decision-making skills for the advanced practice nurse to formulate comprehensive health databases and therapeutic regimens for adult clients. IP permissible. Prerequisite: Graduate standing.

NURS 60042
ADULT PRIMARY HEALTH CARE I (5)
Advanced primary health care for the nurse practitioner student caring for adult clients with common acute and chronic disorders. Emphasis on nursing and health care management within a multidisciplinary context. IP permissible. Prerequisite: NURS 60401, 600206 and physiology.

NURS 60043
ADULT PRIMARY HEALTH CARE II (5)
Advanced primary health care for the nurse practitioner student caring for adult clients with complex acute and chronic disorders. Emphasis on nursing and health care management in a multidisciplinary context. IP permissible. Prerequisite: NURS 60041, 600205, 600206 and 60441.

NURS 60044
ADULT HEALTH PRIMARY CARE NURSE PRACTITIONER ADVANCED PRACTICUM (2)
Course emphasizes provision of primary health care, refinement of nurse practitioner skills in comprehensive clinical assessment, care management and identification of outcomes in selected patients. IP permissible. Prerequisite: NURS 60041.

NURS 60053
CLINICAL INTERVENTION PHYSIOLOGICAL HEALTH (5)
Clinical reasoning (diagnosis, intervention, outcome evaluation) applied to complex problems of clients and their health behaviors, with emphasis on relationship to physiological status. Clinical sites individualized. Prerequisite: BSCI 60495 and NURS 60041.

NURS 60056
ADULT HEALTH NURSING INTERVENTION/PSYCHOSOCIAL HEALTH (5)
Clinical reasoning applied to complex problems of clients and their health behaviors. Includes analysis of socioeconomic, health policies, developmental stages, belief systems and lifestyles. Clinical sites individualized. Prerequisite: BSCI 60495 and NURS 60041.

NURS 60204
HEALTH CARE ISSUES OF AGING: NURSING CONCEPTS (3)
This course focuses on the theory and research related to biophysiological, psychosocial, cultural, ethical, developmental, environmental and policy factors related to aging and health. Students will gain a basic understanding of the multiple factors related to the functional health patterns among an older adult population; this knowledge can be applied by professionals in research and practice with aging adults in a variety of health care settings. The course is open to graduate students in any discipline and is recommended for students in the nursing of the adult graduate program who choose to specialize in the care of elderly clients.

NURS 60207
PROFESSIONAL ISSUES IN ADVANCED PRACTICE NURSING (2)
Analysis of nursing and health care policy at the community and national levels for specific populations at risk. Prerequisite: At least two adult clinical courses or permission.

NURS 60432
ADULT NURSE PRACTITIONER ROLE PRACTICUM (4)
An individually planned practicum in the final semester in which students perform in the role of a nurse practitioner in a selected multidisciplinary primary care context under guidance of an experienced preceptor. IP permissible. Prerequisite: NURS 60431.
Parent Child Nursing

NURS 60031
PARENT CHILD NURSING I (2)
Course emphasizes health, health promotion, illness prevention and assessment and intervention with well children, women and families, in primary or ambulatory settings. Prerequisite: NURS 60101 or concurrent.

NURS 60032
PARENT CHILD NURSING II (2)
Course to develop knowledge and skills necessary for providing advanced-practice nursing care to children, women and parents experiencing acute illness, exacerbation of chronic and long-term illnesses or high-risk situations including pregnancy. Prerequisite: NURS 60031 and 60060, 60061, 60062 or 60063.

NURS 60033
PARENT CHILD NURSING III (2)
Emphasis on the environment, health policy, political action, legal, social and ethical issues with women, childbearing parents and children experiencing chronic health problems or high-risk situations. Prerequisite: NURS 60031 and 60060, 60061, 60062 or 60063.

NURS 60034
PCN NURSE PRACTITIONER MASTERY PRACTICUM (2)
Emphasis will be on refinement of nurse practitioner skills and expansion of knowledge base in selected areas of concentration. IP permissible. Prerequisite: NURS 60031.

NURS 60036
WOMEN'S HEALTH NURSE PRACTITIONER CLINICAL PRACTICUM (2-4)
Emphasis will be placed on refinement of women's health nurse practitioner skills and expansion of knowledge base related to women's health in selected areas of concentration. IP permissible. Prerequisite: NURS 60031 and 60032.

NURS 60037
PEDIATRIC NURSE PRACTITIONER CLINICAL PRACTICUM (2-4)
Clinical focus will be on advanced nursing practice in the primary care of children. Students will improve on physical assessment skills, diagnostic reasoning and critical thinking through practice. IP permissible. Prerequisite: NURS 60031 and 60032.

NURS 60060
WOMEN'S HEALTH NURSE PRACTITIONER I (4)
Clinical course emphasizes attainment of nurse specialist skills necessary for health assessments and interventions with women's health clients in primary and ambulatory care settings. Prerequisite: Concurrent with NURS 60031.

NURS 60061
WOMEN'S HEALTH CLINICAL NURSE SPECIALIST I (4)
Clinical course emphasizes attainment of clinical nurse specialist skills necessary for health assessments and interventions with women's health clients in primary and ambulatory care settings. Prerequisite: Concurrent with NURS 60031.

NURS 60062
PEDIATRIC NURSE PRACTITIONER I (4)
Clinical course emphasizes primary care nursing given by pediatric nurse practitioners to children and families, focusing on advanced health assessment, health promotion and illness prevention in infants and children. Prerequisite: Concurrent with NURS 60031.

NURS 60063
PEDIATRIC CLINICAL NURSE SPECIALIST I (4)
Clinical course emphasizes attainment of clinical nurse specialist skills necessary for health assessments and interventions with pediatric clients in primary and ambulatory care settings. Prerequisite: Concurrent with NURS 60031.

NURS 60064
WOMEN'S HEALTH NURSE PRACTITIONER II (4)
Clinical course emphasizes attainment of nurse practitioner skills necessary for the care of women experiencing acute illness, exacerbation of chronic or long-term illnesses or high-risk situations including pregnancy. Prerequisite: Concurrent with NURS 60032.

NURS 60065
WOMEN'S HEALTH CLINICAL NURSE SPECIALIST II (4)
Clinical course emphasizes attainment of clinical nurse specialist skills necessary for the care of women experiencing acute illness, exacerbation of chronic or long-term illnesses or high-risk situations including pregnancy. Prerequisite: Concurrent with NURS 60032.

NURS 60066
PEDIATRIC NURSE PRACTITIONER II (4)
Clinical course focus will be on advanced practices. Analyzing data from subjective and objective sources to diagnose and treat acutely ill children. Advanced nursing interventions for the child and family will be discussed and developed. Prerequisite: Concurrent with NURS 60032.

NURS 60067
PEDIATRIC CLINICAL NURSE SPECIALIST II (4)
Clinical course focus will be to further develop advanced nursing interventions for children and their families experiencing acute illness/hospitalization. Play therapy, pain management, community resources are examples of nursing interventions. Prerequisite: Concurrent with NURS 60032.
Nursing

NURS 60068  
WOMEN'S HEALTH NURSE PRACTITIONER III (3)  
Clinical course emphasizes development of competent clinical nurse practitioner skills and knowledge including nursing diagnosis, advanced intervention, treatment and evaluation in the care of women with chronic or long-term health concerns. Prerequisite: Concurrent with NURS 60033.

NURS 60069  
WOMEN'S HEALTH CLINICAL NURSE SPECIALIST III (3)  
Clinical course for women's health clinical nurse specialists emphasizing nursing diagnosis, advanced intervention treatment and evaluation in the care of groups of women with chronic or long-term health concerns. Focus on collaboration with other health care providers. Prerequisite: Concurrent with NURS 60033.

NURS 60070  
PEDIATRIC NURSE PRACTITIONER III (3)  
Clinical course emphasizing development of competent clinical skills and knowledge including nursing diagnosis, advanced interventions, treatment and evaluation in the care of children with chronic or long-term health concerns. Prerequisite: Concurrent with NURS 60033.

NURS 60071  
PEDIATRIC CLINICAL NURSE SPECIALIST III (3)  
Clinical course for pediatric clinical nurse specialists. Synthesis of knowledge from NURS 60033 will be incorporated into clinical practice working with parents, families and children with chronic disease in the community. Prerequisite: Concurrent with NURS 60033.

NURS 60072  
WOMEN'S HEALTH NURSE PRACTITIONER CAPSTONE (4)  
Focus is on synthesizing women's health nurse practitioner knowledge and skills to provide expert care to a selected population of women's health clients. Prerequisites: NURS 60031, 60032, 60033 and 60431.

NURS 60073  
PEDIATRIC CLINICAL NURSE SPECIALIST CAPSTONE (4)  
Focus on synthesizing clinical nurse specialist knowledge and skills to provide expert care to a selected population of pediatric clients. Prerequisites: NURS 60031, 60032, 60033 and 60431.

Psychiatric Mental Health Nursing

NURS 60001  
INDIVIDUAL AND GROUP PSYCHOTHERAPY IN NURSING (3)  
Study of psychiatric mental health nursing with emphasis on mental health assessment and individual and group psychotherapy. Pre- or corequisite: NURS 60201.

NURS 60002  
FAMILY PSYCHOTHERAPY IN NURSING (3)  
Study of theoretical approaches to nursing intervention with families and couples with identified mental health problems. Current status of research and evaluation of care is examined. Prerequisite: NURS 60001.

NURS 60003  
CONSULTATION AND LIAISON PSYCHIATRIC NURSING (2)  
Study of needs assessment, program development and evaluation research; consultation with professionals and nonprofessionals, and liaison nursing. Prerequisite: NURS 60001 and 60002, and pre- or corequisite NURS 60201.

NURS 60040  
PRIMARY HEALTH CARE PSYCHIATRIC MENTAL HEALTH CLIENTS (5)  
Advanced primary health care for the psychiatric nurse practitioner student caring for adult psychiatric clients with chronic physical disorders. Prerequisite: NURS 60041.

NURS 60201  
THEORIES FOR ADVANCED PSYCHIATRIC MENTAL HEALTH NURSING (3)  
Major theories of historical importance to psychiatric nursing are studied. Significant relationships between various theories are examined and related to psychiatric nursing practice. Prerequisite: Graduate standing in nursing or permission.

NURS 64492  
PSYCHIATRIC MENTAL HEALTH NURSING PRACTICUM I (4)  
Clinical course emphasizes mental health assessment and individual and group psychotherapy with the chronically and acutely mentally ill. Pre- or corequisite: NURS 60001.

NURS 65592  
PSYCHIATRIC MENTAL HEALTH NURSING PRACTICUM II (4)  
Clinical course emphasizes family and couples psychotherapy. Pre- or corequisite: NURS 60002.
NURS 66692
PSYCHIATRIC MENTAL HEALTH NURSING PRACTICUM III (2)
Clinical course emphasizes consultation and liaison activities with agencies that serve the acutely and chronically ill. Pre- or corequisite: NURS 60003.

Clinical Specialization

NURS 60332
CLINICAL SPECIALIZATION IN PSYCHIATRIC MENTAL HEALTH NURSING (4)
Practicum to test out role of clinical specialist in psychiatric mental health nursing in a setting selected by student and preceptor. Prerequisite: NURS 60331 and 60003.

NURS 60342
CLINICAL SPECIALIST ADULT NURSING (6)
Individually planned practicum in which the student performs in the role of the clinical specialist with a specified population of adult clients. Prerequisite: BSCI 60056 and NURS 60053.

NURS 60352
CLINICAL SPECIALIZATION IN PARENT-CHILD NURSING (4)
The course is an individually planned practicum in which the student performs in the role of the clinical specialist with a specified population of parents or children of the student’s selection. Prerequisite: NURS 60331.

Nursing Education

NURS 60601
NURSING CURRICULUM AND INSTRUCTION IN HIGHER EDUCATION (3)
Web-based course for master’s-enrolled or master’s-prepared nurses to teach content and facilitate advanced critical thinking in the areas of curriculum planning, design, development, implementation and evaluation in higher education nursing. Prerequisite: MSN graduate completion of NURS 60101; 60001 or 60002 or 60041; or permission.

NURS 60602
ROLES AND EVALUATION FOR NURSING CURRICULUMS IN HIGHER EDUCATION (3)
Web-based course for master’s-enrolled or master’s-prepared nurses focusing on content, theory, history and techniques of evaluation for nursing educational programs. Faculty and student roles, and legal and ethical issues are also addressed. Prerequisite: NURS 60601.

NURS 60692
PRACTICUM IN NURSING HIGHER EDUCATION CURRICULUM (2-4)
Curriculum design, implementation and teaching experience with nursing master teacher in higher education undergraduate or graduate nursing courses. Prerequisite: NURS 60601 and 60602.

Nursing Administration

NURS 60313
ANALYSIS OF HEALTH CARE ORGANIZATIONS (3)
An in-depth look at organizational theory and behavior in hospitals and health agencies. Current factions in the environment, organizational design, health policy and their influence on patient-care processes will be studied.

NURS 60314
INTERNSHIP IN HEALTH CARE MANAGEMENT (3)
Provides an opportunity for students to gain practical experience and be exposed to processes of strategy creation, policy development, decision-making and patient care with the health care industry. IP permissible. Prerequisite: All required M.S.N. courses and M.B.A. core courses.

NURS 60392
INTERNSHIP IN HEALTH AND PUBLIC ADMINISTRATION (3)
Provides an opportunity for students to gain practical experience and be exposed to processes of public decision-making and policy development within the health care sector. Prerequisite: Enrollment in M.S.N./M.P.A. program and permission.

NURS 65092
PRACTICUM: NURSING AND HEALTH CARE MANAGEMENT I (3-5)
The required first of two capstone management practicums in a health care agency for nurses. Students integrate and apply management knowledge and are coached in professional roles by established nursing and health care management leaders. IP permissible. Prerequisite: M.S.N. students — 25 plus hours in Nursing and Health Care Management. Post M.S.N. students — M.S.N. plus 13 hours in Nursing and Health Care Management.

NURS 65192
PRACTICUM: NURSING AND HEALTH CARE MANAGEMENT II (3-5)
The second of two capstone management practicums in a health care agency for nurses. Students further integrate and apply management knowledge and their professional roles, coached by established nursing and health care management leaders. One credit hour managerial topics. Prerequisite: NURS 60692.

Nursing Electives

NURS 61001
RELEVANT ISSUES IN NURSING (3)
A forum in which selected current topics impacting on the education, practice and profession of nursing will be studied. Prerequisite: Graduate standing or permission.
NURS 61003
CHRONIC MENTAL ILLNESS AND PSYCHOPHARMACOLOGY  
(4)
Psychodynamics and psychopharmacology of chronic mental 
illness for advanced practice. The course addresses etiology 
and psychopharmacology for clinicians in treatment of 
selected conditions.

NURS 61005
NURSING INFORMATICS  (3)
Explores the role of informatics in professional nursing practice. 
Students learn basic information skills including telecommuni-
cation and management of nursing data, and apply these skills 
with clinical nursing health data. Prerequisite: Controlled.

NURS 61095
SPECIAL TOPICS IN NURSING  (2-6) 
Topics in nursing such as holistic health, selected pathologi-
cal alterations and recent developments. May include clinical 
practicum. May be repeated three times with approval for a 
maximum of 12 credits applied toward the degree. Prerequi-
site: Graduate standing in nursing or permission.

Ph.D. Kent-Akron Joint Program

NURS 70710
HISTORY AND PHILOSOPHY OF NURSING SCIENCE  (3) 
This course examines the nature of metaphysics and episte-
mology and the influence of contemporary Eastern and West-
ern philosophies on the developing epistemology of disciplin-
ary nursing knowledge. Akron 8200:810. Prerequisite: Doctoral 
standing or permission.

NURS 70715
THEORY CONSTRUCTION AND DEVELOPMENT IN NURSING  (3) 
This course examines strategies for theory development in-
cluding logical, empirical, deductive and inductive approaches. 
Emphasis will be on elements and strategies used in theory 
building. Akron 8200:815. Prerequisite: NURS 70710.

NURS 70720
INTRODUCTION TO NURSING KNOWLEDGE DOMAINS  (3) 
Introductory seminar analyzing selected theoretical and meth-
odological approaches to knowledge development in nursing. 
Emphasis on critical analysis of knowledge in areas of special 
interest. Akron 8200:820 Prerequisite: Doctoral standing or 
permission.

NURS 70725
QUANTITATIVE RESEARCH METHODS IN NURSING  (3) 
An integrated approach to the study of quantitative nursing 
research. Exploration of the interdependent relationship of 
methodology, design/measurement issues, including analysis 
and interpretation of findings. Akron 8200:825. Prerequisite: 
Doctoral standing or permission.

NURS 70727
ADVANCED HEALTH CARE STATISTICS I (3) 
Comprehension of bivariate and multivariate descriptive and 
inferential statistics designed for nurse researchers. Appli-
cations to research problems in nursing. Akron 8200:827. 
Prerequisite: Master’s-level statistics, including descriptive and 
inferential statistics. Doctoral standing or permission from the 
department.

NURS 70730
QUALITATIVE RESEARCH METHODS IN NURSING  (3) 
Selected qualitative research methods used to study nurs-
ing phenomena. Philosophical bases; design, data collection 
and analysis; evaluation of rigor; and ethical issues for major 
qualitative methods will be analyzed with regard to nursing 
phenomena. Akron 8200:830. Prerequisite: Doctoral standing 
or permission.

NURS 70735
NURSING AND HEALTH CARE POLICY  (3) 
Critical examination of theories and processes of formulat-
ing state/national health care policy. Focus on health issues, 
the political and legislative process, and contemporary policy 
dilemmas. Akron 8200: 835. Prerequisite: Doctoral standing 
or permission.

NURS 70737
ADVANCED HEALTH CARE STATISTICS II (3) 
Application of bivariate and multivariate descriptive and 
inferential statistics to research problems in nursing. Akron: 
8200:837. Prerequisite: NURS 70727 or equivalent. Doctoral 
standing or permission from department.

NURS 70745
ADVANCED NURSING RESEARCH: QUANTITATIVE METHODS  (3) 
Advanced seminar on selected areas of quantitative methods 
and statistics related to research development, methods and 
evaluation essential to the advancement of nursing knowl-
edge. Akron 8200:845. Prerequisite: NURS 70720 and 70725, 
doctoral standing or permission.

NURS 70746
ADVANCED METHODS FOR NURSING RESEARCH: MEASURE-
MENT IN NURSING  (3) 
Theories and concepts related to measurement and nursing 
research including techniques for construction, testing and re-
fining of instruments with assessment of reliability and validity. 
Akron 8200:846. Prerequisite: Doctoral standing or permission.

NURS 70747
ADVANCED METHODS FOR NURSING RESEARCH: APPLICATION 
OF QUALITATIVE METHODS  (3) 
Theory, data collection and analysis used in qualitative nursing 
research with a focus on phenomenology, grounded theory 
and ethnography. Akron 8200:847. Prerequisite: NURS 70725 
and 70730 or permission.
NURS 70748  ADVANCED METHODS FOR NURSING RESEARCH: PROGRAM EVALUATION IN NURSING  (3)
Seminar and lecture: Analysis of theories and models of program evaluation and their relationships to designs, processes, techniques and outcomes in nursing-related evaluations. Akron 8200:848. Prerequisite: Doctoral standing or permission.

NURS 70749  ADVANCED METHODS FOR NURSING RESEARCH: GRANT DEVELOPMENT AND FUNDING  (3)
Advanced seminar on critical analysis of proposal and grant development, funding, peer review and advocacy process with emphasis on the development of a grant proposal. Akron 8200:849. Prerequisite: Doctoral standing or permission.

NURS 70792  FIELD EXPERIENCE IN NURSING  (1-12)
Individual enrollment in field experience settings related to nursing. Akron 8200:892. Prerequisite: Doctoral standing or permission.

NURS 70795  SPECIAL TOPICS IN NURSING  (2-6)
Study of important topics in nursing practice, research on the profession. Offering in response to existing interests and opportunities. Akron 8200:895. Prerequisite: Doctoral standing or permission.

NURS 70796  INDIVIDUAL INVESTIGATION IN NURSING  (1-3)
Individual enrollment for independent study in nursing carried out by student under supervision of a doctoral faculty member. Akron 8200:896. Prerequisite: Doctoral standing or permission.

NURS 70798  RESEARCH IN NURSING  (1-15)
Research carried out by a student under faculty supervision. In-depth inquiry should result in a paper or appropriate product. Akron 8200:898. Prerequisite: Doctoral standing or permission.

NURS 86091  VARIABLE CONTENT SEMINAR IN NURSING: NURSING SCIENCE I  (3)
Seminar on in-depth analysis, synthesis and evaluation of one substantive area within nursing and related disciplines focusing on the generation and dissemination of nursing knowledge. Akron 8200:840. Prerequisite: NURS 70720.

NURS 86191  VARIABLE CONTENT SEMINAR IN NURSING: NURSING SCIENCE I: FAMILY THEORIES AND NURSING RESEARCH  (3)
Seminar on in-depth analysis, synthesis and evaluation of one substantive area within nursing and related disciplines focusing on the generation and dissemination of nursing knowledge. Akron 8200:840. Prerequisite: NURS 70720.

NURS 86291  VARIABLE CONTENT SEMINAR IN NURSING: NURSING SCIENCE I: NURSING AND WOMEN'S HEALTH  (3)
Seminar: Analysis, synthesis and evaluation of theories and research in women's health across the life span as consumers and providers in nursing and health care. Akron 8200:840. Prerequisite: NURS 70720.

NURS 86391  VARIABLE CONTENT SEMINAR IN NURSING: NURSING SCIENCE I: STRESS, COPING AND SOCIAL SUPPORT AND NURSING RESEARCH  (3)

NURS 87091  VARIABLE CONTENT SEMINAR IN NURSING: NURSING SCIENCE II  (3)
In-depth focused analysis and synthesis of a substantive area relevant to the student's specific research focus, culminating in a written product for dissemination. Akron 8200:850. Prerequisite: NURS 86091.

NURS 80199  DISSERTATION I  (15)
Independent doctoral research for the dissertation under faculty supervision. Registration of at least two semesters is required, continuing until completion of 30 credit hours. Akron 8200:899. Prerequisite: Admission to doctoral candidacy.

NURS 80299  DISSERTATION II  (1 or 15)
Continuing registration of research, after initial 30 hours of
The School of Technology offers a program of graduate study leading to the Master of Technology degree. The program, which provides advanced technical and management skills, meets the needs of the technical workforce in industry and business. It also offers students flexibility in course selection to meet the diverse demands of careers in rapidly changing fields in a technology-based economy. Under established university policy for institutional collaboration and partnerships, the Master of Technology degree program provides a concurrent degree under a bilateral memorandum of agreement with various international institutions. Information about the school and its programs is available at http://www.tech.kent.edu.

The Master of Technology degree program is designed to provide students with a graduate education with advanced and comprehensive technical management skills to support, analyze, modify and manage complex technical systems in the contemporary knowledge economy. Specific objectives of the program are to:

- Enhance proficiencies in planning, organizing, decision making and management of technology and complex systems.
- Understand production and process control to improve quality, reliability and productivity in business, industry and government sectors.
- Apply and control the use of high technologies to improve the efficiency and effectiveness of productive processes and systems in the workforce.
- Enhance problem-solving and creative-thinking skills in interdisciplinary settings.
- Contribute to applied research, development and outreach activities to foster economic development.

Master of Technology Degree Program (MTEC)

The degree provides a set of courses to offer the following options:

- Automation/Electronics/Manufacturing
• Aviation/Aeronautics
• Computer and Information Technology
• Quality/Reliability Systems
• Technology Education
• Technology Management

ADMISSION
While an undergraduate degree in a technology discipline is not required for admission, a background in a technical area is preferred. Students must satisfy prerequisites for all courses in the program, either by showing equivalency or by taking the prerequisite courses, with credits not applying to the graduate program.

In addition to the regular application requirements of the university, consideration for admission to the program requires:

1. A minimum composite grade point average of 2.75 on a 4.0 scale for all undergraduate work attempted.
2. Submission of scores for the General Test of the Graduate Record Examination (GRE) with the expectation of all scores above the 50th percentile. Information about the GRE is available at http://www.gre.org. This requirement is waived for those students with a composite grade point average, for all undergraduate work attempted, of 3.30 or higher on a 4.0 scale.
3. Submission of three letters of recommendation from professional references; at least one of the letters should be from a former/present teacher.
4. Submission of a statement describing career objectives and how this program will help the student further his/her professional career.

An admissions committee of the Graduate Faculty will review all applications. Students with perceived deficiencies based upon undergraduate preparation and/or GRE scores may be admitted conditionally, which may include a requirement of completion of appropriate undergraduate coursework that will not count toward the master’s degree.

PROGRAM REQUIREMENTS
Students admitted to the MT program, in consultation with a graduate technology faculty advisor, will develop a program of studies for degree completion that will include a list of proposed courses to supplement the core requirements. In addition to meeting the general requirements of the university, students working toward the Master of Technology degree must meet the following requirements:

Core Courses

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<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>TECH 50000</td>
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<td>TECH 60000</td>
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<td>TECH 60078</td>
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Other Requirements:
• Total of 32 graduate credit hours.
• Minimum of 16 hours at the 60000 level.
• Minimum of 16 hours in graduate technology courses.
• Maximum of 3 graduate workshop credits may be used toward graduation. Any exceptions must be approved by the dean of the School of Technology.

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<tr>
<th>Course</th>
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<tr>
<td>TECH 50000</td>
<td>QUALITY STANDARDS (3)</td>
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<tr>
<td>TECH 51001</td>
<td>METHODS IN TECHNOLOGY EDUCATION (3)</td>
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<tr>
<td>TECH 51002</td>
<td>ORGANIZATION IN TECHNOLOGY EDUCATION (3)</td>
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<tr>
<td>TECH 51051</td>
<td>FOUNDATIONS AND CONTEMPORARY THEORIES OF TECHNOLOGY EDUCATION (3)</td>
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<tr>
<td>TECH 51052</td>
<td>TECHNOLOGY EDUCATION FOR ELEMENTARY SCHOOL (3)</td>
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<tr>
<td>TECH 51055</td>
<td>INDUSTRIAL PRACTICE (1-4)</td>
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<tr>
<td>TECH 51093</td>
<td>VARIABLE TITLE WORKSHOP IN TECHNOLOGY (1-3)</td>
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Courses (TECH)
TECH 53026
INTRODUCTION TO MICROPROCESSORS (3)
Microprocessor architecture, operation and applications, including machine-language and assembly-language programming. Prerequisite: TECH 33222 (theatre majors only). Special fee: $5 per semester (subject to change).

TECH 53221
CONTROL SYSTEMS AND ROBOTICS (3)
The use of personal computers for data acquisition and control in industrial and laboratory environments. Topics include sensor, interfacing, digital and analog I/O, data analysis, programming of commercially available data acquisition boards and robotics applications. Lecture 2 hours, laboratory 2 hours weekly. Prerequisite: TECH 4/53026. Special fee: $5 per semester (subject to change).

TECH 53550
COMPUTER-AIDED MANUFACTURING (3)
The application of computers to the preparation of machine tool control programs, rapid prototyping and robotic control. Lecture 2 hours, laboratory 2 hours weekly. Prerequisite: TECH 23581. Special fee: $8.33 per credit hour (subject to change).

TECH 53700
COMPUTER INTEGRATED MANUFACTURING (3)
The study of the computer integrated manufacturing as system control, product design, machining, assembly, material logistics, quality, information usage and system integration relates to it. Prerequisite: TECH 31020 and 53550. Special fee: $10 per semester (subject to change).

TECH 53800
APPLIED ENGINEERING TECHNOLOGY SEMINAR (2)
An individual or group project involving the solution of a problem through the application of technology. Prerequisite: Permission. Special fee: $5 per semester (subject to change).

TECH 55150
APPLIED FLIGHT DYNAMICS I (3)
An applied aircraft flight dynamics course that demonstrates aircraft, engine and propeller performance with the overall flight performance and stability of the typical light airplane. Includes flight-testing laboratory participation. Prerequisite: MATH 11012 or 12002, PHY 13001/13002 or PHY 23101/23102 and TECH 15000 or permission. Special fee: $20 per semester (subject to change).

TECH 55350
AVIONICS (3)
A descriptive course that covers electronic systems in aviation, particularly from the standpoint of aircraft equipment, its operational theory, and practical use by the pilot. Prerequisite: PHY 13001/13002 or 23101/23102, TECH 21021 or permission.

TECH 55700
AIRCRAFT DESIGN (3)
Preliminary design of a fixed-wing aircraft for a specific mission; weight estimates; wing platform, airfoil and propulsion selection; airframe configuration and layout design; performance analysis; and overall systems integration. Prerequisite: PHY 13001/13002 or PHY 23101/23102, TECH 15000 and TECH 21021 or permission. Pre- or corequisites: TECH 45030, 45150, 45350 or permission.

TECH 55791
AVIATION SECURITY AND POLICY SEMINAR (3)
Analytical review of policies, practices, procedures and regulatory provisions designed to create and enhance security in civil aviation with a special emphasis on the impact of emerging technologies on aviation security.

TECH 56321
WEB DATABASE INTEGRATION (3)
Laboratory course focused on integrating databases in Web sites. Current topics include using object-oriented technology, structured query language and large-scale database engines. Prerequisite: COMT 21036 or permission.

TECH 56330
VISUAL BASIC PROGRAMMING IN ENGINEERING TECHNOLOGY (3)
This course will cover the concepts of object-oriented, event-driven programming with hands-on application of those concepts to solve engineering-related problems, utilizing the current version of Visual Basic. Prerequisite: TECH 10001, MATH 11011 and PHY 13001, and permission.

TECH 60000
PROJECT MANAGEMENT IN A TECHNOLOGICAL ENVIRONMENT (3)
The planning, organizing, directing and controlling of company technology resources for relatively short-term objectives. Students will also learn to make application of current projects.

TECH 60001
QUANTITATIVE METHODS IN TECHNOLOGY (3)
This course on the use of analytical modeling and computer simulation techniques for the analysis, reformulation, validation and graphic presentation of data in engineering and technology applications. Prerequisite: MATH 12002 or equivalent.

TECH 60078
RESEARCH IN TECHNOLOGY (3)
Research techniques for the technologist. Methods for designing, conducting, analyzing and interpreting results of technological research.
TECH 61000
INDUSTRIAL TECHNOLOGY EDUCATION (3)
This course provides students with an understanding of the rationale and issues related to developing the industrial technology education program.

TECH 61001
ORGANIZATION AND ADMINISTRATION OF INDUSTRIAL EDUCATION (2)
Strategies for organizing and administering industrial education laboratory facilities to accommodate contemporary curriculum and instructional techniques.

TECH 61006
INSTRUCTIONAL STRATEGIES FOR THE MULTIPLE ACTIVITY LABORATORY (2)
Extensive participation and practice with instructional strategies for the multiple activity industrial arts laboratory. Survey of instructional styles, classroom and laboratory settings, and student subpopulations.

TECH 61051
TECHNOLOGY EDUCATION FOR THE ELEMENTARY SCHOOL (2)
The study of nature and purposes of technology education for elementary school and its relationships to general education.

TECH 61091
AEROSPACE SEMINAR (1)
Discussions of selected technical topics related to aerospace technology. Repeat registration permitted for three semesters maximum.

TECH 61095
SPECIAL TOPICS IN TECHNOLOGY (1-4)
Study of special topics in technology, including technological tours offered irregularly as interest and opportunities permit. When offered, contact School of Technology office for details.

TECH 61098
RESEARCH (1-15)
Research or individual investigation for master’s-level graduate students. Credits earned may be applied toward meeting degree requirements if department approves. Repeat registration permitted.

TECH 61199
THESIS I (2-6)
Thesis option student must register for a total of 6 hours, 2 to 6 in a single semester, or to be distributed over several semesters if desired. S/U grading; IP permissible. Prerequisite: Advisor’s approval.

TECH 61299
THESIS II (2)
Thesis students must continue registration each semester until all degree requirements are met. S/U grading; IP permissible. Prerequisite: TECH 61199.

TECH 62001
CONTROL THEORY (3)
Automatic control of electromechanical, pneumatic and hydraulic systems using mathematical models. Discussion of system stability and classical root locus.

TECH 63100
COMPUTER-AIDED DESIGN (3)
Study of modern industrial practice using computers in advanced graphics, design and analysis including geometric dimensioning and tolerancing, parametric design, solid modeling and finite element analysis. Lecture 2 hours and laboratory 2 hours weekly. Prerequisite: TECH 23581 or equivalent or permission.

TECH 63200
COMPUTER-CONTROLLED SYSTEMS (3)
An overview of modern computer control systems in manufacturing. Prerequisite: TECH 4/53221 or permission.

TECH 64010
CONNECTIVITY AND INTEROPERABILITY IN INDUSTRY (3)
This course will focus on integrating and administering multiple systems in an industrial environment. Two and one-half hours lecture and 1 half-hour lab weekly. Prerequisite: TECH 46011 or permission.

TECH 64011
TECHNICAL PROGRAMMING (3)
This course will focus on writing programs to gather data from industrial devices and provide those data to information systems. Two and one-half hours lecture and 1 half-hour lab weekly. Prerequisite: TECH 46008.

TECH 64012
INFORMATION TECHNOLOGY AND AUTOMATION IN INDUSTRY (3)
This course will focus on developing systems that analyze and automate industrial processes and provide decision support. Two and one half hours lecture and 1 half-hour lab weekly. Prerequisite: Permission.

TECH 64095
SPECIAL TOPICS IN COMPUTER TECHNOLOGY (1-4)
Study of various topics that focus on current computer technologies. Repeat registration permitted.
Technology

TECH 65300  
AIRLINE TRANSPORTATION OPERATIONS (3)  
The study of scheduled and nonscheduled airline transport operations under Federal Air Regulations (FAR). Prerequisite: Permission.

TECH 65400  
EVALUATING QUALITY SYSTEM THROUGH PROCESS CONTROL (3)  
Evaluating industrial quality through statistical process control. Methods to produce design, process control and process capability are analyzed and evaluated for industrial quality control. Use of inspection equipment and assurance of receiving, fabricating and shipping acceptable materials, products and systems. Scientific management.

TECH 65500  
QUALITY SYSTEMS AND INDUSTRIAL PRODUCTIVITY (3)  
Tools and techniques for increasing industrial productivity through total quality management. Productivity improvement techniques involving human, technology, material, product and processes, utilizing value engineering, analytical models and scientific management tools in high-technology environment.

TECH 65700  
APPLIED RELIABILITY ENGINEERING (3)  
Designed to provide technical managers, applied engineers, technologists and manufacturing personnel practical working knowledge of reliability measurement and testing. Concepts of reliability engineering are analyzed to determine failure rates for various types of destructive and nondestructive testing. Prerequisite: TECH 65400.

TECH 65800  
BURN-IN/STRESS TESTING FOR RELIABILITY (3)  
Comprehensive course on reliability testing to analyze and establish reliability standards for components, products and systems. Specific emphasis on burn-in and stress-testing procedures to perform effective reliability statistical calculations will be the major focus of the course. Prerequisite: TECH 65700.

Individual Investigations

When a student enrolls for an individual investigation, it is assumed that the student has a problem, technical or professional, on which to concentrate. Study, experimentation and/or research necessary for the solution of the problem will be preceded by an analysis of the problem in consultation with the student’s assigned professor. Documentation of the investigation will be filed with the department.

Adequate undergraduate preparation or equivalent experience in the area of the investigation is a prerequisite. Because of the research nature of these courses, TECH 60078 or equivalent is a prerequisite to the individual investigation.

TECH 62396  
INDIVIDUAL INVESTIGATION IN ELECTRONIC TECHNOLOGY (2)  
Individual investigation of a student-selected topic oriented toward the technical aspects of electronics. IP permissible. Prerequisite: TECH 53221 or equivalent.

TECH 63496  
INDIVIDUAL INVESTIGATION IN ENERGY/POWER TECHNOLOGY (2)  
Individual investigation of selected topics within the energy/power technology systems. IP permissible. Prerequisite: TECH 31032 or permission.

TECH 64396  
INDIVIDUAL INVESTIGATION IN COMMUNICATION TECHNOLOGY (2)  
Independent research consisting of a problem statement followed by literature search and application of an industrial practice. A proposal must be developed and a written paper/project presented to faculty and industrial representatives. IP permissible. Prerequisite: Permission.

TECH 65496  
AEROSPACE TECHNOLOGY (1-4)  
Individual investigation of selected topic from the field of aerospace. IP permissible. Prerequisite: Permission.

TECH 66596  
INDIVIDUAL INVESTIGATION IN MATERIALS TECHNOLOGY (2)  
Research directed toward the study and application of metallic and nonmetallic materials. IP permissible. Prerequisite: TECH 20002 or 33363 or equivalent, or permission.

TECH 66796  
INDIVIDUAL INVESTIGATION IN INDUSTRIAL PROCESSES (2)  
Individual investigation of a student-selected topic oriented toward industrial/manufacturing processes. IP permissible. Prerequisite: TECH 20002 or equivalent, or permission.

TECH 67496  
INDIVIDUAL INVESTIGATION IN CONSTRUCTION TECHNOLOGY (2)  
Provides advanced work in a selected investigation in one or more of the many areas of construction technology. In some instances an introduction to construction technology is considered depending upon student needs. IP permissible. Prerequisite: Permission.

TECH 67596  
INDIVIDUAL INVESTIGATION IN MANUFACTURING TECHNOLOGY (2)  
Independent study related to manufacturing industries. The study may include the development of a product for manufacture (or service) or the in-depth examination of an element of manufacturing. IP permissible.
TECH 68196
INDIVIDUAL INVESTIGATION IN ENGINEERING GRAPHICS (2)
Investigation of selected topics within engineering graphics including computer-aided design. IP permissible. Prerequisite: TECH 31087.

TECH 68796
INDIVIDUAL INVESTIGATION IN INDUSTRIAL TECHNOLOGY SYSTEMS DESIGN (2)
The study of two- and three-dimensional design as related to manufacturing, construction, communication and energy/power including patents, creativity and problem-solving approaches. IP permissible.
Special Programs Courses

SPECIAL PROGRAMS COURSES

GCOL 60120/70120
INTERDISCIPLINARY GERONTOLOGY (3)
Prerequisite: Permission.

GCOL 61000
INTRODUCTION TO LIBERAL STUDIES (2)
Cross-listed with A&S 61000.
Introduction to history, philosophy and curricular structure of graduate liberal studies.

GCOL 61093
WORKSHOP IN COLLEGE TEACHING (1-2)
For students in the Orienting New Teaching Assistants Program (ONTAP) only. S/U grading.

GCOL 61094/71094
COLLEGE TEACHING (1-2)

GCOL 61098
LIBERAL STUDIES ESSAY (3)
Cross-listed with A&S 61098.
The preparation of an essay of approximately 50 pages on a topic related to the student’s program of study for the Master of Liberal Studies degree. S/U grading; IP permissible.
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2Youngstown State University faculty member
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Persons wishing information about admissions, financial aid, residence or educational programs of Kent State University should write to the addresses or call the numbers indicated below. All mail sent to any office of the university should carry the following general address: Office/department name, Kent State University, P.O. Box 5190, Kent, OH 44242-0001. You may call the university general information number 330-672-3000 for any additional information.

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<td>200 Taylor Hall</td>
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<td>110 Cunningham Hall</td>
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<td>Management</td>
<td>A310 Business Administration</td>
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<td>Nursing</td>
<td>113 Henderson Hall</td>
<td>330-672-7930</td>
</tr>
<tr>
<td>Registrar</td>
<td>Michael Schwartz Center</td>
<td>330-672-3131</td>
</tr>
<tr>
<td>Research and Graduate Studies (RAGS)</td>
<td>117 Auditorium Building</td>
<td>330-672-3012</td>
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<tr>
<td>Residence Services</td>
<td>Korb Hall</td>
<td>330-672-7000</td>
</tr>
<tr>
<td>Student Financial Aid</td>
<td>Michael Schwartz Center</td>
<td>330-672-2972</td>
</tr>
<tr>
<td>Technology</td>
<td>123 Van Deusen</td>
<td>330-672-2892</td>
</tr>
</tbody>
</table>

Addresses and phone numbers of specific departments may be found under their respective listings in the catalog.